

# CPDD 80<sup>th</sup> Annual Scientific Meeting Program

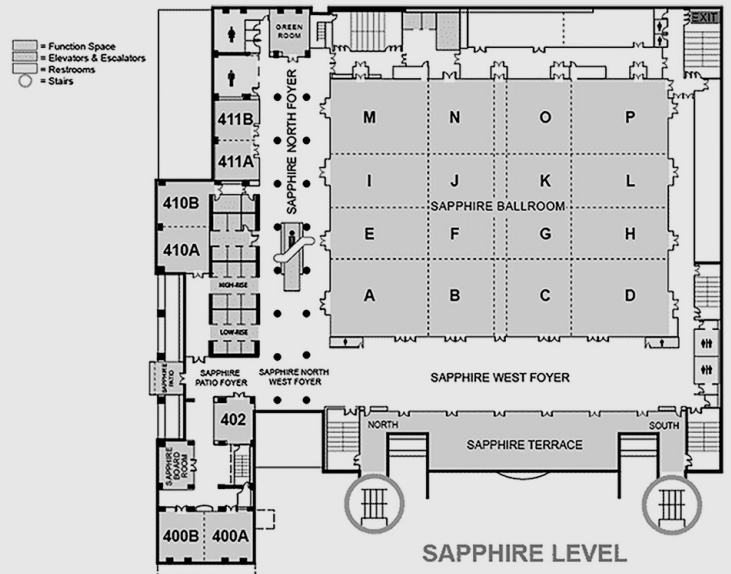
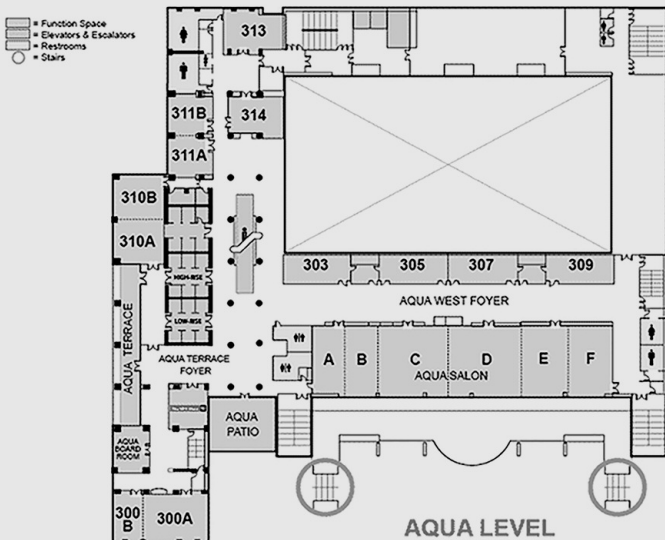
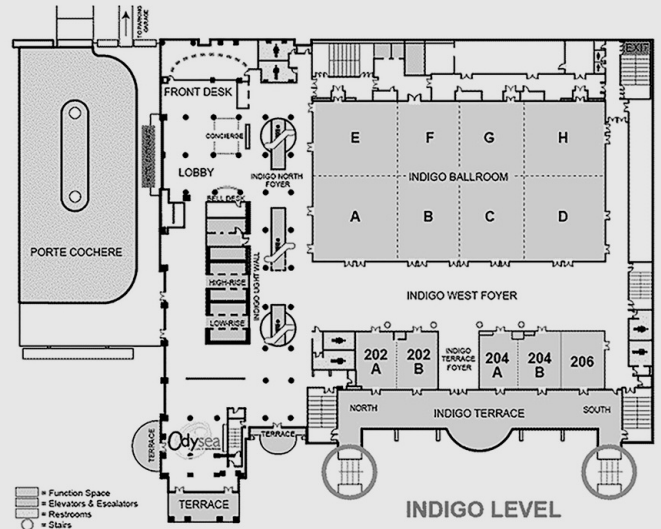
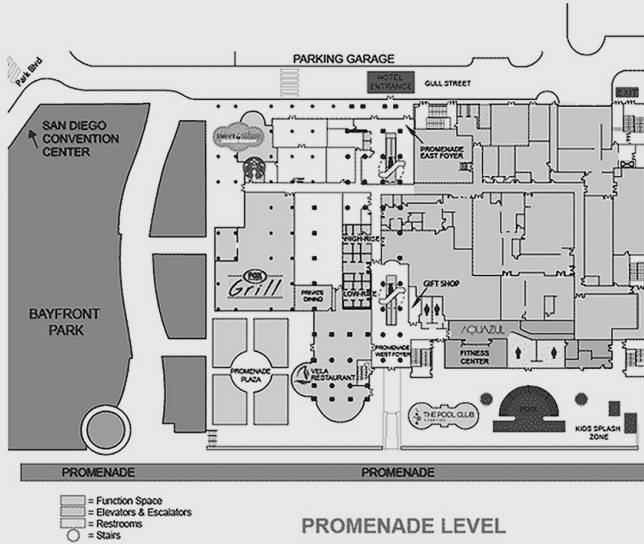
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June 9 - 14, 2018  
Hilton San Diego Bayfront  
San Diego, CA  
#CPDD18



# Hilton San Diego Bayfront Hotel Map



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## Saturday, June 9, 2018

**ISGIDAR**

**Sapphire LP  
8:00 - 5:00 PM**

**NIDA INTERNATIONAL FORUM**

**Sapphire DH  
8:30 - 5:00 PM**

**(PRE-REGISTRANTS ONLY)  
NIDA GRANT-WRITING**

**Aqua C  
1:00 - 5:00 PM**

**REGISTRATION**

**Sapphire NW Foyer  
1:30 - 5:30 PM**

**OPENING RECEPTION**

**Promenade Plaza  
7:00 - 9:00 PM**

## Sunday, June 10, 2018

**PLENARY PROGRAM**

**Indigo BCFG  
8:30 - 11:00 AM**

8:30 *Welcome*

CPDD President Alan J. Budney

8:45 *Celebrating the 80th Annual Scientific Meeting of the  
Committee/College on Problems of Drug Dependence*

Loretta P. Finnegan, CPDD Executive Officer

9:15 *Presentation of the Stephen G. Holtzman Travel Award for Preclinical  
Investigators to Laís F. Berro*

Introduction by Alan J. Budney

9:20 *Presentation of the CPDD/NIDA Media Award to Maia Szalavitz*

Introduction by Meg Chisolm



- 9:35 *Presentation of the Martin & Toby Adler Distinguished Service Award*  
Introduction by Loretta Finnegan
- 9:40 *Presentation of the J. Michael Morrison Award to Ivan D. Montoya*  
Introduction by Francis Levin
- 9:45 *Presentation of the Joseph Cochin Young Investigator Award to Kelly Dunn*  
Introduction by Maxine Stitzer
- 9:50 *Presentation of the Mentorship Award to Leonard Howell*  
Introduction by Laís F. Berro
- 9:55 *Presentation of the Innovator Award to Thomas Prisinzano*  
Introduction by Christopher Cunningham
- 10:05 *Presentation of the Nathan B. Eddy Award to Alex Makriyannis*  
Introduction by Thomas Prisinzano
- 10:15 *Nathan B. Eddy Lecture*  
*Cannabinoid Receptors, Their Structures and Functions*  
Alex Makriyannis, Northeastern University, Boston, MA

**POSTER SESSION I  
GENETICS**

**LUNCH**

**Sapphire ABC/EFG  
11:00 - 1:00 PM**

**Odd numbered posters manned first hour; Even numbered, second hour**

- 1 *Greater oxycodone self-administration by male and female A112G mice than wild type A112A mice*  
Yong Zhang, Devon Collins, Mary Jeanne Kreek, The Rockefeller University, New York, NY
- 2 *Oprm1 A112G, a single nucleotide polymorphism, alters expression of stress-responsive genes in multiple brain regions in male and female mice*  
Devon Collins, Yong Zhang, Matthew Randesi, Joel Correa da Rosa, Mary Jeanne Kreek, The Rockefeller University, New York, NY
- 3 *Associations between the orexin (hypocretin) receptor 2 gene polymorphism Val308Ile and nicotine dependence found in genome-wide and subsequent association studies*  
Daisuke Nishizawa<sup>1</sup>, Shinya Kasai<sup>1</sup>, Junko Hasegawa<sup>1</sup>, Naomi Sato<sup>2</sup>, Hidetaka Yamada<sup>2</sup>, Fumihiko Tanioka<sup>3</sup>, Makoto Nagashima<sup>4</sup>, Hiroshi Ujike<sup>5</sup>, Ryota Hashimoto<sup>6</sup>, Tomio Arai<sup>7</sup>, Seiji Mori<sup>7</sup>, Motoji Sawabe<sup>8</sup>, Makiko Naka-Mieno<sup>9</sup>, Yoshiji Yamada<sup>8</sup>, Miki Yamada<sup>8</sup>, Noriko Sato<sup>8</sup>, Masaaki Muramatsu<sup>8</sup>, Masashi Tanaka<sup>10</sup>, Masakazu Hayashida<sup>11</sup>, Haruhiko Sugimura<sup>2</sup>, Kazutaka Ikeda<sup>1</sup>, <sup>1</sup>Tokyo Metropolitan Institute of Medical Science, Setagaya-ku, Japan, <sup>2</sup>Hamamatsu University School of Medicine, Hamamatsu, Japan, <sup>3</sup>Iwata City Hospital, Iwata, Japan, <sup>4</sup>Toho University Sakura Medical Center, Sakura, Japan, <sup>5</sup>Ujike Nishiguchi Clinic, Okayama, <sup>6</sup>Osaka University Graduate School of Medicine, Osaka, Japan, <sup>7</sup>Tokyo Metropolitan Geriatric Hospital, Tokyo, <sup>8</sup>Tokyo Medical and Dental University, Tokyo, Japan, <sup>9</sup>Jichi Medical University, Shimotsuke, Japan, <sup>10</sup>Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan, <sup>11</sup>Juntendo University School of Medicine, Tokyo, Japan
- 4 *Gender-specific association of functional PDYN 68-base pair repeats with cannabis exposure in an African-American cohort*  
Vadim Yuferov, The Rockefeller University, New York, NY
- 5 *Gene-environment correlation in affiliating with substance using friends from childhood to young adulthood*  
Cristina Bares<sup>1</sup>, Berenice Castillo<sup>1</sup>, Kenneth Kendler<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Virginia Commonwealth University, Richmond, VA

**POSTER I**  
**STIMULANTS PRECLINICAL I**

**Sapphire ABC/EFG**  
**11:00 - 1:00 PM**

- 6 *The Cocaine Biobank: A repository of biological samples from genetically characterized outbred rats that exhibit compulsive-like escalation of cocaine self-administration*  
Olivier George<sup>1</sup>, Lisa Maturin<sup>1</sup>, Giordano De Guglielmo<sup>1</sup>, Molly Brennan<sup>1</sup>, Leah Solberg-Woods<sup>2</sup>, Dana Conlisk<sup>1</sup>, Abraham Palmer<sup>1</sup>, <sup>1</sup>The Scripps Research Institute, La Jolla, CA, <sup>2</sup>Wake Forest University School of Medicine, Winston-Salem, NC
- 7 *The effect of a recombinant humanized anti-cocaine monoclonal antibody on the urinary clearance of cocaine and metabolites in rats*  
Jordan Marckel<sup>1</sup>, Hanna Wetzel<sup>2</sup>, Andrew Norman<sup>1</sup>, Hassane Amlal<sup>2</sup>, <sup>1</sup>University of Cincinnati, College of Medicine, Cincinnati, OH, <sup>2</sup>University of Cincinnati, Cincinnati, OH
- 8 *Repeated cocaine and novel environmental exposures have divergent effects on locus coeruleus cFOS expression and forebrain region monoamine concentrations*  
Michael Lisieski, Klevis Karavidha<sup>1</sup>, Ali Gheidi<sup>2</sup>, Rafael Garibyan<sup>1</sup>, Alana Conti<sup>3</sup>, Jonathan Morrow<sup>4</sup>, Shane Perrine<sup>3</sup>, <sup>1</sup>Wayne State University School of Medicine, Detroit, MI, <sup>2</sup>University of Michigan Medical School, Ann Arbor, MI, <sup>3</sup>Wayne State University, Detroit, MI, <sup>4</sup>University of Michigan, Ann Arbor, MI
- 9 *Expression of DeltaFosB in taurine-cocaine treated rat brains*  
Tianna Irving<sup>1</sup>, Ayana Cole<sup>2</sup>, Temitayo Adebawale<sup>3</sup>, Cladimar Vasquez<sup>2</sup>, Ugochukwu Akpara<sup>4</sup>, Rina Liang<sup>3</sup>, Kaliris Salas-Ramirez<sup>5</sup>, Avery Villa-Gonzalez<sup>3</sup>, <sup>1</sup>TRACC Training Grant, Elmont, NY, <sup>2</sup>CUNY School of Medicine, New York, NY, <sup>3</sup>The City College of New York, New York, NY, <sup>4</sup>TRACC Training Grant, Brooklyn, NY, <sup>5</sup>The Sophie Davis School of Biomedical Education, New York, NY
- 10 *Role of ventral tegmental area serum- and glucocorticoid-inducible kinase 1 (SGK1) catalytic activity and phosphorylation in drug-related behaviors*  
Marie Doyle<sup>1</sup>, Vedrana Bali<sup>1</sup>, Sarah Cooper<sup>1</sup>, Sophia Kaska<sup>1</sup>, Michelle Mazei-Robison<sup>1</sup>, Shane Perrine<sup>2</sup>, <sup>1</sup>Michigan State University, East Lansing, MI, <sup>2</sup>Wayne State University, Detroit, MI
- 11 *Hypocretin/orexin innervation within ventral midbrain: Afferent topography and function in psychostimulant use disorders*  
Steven Simmons, Rose Martorana, Taylor Gentile, Helene Philogene, Scott Rawls, John Muschamp, Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- 12 *Opposing action of dynorphin and orexin in the posterior paraventricular nucleus of the thalamus: Cellular and behavioral evidence.*  
Remi Martin-Fardon, Marsida Kallupi, Olivier George, Paul Schweitzer, Alessandra Matzeu, The Scripps Research Institute, La Jolla, CA
- 13 *Orexin A in the posterior paraventricular nucleus of the thalamus promotes cocaine-seeking behavior: Differential hypothalamic activation during abstinence.*  
Alessandra Matzeu, Remi Martin-Fardon, The Scripps Research Institute, La Jolla, CA
- 14 *Reconsolidation of cocaine reward memory requires NMDA-GSK3 signaling*  
Xiangdang Shi<sup>1</sup>, Eva Von Weltin<sup>2</sup>, Ellen Unterwald<sup>1</sup>, <sup>1</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA, <sup>2</sup>Temple University, Philadelphia, PA
- 15 *Remembering addictive behaviours: Effect of cocaine-associated stimuli on memory formation*  
Francesco Leri, Michael Wolter, Boyer Winters, Ethan Huff, University of Guelph, Guelph, ON, Canada
- 16 *SNC80, a delta opioid receptor agonist, reduces cocaine-induced increases in CRF mRNA in female rats*  
Krista Connelly, Ellen Unterwald, Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- 17 *Comparison of the reinstatement of cocaine-seeking in remission induced by cues, drug or a drug/cue combination – an IVSA study in rats*  
Elaine Keogh<sup>1</sup>, Sharon Smith<sup>2</sup>, David Heal<sup>2</sup>, <sup>1</sup>RenaSci Ltd, Nottingham, United Kingdom, <sup>2</sup>RenaSci Ltd, Nottingham
- 18 *The wrong crowd: Social influences on cue-induced cocaine seeking.*  
Lindsey Hammerslag, Joshua Beckmann, Michael Bardo, University of Kentucky, Lexington, KY

- 19 *A data analysis strategy for rodent self-administration studies*  
Sharon Rowton<sup>1</sup>, Kelly Ashcroft-Hawley<sup>1</sup>, Beatriz Rocha<sup>2</sup>, <sup>1</sup>Covance Laboratories, Harrogate, United Kingdom, <sup>2</sup>Covance, Princeton, NJ

**POSTER I  
PERINATAL**

**Sapphire ABC/EFG  
11:00 - 1:00 PM**

- 20 *Perceived stressors reported by mothers with Opioid Use Disorder: Qualitative findings from an inpatient substance use program*  
Angela Moreland, Aimee McRae-Clark, Medical University of South Carolina, Charleston, SC
- 21 *Post-birth treatment outcomes in pregnant, methadone-maintained women*  
Jennifer Ellis<sup>1</sup>, Meagan Carr<sup>2</sup>, Molly Cairncross<sup>3</sup>, Cara Struble<sup>1</sup>, Leslie Lundahl<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>Eastern Michigan University, Detroit, MI, <sup>3</sup>University of Windsor, Windsor, ON, Canada
- 22 *A pilot randomized clinical trial of Bupropion Sustained Release as an aid for smoking cessation during pregnancy: Challenges of recruitment and retention of subjects*  
Valentina Fokina<sup>1</sup>, Cheryl Oncken<sup>2</sup>, Richard Feinn<sup>3</sup>, Holly West<sup>1</sup>, Shannon Clark<sup>1</sup>, Gary Hankins<sup>1</sup>, Mahmoud Ahmed<sup>1</sup>, Tatiana Nanovskaya<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX, <sup>2</sup>University of Connecticut Health Center, Farmington, CT, <sup>3</sup>Frank H Netter, MD, School of Medicine, Medical Sciences, Quinnipiac University, North Haven, CT
- 23 *Anticipated vs. actual postpartum contraceptive use among pregnant cigarette smokers*  
Sarah Heil<sup>1</sup>, Ivori Zvorsky<sup>2</sup>, Allison Kurti<sup>1</sup>, Ira Bernstein<sup>1</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT
- 24 *Examining interrelationships between delay discounting and simulated demand for cigarettes among pregnant women*  
Tyler Nighbor<sup>1</sup>, Ivori Zvorsky<sup>2</sup>, Allison Kurti<sup>1</sup>, Warren Bickel<sup>3</sup>, Derek Reed<sup>4</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>3</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>4</sup>University of Kansas, Lawrence, KS
- 25 *A new method with improved sensitivity of the detection of marijuana metabolite in human umbilical cord tissue using 2-D GC/MSMS*  
Jason Hulen, Joseph Jones, Mary Jones, Andre Sukta, United States Drug Testing Laboratories, Des Plaines, IL
- 26 *Trends in self-reported and biochemically tested marijuana use among pregnant adolescents and adults in California from 2009-2016*  
Kelly Young-Wolff, Lue-Yen Tucker, Stacey Alexeeff, Mary Anne Armstrong, Amy Conway, Constance Weisner, Nancy Goler, Kaiser Permanente Northern California, Oakland, CA

**POSTER I  
ADOLESCENT DRUG ABUSE I**

**Sapphire ABC/EFG  
11:00 - 1:00 PM**

- 27 *Contributions of sexual violence perpetration and victimization to drug and alcohol abuse risk in adolescence: A four-year longitudinal study*  
Sara Stein<sup>1</sup>, Philip Veliz<sup>1</sup>, Yasamin Kusunoki<sup>2</sup>, Carol Boyd<sup>1</sup>, Quyen Ngo<sup>3</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan, School of Nursing, Ann Arbor, MI, <sup>3</sup>University of Michigan Injury Prevention Center, Ann Arbor, MI



- 28 *Association between youth recall of alcohol marketing across venues and underage drinking*  
Joy Gabrielli<sup>1</sup>, Mike Stoolmiller<sup>2</sup>, Zoe Brennan<sup>3</sup>, Susanne Tanski<sup>4</sup>, Auden McClure<sup>4</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Enfield, NH, <sup>2</sup>Michigan State University, Lansing, MI, <sup>3</sup>Department of Biomedical Data Science at Dartmouth, Hanover, NH, <sup>4</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH
- 29 *Tobacco incidence in school-attending Brazilian adolescents: Contextual factors and comorbid patterns*  
Marcos Ribeiro<sup>1</sup>, Silvia Martins<sup>2</sup>, Thiago Fidalgo<sup>1</sup>, Zila M. Sanchez<sup>1</sup>, Sheila C. Caetano<sup>1</sup>, <sup>1</sup>Universidade Federal de São Paulo, São Paulo, <sup>2</sup>Columbia University, New York, NY
- 30 *A videogame intervention for tobacco product use prevention in adolescents*  
Lynn Fiellin, Yale University, New Haven, CT
- 31 *High school adolescents use several types of e-cigarette devices*  
Asti Jackson<sup>1</sup>, Grace Kong<sup>1</sup>, Deepa Camenga<sup>1</sup>, Meghan Morean<sup>2</sup>, Krysten Bold<sup>1</sup>, Dana Cavallo<sup>1</sup>, Patricia Simon<sup>1</sup>, Ran Wu<sup>1</sup>, Suchitra Krishnan-Sarin<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Oberlin College, Oberlin, OH
- 32 *Has alternative tobacco product use influenced future cigarette smoking intention differently in male and female adolescents from 2011 to 2015?*  
Luis Segura<sup>1</sup>, Julian Santaella-Tenorio<sup>1</sup>, Shivani Mantha<sup>2</sup>, Pia Mauro<sup>1</sup>, Daniel Giovenco<sup>1</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY
- 33 *Trends in cannabis and nicotine co-use among adolescent cannabis users*  
Ashley Knapp<sup>1</sup>, Dustin Lee<sup>2</sup>, Joy Gabrielli<sup>3</sup>, Jacob Borodovsky<sup>1</sup>, Samantha Auty<sup>4</sup>, Alan Budney<sup>5</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Geisel School of Medicine at Dartmouth, Enfield, NH, <sup>4</sup>Geisel School of Medicine at Dartmouth, Lebanon, <sup>5</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH
- 34 *Longitudinal brain metabolites changes in young marijuana users*  
Christine Cloak<sup>1</sup>, Thomas Ernst<sup>2</sup>, Linda Chang<sup>3</sup>, <sup>1</sup>University of Maryland, School of Medicine, Baltimore, MD, <sup>2</sup>Department of Medicine, John A. Burns School of Medicine, University of Hawaii and Queen's Medical Center, Baltimore, MD, <sup>3</sup>John A. Burns School of Medicine, Honolulu, HI
- 35 *Adding working memory training to contingency management for adolescent cannabis misuse: A sequential multiple assignment randomized trial*  
Catherine Stanger<sup>1</sup>, Emily Scherer<sup>1</sup>, Ashley Knapp<sup>2</sup>, Hoa Vo<sup>3</sup>, Marc Fishman<sup>3</sup>, Alan Budney<sup>4</sup>, <sup>1</sup>Dartmouth College, Hanover, NH, <sup>2</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>3</sup>Mountain Manor Treatment Center, Baltimore, MD, <sup>4</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH
- 36 *Is heavy cannabis use associated with reduced motivation among adolescents?*  
Ileana Pacheco-Colon, Raul Gonzalez, Florida International University, Miami, FL
- 37 *Investigating the relationship between perceived availability of marijuana and marijuana use among adolescents in Chile, Argentina, and Uruguay over time*  
Julia Schleimer<sup>1</sup>, Ariadne Rivera-Aguirre<sup>2</sup>, Alvaro Castillo-Carniglia<sup>2</sup>, Hannah Sybil Laqueur<sup>2</sup>, Silvia Martins<sup>1</sup>, Magdalena Cerda<sup>2</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>University of California Davis, Sacramento, CA
- 38 *Medical marijuana laws, dispensary status and design, and past 30-day youth marijuana and heavy marijuana use: A 46 state analysis, 1991-2015*  
Julie Johnson<sup>1</sup>, Renee Johnson<sup>2</sup>, Abenaa Jones<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD
- 39 *Perceptions of primary care services among Veterans with opioid use disorder in the Veterans Health Administration*  
Audrey Jones<sup>1</sup>, Ying Suo<sup>2</sup>, Adam Gordon<sup>2</sup>, <sup>1</sup>VA Salt Lake City Health Care System, Salt Lake City, UT,

<sup>2</sup>University of Utah, Salt Lake City, UT

40 *Predictors of nonmedical prescription opioid use in adolescents*

Junhan Cho<sup>1</sup>, Lorraine Kelley-Quon<sup>2</sup>, Afton Kechter<sup>1</sup>, Adam Leventhal<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>Children's Hospital Los Angeles, Los Angeles, CA

41 *Peer norms and access to prescription drugs in the home are associated with nonmedical prescription opioid use among adolescents*

Kathleen Egan<sup>1</sup>, Eric Gregory<sup>2</sup>, Amy Elliott<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL,

<sup>2</sup>Community Survey Solutions, LLC, Bowling Green, KY

42 *Association of nonmedical prescription opioid use with subsequent heroin use Initiation in adolescents*

Lorraine Kelley-Quon<sup>1</sup>, David Stong<sup>2</sup>, Junhan Cho<sup>3</sup>, Afton Kechter<sup>3</sup>, Adam Leventhal<sup>3</sup>, <sup>1</sup>Children's Hospital Los Angeles, Los Angeles, CA, <sup>2</sup>University of California San Diego, La Jolla, CA, <sup>3</sup>University of Southern California, Los Angeles, CA

43 *Receipt of medications for opioid use disorder among youth: Data from 8 health systems*

Sarah Bagley<sup>1</sup>, Laura Chavez<sup>2</sup>, Jordan Braciszewski<sup>3</sup>, Gavin Bart<sup>4</sup>, Bobbi Jo Yarborough<sup>5</sup>, Gwen Lapham<sup>6</sup>, Denise Boudreau<sup>6</sup>, Jeffrey Samet<sup>1</sup>, Andrew Saxon<sup>7</sup>, Cynthia Campbell<sup>8</sup>, Kathy Bradley<sup>6</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Ohio State University, Columbus, OH, <sup>3</sup>Henry Ford Health System, Detroit, MI, <sup>4</sup>University of Minnesota, Minneapolis, MN, <sup>5</sup>Kaiser Permanente Northwest Center for Health Research, Portland, OR, <sup>6</sup>Kaiser Permanente Washington Health Research Institute, Seattle, WA, <sup>7</sup>VA Puget Sound Healthcare System, Seattle, WA, <sup>8</sup>Kaiser Permanente North California Division of Research, Oakland, CA

44 *Injectors v. non-injectors: Baseline sample differences from a study of vivitrol treatment for youth with opioid use disorder*

Shannon Mitchell<sup>1</sup>, Laura Monico<sup>1</sup>, Robert Schwartz<sup>1</sup>, Jan Gryczynski<sup>1</sup>, Kevin O'Grady<sup>2</sup>, Marc Fishman<sup>3</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, College Park, MD, <sup>3</sup>Mountain Manor Treatment Center, Baltimore, MD

45 *Substance use and mental health trends in the adolescent population in Ontario, Canada*

Bruna Brands<sup>1</sup>, Angela Boak<sup>2</sup>, Robert Mann<sup>2</sup>, Hayley Hamilton<sup>2</sup>, <sup>1</sup>Health Canada, Toronto, ON, Canada, <sup>2</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada

46 *Association of concern over societal increases in discrimination with substance use and mental health amongst adolescents during 2016-2017*

Adam Leventhal, Junhan Cho, University of Southern California, Los Angeles, CA

47 *Does a major depression precursor state influence adolescent-onset heroin use? Epidemiologic case-control evidence*

Alyssa Vanderziel<sup>1</sup>, James Anthony<sup>2</sup>, <sup>1</sup>Michigan State University, East Lansing, MI, <sup>2</sup>Michigan State University, Lansing, MI

48 *Depression among adolescent newly incident cannabis users from 2012 to 2015*

Natalie Gukasyan<sup>1</sup>, Eric Strain<sup>2</sup>, <sup>1</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD

49 *Effects of modes of nicotine administration on depression*

Sophia Holmqvist<sup>1</sup>, Sandra Brown<sup>2</sup>, Kevin Cummins<sup>2</sup>, <sup>1</sup>University of California San Diego, San Diego, CA, <sup>2</sup>University of California San Diego, La Jolla, CA

**POSTER I  
CANNABINOIDS/THC**

**Sapphire ABC/EFG  
11:00 - 1:00 PM**

- 50 *Synthetic cannabinoid AM2201 induces epileptic seizures by enhancing glutamatergic transmission in the hippocampus*  
Masahiko Funada<sup>1</sup>, Mika Takebayashi-Ohsawa<sup>2</sup>, Tomiyama Kenichi<sup>3</sup>, <sup>1</sup>NIMH, NCNP, Kodaira, <sup>2</sup>NIMH, NCNP, Kodaira, Japan, <sup>3</sup>National Center of Neurology and Psychiatry, Kodaira, Japan
- 51 *Cannabinoid-like effects of five novel MDMB and FUBINACA synthetic cannabinoids*  
Michael Forster, Michael Gatch, University of Texas Health Science Center, Fort Worth, TX
- 52 *Synthetic and natural cannabinoid use in relation to psychosis: Evaluation of childhood trauma*  
Anahita Bassir Nia<sup>1</sup>, Claire Mann<sup>1</sup>, Sharron Spriggs<sup>1</sup>, Charles Perkel<sup>1</sup>, Lingyun Li<sup>2</sup>, Daniel DeFransosco<sup>1</sup>, Samantha Jankowski<sup>1</sup>, Nina-Lucia Rodriguez<sup>1</sup>, Hadi Estakhri<sup>1</sup>, Anna Oprescu<sup>1</sup>, Robert Linhardt<sup>3</sup>, Igor Galynker<sup>1</sup>, Yasmin Hurd<sup>1</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>2</sup>New York State Department of Health, New York, NY, <sup>3</sup>Rensselaer Polytechnic Institute, Troy, NY
- 53 *Effects of smoked cannabidiol on cardiovascular, subjective and reinforcing effects of smoked THC*  
Leslie Lundahl, Mark Greenwald, Wayne State University, Detroit, MI
- 54 *Pilot testing a novel signal-detection task of cannabis-cue attentional bias*  
Joseph Alcorn, William Stoops<sup>1</sup>, Craig Rush<sup>1</sup>, Joshua Lile<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 55 *Biological correlates of self-reported new and continued abstinence in cannabis cessation treatment clinical trials*  
Nathaniel Baker, Kevin Gray, Brian Sherman, Kristen Morella, Gregory Sahlem, Amanda Wagner, Aimee McRae-Clark, Medical University of South Carolina, Charleston, SC
- 56 *Predictors of craving and substance use among patients with alcohol, tobacco, cannabis or opiates addictions: Commonalities and specificities across substances*  
Fuschia Serre<sup>1</sup>, Melina Fatseas<sup>2</sup>, Cecile Denis<sup>3</sup>, Joel Swendsen<sup>4</sup>, Marc Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, <sup>2</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>3</sup>University of Pennsylvania, Philadelphia, PA, <sup>4</sup>Université de Bordeaux, Bordeaux, France
- 57 *Real-time assessment of marijuana craving, mood, and anxiety among college student marijuana users*  
Kristina Phillips, Michael Phillips, Kerry Duck, University of Northern Colorado, Greeley, CO
- 58 *Demographic and clinical predictors of treatment retention in a randomized, placebo-controlled trial of quetiapine for Cannabis Use Disorder: A preliminary analysis*  
Mariely Hernandez<sup>1</sup>, John Mariani<sup>2</sup>, C. Jean Choi<sup>3</sup>, Daniel Brooks<sup>2</sup>, Frances Levin<sup>3</sup>, <sup>1</sup>The City University of New York, New York, NY, <sup>2</sup>New York State Psychiatric Institute, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY
- 59 *Assessing cannabis use outcomes in a clinical trial for Cannabis Use Disorder: Self-report, qualitative urine toxicology and quantitative urine toxicology approaches*  
Nicolas Schlienz<sup>1</sup>, Dustin Lee<sup>1</sup>, Erin Martin<sup>1</sup>, Ryan Vandrey<sup>2</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Behavioral Pharmacology Research Unit, Johns Hopkins Hospital, Baltimore, MD
- 60 *Measuring medicinal cannabis outcomes: Inconsistency between symptom outcome measures and patient perception of benefits*  
Mallory Loflin<sup>1</sup>, Travis Hyke<sup>2</sup>, Marcel Bonn-Miller<sup>3</sup>, <sup>1</sup>Veterans Affairs San Diego Healthcare System, San Diego, CA, <sup>2</sup>Palo Alto University, Los Altos, CA, <sup>3</sup>University of Pennsylvania, Southmont, NC
- 61 *Associations between abstinence and reduction in marijuana use and changes in mental and physical health well-being among primary care patients in Los Angeles*  
Chukwuemeka Okafor<sup>1</sup>, Steve Shoptaw<sup>1</sup>, Melvin Rico<sup>2</sup>, Lillian Gelberg<sup>2</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>University of California, Department of Family Medicine, Los Angeles, CA
- 62 *Factors related to severe substance use and substance use treatment attendance among hospitalized HIV infected patients: A machine learning approach*  
Daniel Feaster<sup>1</sup>, Yue Pan<sup>1</sup>, Raul Mandler<sup>2</sup>, Petra Jacobs<sup>3</sup>, Carlos del Rio<sup>4</sup>, Lisa Metsch<sup>5</sup>, <sup>1</sup>University of Miami

- Miller School of Medicine, Miami, FL, <sup>2</sup>Center for the Clinical Trials Network NIDA, Bethesda, MD, <sup>3</sup>National Institutes of Health, National Institute on Drug Abuse, Center for the Clinical Trials Network, Bethesda, MD, <sup>4</sup>Emory University, Atlanta, GA, <sup>5</sup>Columbia University, New York, NY
- 63 *Substance use and peer use from adolescence to adulthood in the MTA*  
Traci Kennedy<sup>1</sup>, Andrea Howard<sup>2</sup>, James Swanson<sup>3</sup>, John Mitchell<sup>4</sup>, Annamarie Stehli<sup>3</sup>, Brooke Molina<sup>1</sup>,  
<sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>Carleton University, Department of Psychology, Ottawa, ON, Canada, <sup>3</sup>University of California Irvine, Irvine, CA, <sup>4</sup>Duke University School of Medicine, Durham, NC
- 64 *Patterns of drug use among gay men and their relationship partners: A latent class analysis*  
Gabriel Robles<sup>1</sup>, Jeffrey Parsons<sup>2</sup>, Mark Pawson<sup>3</sup>, Tyrel Starks<sup>2</sup>, <sup>1</sup>Hunter College Center for HIV Educational Studies & Training, New York, NY, <sup>2</sup>Hunter College, CUNY, New York City, NY, <sup>3</sup>Graduate Center and CHEST, New York, NY
- 65 *Cannabis in end-of-life care: Examining the attitudes and practices of palliative care providers*  
Rachel Luba<sup>1</sup>, Mitch Earleywine<sup>1</sup>, Melissa Slavin<sup>1</sup>, Stacey Farmer<sup>2</sup>, <sup>1</sup>State University of New York at Albany, Albany, NY, <sup>2</sup>McLean Hospital, Brain Imaging Center, Belmont, MA
- 66 *Potential risks of cannabis vaping and edible use*  
Connor Jones, Madeline Meier, Arizona State University, Tempe, AZ
- 67 *Changes in driving under the influence of cannabis in the US from 2001-2002 to 2012-2013*  
Bradley Kerridge<sup>1</sup>, Roger Pickering<sup>2</sup>, June Ruan<sup>2</sup>, Patricia Chou<sup>2</sup>, <sup>1</sup>NIH, NIAAA, Bethesda, MD, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 68 *Driving under the influence of cannabis among medical cannabis patients*  
Erin Bonar<sup>1</sup>, Brooke Arterberry<sup>1</sup>, James Cranford<sup>1</sup>, Maureen Walton<sup>2</sup>, Kipling Bohnert<sup>2</sup>, Mark Ilgen<sup>1</sup>,  
<sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan, Addiction Center, Ann Arbor, MI
- 69 *Evaluating perceived risk of driving under the influence of cannabis and driving behavior*  
Jacob Borodovsky<sup>1</sup>, Lisa Marsch<sup>1</sup>, Emily Scherer<sup>2</sup>, Alan Budney<sup>3</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>2</sup>Dartmouth College, Hanover, NH, <sup>3</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH
- 70 *Sex differences in the effects of cannabis on simulated driving performance*  
Andrew Fares<sup>1</sup>, Justin Matheson<sup>1</sup>, Robert Mann<sup>1</sup>, Bernard LeFoll<sup>1</sup>, Christine Wickens<sup>1</sup>, Bruna Brands<sup>2</sup>,  
<sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>Health Canada, Toronto, ON, Canada

## POSTER I HIV

**Sapphire ABC/EFG**  
**11:00 - 1:00 PM**

- 71 *Art adherence among opiate addicted patients treated with naltrexone: Oral and implantable*  
Tatiana Yaroslavtseva<sup>1</sup>, Elena Blokhina<sup>1</sup>, Evgeny Krupitsky<sup>2</sup>, Elena Vladimirovna Verbitskaya<sup>1</sup>, Edwin Zvartau<sup>1</sup>, Vladimir Palatkin<sup>3</sup>, Natalia Bushara<sup>3</sup>, Robert Gross<sup>4</sup>, George Woody<sup>4</sup>, Sabrina Poole<sup>4</sup>, <sup>1</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russian Federation, <sup>2</sup>V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russian Federation, <sup>3</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, <sup>4</sup>University of Pennsylvania, Philadelphia, PA
- 72 *Mixed-methods study estimating the impact and feasibility of providing HIV antiretroviral treatment (ART) and opioid agonist therapy (OAT) in prison and upon release on HIV incidence among people who inject drugs (PWID) in Tijuana, Mexico*  
Annick Borquez<sup>1</sup>, Daniela Abramovitz<sup>1</sup>, Leo Beletsky<sup>2</sup>, Steffanie Strathdee<sup>1</sup>, Natasha Martin<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>Northeastern University, Boston, MA

- 73 *HIV clinic-based buprenorphine versus methadone impact on the HIV care continuum in Vietnam: BRAVO study 6-Month outcomes*  
Philip Todd Korthuis<sup>1</sup>, Gavin Bart<sup>2</sup>, Lynn Kunkel<sup>1</sup>, Thuan Nguyen<sup>1</sup>, Giang Le<sup>3</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>University of Minnesota, Minneapolis, MN, <sup>3</sup>Hanoi Medical University, Hanoi, Viet Nam
- 74 *Engaging in the HIV care continuum: Do opioid users differ from those who use other substances?*  
Lacey Critchley<sup>1</sup>, Adam Carrico<sup>1</sup>, Raul Mandler<sup>2</sup>, Petra Jacobs<sup>3</sup>, Allan Rodriguez<sup>1</sup>, Carlos del Rio<sup>4</sup>, Lisa Metsch<sup>5</sup>, Daniel Feaster<sup>6</sup>, <sup>1</sup>University of Miami, Miami, FL, <sup>2</sup>Center for the Clinical Trials Network NIDA, Bethesda, MD, <sup>3</sup>National Institutes of Health, National Institute on Drug Abuse, Center for the Clinical Trials Network, Bethesda, MD, <sup>4</sup>Emory University, Atlanta, GA, <sup>5</sup>Columbia University, New York, NY, <sup>6</sup>University of Miami Miller School of Medicine, Miami, FL
- 75 *HIV continuum of care disparities among Latinos with a history of injection drug use*  
Diana Sheehan, Florida International University, Miami, FL
- 76 *Structural determinants of community viral load trends in New York City (2009-2013)*  
Amar Mandavia<sup>1</sup>, Raksha Kandlur<sup>1</sup>, Daniel Samost<sup>1</sup>, Videesha Bordoloi<sup>1</sup>, Gurmeher Juneja<sup>1</sup>, Nabila El-Bassel<sup>2</sup>, <sup>1</sup>Columbia University, Teachers College, New York, NY, <sup>2</sup>Columbia University, New York, NY
- 77 *Reported substance use and HIV testing among emergency department patients who complete a tablet-based intervention*  
Ian Aronson<sup>1</sup>, Charles Cleland<sup>2</sup>, Lisa Marsch<sup>3</sup>, Theodore Bania<sup>4</sup>, <sup>1</sup>Digital Health Empowerment / NDRI, Brooklyn, NY, <sup>2</sup>NYU Rory Meyers College of Nursing, New York, NY, <sup>3</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>4</sup>Mount Sinai School of Medicine, New York, NY
- 78 *Interest in HIV PrEP and medications to treat opioid use disorder at a drug detoxification center*  
Sabrina Assoumou<sup>1</sup>, Samantha Paniagua<sup>1</sup>, Curt Beckwith<sup>2</sup>, Jianing Wang<sup>3</sup>, Jeffrey Samet<sup>1</sup>, Jonathan Hall<sup>3</sup>, Benjamin Linas<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Brown University, Providence, RI, <sup>3</sup>Boston Medical Center, Boston, MA
- 79 *Length of time injecting and its association with receptive syringe sharing among persons who inject drugs in Philadelphia, PA*  
Jennifer Shinefeld<sup>1</sup>, Sarah Bass<sup>2</sup>, Robert Whitaker<sup>2</sup>, Kathleen Brady<sup>1</sup>, <sup>1</sup>Philadelphia Department of Public Health, Philadelphia, PA, <sup>2</sup>Temple University, Philadelphia, PA
- 80 *Prediction of viral suppression and HIV treatment adherence among hospitalized HIV infected patients using supervised learning algorithms*  
Yue Pan<sup>1</sup>, Lisa Metsch<sup>2</sup>, Raul Mandler<sup>3</sup>, Petra Jacobs<sup>4</sup>, Carlos del Rio<sup>5</sup>, Daniel Feaster<sup>1</sup>, <sup>1</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Center for the Clinical Trials Network NIDA, Bethesda, MD, <sup>4</sup>National Institutes of Health, National Institute on Drug Abuse, Center for the Clinical Trials Network, Bethesda, MD, <sup>5</sup>Emory University, Atlanta, GA
- 81 *Do persons with opioid use disorder and injection-related infections really need prolonged hospitalizations to complete intravenous antibiotic therapy?*  
Laura Fanucchi<sup>1</sup>, Sharon Walsh<sup>2</sup>, Alice Thornton<sup>1</sup>, Paul Nuzzo<sup>2</sup>, Michelle Lofwall<sup>1</sup>, <sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY
- 82 *Effects of reduced drug use on HIV outcomes in primary care patients*  
Efrat Aharonovich<sup>1</sup>, Malka Stohl<sup>2</sup>, Deborah Hasin<sup>3</sup>, <sup>1</sup>Columbia University Medical Center, New York, NY, <sup>2</sup>New York State Psychiatric Institute, New York, NY, <sup>3</sup>Columbia University, New York, NY
- 83 *Effectiveness of an addiction treatment program integrated in an HIV clinic: Results of a 4-year program in Ho Chi Minh, Vietnam*  
Cecile Denis<sup>1</sup>, Loan Nguyen<sup>2</sup>, Huy Tran<sup>2</sup>, Song Chi Trung Nguyen<sup>3</sup>, Vincent Trias<sup>2</sup>, Augustin Voisin<sup>4</sup>, Lisa Huang<sup>2</sup>, Son Mai Thi Hoai<sup>5</sup>, Giang Le Truong<sup>5</sup>, Marc Auriacombe<sup>6</sup>, Jean-Pierre Daulouede<sup>4</sup>, David Metzger<sup>1</sup>,

Charles O'Brien<sup>7</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Expertise France, France, France, <sup>3</sup>Expertise France Vietnam, Ho Chi Minh City, Vietnam, <sup>4</sup>Bizia Addiction Clinic, Bayonne, <sup>5</sup>HCMC AIDS Committee, Ho Chi Minh City, Vietnam, <sup>6</sup>Université de Bordeaux, Bordeaux, <sup>7</sup>University of Pennsylvania, VA Medical Center, Philadelphia, PA

- 84 *The role of nominal group technique in scaling up opioid agonist treatment in Ukraine*  
Lynn Madden<sup>1</sup>, Anna Meteliuk<sup>2</sup>, Scott Farnum<sup>1</sup>, Tetiana Fomenko<sup>3</sup>, Ruthanne Marcus<sup>4</sup>, Iryna Pykalo<sup>5</sup>, Katherine LaMonaca<sup>4</sup>, Declan Barry<sup>4</sup>, Frederick Alice<sup>4</sup>, <sup>1</sup>APT Foundation, Inc., New Haven, CT, <sup>2</sup>ICF Alliance for Public Health, Kyiv, Ukraine, <sup>3</sup>ICF Alliance for Public Health, Kiev, Ukraine, <sup>4</sup>Yale University School of Medicine, New Haven, CT, <sup>5</sup>Ukrainian Institute on Public Health Policy, Kyiv, Ukraine
- 85 *Mortality rate among people who Inject drugs (PWID) in Haiphong, Vietnam: High burden of probable infectious causes*  
Nicolas Nagot<sup>1</sup>, Don Des Jarlais<sup>2</sup>, the DRIVE Study team<sup>1</sup>, <sup>1</sup>University of Montpellier, Montpellier, France, <sup>2</sup>Icahn School of Medicine at Mount Sinai, New York, NY
- 86 *Double stigma among HIV-positive PWID in Russia and health care outcomes*  
Karsten Lunze<sup>1</sup>, Debbie Cheng<sup>1</sup>, Maryia Vetrova<sup>2</sup>, Christine Lloyd-Travaglini<sup>1</sup>, Elena Blokhina<sup>3</sup>, Sally Bendiks<sup>4</sup>, Natalia Gnatienco<sup>1</sup>, Jason Luoma<sup>5</sup>, Evgeny Krupitsky<sup>6</sup>, Dmitry Lioznov<sup>3</sup>, Jeffrey Samet<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, <sup>3</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russian Federation, <sup>4</sup>Boston Medical Center, Boston, MA, <sup>5</sup>Portland Psychotherapy Clinic, Research, & Training Center, Portland, OR, <sup>6</sup>V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russian Federation

## POSTER I PRESCRIPTION OPIOIDS

**Sapphire ABC/EFG**  
**11:00 - 1:00 PM**

- 87 *Development of a brief screening tool to assess prescription opioid dependence*  
Suzanne Nielsen<sup>1</sup>, Briony Larance<sup>2</sup>, Gabrielle Campbell<sup>2</sup>, Louisa Degenhardt<sup>3</sup>, Nicholas Lintzeris<sup>4</sup>, Fiona Blyth<sup>5</sup>, Michael Farrell<sup>3</sup>, Richard Mattick<sup>1</sup>, Raimondo Bruno<sup>6</sup>, <sup>1</sup>University of New South Wales, Sydney, Australia, <sup>2</sup>University of South Wales, Sydney, Australia, <sup>3</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>4</sup>Drug and Alcohol Services, South Eastern Sydney Local Health District, Surry Hills, Australia, <sup>5</sup>University of Sydney, Sydney, Australia, <sup>6</sup>University of Tasmania, Sydney, Australia
- 88 *The utility of the pain medication questionnaire to predict aberrant urine drug tests: Results from a prospective cohort study*  
Ben Morasco<sup>1</sup>, Travis Lovejoy<sup>1</sup>, Steven Dobscha<sup>1</sup>, Richard Deyo<sup>2</sup>, Megan Iacocca<sup>1</sup>, Stephanie Hyde<sup>2</sup>, Bobbi Jo Yarbrough<sup>3</sup>, <sup>1</sup>VA Portland Health Care System, Portland, OR, <sup>2</sup>Oregon Health & Science University, Portland, OR, <sup>3</sup>Kaiser Permanente Northwest Center for Health Research, Portland, OR
- 89 *Comparative effectiveness of non-opioid and long-term opioid therapy for pain and health-related outcomes*  
Ainhua Coloma-Carmona<sup>1</sup>, José Carballo<sup>1</sup>, Jesús Rodríguez-Marín<sup>1</sup>, Ana Pérez-Carbonell<sup>2</sup>, Carlos Van-der Hofstadt Román<sup>1</sup>, Roberto Secades Villa<sup>3</sup>, Sergio Fernandez-Artamendi<sup>4</sup>, <sup>1</sup>Miguel Hernández University, Elche, Spain, <sup>2</sup>General University Hospital of Elche, Elche, Spain, <sup>3</sup>University of Oviedo, Oviedo, Spain, <sup>4</sup>Universidad Loyola Andalucía, Sevilla, Spain
- 90 *Non-medical use of prescription drugs and health-related quality of life among the general population in Taiwan: Results from the 2014 National Survey of Substance Use*  
Shang-Chi Wu<sup>1</sup>, Wen-Ing Tsay<sup>2</sup>, Chuan-Yu Chen<sup>3</sup>, Jui Hsu<sup>2</sup>, Wei-J Chen<sup>4</sup>, <sup>1</sup>National Taiwan University,



- Epidemiology and Preventive Medicine, Taipei City, Taiwan Food and Drug Administration, Taipei,  
<sup>3</sup>National Yang-Ming University, Taipei, Taiwan, <sup>4</sup>National Taiwan University, Taipei City
- 91 *European opioid addiction treatment survey – EUROPAD – The France experience*  
 Manon Chevalier<sup>1</sup>, Jean-Pierre Daulouede<sup>2</sup>, Fuschia Serre<sup>3</sup>, Didier Touzeau<sup>4</sup>, Amine Benyamina<sup>5</sup>, Carolina Baran<sup>5</sup>, Pierre Villeger<sup>6</sup>, Melina Fatseas<sup>7</sup>, Marc Auriacombe<sup>3</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Bizia Addiction Clinic, Bayonne, <sup>3</sup>Université de Bordeaux, Bordeaux, <sup>4</sup>Addiction Clinic, CH Paul Guiraud, Bagneux, France, <sup>5</sup>Addiction Clinic, Paul Brousse Hospital, Villejuif, France, <sup>6</sup>Addiction Clinic, CH Esquirol, Limoges, France, <sup>7</sup>Centre Hospitalier Charles Perrens, Bordeaux, France
- 92 *Opioid prescriptions in the year prior to admission to opioid use disorder treatment*  
 Gillian Leichtling<sup>1</sup>, Daniel Hartung<sup>2</sup>, Kirbee Johnston<sup>2</sup>, Christi Hildebran<sup>1</sup>, Philip Todd Korthuis<sup>3</sup>,  
<sup>1</sup>HealthInsight, Portland, OR, <sup>2</sup>Oregon State University/ Oregon Health & Science University College of Pharmacy, Portland, OR, <sup>3</sup>Oregon Health & Science University, Portland, OR
- 93 *Comparing prescription opioids, methadone, and heroin rates from the treatment episode data set to the RADARS® System Treatment Center Programs*  
 Heather Olsen<sup>1</sup>, Stevan Severtson<sup>1</sup>, John Schwarz<sup>1</sup>, Matthew Ellis<sup>2</sup>, Theodore Cicero<sup>2</sup>, Richard Dart<sup>1</sup>, <sup>1</sup>Rocky Mountain Poison & Drug Center, Denver, CO, <sup>2</sup>Washington University, St. Louis, MO
- 94 *Differences between misusers of buprenorphine and other prescription opioids*  
 Howard Chilcoat<sup>1</sup>, Andrew Joyce<sup>2</sup>, Silvia Martins<sup>3</sup>, <sup>1</sup>Indivior Inc., Richmond, VA, <sup>2</sup>Venebio Group, LLC, North Chesterfield, VA, <sup>3</sup>Columbia University, New York, NY
- 95 *Prescription opioid sources for misuse in older adults*  
 Ty Schepis<sup>1</sup>, Christian Teter<sup>2</sup>, Sean McCabe<sup>3</sup>, <sup>1</sup>Texas State University, San Marcos, TX, <sup>2</sup>Psychopharmacology Consultant, Portland, ME, <sup>3</sup>University of Michigan, Ann Arbor, MI
- 96 *Sources of prescription drug misuse among US emerging adults*  
 Sean McCabe<sup>1</sup>, Carol Boyd<sup>1</sup>, Christian Teter<sup>2</sup>, Brady West<sup>1</sup>, Philip Veliz<sup>1</sup>, Jason Ford<sup>3</sup>, Corey Pomykacz<sup>3</sup>, Ty Schepis<sup>4</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Psychopharmacology Consultant, Portland, ME, <sup>3</sup>University of Central Florida, Orlando, FL, <sup>4</sup>Texas State University, San Marcos, TX
- 97 *How characteristics of nonmedical prescription opioid use in adolescence relates to substance use disorder symptoms in adulthood*  
 Philip Veliz<sup>1</sup>, John Schulenberg<sup>1</sup>, Carol Boyd<sup>1</sup>, Ty Schepis<sup>2</sup>, Sean McCabe<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Texas State University, San Marcos, TX
- 98 *Prevalence and predictors of driving after prescription opioid use in an adult emergency department sample*  
 Aaron Dora-Laskey, Jason Goldstick, Brooke Arterberry, Suni Jo Roberts, Amy Bohnert, Patrick Carter, University of Michigan, Ann Arbor, MI
- 99 *Behavioral intervention to reduce opioid overdose among high-risk persons with opioid use disorder: A pilot randomized controlled trial*  
 Emily Behar<sup>1</sup>, Glenn-Milo Santos<sup>2</sup>, Christopher Rowe<sup>1</sup>, Talia Rubin<sup>1</sup>, Janelle Silvis<sup>1</sup>, Eric Vittinghoff<sup>2</sup>, Phillip Coffin<sup>1</sup>, <sup>1</sup>San Francisco Department of Public Health, San Francisco, CA, <sup>2</sup>University of California San Francisco, San Francisco, CA
- 100 *County-level overdose deaths and prescription opioid dispensing patterns in Ohio*  
 Erin Winstanley<sup>1</sup>, Brian Hendricks<sup>1</sup>, Yifan Zhang<sup>1</sup>, Cameron McNamee<sup>2</sup>, Alexandria Castracane<sup>3</sup>, Gordon Smith<sup>1</sup>, <sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>State of Ohio Board of Pharmacy, Columbus, OH, <sup>3</sup>West Virginia University School of Pharmacy, Morgantown, WV
- 101 *Prescription drug monitoring programs and opioid overdoses: Exploring sources of heterogeneity*  
 Alvaro Castillo-Carniglia<sup>1</sup>, William Ponicki<sup>2</sup>, Andrew Gaidus<sup>2</sup>, Paul Gruenewald<sup>2</sup>, Brandon Marshall<sup>3</sup>, David Fink<sup>4</sup>, Silvia Martins<sup>5</sup>, Ariadne Rivera-Aguirre<sup>1</sup>, Garen Wintemute<sup>6</sup>, Magdalena Cerda<sup>1</sup>, <sup>1</sup>University of

- California Davis, Sacramento, CA, <sup>2</sup>Prevention Research Center, Pacific Institute for Research and Evaluation, Oakland, CA, <sup>3</sup>Brown School of Public Health, Providence, RI, <sup>4</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>5</sup>Columbia University, New York, NY, <sup>6</sup>Violence Prevention Research Program, Department of Emergency Medicine, UC Davis School of Medicine, Sacramento, CA
- 102 *The relationship between quantity of cannabis use and prescription opioids misuse in medical cannabis patients*  
Mark Ilgen<sup>1</sup>, Kipling Bohnert<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan, Addiction Center, Ann Arbor, MI
- 103 *Stimulant prescription drug misuse types, motives and use disorder symptoms among U.S. young adults*  
Christian Teter<sup>1</sup>, Ty Schepis<sup>2</sup>, Cody Black<sup>3</sup>, Sean McCabe<sup>4</sup>, <sup>1</sup>Psychopharmacology Consultant, Portland, ME, <sup>2</sup>Texas State University, San Marcos, TX, <sup>3</sup>University of New England, Portland, ME, <sup>4</sup>University of Michigan, Ann Arbor, MI
- 104 *Alcohol use disorder and motives for prescription opioid misuse*  
Victoria Votaw<sup>1</sup>, R. Kathryn McHugh<sup>2</sup>, Katie Witkiewitz<sup>1</sup>, <sup>1</sup>University of New Mexico, Albuquerque, NM, <sup>2</sup>McLean Hospital, Belmont, MA

## POSTER I EPIDEMIOLOGY I

**Sapphire ABC/EFG**  
**11:00 - 1:00 PM**

- 105 *Opioid misuse among Latino primary care patients in Los Angeles*  
Melvin Rico<sup>1</sup>, Lillian Gelberg<sup>1</sup>, Chukwuemeka Okafor<sup>2</sup>, <sup>1</sup>University of California, Department of Family Medicine, Los Angeles, CA, <sup>2</sup>University of California Los Angeles, Los Angeles, CA
- 106 *Trends in engagement in the cascade of care for opioid use disorders, Vancouver, Canada, 2006-2016*  
M. Eugenia Socias<sup>1</sup>, Evan Wood<sup>2</sup>, Thomas Kerr<sup>2</sup>, Seonaid Nolan<sup>1</sup>, Kanna Hayashi<sup>3</sup>, Ekaterina Nosova<sup>3</sup>, julio montaner<sup>2</sup>, MJ Milloy<sup>2</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>University of British Columbia, Vancouver, <sup>3</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver
- 107 *The impact of cannabis use on patients enrolled in opioid agonist therapy in Ontario, Canada*  
Joseph Eibl, David Marsh, Northern Ontario School of Medicine, Sudbury, ON, Canada
- 108 *Estimating the proportion of crimes caused by alcohol and other drugs in Canada, 2007- 2014*  
Matthew Young, Canadian Centre on Substance Abuse, Ottawa, ON, Canada
- 109 *Trends in illicit drug use among cigarette smokers in the US, 2002-2014*  
Scott Moeller<sup>1</sup>, David Fink<sup>2</sup>, Misato Gbedemah<sup>3</sup>, Deborah Hasin<sup>4</sup>, Sandro Galea<sup>5</sup>, Michael Zvolensky<sup>6</sup>, Renee Goodwin<sup>7</sup>, <sup>1</sup>Stony Brook University, Stony Brook, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>3</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>4</sup>Columbia University, New York, NY, <sup>5</sup>Boston University School of Public Health, Boston, MA, <sup>6</sup>University of Houston, Houston, TX, <sup>7</sup>The City University of New York, New York, NY
- 110 *Zero-inflated Poisson growth curve modeling of substance use among young sexual minority men from ages 18 through 21: The P18 Cohort Study*  
Danielle Ompad<sup>1</sup>, Stephanie Cook<sup>2</sup>, Richard Marino<sup>2</sup>, Sophia Halkitis<sup>2</sup>, Farzana Kapadia<sup>2</sup>, Perry Halkitis<sup>3</sup>, <sup>1</sup>New York University, College of Public Health, New York, NY, <sup>2</sup>New York University College of Global Public Health, New York, NY, <sup>3</sup>Rutgers University, Piscataway, NJ
- 111 *Educational achievement of monthly marijuana, tobacco, and alcohol users*  
Charles Whitmore<sup>1</sup>, Susan Mikulich-Gilbertson<sup>2</sup>, Shannon McWilliams<sup>2</sup>, Robin Corley<sup>3</sup>, Michael Stallings<sup>1</sup>, John Hewitt<sup>1</sup>, Christian Hopfer<sup>2</sup>, <sup>1</sup>University of Colorado, Aurora, CO, <sup>2</sup>University of Colorado School of

- Medicine, Aurora, CO, Institute for Behavioral Genetics, Boulder, CO
- 112 *Cannabis use and changes in body weight studied prospectively: New estimates for the US*  
Omayma Alshaarawy, James Anthony, Michigan State University, Lansing, MI
- 113 *Characterizing the preferences and practices of those who use marijuana for medical purposes*  
Andrew Fiore, Dominique Easterling, University of Florida, Gainesville, FL
- 114 *Diverging trends in cannabis and cigarette use among youth with depression in the United States, 2002-2016*  
Andrea Weinberger<sup>1</sup>, Misato Gbedemah<sup>2</sup>, Renee Goodwin<sup>3</sup>, <sup>1</sup>Yeshiva University, New York, NY, <sup>2</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>3</sup>The City University of New York, New York, NY
- 115 *Cannabis use disorder among cannabis users by frequency of use in the USA, 2002–2014*  
Julian Santaella-Tenorio<sup>1</sup>, Shivani Mantha<sup>2</sup>, Emily Boller<sup>1</sup>, Luis Segura<sup>1</sup>, Pia Mauro<sup>1</sup>, Christine Mauro<sup>1</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY
- 116 *Patterns of past 30 day concurrent use of drugs among varying age cohorts: Self-reported data from community members*  
Catherine Woodstock Striley<sup>1</sup>, Mirsada Serdarevic<sup>1</sup>, Bertha Madras<sup>2</sup>, Henry Young<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>McLean Hospital, Belmont, MA
- 117 *Analyzing the initiation of marijuana use in adulthood*  
Shawnta Lloyd<sup>1</sup>, Linda Cottler<sup>2</sup>, Catherine Woodstock Striley<sup>2</sup>, <sup>1</sup>University of Florida, College of Public Health and Health Professions, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL
- 118 *Neuropsychological impairment in older adult cannabis users*  
Madeline Meier, Arizona State University, Tempe, AZ
- 119 *Medicaid expansion and treatment for opioid use disorders in Oregon*  
Dennis McCarty, Yifan Gu, Stephanie Renfro, Robin Baker, Bonnie Lind, Oregon Health & Science University, Portland, OR
- 120 *Preventing injection initiation: The challenge of high frequency initiators among people who inject drugs*  
Ricky Bluthenthal<sup>1</sup>, Lynn Wenger<sup>2</sup>, Kelsey Simpson<sup>1</sup>, Carol Strike<sup>3</sup>, Alex Kral<sup>4</sup>, <sup>1</sup>Keck School of Medicine University of Southern California, Los Angeles, CA, <sup>2</sup>RTI International, San Francisco, CA, <sup>3</sup>Dalla Lana School of Public Health University of Toronto, Toronto, ON, Canada, <sup>4</sup>RTI International, Research Triangle Park, NC
- 121 *Reasons for assisting with injection initiation: Results from a large survey of people who inject drugs in Los Angeles and San Francisco, California, 2016/17.*  
Kelsey Simpson<sup>1</sup>, Alex Kral<sup>2</sup>, Lynn Wenger<sup>3</sup>, Carol Strike<sup>4</sup>, Ricky Bluthenthal<sup>1</sup>, <sup>1</sup>Keck School of Medicine University of Southern California, Los Angeles, CA, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>RTI International, San Francisco, CA, <sup>4</sup>Dalla Lana School of Public Health University of Toronto, Toronto, ON, Canada
- 122 *Enrollment in medication-assisted treatment and its association with injection initiation assistance in Vancouver, Canada*  
Maria Luisa Mittal<sup>1</sup>, Sonia Jain<sup>2</sup>, Kanna Hayashi<sup>3</sup>, M-J Milloy<sup>4</sup>, Kora DeBeck<sup>3</sup>, Shelly Sun<sup>2</sup>, Dan Werb<sup>2</sup>, <sup>1</sup>University of California San Diego, Division of Infectious Diseases and Global Public Health, La Jolla, CA, <sup>2</sup>University of California San Diego, La Jolla, CA, <sup>3</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, <sup>4</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver
- 123 *Receipt of medications for opioid use disorder after injection drug associated endocarditis or osteomyelitis*  
Simeon Kimmel<sup>1</sup>, Alexander Walley<sup>1</sup>, Dana Bernson<sup>2</sup>, Thomas Land<sup>2</sup>, Benjamin Linas<sup>1</sup>, Marc Larochelle<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Massachusetts Department of Public Health, Boston, MA

- 124 *Trends in receptive syringe sharing and correlates of 'ever' sharing among a cohort of people who inject drugs regularly in Melbourne, Australia*  
Danielle Horyniak, Daniel O'Keefe, Penny Hill, Jessica Howell, Paul Dietze, Burnet Institute, Melbourne, Australia
- 125 *Men who have sex with men and inject drugs in a Canadian setting*  
Ayden Scheim<sup>1</sup>, Rod Knight<sup>2</sup>, Hennady Shulha<sup>2</sup>, Ekaterina Nosova<sup>3</sup>, Kanna Hayashi<sup>3</sup>, M-J Milloy<sup>3</sup>, Thomas Kerr<sup>4</sup>, Kora DeBeck<sup>3</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver, <sup>4</sup>University of British Columbia, BC Centre on Substance Use, Vancouver, BC, Canada
- 126 *Shooting gallery networks and risk: Women's injection venue affiliation networks in Tijuana, Mexico*  
Brooke West<sup>1</sup>, Patricia Gonzalez-Zuniga<sup>1</sup>, James Fowler<sup>1</sup>, Kimberly Brouwer<sup>2</sup>, Steffanie Strathdee<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>University of California San Diego, San Diego, CA
- 127 *Heroin resurgence: Evidence from a national study of harm reduction among people who inject drugs (PWID)*  
Usaney Perngarn<sup>1</sup>, Chitlada Areesantichai<sup>1</sup>, Linda Cottler<sup>2</sup>, <sup>1</sup>Chulalongkorn University, Bangkok, Thailand, <sup>2</sup>University of Florida, Gainesville, FL

**POSTER I**  
**POLYDRUG ABUSE I**

**Sapphire ABC/EFG**  
**11:00 - 1:00 PM**

- 128 *Factors associated with inability to access health clinics among people who inject drugs in a Canadian setting with universal healthcare*  
Rupinder Brar<sup>1</sup>, Seonaid Nolan<sup>1</sup>, Ekaterina Nosova<sup>2</sup>, M-J Milloy<sup>2</sup>, Kora DeBeck<sup>2</sup>, Evan Wood<sup>3</sup>, Kanna Hayashi<sup>4</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>University of British Columbia, Vancouver, <sup>4</sup>Simon Fraser University, Vancouver, BC, Canada
- 129 *Do incentives and alerts have a modifying effect on the impact of clients' travel time on continuity after discharge?*  
Deborah Garnick<sup>1</sup>, Constance Horgan<sup>2</sup>, Margaret Lee<sup>3</sup>, Andrea Acevedo<sup>4</sup>, Lee Panas<sup>3</sup>, Grant Ritter<sup>3</sup>, Kevin campbell<sup>5</sup>, <sup>1</sup>Brandeis University, Waltham, MA, <sup>2</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>3</sup>Institute for Behavioral Health, Brandeis University, Waltham, MA, <sup>4</sup>Tufts University, Medford, MA, <sup>5</sup>Behavioral Health Administration, Olympia, WA
- 130 *A shared parameter pattern-mixture model as a 'missing not at random' sensitivity analysis for substance use disorder randomized clinical trials*  
Sterling McPherson<sup>1</sup>, Ekaterina Burduli<sup>2</sup>, David Ihle<sup>2</sup>, Michael Orr<sup>3</sup>, Crystal Smith<sup>4</sup>, John Roll<sup>4</sup>, <sup>1</sup>Washington State University, Elson S. Floyd College of Medicine, Spokane, WA, <sup>2</sup>Washington State University, Spokane, WA, <sup>3</sup>Washington State University College of Nursing, Spokane, WA, <sup>4</sup>Washington State University, Pullman, WA
- 131 *Combining the WLSMV estimator with multiple imputation for categorical outcomes in substance use disorder randomized clinical trials*  
Ekaterina Burduli<sup>1</sup>, David Ihle<sup>1</sup>, Michael Orr<sup>2</sup>, Crystal Smith<sup>3</sup>, John Roll<sup>3</sup>, Sterling McPherson<sup>4</sup>, <sup>1</sup>Washington State University, Spokane, WA, <sup>2</sup>Washington State University College of Nursing, Spokane, WA, <sup>3</sup>Washington State University, Pullman, WA, <sup>4</sup>Washington State University, Elson S. Floyd College of Medicine, Spokane, WA

- 132 *Understanding the impact and sources of site differences in a multisite clinical trial of a technology-delivered psychosocial intervention for substance use disorders*  
Martina Pavlicova<sup>1</sup>, Leila Vaezazizi<sup>2</sup>, Aimee Campbell<sup>2</sup>, Mei-Chen Hu<sup>3</sup>, Edward Nunes<sup>2</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Columbia University, New York, NY
- 133 *Examining the influence of individualized homophily over neighbor engagement in those with substance use experience using the social interactome*  
Derek Pope, Virginia Tech Carilion Research Institute, Roanoke, VA
- 134 *Opioid and benzodiazepine co-use among women associated with binge drinking*  
Jennifer Lorvick<sup>1</sup>, Barrot Lambdin<sup>2</sup>, Megan Comfort<sup>2</sup>, Alex Kral<sup>2</sup>, <sup>1</sup>RTI International, San Francisco, CA, <sup>2</sup>RTI International, Research Triangle Park, NC
- 135 *Substance use and sleep in pre-deployed US Army soldiers*  
Alexxa Bessey<sup>1</sup>, Alexa Lopez<sup>2</sup>, Maria St. Pierre<sup>3</sup>, Lillian Skeiky<sup>3</sup>, Walter Sowden<sup>3</sup>, <sup>1</sup>Walter Reed Army Institute of Research, Washington, DC, <sup>2</sup>US Army Medical Research Directorate-West, Tacoma, WA, <sup>3</sup>Walter Reed Army Institute of Research, Silver Spring, MD
- 136 *Prevalence of clinical insomnia in a residential substance use disorder population*  
Denis Antoine<sup>1</sup>, Traci Speed<sup>2</sup>, Eric Strain<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins Hospital, Baltimore, MD
- 137 *Leveraging the patient-counselor relationship to reduce sexual risk behavior: Results from a multi-site study in substance use disorder treatment programs*  
Mary Hatch-Maillette<sup>1</sup>, Robin Harwick<sup>1</sup>, Tatiana Masters<sup>1</sup>, John Baer<sup>2</sup>, Lynette Wright<sup>1</sup>, Blair Beadnell<sup>1</sup>, Elizabeth Wells<sup>1</sup>, <sup>1</sup>University of Washington Alcohol & Drug Abuse Institute, Seattle, WA, <sup>2</sup>VA Puget Sound Healthcare System, Seattle, WA
- 138 *Substance use and sexual assault perpetration: The role of mindfulness and empathy*  
Quyen Ngo<sup>1</sup>, Penny Warmanen<sup>2</sup>, Yasamin Kusunoki<sup>3</sup>, Erin Bonar<sup>2</sup>, Meredith Philyaw-Kotov<sup>2</sup>, Maureen Walton<sup>4</sup>, <sup>1</sup>University of Michigan Injury Prevention Center, Ann Arbor, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI, <sup>3</sup>University of Michigan, School of Nursing, Ann Arbor, MI, <sup>4</sup>University of Michigan, Addiction Center, Ann Arbor, MI
- 139 *Non-partner violence perpetration among emerging adults: Relationship between poly-substance use and trait mindfulness*  
Jessica Ramirez, Sara Stein, University of Michigan, Ann Arbor, MI
- 140 *Systematic review and meta-analysis on the dimensions of anger in men using psychoactive substances*  
Helen Laitano<sup>1</sup>, Felix Kessler<sup>2</sup>, Thiago Hartmann<sup>3</sup>, Felix Kessler<sup>2</sup>, Flavio Pechansky<sup>2</sup>, <sup>1</sup>Luiz Englert Fundação, Porto Alegre, Brazil, <sup>2</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre, <sup>3</sup>Center for Drug and Alcohol Research, Porto Alegre, Brazil
- 141 *Patterns of adverse childhood experiences, impulsivity and problematic substance use in young adulthood*  
Sunny Shin, Shelby McDonald, David Conley, Virginia Commonwealth University, Richmond, VA
- 142 *Families in crisis: Understanding the needs of homeless families with parental substance use disorders*  
Roya Ijadi-Maghsoodi<sup>1</sup>, Michelle Quan<sup>1</sup>, Kayleen Ports<sup>1</sup>, Sheryl Kataoka<sup>2</sup>, Gery Ryan<sup>3</sup>, Lillian Gelberg<sup>4</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>Semel Institute for Neuroscience and Human Behavior (UCLA), Los Angeles, CA, <sup>3</sup>RAND Corporation, Arlington, VA, <sup>4</sup>University of California, Department of Family Medicine, Los Angeles, CA
- 143 *Vulnerability to higher stress levels in people who use drugs linked to maladaptive coping mechanisms*  
Divya Seth<sup>1</sup>, Ndeah Terry<sup>2</sup>, Landhing Moran<sup>3</sup>, David Epstein<sup>3</sup>, Kenzie Preston<sup>3</sup>, Karran Phillips<sup>4</sup>, <sup>1</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>2</sup>NIAAA Intramural Research Program, Bethesda, MD, <sup>3</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>4</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD

- 144 *The impact of abstinence on distress tolerance trajectories from pre- to 1-year post substance use treatment*  
Elizabeth Reese<sup>1</sup>, Christopher Conway<sup>2</sup>, Deepika Anand<sup>1</sup>, Daniel Bauer<sup>1</sup>, Stacey Daughters<sup>1</sup>, <sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, <sup>2</sup>College of William & Mary, Williamsburg, VA
- 145 *Distinct measures of distress tolerance predict success for different health behaviours*  
Daisy Thompson-Lake<sup>1</sup>, Emma O'Byrne<sup>1</sup>, Richard De La Garza, II<sup>2</sup>, Peter Hajek<sup>1</sup>, <sup>1</sup>Queen Mary University of London, London, United Kingdom, <sup>2</sup>Baylor College of Medicine, Houston, TX
- 146 *Food addiction is associated with higher neuroticism, lower conscientiousness, higher impulsivity, but lower extraversion in obese patients candidates for bariatric surgery*  
Paul Brunault<sup>1</sup>, Pierre-Henri Ducluzeau<sup>2</sup>, Robert Courtois<sup>2</sup>, Céline Bourbao-Tournois<sup>2</sup>, Jérôme Bachellier<sup>2</sup>, Servane Barrault<sup>2</sup>, Damien Mauge<sup>2</sup>, Christian Réveillère<sup>3</sup>, Ballon Nicols<sup>2</sup>, <sup>1</sup>University Hospital of Tours, Tours, France, <sup>2</sup>CHRU de Tours, Clinique Psychiatrique Universitaire, Tours, France, <sup>3</sup>Université Francois Rabelais de Tours, Tours, France
- 147 *Association between obesity and co-occurring heroin- and nicotine-dependence*  
Lian Hu, Paul VanVeldhuisen, The Emmes Corporation, Rockville, MD
- 148 *Acceptability and feasibility of the tobacco, alcohol, prescription medication, and other substance use (TAPS) tool in US primary care patients*  
Angeline Adam<sup>1</sup>, Robert Schwartz<sup>2</sup>, Li-Tzy Wu<sup>3</sup>, Geetha Subramaniam<sup>4</sup>, Gaurav Sharma<sup>5</sup>, Eugene Laska<sup>1</sup>, Jennifer McNeely<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Friends Research Institute, Baltimore, MD, <sup>3</sup>Duke University School of Medicine, Durham, NC, <sup>4</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>5</sup>The Emmes Corporation, Rockville, MD
- 149 *Impact of SBI training on health professional students' knowledge and confidence in addressing unhealthy substance use*  
Katherine Covington, Yunmi Chung, Aaron Johnson, Augusta University, Augusta, GA
- 150 *Impact of a multi-year screening, brief intervention, and referral to treatment (SBIRT) curriculum on medical student attitudes toward patients with substance use disorders*  
Jeremy Kidd<sup>1</sup>, Jennifer Smith<sup>1</sup>, Mei-Chen Hu<sup>1</sup>, Adam Bisaga<sup>2</sup>, Edward Nunes<sup>1</sup>, Frances Levin<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY
- 151 *Mentorship for addiction problems (MAP)*  
Kathlene Tracy<sup>1</sup>, Leah Wachtel<sup>1</sup>, Emily Goldmann<sup>2</sup>, Samuel Ball<sup>3</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University College of Global Public Health, New York, NY, <sup>3</sup>Yale University School of Medicine, New Haven, CT

**ANIMALS IN RESEARCH FORUM: TRANSLATIONAL Indigo A  
AND REVERSE-TRANSLATIONAL RESEARCH IN 1:00 - 2:45 PM  
ADDICTION: HOW HUMAN AND ANIMAL STUDIES  
MUTUALLY INFORM ONE ANOTHER**

Chairs: Mark Smith and Ziva Cooper

*Utility of preclinical drug-vs.-food choice procedures to translate effective treatments for drug addiction*  
M. Banks, Virginia Commonwealth University, Richmond, VA

*Bi-directional translation of monkey and human methods to develop functionally equivalent cocaine self-administration choice procedures*

J. Lile, University of Kentucky, College of Medicine, Lexington, KY

*Development of translational models of drug self-administration in humans and non-human primates: Challenges and tribulations*

S. Evans, Columbia University and NYSPI, New York, NY



## CONFIDENTIALITY FORUM

**Indigo D**  
**1:00 - 2:45 PM**

Chairs: Jonathan Stoltman and John Roll

*Ethical implications of social media in clinical trials*

E. Winstanley, West Virginia University, Morgantown, WV

*EMA and geospatial data in addiction research*

B. Heckman, Medical University of South Carolina, Charleston, SC

*Navigating research ethics in the digital age*

C. Nebeker, University of California San Diego, La Jolla, CA

*Ethical issues using social media in health behavior research*

S. Young,

*Ethics, Addiction Research, and Emerging Technologies*

T. Cvrkel, University of California Los Angeles, Los Angeles, CA

## ORAL COMMUNICATIONS 2 THERE'S SOMETHING IN MY GENES

**Indigo H**  
**2:00 - 4:00 PM**

Chairs: Wendy Lynch and Tabitha Moses

2:00 *Heroin delay discounting and impulsivity: Modulation by DRD1 genetic variation*

Tabitha Moses<sup>1</sup>, Margit Burmeister<sup>2</sup>, Mark Greenwald<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI

2:15 *Validating electronic health record (EHR)-based prescription opioid phenotypes for genetic discovery*

Christopher Rentsch<sup>1</sup>, E. Jennifer Edelman<sup>2</sup>, Amy Justice<sup>3</sup>, Brandon Marshall<sup>4</sup>, Henry Kranzler<sup>5</sup>, Ke Xu<sup>3</sup>, Stephen Crystal<sup>6</sup>, Julie Gaither<sup>7</sup>, Adam Gordon<sup>8</sup>, David Fiellin<sup>2</sup>, Janet Tate<sup>3</sup>, William Becker<sup>3</sup>, <sup>1</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>Brown School of Public Health, Providence, RI, <sup>5</sup>University of Pennsylvania, Philadelphia, PA, <sup>6</sup>Rutgers University, New Brunswick, NJ, <sup>7</sup>Yale Center for Medical Informatics, New Haven, CT, <sup>8</sup>University of Utah, Salt Lake City, UT

2:30 *Variants in stress-signaling genes NR3C1 and FKBP5 modulate opioid abstinence during buprenorphine (BUP) stabilization and dose tapering*

Mark Greenwald<sup>1</sup>, Margit Burmeister<sup>2</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI

2:45 *Moderation of buprenorphine therapy efficacy for cocaine dependence by variation of the preprodynorphin gene*

David Nielsen<sup>1</sup>, Robrina Walker<sup>2</sup>, Mark Harding<sup>3</sup>, Walter Ling<sup>4</sup>, Thomas Kosten<sup>5</sup>, <sup>1</sup>Baylor College of Medicine, Montgomery, TX, <sup>2</sup>University of Texas Southwestern Medical Center, Dallas, TX, <sup>3</sup>Baylor College of Medicine, Houston, TX, <sup>4</sup>University of California Los Angeles, Los Angeles, CA, <sup>5</sup>Baylor College of Medicine, Bellaire, TX

3:00 *The efficacy of exercise as in anti-relapse intervention is associated with BDNF and GRM5 gene expression in the prefrontal cortex*

Wendy Lynch, Jean Abel, Tanseli Nesil, University of Virginia, Charlottesville, VA

3:15 *Prenatal cocaine exposure and cortisol reactivity in early adolescence*

Rina Eiden<sup>1</sup>, Douglas Granger<sup>2</sup>, Pamela Schuetze<sup>3</sup>, Amanda Nickerson<sup>1</sup>, <sup>1</sup>State University of New York at Buffalo, Buffalo, NY, <sup>2</sup>University of California Irvine, Irvine, CA, <sup>3</sup>Buffalo State College, Buffalo, NY

- 3:30 *Evocative gene-environment correlation underlying aggression and family cohesion in adolescent marijuana use*  
Kit Elam, Danielle Pandika, Laurie Chassin, Ariel Sternberg, Leena Bui, Arizona State University, Tempe, AZ
- 3:45 *The Interplay between conduct disorder polygenic score and community disadvantage in predicting marijuana use disorders*  
Jill Rabinowitz<sup>1</sup>, Rashelle Musci<sup>2</sup>, Adam Milam<sup>1</sup>, Kelly Benke<sup>1</sup>, Danielle Sisto<sup>1</sup>, Nicholas Ialongo<sup>3</sup>, Brion Maher<sup>1</sup>, <sup>1</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

**ORAL COMMUNICATIONS 1**  
**YOU'RE ALWAYS ON MY MIND:**  
**PRE-FRONTAL CORTEX IN ADDICTION**

**Indigo E**  
**3:00 - 5:00 PM**

Chairs: Julie McCarthy and Stacey Daughters

- 3:00 *Reduced executive control connectivity in women vs. men with chronic and acute nicotine exposure*  
Julie McCarthy, Kelly Dumais, Maya Zegel, Amy Janes, McLean Hospital, Harvard Medical School, Belmont, MA
- 3:15 *Ventromedial prefrontal cortex TMS attenuates smoking cue reactivity in cigarette smokers*  
Tonisha Kearney-Ramos<sup>1</sup>, Sarah Snider<sup>2</sup>, Warren Bickel<sup>3</sup>, Colleen Hanlon<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>Addiction Recovery Research Center, Roanoke, VA, <sup>3</sup>Virginia Tech Carilion Research Institute, Roanoke, VA
- 3:30 *Transcranial direct current stimulation in nicotine addiction*  
Ilse Verveer<sup>1</sup>, Danielle Remmerswaal<sup>1</sup>, Freddy van der Veen<sup>1</sup>, Ingmar Franken<sup>2</sup>, <sup>1</sup>Erasmus University Rotterdam, Rotterdam, Netherlands, <sup>2</sup>Erasmus University Rotterdam, Rotterdam
- 3:45 *Emotion dysregulation in young smokers: Link to connectivity of the raphe nuclei with the amygdala*  
Paul Faulkner, Andrew Dean, Dara Ghahremani, Zoe Guttman, Edythe London, University of California Los Angeles, Los Angeles, CA
- 4:00 *Sex differences in corticostriatal local field potentials: Implications for alcohol drinking behavior*  
Angela Henricks, Lucas Dwiell, Emily Sullivan, Alan Green, Wilder Doucette, Dartmouth College, Hanover, NH
- 4:15 *Sex differences in the relationship between basal leptin and alcohol- and food-related reward behaviors: A functional magnetic resonance imaging study.*  
Dongju Seo<sup>1</sup>, Chloe Larkin<sup>1</sup>, Cheryl Lacadie<sup>2</sup>, Marc Potenza<sup>1</sup>, Rajita Sinha<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Department of Radiology, Yale University, New Haven, CT
- 4:30 *Effect of non-invasive transcranial alternating currents stimulation (tACS) on inhibitory control among substance users in intensive outpatient substance use treatment*  
Stacey Daughters, Jennifer Yi, Rachel Wells, Rachel Phillips, Sydney Baker, Regina Carelli, Flavio Frohlich, University of North Carolina at Chapel Hill, Chapel Hill, NC
- 4:45 *Cocaine-related differences in neural loss aversion and the moderating effects of socioeconomic status*  
Andréa Hobkirk<sup>1</sup>, Merideth Addicott<sup>2</sup>, Sheri Towe<sup>3</sup>, Christina Meade<sup>3</sup>, <sup>1</sup>Penn State College of Medicine, Hershey, PA, <sup>2</sup>University of Arkansas for Medical Sciences, Little Rock, AK, <sup>3</sup>Duke University School of Medicine, Durham, NC

**SYMPOSIUM I**  
**WEARABLE/BIOSENSORS IN ADDICTION**  
**MEDICINE--FUTURE VISTAS**

**Indigo A**  
**3:00 - 5:00 PM**

Chairs: Scott Lukas and Stephanie Carreiro

- 3:00 *Using biosensors to enhance preclinical models of cannabinoid withdrawal*  
C. Paronis, McLean Hospital, Harvard Medical School, Belmont, MA
- 3:25 *Wearable biosensors: Novel applications across the spectrum of addiction*  
S. Carreiro, University of Massachusetts Memorial Medical Center, Worcester, MA
- 3:50 *Design challenges and implementation of wearable biosensors*  
E. Sazonov, University of Alabama, Birmingham, AL
- 4:15 *Geographically-explicit ecological momentary assessment (GEMA): A unifying framework linking sensors and subjective experience.*  
T. Kirchner, New York University, New York, NY
- 4:40 *Neurons to neighborhoods--How novel biosensors and wearables will impact the future of addiction medicine*  
S. Lukas, McLean Hospital, Harvard Medical School, Belmont, MA

**SYMPOSIUM II**  
**MARIJUANA: THE CHANGING LEGAL**  
**LANDSCAPE AND ITS IMPACT ON OPIOID USE**

**Indigo BF**  
**3:00 - 5:00 PM**

Chairs: Marsha Lopez and Heather Kimmel

- 3:00 *Changes in medical and recreational cannabis policies: How do they relate to opioid use, opioid use disorder and opioid overdoses?*  
S. Martins, Columbia University, New York, NY
- 3:25 *Prescription opioid misuse among young adult cannabis users in Los Angeles: A longitudinal study*  
S. Lankenau, Drexel University Dornsife School of Public Health, Philadelphia, PA
- 3:50 *Do adults with chronic pain use marijuana to reduce use of opioids? Results from Oregon*  
J. Dilley, Oregon Health Authority, Portland, OR
- 4:15 *Marijuana legalization and abuse and overdose of opioid analgesics*  
Y. Shi, University of California San Diego, La Jolla, CA
- 4:40 *Discussant*  
B. Fischer, University of Toronto, Toronto, ON, Canada

**SYMPOSIUM III**  
**NOVEL PSYCHOACTIVE SUBSTANCES: A**  
**TRANSLATIONAL SCIENCE APPROACH**

**Indigo D**  
**3:00 - 5:00 PM**

Chairs: Aviv Weinstein and William Fantegrossi

- 3:00 *NPs- summary of findings presented, and ideas for future research to address the ongoing NPS phenomenon.*  
W. Fantegrossi, University of Arkansas for Medical Sciences, Little Rock, AK
- 3:25 *Pharmacological effects of synthetic cannabinoids and their pyrolysis products in animal models*  
B. Thomas, RTI International, Research Triangle Park, NC
- 3:50 *Impaired executive function and brain imaging in fMRI in human synthetic cannabinoid users*  
A. Weinstein, Ariel University, Ariel, Israel
- 4:15 *Preclinical studies on the pharmacology of synthetic cathinones and newer non-cathinone compounds*  
M. Baumann, NIDA Intramural Research Program, Baltimore, MD

- 4:40 *The effects of synthetic cathinones after administration to humans under controlled laboratory conditions*  
M. Farré, Hospital Universitari Germans Trias i Pujol, Badalona, Spain

**ORAL COMMUNICATIONS 3**  
**STRESSING HORMONES AND DRUGS:**  
**PREGNANCY THROUGH MENOPAUSE**

**Indigo H**  
**4:15 - 5:15 PM**

Chairs: MacKenzie Peltier and Loretta Finnegan

- 4:15 *The effect of sex hormones on smoking cessation across the menopausal transition in a 10-year longitudinal sample*  
MacKenzie Peltier<sup>1</sup>, Philip Smith<sup>2</sup>, Sherry McKee<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>CUNY School of Medicine, New York, NY
- 4:30 *Prenatal cigarette and cannabis exposure effects on parenting: Role of postnatal adversity*  
Meghan Casey<sup>1</sup>, Shannon Shisler<sup>1</sup>, Rina Eiden<sup>2</sup>, <sup>1</sup>Research Institute on Addictions, Buffalo, NY, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY
- 4:45 *Co-occurring tobacco and cannabis use prenatally increases odds of ADHD in kindergarten*  
Shannon Shisler<sup>1</sup>, Rina Eiden<sup>2</sup>, Pamela Schuetze<sup>3</sup>, <sup>1</sup>Research Institute on Addictions, Buffalo, NY, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY, <sup>3</sup>Buffalo State College, Buffalo, NY
- 5:00 *Effects of co-occurring prenatal tobacco and cannabis exposure on cortisol reactivity at early school age*  
Pamela Schuetze<sup>1</sup>, Shannon Shisler<sup>2</sup>, Rina Eiden<sup>3</sup>, Douglas Granger<sup>4</sup>, <sup>1</sup>Buffalo State College, Buffalo, NY, <sup>2</sup>Research Institute on Addictions, Buffalo, NY, <sup>3</sup>State University of New York at Buffalo, Buffalo, NY, <sup>4</sup>University of California Irvine, Irvine, CA

**PRIMM-SINGLETON AWARDEES RECEPTION**

**Aqua 310/Terrace**  
**5:00 - 6:00 PM**

**WORKSHOP I**  
**THERAPEUTIC APPLICATIONS AND ABUSE**  
**LIABILITY ASSESSMENT OF CANNABIDIOL**

**Indigo A**  
**7:00 - 9:00 PM**

Chairs: Royston Gray and Charles France

- Demystifying the legal status of cannabinoids*  
A. Mead, Greenwich Biosciences, Carlsbad, CA
- FDA/CSS view on abuse potential assessment during drug development for cannabinoid therapeutics*  
D. Chiapperino, Head Controlled Substance Staff, FDA, Silver Spring, MD
- An evaluation of the discriminative and reinforcing properties of cannabidiol in rats*  
D. Heal, RenaSci Ltd, Nottingham, Notts
- Assessment of cannabidiol in nonhuman primates*  
C. France, University of Texas Health Science Center, San Antonio, TX
- Cannabidiol: Assessment of human abuse potential*  
E. Sellers, DL Global Partners Inc., Toronto, ON, Canada

## **WORKSHOP II**

### **CHARTING THE FUTURE OF HIV RESEARCH AMONG RACIAL/ETHNIC SUBSTANCE USERS: THE NEXT GENERATION OF RESEARCHERS SPEAK**

**Indigo D**

**7:00 - 9:00 PM**

Chairs: A. Kathleen Burlew and Carmen Masson

*Evaluating the psychometric properties of the 15-item condom use self efficacy scale among substance using adults*

D. Lanaway, University of Cincinnati, Cincinnati, OH

*Condom use barriers among African American substance users: Age and gender differences*

C. McCuistian, University of Cincinnati, Cincinnati, OH

*Outcome of combined HIV and HCV testing and opportunities for prevention at an acute detoxification center*

S. Assoumou, Boston University School of Medicine, Boston, MA

## **WORKSHOP III**

### **THE ADOLESCENT BRAIN COGNITIVE DEVELOPMENT (ABCD) STUDY: EMERGING FINDINGS ON SUBSTANCE USE, RISK AND PROTECTIVE FACTORS, AND NEUROIMAGING**

**Indigo E**

**7:00 - 9:00 PM**

Chairs: Mary Heitzeg and Krista Lisdahl

*An Introduction and Overview of the ABCD Study and Description of the ABCD Cohort*

S. Tapert, University of California San Diego, La Jolla, CA

*Early Substance Use Rates and Attitudes: Preliminary Findings from the ABCD Study*

K. Lisdahl, University of Wisconsin-Milwaukee, Milwaukee, WI

*Culture and Environmental Risk and Protective Factors: Preliminary Findings from the ABCD Study*

R. Gonzalez, Florida International University, Miami, FL

*Imaging Reward, Emotion and Cognition in the Developing Brain: Preliminary Findings from the ABCD Study*

H. Garavan, University of Vermont, Burlington, VT

*Discussant*

S. Weiss, National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD

## **WORKSHOP IV**

### **NAVIGATING KEY STAGES OF A CAREER IN ADDICTION SCIENCE**

**Indigo H**

**7:00 - 9:00 PM**

Chairs: Denise Vidot and Pia Mauro

*Navigating the pre-doctoral stage*

Q. Brown, Rutgers University School of Social Work and School of Public Health, New Brunswick, NJ

*Navigating the post-doctoral stage*

T. Franklin, University of Pennsylvania, Philadelphia, PA

*Navigating an early career in academia*

C. Bares, University of Michigan, Ann Arbor, MI

*Navigating substance use disorder careers outside of academia*

A. Duncan, The Pew Charitable Trusts, Washington, DC

**Monday, June 11, 2018**

**POSTER II  
DESIGNER DRUGS**

**BREAKFAST**

**Sapphire ABC/EFG  
8:00 - 10:00 AM**

**Odd numbered posters manned first hour; Even numbered, second hour**

- 1     *An investigation of the reinforcing effects of MDMA in rats trained to self-administer heroin.*  
Sharon Smith, Michelle Hallam, David Heal, RenaSci Ltd, Nottingham
- 2     *MDMA-like effects of synthetic cathinones*  
Michael Gatch, Michael Forster, University of Texas Health Science Center, Fort Worth, TX
- 3     *Reinforcer efficacy of entactogen psychostimulants following extended access self-administration in female rats*  
Michael Taffe, Jacques Nguyen, Mehrak Javadi-Paydar, Sophia A. Vandewater, Kevin Creehan, Yanabel Grant, Eric Harvey, Tobin Dickerson, The Scripps Research Institute, La Jolla, CA
- 4     *Analysis of neurotransmitter and inflammatory biomarkers during synthetic cathinone self-administration*  
Julie Marusich<sup>1</sup>, Delisha Stewart<sup>2</sup>, Bruce Blough<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC,  
<sup>2</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC
- 5     *Evaluation of the interoceptive stimulus effects of the synthetic cathinones, 4-MMC and MDPV, using a three-lever drug discrimination procedure*  
Trent Bullock, Amy Goodwin, Lisa Baker, Western Michigan University, Kalamazoo, MI
- 6     *Interactions between reinforcement history and drug-primed reinstatement: Studies with MDPV and mixtures of MDPV and caffeine*  
Michelle Doyle<sup>1</sup>, Agnieszka Sulima<sup>2</sup>, Kenner Rice<sup>2</sup>, Gregory Collins<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, San Antonio, TX, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 7     *Increased executive dysfunction and disinhibition in marijuana and MDMA users compared to controls*  
Kelah Hatcher, University of Wisconsin-Milwaukee, Milwaukee, WI
- 8     *MDMA use disorder and other substance use among international MDMA users*  
Nancy Haug, James Sottile, Palo Alto University, Los Altos, CA
- 9     *Typical MDMA dose per session differs by lifetime frequency and route of administration*  
James Sottile, Nancy Haug, Palo Alto University, Los Altos, CA
- 10    *Establishment of screening method for selective NMDA receptor antagonist using HEK-293 cell line expressing NR1/NR2B*  
Tomiya Kenichi<sup>1</sup>, Masahiko Funada<sup>2</sup>, <sup>1</sup>National Center of Neurology and Psychiatry, Kodaira, Japan,  
<sup>2</sup>NIMH, NCNP, Kodaira
- 11    *A study on factors of better treatment outcome for patients with new psychoactive-substances-related disorders in specialized clinics or wards for drug dependence in Japan*  
Yuko Tanibuchi<sup>1</sup>, Toshihiko Matsumoto<sup>2</sup>, Daisuke Funada<sup>3</sup>, Yasunari Kawasoe<sup>4</sup>, Satoshi Sakakibara<sup>5</sup>, Nobuya Naruse<sup>6</sup>, Shunichiro IKEDA Ikeda<sup>7</sup>, Takashi Sunami<sup>8</sup>, Takeo Muto<sup>9</sup>, Tetsuji Cho<sup>10</sup>, <sup>1</sup>Chiba Hospital, Funabashi, Japan, <sup>2</sup>National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Japan, <sup>3</sup>Center Hospital, National Center of Neurology and Psychiatry, Kodaira, Japan, <sup>4</sup>Asahi General Hospital, Asahi, Japan, <sup>5</sup>Tokyo Metropolitan Matsuzawa Hospital, Setagaya, Japan, <sup>6</sup>Saitama Psychiatric Medical Center, Kita-adachi-gun, Japan, <sup>7</sup>Kansai Medical University, Hirakata, Japan, <sup>8</sup>Okayama Psychiatric Medical Center, Kita-Ku, Japan, <sup>9</sup>Hizen Psychiatric Center, Kanzaki-gun, Japan, <sup>10</sup>Mie Prefectural Mental Medical Center, Tsu, Japan
- 12    *Being online's cracked: The relationship between personality and illicit drug use among online users*  
Hao-Jan Yang, Chung Shan Medical University, Taichung City, Taiwan



- 13 *Willingness to provide a hair sample for drug testing among electronic dance music party attendees*  
Joseph Palamar<sup>1</sup>, Alberto Salomone<sup>2</sup>, Charles Cleland<sup>3</sup>, Scott Sherman<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Centro Regionale Antidoping e di Tossicologia, Italy, <sup>3</sup>NYU Rory Meyers College of Nursing, New York, NY

**POSTER II  
EPIDEMIOLOGY II**

**Sapphire ABC/EFG  
8:00 - 10:00 AM**

- 14 *Trends in adolescent heroin and injection drug use (IDU) in 13 US cities, 1999 to 2015*  
Sherri-Chanelle Brighthaupt<sup>1</sup>, Julie Johnson<sup>2</sup>, Abenaa Jones<sup>2</sup>, Kristin Schneider<sup>1</sup>, Renee Johnson<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 15 *“Reverse Transitions” from injecting to non-injecting drug use during the US opioid epidemic*  
Don Des Jarlais<sup>1</sup>, Kamyar Arasteh<sup>1</sup>, Courtney McKnight<sup>1</sup>, Jonathan Feelemyer<sup>1</sup>, David Barnes<sup>1</sup>, Susan Tross<sup>2</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>2</sup>Columbia University, New York, NY
- 16 *Transition from prescription opioid misuse to injection drug use in social networks of youth and young adults*  
Alia Al-Tayyib<sup>1</sup>, Stephen Muth<sup>2</sup>, Paula Riggs<sup>3</sup>, <sup>1</sup>Denver Public Health, Denver, CO, <sup>2</sup>Quintus-ential Solutions, Colorado Springs, CO, <sup>3</sup>University of Colorado School of Medicine, Aurora, CO
- 17 *A mutoscope view of heroin incidence from mid-teens to mid-thirties*  
Prashanti Boinapally, James Anthony, Michigan State University, Lansing, MI
- 18 *Medication-assisted treatment for opioids among veterans being treated for pain*  
Lisham Ashrafioun, Kristin Falbo, Wilfred Pigeon, VA VISN 2 Center of Excellence for Suicide Prevention, Canandaigua, NY
- 19 *High-dose opioid prescribing is associated with an increased risk of heroin use among US veterans*  
Geetanjoli Banerjee<sup>1</sup>, E. Jennifer Edelman<sup>2</sup>, Declan Barry<sup>2</sup>, Stephen Crystal<sup>3</sup>, Julie Gaither<sup>4</sup>, Kirsha Gordon<sup>5</sup>, Robert Kerns<sup>6</sup>, Ajay Manhapra<sup>7</sup>, Brent Moore<sup>2</sup>, David Fiellin<sup>2</sup>, Brandon Marshall<sup>1</sup>, <sup>1</sup>Brown School of Public Health, Providence, RI, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Rutgers University, New Brunswick, NJ, <sup>4</sup>Yale Center for Medical Informatics, New Haven, CT, <sup>5</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>6</sup>Yale University School of Medicine, West Haven, CT, <sup>7</sup>Yale School of Medicine, Norfolk, VA
- 20 *Negative non-deployment emotions associated with substance use among never-deployed reserve soldiers*  
Rachel Hoopsick, D. Lynn Homish, Bonnie Vest, Jessica Kulak, Gregory Homish, State University of New York at Buffalo, Buffalo, NY
- 21 *The impact of buprenorphine and methadone on mortality: A primary care cohort study in the United Kingdom*  
Miranda Cuming, University of Bristol, Bristol, UK
- 22 *Opioid tapering and discontinuation patterns in a large Colorado health system: 2012-2016*  
Ingrid Binswanger, Komal Narwaney, Jason Glanz, Kaiser Permanente Colorado, Denver, CO
- 23 *A survey study characterizing use of kratom (Mitragyna speciosa)*  
Albert Garcia-Romeu, Kelly Dunn, Roland Griffiths, Johns Hopkins University School of Medicine, Baltimore, MD
- 24 *Characteristics of problematic users of trihexyphenidyl in a French overseas territory*  
Gaetan Tomas-Bouil-Broto<sup>1</sup>, Laurent Blum<sup>1</sup>, Michel Spodenkiewicz<sup>1</sup>, David Mété<sup>2</sup>, Jean-Marc Alexandre<sup>3</sup>, Fuschia Serre<sup>3</sup>, Melina Fatseas<sup>4</sup>, Marc Auriacombe<sup>3</sup>, <sup>1</sup>CHU Sud Reunion, University of Reunion, Saint-Pierre, <sup>2</sup>Addiction Clinic, CHU Félix Guyon, Saint-Denis, France, <sup>3</sup>Université de Bordeaux, Bordeaux, <sup>4</sup>Centre Hospitalier Charles Perrens, Bordeaux, France

- 25 *5-Methoxy-N,N-dimethyltryptamine (5-MeO-DMT): Patterns of use, motives for consumption, and acute subjective effects*  
 Alan Davis<sup>1</sup>, Joseph Barsuglia<sup>2</sup>, Rafael Lancelotta<sup>3</sup>, Robert Grant<sup>4</sup>, Elise Renn<sup>2</sup>, <sup>1</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>2</sup>Crossroads Treatment Center, Mexico, <sup>3</sup>University of Wyoming, Laramie, WY, <sup>4</sup>University of California San Francisco, San Francisco
- 26 *Assessing differential risks of cocaine dependence problems based on cocaine onset lag-times*  
 Madhur Chandra<sup>1</sup>, James Anthony<sup>2</sup>, <sup>1</sup>Michigan State University, East Lansing, MI, <sup>2</sup>Michigan State University, Lansing, MI
- 27 *Cocaine use among emerging adults in the united states: Trends by race, sex, and college enrollment in the national survey on drug use and health (2002-2014)*  
 Kristin Schneider<sup>1</sup>, Julie Johnson<sup>2</sup>, Renee Johnson<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 28 *Past-month substance use by sexual identity among american adult women*  
 Emily Greene, Silvia Martins, Columbia University, New York, NY
- 29 *Suicide attempts and death among heroin-involved women seeking methadone treatment in Taiwan*  
 Wan-Ting Chen<sup>1</sup>, I-An Wang<sup>2</sup>, Sheng-Chang Wang<sup>3</sup>, Chuan-Yu Chen<sup>4</sup>, <sup>1</sup>National Health Research Institutes, Zhunan, Taiwan, <sup>2</sup>Center of Neuropsychiatric Research, National Health Research Institutes, Miaoli, <sup>3</sup>National Health Research Institutes, Zhunan, <sup>4</sup>National Yang-Ming University, Taipei, Taiwan
- 30 *Of substance: Stressful life events and substance use in a national sample*  
 Carol Boyd, Stephen Strobbe, Brady West, Sean McCabe, University of Michigan, Ann Arbor, MI
- 31 *Beyond percent days abstinent: Quality of life indices as a function of time in recovery in a nationally representative sample of US adults*  
 M. Claire Greene<sup>1</sup>, Brandon Bergman<sup>2</sup>, John Kelly<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Massachusetts General Hospital, Boston, MA
- 32 *Item Response Theory analyses of DSM-5 substance criteria: Comparison of active substance users seeking treatment and those in harm reduction settings*  
 Marc Auriacombe<sup>1</sup>, Charlotte Kervran<sup>1</sup>, Fuschia Serre<sup>1</sup>, Cecile Denis<sup>2</sup>, Perrine Roux<sup>3</sup>, Marie Jauffret-Roustide<sup>3</sup>, Laurence Lalanne<sup>4</sup>, Melina Fatseas<sup>5</sup>, Jean-Pierre Daulouede<sup>6</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>INSERM, Marseille, <sup>4</sup>University Hospital of Strasbourg, Strasbourg, <sup>5</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>6</sup>Bizia Addiction Clinic, Bayonne
- 33 *From DSM-IV to DSM-V alcohol-use disorders among university students from Lebanon: Epidemiological and clinical implications*  
 Lilian Ghandour, Sirine Anouti, American University of Beirut, Beirut
- 34 *The neighborhood retail environment & pedestrian injury risk: The unique role of alcohol outlets*  
 Elizabeth Nesoff<sup>1</sup>, Adam Milam<sup>2</sup>, Charles Branas<sup>1</sup>, Silvia Martins<sup>1</sup>, Debra Furr-Holden<sup>3</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>3</sup>Michigan State University, Flint, MI
- 35 *Who gets cleared for opioid detoxification trials: From the window of apathy or trauma*  
 Alison Oliveto<sup>1</sup>, Prasad Padala<sup>2</sup>, Jeff Thostenson<sup>1</sup>, Michael Mancino<sup>1</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AK, <sup>2</sup>Eugene J. Towbin Veterans Healthcare Center, North Little Rock, AK

**POSTER II**  
**ETHNIC DISPARITIES**

**Sapphire ABC/EFG**  
**8:00 - 10:00 AM**

- 36 *Treatment completion outcomes for opioid users: Are there racial and ethnic disparities across large us metropolitan areas?*  
Jerry Stahler, Jeremy Mennis, Temple University, Philadelphia, PA
- 37 *Differences associated with injection drug use (IDU) vs non-IDU among black heroin users in an urban setting*  
Joi-Sheree' Knighton<sup>1</sup>, Mark Greenwald<sup>2</sup>, <sup>1</sup>Wayne State University School of Medicine, Detroit, MI, <sup>2</sup>Wayne State University, Detroit, MI
- 38 *Heroin and non-medical prescription opioid use trends in young adults by race/ethnicity, education, and psychological distress between 2005-2014*  
Leila Vaezazizi<sup>1</sup>, Meghan Cahill<sup>2</sup>, Pia Mauro<sup>3</sup>, Luis Segura<sup>3</sup>, Julian Santaella-Tenorio<sup>3</sup>, Silvia Martins<sup>3</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>3</sup>Columbia University, New York, NY
- 39 *Trauma, race/ethnicity and risk for su and sud among florida justice-involved children*  
Micah Johnson, Linda Cottler, University of Florida, Gainesville, FL
- 40 *Childhood risk factors to early onset cannabis use among African American and European American adolescents*  
Manik Ahuja<sup>1</sup>, Kathleen Bucholz<sup>2</sup>, <sup>1</sup>Postdoctoral Research Scholar, St. Louis, MO, <sup>2</sup>Washington University School of Medicine, St. Louis, MO
- 41 *Social capital predicts cigarette smoking in majority white counties, but not counties that are majority African American, Latina/o, or American Indian/Alaska native*  
Nathan Smith, Kathleen Egan, Micah Johnson, Linda Cottler, University of Florida, Gainesville, FL
- 42 *Examining the relationship of disordered eating and substance use among adolescent females*  
Alia Rowe, Tamika Zapolski, Indiana University Purdue University Indianapolis, Indianapolis, IN
- 43 *Why now? Examining antecedents for substance use initiation among African American adolescents*  
Tamika Zapolski<sup>1</sup>, Tianyi Yu<sup>2</sup>, Gene Brody<sup>2</sup>, Devin Banks<sup>1</sup>, Allen Barton<sup>2</sup>, <sup>1</sup>Indiana University Purdue University Indianapolis, Indianapolis, IN, <sup>2</sup>University of Georgia, Athens, GA

## POSTER II D PROGRAM DESCRIPTION

**Sapphire ABC/EFG**  
**8:00 - 10:00 AM**

- 44 *A model to integrate tobacco-free workplace programs into substance use treatment centers*  
Virmarie Correa-Fernandez<sup>1</sup>, Daniel Connor<sup>1</sup>, Bryce Kyburz<sup>2</sup>, Isabel Martinez Leal<sup>1</sup>, Teresa Williams<sup>2</sup>, Kathleen Casey<sup>2</sup>, William Wilson<sup>2</sup>, Shaili Bhavsar<sup>1</sup>, Hiroe Okamoto<sup>1</sup>, Ezemenari Obasi<sup>1</sup>, Lorraine Reitzel<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>Integral Care, Austin, TX
- 45 *Smartphone-based financial incentives to promote smoking cessation among pregnant women*  
Allison Kurti<sup>1</sup>, Alex Cohen<sup>2</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Vermont, Burlington
- 46 *Implementation of a substance use-focused ambulatory "ICU" for primary care: the The streamlined unified meaningfully managed interdisciplinary team (SUMMIT)*  
Brian Chan<sup>1</sup>, Matthew Mitchell<sup>2</sup>, Philip Todd Korthuis<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>Central City Concern, Portland, OR
- 47 *North Campus: Integrating primary and behavioral healthcare for individuals with substance use disorders*  
Jim May, Dawn Farrell-Moore, Neal Masri, Sara Hilleary, Richmond Behavioral Health Authority, Richmond, VA
- 48 *Public Health Assessment via Structural Evaluation (PHASE): A structure-based approach for assessing the abuse potential of designer drugs*  
Christopher Ellis<sup>1</sup>, Naomi Kruhlak<sup>2</sup>, Greg Hawkins<sup>2</sup>, Lidiya Stavitskaya<sup>2</sup>, <sup>1</sup>U.S. Food and Drug Administration, Columbia, MD, <sup>2</sup>U.S. Food and Drug Administration, Silver Spring, MD

- 49 *Adapting an addiction technology transfer model to address HIV and injection drug use in Ukraine*  
Anna Blyum<sup>1</sup>, Igor Koutsenok<sup>1</sup>, David Grelotti<sup>2</sup>, Sherry Larkins<sup>3</sup>, Irina Pinchuk<sup>4</sup>, Yulia Yachnik<sup>4</sup>, <sup>1</sup>University of California San Diego, San Diego, CA, <sup>2</sup>University of California San Diego, San Diego, Zimbabwe, <sup>3</sup>University of California Los Angeles, Los Angeles, CA, <sup>4</sup>International Addiction Technology Transfer Center in Ukraine, San Diego, CA
- 50 *The rise of overdose deaths involving fentanyl and the value of early warning*  
Zachary Patterson, Bridget Hall, Matthew Young, Canadian Centre on Substance Abuse, Ottawa, ON, Canada
- 51 *Development of a qualitative coding methodology to assess motivations for use of suboxone film*  
Natasha Oyedele, Taryn Dailey-Govoni, Michael Behling, Inflexxion, Inc., Waltham, MA
- 52 *Successful retention strategies for participants in opioid-dependence research in NYC*  
Peter Greco<sup>1</sup>, Sarah Meyers-Ohki<sup>1</sup>, Amber Regis<sup>1</sup>, Rosemary Lopez<sup>1</sup>, Jan Garcia<sup>1</sup>, Ryan McCormack<sup>1</sup>, Michael Bogenschutz<sup>2</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University, New York
- 53 *Academic detailing intervention in primary care: Addressing opioid prescribing*  
Sarah Ball<sup>1</sup>, Megan Pruitt<sup>1</sup>, Jenna McCauley<sup>1</sup>, Jingwen Zhang<sup>1</sup>, William Moran<sup>1</sup>, Kit Simpson<sup>1</sup>, Khosrow Heidari<sup>2</sup>, Kathleen Brady<sup>1</sup>, Patrick Mauldin<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>South Carolina Department of Health and Environmental Control, Columbia, SC
- 54 *Hub and spoke model to improve pharmacotherapy use for opioid addiction – early implementation*  
Sharon Reif<sup>1</sup>, Mary Brolin<sup>1</sup>, Maureen Stewart<sup>2</sup>, <sup>1</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>2</sup>Brandeis University, Waltham, MA
- 55 *Rationale for combination of XR-naltrexone and bupropion for the treatment of methamphetamine use disorder in the NIDA CTN--0068 ADAPT-2 Trial*  
Adriane dela Cruz<sup>1</sup>, Larissa Mooney<sup>2</sup>, Robrina Walker<sup>1</sup>, Maureen Hillhouse<sup>3</sup>, Madhukar Trivedi<sup>1</sup>, Walter Ling<sup>4</sup>, <sup>1</sup>University of Texas Southwestern Medical Center, Dallas, TX, <sup>2</sup>UCLA Integrated Substance Abuse Programs, Los Angeles, CA, <sup>3</sup>New York University, New York, NY, <sup>4</sup>University of California Los Angeles, Los Angeles, CA
- 56 *NIDA CTN Protocol 0068: Design of the accelerated development of additive pharmacotherapy treatment (ADAPT-2) for methamphetamine use disorder trial*  
Robrina Walker<sup>1</sup>, Mora Kim<sup>1</sup>, Gaurav Sharma<sup>2</sup>, Thomas Carmody<sup>1</sup>, Steven Sparenborg<sup>3</sup>, Adriane dela Cruz<sup>1</sup>, Walter Ling<sup>4</sup>, Madhukar Trivedi<sup>1</sup>, <sup>1</sup>University of Texas Southwestern Medical Center, Dallas, TX, <sup>2</sup>The Emmes Corporation, Rockville, MD, <sup>3</sup>Arete Addiction Services and Arete Products, Dallas, TX, <sup>4</sup>University of California Los Angeles, Los Angeles, CA
- 57 *Initiation of STAMPOUT: Study of antibody for methamphetamine outpatient therapy in recreational methamphetamine abusers*  
Ryan Turncliff<sup>1</sup>, Lynn Webster<sup>1</sup>, Misty Stevens<sup>2</sup>, W. Gentry<sup>3</sup>, <sup>1</sup>PRA Health Sciences, Salt Lake City, UT, <sup>2</sup>InterveXion Therapeutics, Little Rock, AR, <sup>3</sup>University of Arkansas for Medical Sciences, Little Rock, AR
- 58 *Towards detecting cocaine use using smartwatches in the NIDA Clinical Trials Network: Rationale, design, and methodology*  
Bethany McLeman<sup>1</sup>, August Holtyn<sup>2</sup>, Lisa Marsch<sup>3</sup>, Santosh Kumar<sup>4</sup>, Emre Ertin<sup>5</sup>, Kenzie Preston<sup>6</sup>, Shahin Samiei<sup>4</sup>, Andrea Meier<sup>7</sup>, Elizabeth Saunders<sup>8</sup>, Julia Collins<sup>9</sup>, Dikla Blumberg<sup>9</sup>, Jennifer McCormack<sup>9</sup>, Udi Ghitza<sup>10</sup>, Olivia Walsh<sup>11</sup>, <sup>1</sup>Northeast Node of the CTN/Dartmouth College, Lebanon, NH, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>4</sup>University of Memphis, Memphis, TN, <sup>5</sup>Ohio State University, Columbus, OH, <sup>6</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>7</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>8</sup>The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH, <sup>9</sup>The Emmes Corporation, Rockville, MD, <sup>10</sup>National Institutes of Health, National Institute on Drug Abuse, Center for the Clinical Trials Network, Bethesda, MD,

- <sup>1</sup>Dartmouth College, Hanover, NH
- 59 *Australian centre for cannabinoid clinical and research excellence (ACRE): A novel multidisciplinary approach to evidence development and translation*  
Jan Copeland<sup>1</sup>, Nadia Solowij<sup>2</sup>, Jennifer Martin<sup>3</sup>, <sup>1</sup>University of South Wales, Sydney, <sup>2</sup>University of Wollongong, Wollongong, Australia, <sup>3</sup>University of Newcastle, Callaghan, Australia
- 60 *Twitter-based intervention for young adult African American blunt smokers*  
LaTrice Montgomery, University of Cincinnati, College of Medicine, Cincinnati, OH
- 61 *Preparing post-graduate trainees to deliver team-based primary care to homeless veterans*  
Lillian Gelberg<sup>1</sup>, Michael Soh<sup>2</sup>, Kristin Kopelson<sup>2</sup>, Kerri Schutz<sup>2</sup>, Brianna Cowan<sup>2</sup>, Margaret Stuber<sup>2</sup>, Shinobu Seragaki<sup>2</sup>, Andrew Shaner<sup>2</sup>, Carole Warde<sup>2</sup>, <sup>1</sup>University of California, Department of Family Medicine, Los Angeles, CA, <sup>2</sup>Greater Los Angeles VA, Los Angeles, CA
- 62 *Building health homes for clients in treatment for substance use disorders*  
Elizabeth Waddell<sup>1</sup>, Tracy Anastas<sup>2</sup>, Gretchen Horton-Dunbar<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>School of Science, IUPUI, Indianapolis, IN
- 63 *Counteracting reflexive, dehumanizing responses*  
Michael Soh<sup>1</sup>, Andrew Shaner<sup>1</sup>, Lillian Gelberg<sup>2</sup>, Kristin Kopelson<sup>1</sup>, Margaret Stuber<sup>1</sup>, Carole Warde<sup>1</sup>, <sup>1</sup>Greater Los Angeles VA, Los Angeles, CA, <sup>2</sup>University of California, Department of Family Medicine, Los Angeles, CA
- 64 *The impact of substance use disorders on diabetes quality of care measures*  
Blanca Noriega Esquivas<sup>1</sup>, Rui Duan<sup>1</sup>, Daniel Feaster<sup>2</sup>, Viviana Horigian<sup>1</sup>, <sup>1</sup>University of Miami, Miami, FL, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL
- 65 *Sex-specific neurobiological differences in substance addiction: An educational pilot program for next generation STEM workforce*  
Philip Vieira, CSU Dominguez Hills, Carson, CA
- 66 *Introducing the NIDA core center of excellence in omics, systems genetics, and the addictome*  
Laura Saba<sup>1</sup>, Saunak Sen<sup>2</sup>, Robert Williams<sup>3</sup>, <sup>1</sup>University of Colorado Anschutz Medical Campus, Aurora, CO, <sup>2</sup>Departments of Preventive Medicine, and Genetics Genomics and Informatics, University of Tennessee, Memphis, TN, <sup>3</sup>University of Tennessee Health Science Center, Memphis, TN

## POSTER II

### STIMULANTS: PRECLINICAL II

## Sapphire ABC/EFG

8:00 - 10:00 AM

- 67 *Tat-GluR23Y peptide disrupts the methamphetamine-associated memory and reduces long-term relapse*  
Xiaojie Zhang, Central South University, Changsha, China, China
- 68 *Profile of dasotraline in rats trained to discriminate d-amphetamine from saline compared with various drugs used to treat ADHD*  
Jane Gosden<sup>1</sup>, Nigel Slater<sup>1</sup>, David Heal<sup>2</sup>, Tracy Deats<sup>3</sup>, Seth C. Hopkins<sup>3</sup>, Kenneth Koblan<sup>3</sup>, <sup>1</sup>RenaSci Ltd, Nottingham, United Kingdom, <sup>2</sup>RenaSci Ltd, Nottingham, <sup>3</sup>Sunovion Pharmaceuticals Inc, Marlborough, MA
- 69 *Dasotraline is a monoamine reuptake inhibitor not a releasing agent as revealed by tetrodotoxin (TTX) sensitivity in microdialysis in the nucleus accumbens of freely-moving rats*  
David Heal<sup>1</sup>, Rajiv Kulkarni<sup>2</sup>, Lucy Pinder<sup>2</sup>, Helen Rowley<sup>2</sup>, Tracy Deats<sup>3</sup>, Seth C. Hopkins<sup>3</sup>, Kenneth Koblan<sup>3</sup>, <sup>1</sup>RenaSci Ltd, Nottingham, <sup>2</sup>RenaSci Ltd, Nottingham, United Kingdom, <sup>3</sup>Sunovion Pharmaceuticals Inc, Marlborough, MA
- Enhanced acquisition of cocaine self-administration in male and female rats following amphetamine exposure during adolescence*

- 70 *Enhanced acquisition of cocaine self-administration in male and female rats following amphetamine exposure during adolescence*  
Ryan Lacy, Hannah Schorsch, Bridget Austin, Franklin and Marshall College, Lancaster, PA
- 71 *Identification of neural circuits recruited during withdrawal from methamphetamines using whole brain imaging*  
Adam Kimbrough<sup>1</sup>, Andres Collazo<sup>2</sup>, Marsida Kallupi<sup>1</sup>, Olivier George<sup>1</sup>, <sup>1</sup>The Scripps Research Institute, La Jolla, CA, <sup>2</sup>Caltech Bioimaging Facility, Pasadena, CA
- 72 *Associations between perceived stress and poor everyday functioning in methamphetamine (METH) dependence and/or HIV infection*  
Mariam Hussain<sup>1</sup>, Jennifer Iudicello<sup>1</sup>, Erin Morgan<sup>1</sup>, Igor Grant<sup>2</sup>, Robert Heaton<sup>1</sup>, <sup>1</sup>University of California San Diego, San Diego, CA, <sup>2</sup>University of California San Diego, La Jolla, CA
- 73 *Unraveling individual differences in the HIV-1 transgenic rat: Therapeutic efficacy of methylphenidate*  
Steven Harrod, Kristen McLaurin, Hailong Li, Rosemarie Booze, Amanda Fairchild, Charles Mactutus, University of South Carolina, Charleston, SC
- 74 *The impact of sex and exercise on methamphetamine preference in a rat animal model*  
Mari Purpura, University of California Santa Barbara, San Francisco, CA
- 75 *The role of E3 ligase parkin deficit in vulnerability to abuse methamphetamine*  
Anna Moszczynska, Wayne State University, Detroit, MI
- 76 *The effect of Hnrnp1 deletion upon reinforcement varies as a function of the reinforcer*  
Elissa Fultz<sup>1</sup>, Qui Ruan<sup>2</sup>, Neema Yazdani<sup>2</sup>, Nicholas Stailey<sup>1</sup>, Sami Ferdousian<sup>1</sup>, Elijah Lustig<sup>1</sup>, Aidan Healy<sup>1</sup>, Camron Bryant<sup>2</sup>, Karen Szumlinski<sup>1</sup>, <sup>1</sup>University of California Santa Barbara, Santa Barbara, CA, <sup>2</sup>Boston University School of Medicine, Boston, MA
- 77 *Cardiovascular safety of dopamine D3 receptor antagonists and cocaine*  
Nathan Appel, Jane Acri, National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 78 *Neurochemical and cardiovascular effects of beta-methyl phenethylamine analogs found in dietary supplements*  
Charles Schindler<sup>1</sup>, Eric Thorndike<sup>1</sup>, Kenner Rice<sup>2</sup>, Michael Baumann<sup>1</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 79 *Caffeine dose-dependently increases sign tracking and decreases goal tracking in a Pavlovian conditioned approach paradigm*  
Curtis Bradley, Caleb Bailey, Dustin Harryman, Gerald Deehan, Jr., Matthew Palmatier, East Tennessee State University, Johnson City, TN

## POSTER II IMAGING

**Sapphire ABC/EFG  
8:00 - 10:00 AM**

- 80 *"The amygdala gets what the amygdala wants": Amygdalar activation by 6 second cocaine videos predicts relapse, and fully mediates outcome prediction by the positive affective bias to implicit cocaine cues.*  
Anna Rose Childress<sup>1</sup>, Kanchana Jagannathan<sup>1</sup>, Paul Regier<sup>1</sup>, Jesse Suh<sup>1</sup>, Ron Ehrman<sup>1</sup>, Stefanie Darnley<sup>1</sup>, Elliott Berkowitz-Sturgis<sup>1</sup>, Zach Monge<sup>1</sup>, Teresa Franklin<sup>1</sup>, Reagan Wetherill<sup>1</sup>, Daniel Langleben<sup>2</sup>, Kimberly Young<sup>1</sup>, Michael Gawrysiak<sup>3</sup>, Regina Szucs-Reed<sup>1</sup>, Kyle Kampman<sup>1</sup>, Charles O'Brien<sup>4</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Veterans Administration, Philadelphia, PA, <sup>3</sup>West Chester University of Pennsylvania, West Grove, PA, <sup>4</sup>University of Pennsylvania, VA Medical Center, Philadelphia, PA
- 81 *Examining the relationship between dopamine 2 (D2) receptor availability, early life stress (ELS), and vulnerability to the reinforcing effects of cocaine in male and female rhesus macaques.*  
Alison Wakeford<sup>1</sup>, Jonathon Nye<sup>2</sup>, Mar Sanchez<sup>3</sup>, Leonard Howell<sup>2</sup>, <sup>1</sup>Yerkes National Primate Research Center, Atlanta, GA, <sup>2</sup>Emory University, Atlanta, GA, <sup>3</sup>Yerkes National Primate Research Center & Emory University, Atlanta, GA



- 82 *White matter abnormalities in cocaine use disorder: are there differences between snorted cocaine and crack cocaine users?*  
Mauricio Serpa<sup>1</sup>, Fabio Duran<sup>1</sup>, Hercílio Pereira de Oliveira Junior<sup>2</sup>, Priscila Goncalves<sup>1</sup>, Caio Vinícius de Melo<sup>3</sup>, Mariella Ometto<sup>2</sup>, Bernardo dos Santos<sup>1</sup>, André Malbergier<sup>2</sup>, Ricardo Amaral<sup>2</sup>, Sergio Nicastrí<sup>4</sup>, Arthur Andrade<sup>2</sup>, Geraldo Busatto Filho<sup>5</sup>, Paulo Jannuzzi Cunha<sup>5</sup>, <sup>1</sup>University of São Paulo, São Paulo, Brazil, <sup>2</sup>University of São Paulo Medical School, São Paulo, <sup>3</sup>Student, São Paulo, Brazil, <sup>4</sup>Hospital Israelita Albert Einstein, São Paulo, Brazil, <sup>5</sup>University of São Paulo Medical School, São Paulo, Brazil
- 83 *Distinct patterns of resting state functional connectivity among inpatients reporting crack use versus snorted cocaine use*  
Priscila Dib Gonçalves<sup>1</sup>, Luciano de Menezes Sanchez<sup>2</sup>, Pedro Rosa<sup>1</sup>, Hercílio Pereira de Oliveira Junior<sup>3</sup>, Danielle Lima<sup>2</sup>, Maya Foigel<sup>2</sup>, Mariella Ometto<sup>3</sup>, Caio Vinícius de Melo<sup>4</sup>, Ricardo Amaral<sup>3</sup>, André Malbergier<sup>3</sup>, Sergio Nicastrí<sup>5</sup>, Arthur Andrade<sup>3</sup>, Geraldo Busatto Filho<sup>2</sup>, Paulo Jannuzzi Cunha<sup>2</sup>, <sup>1</sup>University of São Paulo, São Paulo, Brazil, <sup>2</sup>University of São Paulo Medical School, São Paulo, Brazil, <sup>3</sup>University of São Paulo Medical School, São Paulo, <sup>4</sup>Student, São Paulo, Brazil, <sup>5</sup>Hospital Israelita Albert Einstein, São Paulo, Brazil
- 84 *Naltrexone reduces striatal resting state functional connectivity in people with methamphetamine use disorder*  
Milky Kohno, Laura Dennis, William Hoffman, Holly McCready, Philip Todd Korthuis, Oregon Health & Science University, Portland, OR
- 85 *Using dynamic contrast enhanced MRI to measure methamphetamine's effects on blood brain barrier permeability*  
Mudassir Mumtaz<sup>1</sup>, Jermaine Jones<sup>2</sup>, Alayar Kangarlui<sup>3</sup>, Verena Metz<sup>4</sup>, Jeanne Manubay<sup>5</sup>, Shanthi Mogali<sup>4</sup>, Diana Martinez<sup>3</sup>, Henrik Larsson<sup>6</sup>, Feng Liu<sup>3</sup>, Sandra Comer<sup>4</sup>, <sup>1</sup>CUNY School of Medicine, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>3</sup>New York State Psychiatric Institute, New York, NY, <sup>4</sup>Columbia University and NYSPI, New York, NY, <sup>5</sup>Columbia University, New York, NY, <sup>6</sup>Danish Research Center of Magnetic Resonance, Hvidovre, Denmark
- 86 *An effective connectivity study of emotion processing in cannabis use disorder*  
Liangsuo Ma<sup>1</sup>, Joel Steinberg<sup>1</sup>, James Bjork<sup>1</sup>, Lori Keyser-Marcus<sup>1</sup>, Jasmin Vassileva<sup>1</sup>, Sergi Ferré<sup>2</sup>, Antonio Abbate<sup>1</sup>, F. Gerard Moeller<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>NIDA Intramural Research Program, Baltimore, MD
- 87 *Neuromodulation of functional connectivity in emerging adults with cannabis use disorder*  
Michael Wesley<sup>1</sup>, Qiang (Shawn) Cheng<sup>2</sup>, Anil C<sup>2</sup>, Joshua Lile<sup>1</sup>, <sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY
- 88 *The effects of synthetic cannabinoids (SCs) on the brain's structure and function*  
Aviv Weinstein<sup>1</sup>, Abigail Livny<sup>2</sup>, Koby Cohen<sup>1</sup>, Niv Tik<sup>3</sup>, Paola Roska<sup>4</sup>, <sup>1</sup>Ariel University, Ariel, Israel, <sup>2</sup>Sheba Medical Center, Tel Hashomer, Israel, <sup>3</sup>Tel Hashomer Hospital, Tel Hashomer, Israel, <sup>4</sup>Ministry of Health, Jerusalem, Israel
- 89 *Relationship between fMRI response during a nonverbal memory task and marijuana use in college students*  
Alecia Dager<sup>1</sup>, Madelynn Tice<sup>2</sup>, Gregory Book<sup>3</sup>, Sarah Raskin<sup>4</sup>, Howard Tennen<sup>5</sup>, Carol Austad<sup>6</sup>, Rebecca Wood<sup>7</sup>, Carolyn Fallahi<sup>7</sup>, Keith Hawkins<sup>8</sup>, Godfrey Pearson<sup>8</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Public Health, Hartford, CT, <sup>3</sup>Olin Neuropsychiatry Research Center, Hartford Hospital, Hartford, CT, <sup>4</sup>Trinity College, Hartford, CT, <sup>5</sup>University of Connecticut Health Center, Farmington, CT, <sup>6</sup>Center Connecticut State University, New Britain, CT, <sup>7</sup>Central Connecticut State University, New Britain, CT, <sup>8</sup>Yale University Department of Psychiatry, Hartford, CT
- 90 *Increased mean diffusivity is associated with greater past month cannabis use in emerging adults, but not alcohol or same-day alcohol and cannabis use*  
Natasha Wade<sup>1</sup>, Alicia Thomas<sup>1</sup>, Staci Gruber<sup>2</sup>, Susan Tapert<sup>3</sup>, Francesca Filbey, Krista Lisdahl<sup>1</sup>, <sup>1</sup>University

- of Wisconsin-Milwaukee, Milwaukee, WI, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>3</sup>University of California San Diego, La Jolla, CA
- 91 *Slow-wave sleep disruption is associated with increased insula activity during inhibitory control in adolescents*  
Lora Cope<sup>1</sup>, Meghan Martz<sup>1</sup>, Deirdre Conroy<sup>1</sup>, Philip Cheng<sup>2</sup>, Robert Hoffman<sup>1</sup>, J. Todd Arnedt<sup>1</sup>, Mary Heitzeg<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Henry Ford Health System, Detroit, MI
- 92 *Nicotine effects on white matter microstructure in male and female young adults*  
Megan Kangiser, Alicia Thomas, Christine Kaiver, Krista Lisdahl, University of Wisconsin-Milwaukee, Milwaukee, WI
- 93 *Decreased regional gray matter volume in male adolescents with substance use disorder and limited prosocial emotions*  
Janet Kim<sup>1</sup>, Susan Mikulich-Gilbertson<sup>2</sup>, Manish Dalwani<sup>2</sup>, Kristen Raymond<sup>1</sup>, Shannon McWilliams<sup>2</sup>, Joseph Sakai<sup>2</sup>, <sup>1</sup>University of Colorado, Aurora, CO, <sup>2</sup>University of Colorado School of Medicine, Aurora, CO
- 94 *Larger volume in reward-related temporal lobe regions is associated with impulsivity and craving in cigarette smokers*  
Yasmin Mashhoon, Jennifer Betts, Scott Lukas, McLean Hospital, Harvard Medical School, Belmont, MA
- 95 *Lower cortical dopamine D2 receptor availability in smokers compared to nonsmokers and the relationship to cognitive function*  
Yasmin Zakiniaieiz<sup>1</sup>, Ansel Hillmer<sup>1</sup>, Evan Morris<sup>1</sup>, David Matuskey<sup>1</sup>, Nabeel Nabulsi<sup>1</sup>, Yiyun Henry Huang<sup>1</sup>, Sherry McKee<sup>2</sup>, Kelly Cosgrove<sup>1</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT
- 96 *Lighting up: Neural responses to cigarette smoking*  
Ariel Ketcherside<sup>1</sup>, Kanchana Jagannathan<sup>1</sup>, Nathan Hager<sup>2</sup>, Danielle Pelosi<sup>3</sup>, Stefanie Darnley<sup>1</sup>, Fan Nils Yang<sup>1</sup>, H Rao<sup>1</sup>, John Detre<sup>1</sup>, Sudipto Dolui<sup>4</sup>, Teresa Franklin<sup>1</sup>, Reagan Wetherill<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Old Dominion University, Norfolk, VA, <sup>3</sup>Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, <sup>4</sup>Department of Radiology, The University of Pennsylvania, Philadelphia, PA
- 97 *Additive effects of HIV-infection and chronic tobacco smoking on brain microstructure*  
Huajun Liang<sup>1</sup>, Thomas Ernst<sup>2</sup>, David Greenstein<sup>3</sup>, Linda Chang<sup>3</sup>, <sup>1</sup>University of Hawaii, Baltimore, MD, <sup>2</sup>Department of Medicine, John A. Burns School of Medicine, University of Hawaii and Queen's Medical Center, Baltimore, MD, <sup>3</sup>Queen's Medical Center, Department of Medicine, John A. Burns School of Medicine, Baltimore, MD
- 98 *Behind the mask: Elevated BOLD, but not behavioral responses to pain in individuals using prescription opiates*  
Logan Dowdle, Jeffrey Borckardt, Sudie Back, Colleen Hanlon, Medical University of South Carolina, Charleston, SC

## POSTER II HIV/HCV

## Sapphire ABC/EFG 8:00 - 10:00 AM

- 99 *Factors related to prescription opioid misuse among HIV positive substance users: Understanding the role of substance use, mental health and ARV adherence*  
Maria Levi-Minzi<sup>1</sup>, Hilary Surratt<sup>2</sup>, <sup>1</sup>Nova Southeastern University, Miami, FL, <sup>2</sup>University of Kentucky, Lexington, KY
- 100 *Impact of syndemic conditions on perceived barriers to pre-exposure prophylaxis use among female sex workers along Mexico's northern border*

- Jennifer Jain<sup>1</sup>, Steffanie Strathdee<sup>2</sup>, Thomas Patterson<sup>2</sup>, Shirley Semple<sup>2</sup>, Alicia Vera<sup>2</sup>, Carlos Magis-Rodriguez<sup>3</sup>, Gustavo Martinez<sup>4</sup>, Heather Pines<sup>2</sup>, <sup>1</sup>University of California, Department of Medicine, San Diego, CA, <sup>2</sup>University of California San Diego, La Jolla, CA, <sup>3</sup>Center for HIV/AIDS Prevention and Control, Mexico City, <sup>4</sup>Federacion Mexicana de Asociaciones Privadas, Ciudad Juarez, Chihuahua, Mexico
- 101 *Associations between unprotected sex, psychiatric comorbidity, and substance use frequency in a cohort of HIV-infected and at-risk women with a history of housing instability*  
Meredith Meacham, Amber Bahorik, Elise Riley, University of California San Francisco, San Francisco, CA
- 102 *The mediating effect of illicit drug use on the relationship between risky sexual behaviors and HIV infection: Results from the 2013 Taiwan Internet MSM Sex Survey*  
Lian-Yu Chen<sup>1</sup>, Shang-Chi Wu<sup>2</sup>, Nai-Ying Ko<sup>3</sup>, <sup>1</sup>Taipei City Hospital, Taipei, Taiwan, <sup>2</sup>National Taiwan University, Epidemiology and Preventive Medicine, Taipei City, <sup>3</sup>National Cheng Kung University, Department of Nursing, Tainan
- 103 *Clusters of substance use and HIV risk behaviors among people who inject drugs in Kazakhstan*  
Phillip Marotta<sup>1</sup>, Daniel Feaster<sup>2</sup>, Assel Terlikbayeva<sup>1</sup>, Louisa Gilbert<sup>1</sup>, Tim Hund<sup>1</sup>, Elwin Wu<sup>1</sup>, Nabila El-Bassel<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL
- 104 *Preliminary efficacy of adjunct components for couples HIV testing and counseling: Reducing drug use and depression in gay couples*  
Tyrel Starks<sup>1</sup>, Trey Dellucci<sup>2</sup>, Mark Pawson<sup>3</sup>, Jeffrey Parsons<sup>1</sup>, <sup>1</sup>Hunter College, CUNY, New York City, NY, <sup>2</sup>Health Psychology and Clinical Science Training Program, Graduate Center, CUNY, New York, NY, <sup>3</sup>Graduate Center and CHEST, New York, NY
- 105 *HIV health care behaviors in substance users during patient navigation with and without contingent financial incentives*  
Maxine Stitzer<sup>1</sup>, James Sorensen<sup>2</sup>, Lisa Metsch<sup>3</sup>, Carlos del Rio<sup>4</sup>, Daniel Feaster<sup>5</sup>, Alexis Hammond<sup>6</sup>, Rui Duan<sup>7</sup>, Tim Matheson<sup>8</sup>, Lauren Gooden<sup>3</sup>, <sup>1</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>2</sup>University of California San Francisco, San Francisco, CA, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>Emory University, Atlanta, GA, <sup>5</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>6</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>7</sup>University of Miami, Miami, FL, <sup>8</sup>San Francisco Department of Public Health, San Francisco, CA
- 106 *Recent cannabis use and advanced liver fibrosis among HIV-infected heavy drinkers.*  
Daniel Fuster<sup>1</sup>, Kaku So-Armah<sup>2</sup>, Debbie Cheng<sup>2</sup>, Sharon Coleman<sup>3</sup>, Natalia Gnatienco<sup>2</sup>, Dmitry Lioznov<sup>4</sup>, Evgeny Krupitsky<sup>5</sup>, Matthew Freiberg<sup>6</sup>, Jeffrey Samet<sup>2</sup>, <sup>1</sup>Hospital Universitari Germans, Badalona, Spain, <sup>2</sup>Boston University School of Medicine, Boston, MA, <sup>3</sup>Boston University School of Public Health, Boston, MA, <sup>4</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russian Federation, <sup>5</sup>V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russian Federation, <sup>6</sup>Vanderbilt University Medical Center, Nashville, TN
- 107 *Prevalence of hazardous drinking differs between HIV+ adults reporting using marijuana for recreational versus medicinal reasons*  
Zachary Mannes<sup>1</sup>, Robert Cook<sup>2</sup>, Erin Ferguson<sup>3</sup>, Nicole Ennis Whitehead<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida SHARC Center, Gainesville, FL, <sup>3</sup>Graduate Student, Gainesville, FL
- 108 *Hepatitis screening through the analysis of liver enzymes in drug users*  
Octavio Campollo, Arturo Panduro, Sonia Roman, GABRIEL HERNANDEZ, Universidad de Guadalajara, Guadalajara
- 109 *Is HCV elimination among HIV-infected people who inject drugs possible through HCV treatment targeting HIV/HCV coinfection? A modeling analysis for Andalusia, Spain*  
Britt Skaathun<sup>1</sup>, Annick Borquez<sup>1</sup>, Sanjay Mehta<sup>1</sup>, Antonio Rivero-Juarez<sup>2</sup>, Francisco Tellez<sup>3</sup>, Manuel Castaño<sup>4</sup>, Dolores Merino<sup>5</sup>, Jesus Santos<sup>4</sup>, Juan Macias<sup>6</sup>, Antonio Rivero-Juarez<sup>2</sup>, Natasha Martin<sup>1</sup>,

<sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>Instituto Maimonides de Investigaciones Biomedicas de Cordoba, Córdoba, <sup>3</sup>Universidad de Cádiz, Cádiz, <sup>4</sup>Hospital Regional Universitario de Málaga, Málaga, <sup>5</sup>Hospitales Juan Ramón Jiménez e Infanta Elena de Huelva, Huelva, <sup>6</sup>Hospital Universitario de Valme, Instituto de Biomedicina de Sevilla, Sevilla

- 110 *Randomized trial of hepatitis c treatment for people who inject drugs at high risk for secondary transmission*  
Phillip Coffin<sup>1</sup>, Glenn-Milo Santos<sup>2</sup>, Jaclyn Hern<sup>1</sup>, Emily Behar<sup>1</sup>, Kimberly Page<sup>3</sup>, Rena Fox<sup>2</sup>, Eric Vittinghoff<sup>2</sup>, <sup>1</sup>San Francisco Department of Public Health, San Francisco, CA, <sup>2</sup>University of California San Francisco, San Francisco, CA, <sup>3</sup>University of New Mexico, Albuquerque

- 111 *Prescription opioid injection among young adults who use drugs: Associations with HCV infection and drug overdose*  
Pedro Mateu-Gelabert, Honoria Guarino, Jennifer Teubl, Jon Zibbell, Samuel Friedman, National Development and Research Institute, Inc., New York, NY

## POSTER II CRIMINAL JUSTICE

**Sapphire ABC/EFG**  
**8:00 - 10:00 AM**

- 112 *HCV status and psychiatric burden of opioid dependent-adults and young offenders in Austrian prisons*  
Laura Brandt<sup>1</sup>, Marisa Silbernagl<sup>2</sup>, Rudolf Slamanig<sup>2</sup>, Gabriele Fischer<sup>3</sup>, <sup>1</sup>University of Vienna, Austria, <sup>2</sup>Medical University of Vienna, Center for Public Health, Vienna, Austria, <sup>3</sup>Medizinische Universität Wien, Wien
- 113 *HIV prevention in rural jails: Implications for re-entry risk reduction*  
Michele Staton<sup>1</sup>, Justin Strickland<sup>2</sup>, Matt Webster<sup>2</sup>, Carl Leukefeld<sup>2</sup>, Carrie Oser<sup>2</sup>, Erika Pike<sup>2</sup>, <sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY
- 114 *A randomized controlled trial of prison-initiated buprenorphine: Longitudinal analysis of HIV-risk behaviors*  
Thomas Blue<sup>1</sup>, Michael Gordon<sup>1</sup>, Robert Schwartz<sup>1</sup>, Frank Vocci, Jr.<sup>1</sup>, Kevin O'Grady<sup>2</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, College Park, MD
- 115 *A randomized controlled trial of buprenorphine for prisoners: Official rearrest outcomes*  
Michael Gordon<sup>1</sup>, Thomas Blue<sup>1</sup>, Robert Schwartz<sup>1</sup>, Terrence Fitzgerald<sup>2</sup>, Frank Vocci, Jr.<sup>1</sup>, Kevin O'Grady<sup>3</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>Glenwood Life Counseling Center, Baltimore, MD, <sup>3</sup>University of Maryland, College Park, MD
- 116 *Polysubstance opioid use profiles in an incarcerated population*  
Amanda Bunting<sup>1</sup>, Carrie Oser<sup>1</sup>, Michele Staton<sup>2</sup>, Erin Winston<sup>1</sup>, Kevin Pangburn<sup>3</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>3</sup>Kentucky Department of Corrections, Frankfort, KY
- 117 *Typology of offenders: Violence and substance use outcomes*  
Cassandra Barbary, Cory Crane, Caroline Easton, Rochester Institute of Technology, Rochester, NY
- 118 *Appalachian clinician's views on medication-assisted treatment for re-entering offenders*  
Carrie Oser<sup>1</sup>, Amanda Bunting<sup>1</sup>, Michele Staton<sup>2</sup>, Erin Winston<sup>1</sup>, Kate Eddens<sup>1</sup>, Hannah Knudsen<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 119 *Correlates of re-entry employment among rural female drug-involved offenders*  
Matt Webster<sup>1</sup>, Megan Dickson<sup>1</sup>, Michele Staton<sup>2</sup>, Carrie Oser<sup>1</sup>, Carl Leukefeld<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 120 *Health needs and health service utilization among reincarcerated drug-using women in rural Appalachia*  
Megan Dickson<sup>1</sup>, Michele Staton<sup>2</sup>, Matt Webster<sup>1</sup>, Carrie Oser<sup>1</sup>, Carl Leukefeld<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

- 121 *Predictors of recidivism among rural, incarcerated, substance-using women*  
Brittany Miller-Roenigk<sup>1</sup>, Bridgette Peteet<sup>1</sup>, Michele Staton<sup>2</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH,  
<sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 122 *Age differences in substance use and treatment among African American men incarcerated in North Carolina*  
Joy Scheidell<sup>1</sup>, Samuel Friedman<sup>2</sup>, Maria Khan<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY,  
<sup>2</sup>National Development and Research Institute, Inc., New York, NY
- 123 *Substance Use and Mental Health Profiles of Judicially-Involved Commercially Sexually Exploited Youth*  
Kayleen Ports<sup>1</sup>, Elizabeth Barnert<sup>2</sup>, Sangeeta Mondal<sup>1</sup>, Lindsey Thompson<sup>2</sup>, Mikaela Kelly<sup>3</sup>, Sarah Godoy<sup>3</sup>,  
Mekeila Cook<sup>1</sup>, Eraka Bath<sup>1</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>University of  
California, Pediatrics, Los Angeles, CA, <sup>3</sup>University of California, Psychiatry, Los Angeles, CA
- 124 *Differential associations of marijuana typologies with psychological problems and substance abuse among  
juvenile detainees*  
Devin Banks, Tamika Zapolski, Indiana University Purdue University Indianapolis, Indianapolis, IN
- 125 *Substance use and other risks associated with offence types among justice involved youth*  
Hayley Hamilton<sup>1</sup>, Evelyn Vingilis<sup>2</sup>, Shannon Stewart<sup>2</sup>, Jane Seeley<sup>2</sup>, Kathleen Einarson<sup>3</sup>, Patricia Erickson<sup>3</sup>,  
<sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>Western University, London, UK, Canada,  
<sup>3</sup>University of Toronto, Toronto, ON, Canada
- 126 *Examining changes in youth community treatment agency linkages*  
Carl Leukefeld<sup>1</sup>, Rob Seaver<sup>1</sup>, Erin Winston<sup>1</sup>, Martha Tillson<sup>1</sup>, Megan Dickson<sup>1</sup>, Hannah Knudsen<sup>1</sup>, Michele  
Staton<sup>2</sup>, Matt Webster<sup>1</sup>, Carrie Oser<sup>1</sup>, Jennifer Havens<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University  
of Kentucky, College of Medicine, Lexington, KY
- 127 *Dynamic model of first-time offenders of illicit drug use trajectory in Taiwan*  
Wei-J Chen<sup>1</sup>, Shang-Chi Wu<sup>2</sup>, Chi-Ya Chen<sup>3</sup>, Hsien-Ho Lin<sup>3</sup>, Kevin Chien-Chang Wu<sup>2</sup>, Tzu-Pin Lu<sup>2</sup>, Susyan  
Jou<sup>4</sup>, Wen-Ing Tsay<sup>5</sup>, Jui Hsu<sup>5</sup>, <sup>1</sup>National Taiwan University, Taipei City, <sup>2</sup>National Taiwan University,  
Epidemiology and Preventive Medicine, Taipei City, <sup>3</sup>National Taiwan University, Epidemiology and  
Preventive Medicine, Taipei City, Taiwan, <sup>4</sup>National Taipei University, New Taipei City, Taiwan, <sup>5</sup>Taiwan  
Food and Drug Administration, Taipei

## POSTER II OVERDOSE

**Sapphire ABC/EFG**  
**8:00 - 10:00 AM**

- 128 *Opioid involvement in intentional and unintentional poisonings: The moderating effect of poisoning severity*  
Sarah Cercone Heavey, Kenneth Conner, Timothy Wiegand, University of Rochester Medical Center,  
Rochester, NY
- 129 *Non-fatal overdose prevalence among people who inject drugs – A multi-stage systematic review and meta-  
analysis of recent evidence*  
Samantha Colledge<sup>1</sup>, Amy Peacock<sup>1</sup>, Janni Leung<sup>2</sup>, Miranda Cuming<sup>3</sup>, Michael Farrell<sup>1</sup>, Sarah Larney<sup>1</sup>,  
Louisa Degenhardt<sup>1</sup>, Jason Grebely<sup>4</sup>, <sup>1</sup>National Drug and Alcohol Research Centre, Sydney, Australia,  
<sup>2</sup>NDARC, UNSW, Australia, Brisbane, Australia, <sup>3</sup>University of Bristol, Bristol, <sup>4</sup>The Kirby Institute, Sydney,  
Australia
- 130 *Association between drug use history and non-fatal overdose: A cross-sectional study of community members  
who use prescription opioids non-medically in West Virginia*  
Kelly Gurka<sup>1</sup>, Kathleen Egan<sup>1</sup>, Alexandria Macmadu<sup>2</sup>, Herbert Linn<sup>3</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida,  
Gainesville, FL, <sup>2</sup>The Center for Prisoner Health and Human Rights, The Miriam Hospital, Providence, RI,  
<sup>3</sup>West Virginia University, Morgantown, WV

- 131 *Implementation and feasibility of a public health led non-fatal overdose response system in New York City*  
Hillary Kunins, Alice Welch, Angela Jeffers, Dominique Chambless, Denise Paone, NYC Department of Health and Mental Hygiene, Queens, NY
- 132 *Life after overdose: Survivor narratives and their implications for emergency department interventions*  
Luther Elliott<sup>1</sup>, Brett Wolfson-Stofko<sup>2</sup>, Alexander Bennett<sup>1</sup>, <sup>1</sup>National Development and Research Institute, Inc., New York, NY, <sup>2</sup>New York University, New York, NY
- 133 *Factors associated with overdose response self-efficacy among adults who report lifetime opioid use*  
Kayla Tormohlen, Karin Tobin, Melissa Davey-Rothwell, Carl Latkin, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 134 *Young adults' opioid use trajectories: Opioid type and route transitions, overdose and treatment*  
Honorio Guarino, Pedro Mateu-Gelabert, Jennifer Teubl, Elizabeth Goodbody, National Development and Research Institute, Inc., New York, NY
- 135 *Risk factors associated with overdose during follow-up in treatment-seeking youth with substance use disorders*  
Amy Yule<sup>1</sup>, Nicholas Carrellas<sup>2</sup>, Maura Fitzgerald<sup>2</sup>, Brandon Bergman<sup>2</sup>, John Kelly<sup>2</sup>, Jessica Nargiso<sup>2</sup>, James McKowen<sup>2</sup>, Timothy Wilens<sup>3</sup>, <sup>1</sup>MGH, Boston, MA, <sup>2</sup>Massachusetts General Hospital, Boston, MA, <sup>3</sup>Harvard Medical School, Boston, MA
- 136 *Examining gaps in the naloxone (Narcan) cascade of care*  
Karin Tobin, Melissa Davey-Rothwell, Carl Latkin, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 137 *Military veterans' overdose risk: Demographic and biopsychosocial influences*  
Alexander Bennett<sup>1</sup>, Luther Elliott<sup>1</sup>, J. Watford<sup>2</sup>, Andrew Golub<sup>1</sup>, Peter Britton<sup>3</sup>, Andrew Rosenblum<sup>4</sup>, Honorio Guarino<sup>1</sup>, <sup>1</sup>National Development and Research Institute, Inc., New York, NY, <sup>2</sup>New York University, New York, NY, <sup>3</sup>VA VISN 2 Center of Excellence for Suicide Prevention, Canandaigua, NY, <sup>4</sup>NDRI, Metuchen, NJ
- 138 *Fentanyl checking interest and overdose risk among opioid users: A multisite study*  
Ju Nyeong Park<sup>1</sup>, Kenneth Morales<sup>2</sup>, Michelle McKenzie<sup>3</sup>, Traci Green<sup>4</sup>, Susan Sherman<sup>1</sup>, <sup>1</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>3</sup>Lifespan, Providence, RI, <sup>4</sup>Boston University School of Medicine, Boston, MA
- 139 *Precursors to drug use escalation in a New Hampshire convenience sample of current and recent opioid users*  
Sarah Moore<sup>1</sup>, Andrea Meier<sup>1</sup>, Elizabeth Saunders<sup>2</sup>, Stephen Metcalf<sup>3</sup>, Bethany McLeman<sup>4</sup>, Olivia Walsh<sup>5</sup>, Lisa Marsch<sup>3</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>2</sup>The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH, <sup>3</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>4</sup>Northeast Node of the CTN/Dartmouth College, Lebanon, NH, <sup>5</sup>Dartmouth College, Hanover, NH
- 140 *Trends in Opioid-related overdose deaths in Virginia from 2011-2016*  
Lori Keyser-Marcus, Mary Bowman, Edward Boone, Tamas Gal, F. Gerard Moeller, Virginia Commonwealth University, Richmond, VA
- 141 *A urinalysis-based study of the prevalence of fentanyl use among opioid users in New York City*  
Suky Martinez<sup>1</sup>, Jermaine Jones<sup>2</sup>, Nicholas Allwood<sup>1</sup>, Sandra Comer<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY
- 142 *Hepatitis C virus as a moderator of opioid treatment and past opioid overdose*  
Samantha Schiavon, Karen Cropsey, University of Alabama, Birmingham, AL
- 143 *Regional heterogeneity in the association between medical marijuana laws and opioid overdose: findings from the National Health Interview Survey, 1986-2011*  
June Kim<sup>1</sup>, Julian Santaella-Tenorio<sup>2</sup>, Christine Mauro<sup>2</sup>, Deborah Hasin<sup>2</sup>, Guohua Li<sup>2</sup>, Silvia Martins<sup>2</sup>, <sup>1</sup>New York University, New York, NY, <sup>2</sup>Columbia University, New York, NY

- 144 *Use of automated data to study trends in heroin and pharmaceutical opioid overdoses in a large health system: 2006-2015*  
Jason Glanz, Komal Narwaney, Kris Wain, Andrew Sterrett, Shane Mueller, LeeAnn Quintana, Ingrid Binswanger, Kaiser Permanente Colorado, Denver, CO

## POSTER II TECHNOLOGY

**Sapphire ABC/EFG  
8:00 - 10:00 AM**

- 145 *A digital therapy to support recovery from opioid use disorder*  
Patricia Cavazos<sup>1</sup>, Melissa Krauss<sup>1</sup>, Shaina Sowles<sup>2</sup>, Elizabeth Cahn<sup>2</sup>, Laura Bierut<sup>2</sup>, <sup>1</sup>Washington University St. Louis, St. Louis, MI, <sup>2</sup>Washington University School of Medicine, St. Louis, MO
- 146 *Perceptions of technology and health resource access among patients in opioid treatment*  
Ida Chen, J. Fokuo, Carmen Masson, University of California San Francisco, San Francisco, CA
- 147 *Usability testing of a mHealth prototype to enhance HIV, HCV, and buprenorphine treatment in primary care*  
Babak Tofighi<sup>1</sup>, Chemi Chami<sup>1</sup>, Selena Sindhu<sup>1</sup>, Michelle Acosta<sup>2</sup>, Edward Nunes<sup>3</sup>, Joshua Lee<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>National Development and Research Institute, Inc., New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY
- 148 *Formative evaluation of a mobile application to assist with methadone stabilization*  
Emily Loscalzo, Robert Sterling, Stephen Weinstein, Thomas Jefferson University, Philadelphia, PA
- 149 *Leveraging technology to address unhealthy drug use in primary care: Development of a clinical decision support tool for primary care providers*  
Jennifer McNeely<sup>1</sup>, Donna Shelley<sup>1</sup>, Antonia Polyn<sup>1</sup>, Christine Chollak<sup>1</sup>, Angeline Adam<sup>1</sup>, Andre Kushniruk<sup>2</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>University of Victoria, Victoria, BC, Canada
- 150 *Implementing substance use screening in rural federally qualified health centers: Results from focus groups*  
Bethany McLeman<sup>1</sup>, Jennifer McNeely<sup>2</sup>, Elizabeth Saunders<sup>3</sup>, SARAH FARKAS<sup>2</sup>, Olivia Walsh<sup>4</sup>, Andrea Meier<sup>5</sup>, Trip Gardner<sup>6</sup>, Noah Nesin<sup>6</sup>, Seamus Higgins<sup>6</sup>, Lisa Marsch<sup>7</sup>, <sup>1</sup>Northeast Node of the CTN/Dartmouth College, Lebanon, NH, <sup>2</sup>New York University School of Medicine, New York, NY, <sup>3</sup>The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH, <sup>4</sup>Dartmouth College, Hanover, NH, <sup>5</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>6</sup>Penobscot Community Health Care, Bangor, ME, <sup>7</sup>Geisel School of Medicine at Dartmouth, Hanover, NH
- 151 *Clinical research applications of a statewide health information exchange (HIE)*  
Jan Gryczynski<sup>1</sup>, Courtney Nordeck<sup>1</sup>, Robert Schwartz<sup>1</sup>, Shannon Mitchell<sup>1</sup>, Christopher Welsh<sup>2</sup>, Ross Martin<sup>3</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, School of Medicine, Baltimore, MD, <sup>3</sup>CRISP, Columbia, MD
- 152 *User experience of four point-of-collection oral fluid devices by Brazilian traffic agents – preliminary findings*  
Flavio Pechansky<sup>1</sup>, Juliana Scherer<sup>1</sup>, Vinicius S. Roglio<sup>1</sup>, Yeger Telles<sup>2</sup>, Jaqueline B. Schuch<sup>1</sup>, Roberta B. Silvestrin<sup>1</sup>, Tanara Sousa<sup>1</sup>, <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre, <sup>2</sup>Center for Drug and Alcohol Research, Porto Alegre, Brazil
- 153 *Computer-facilitated 5A's for tobacco use disorders: Using technology to improve screening and brief interventions*  
Jason Satterfield, Steve Gregorich, Maya Vijayaraghavan, University of California San Francisco, San Francisco, CA
- 154 *Feasibility and validity of collecting intensive longitudinal alcohol use data with mechanical turk*  
Justin Strickland, William Stoops, University of Kentucky, Lexington, KY

## ORAL COMMUNICATIONS 4

Indigo E

### TWEETMENT 8.0

10:00 - 11:00 AM

Chairs: Suzette Glasner and Michael Mason

- 10:00 *Exploring trends in breathalyzer test results among participants of the Ria Treatment Program using dynamic structural equation modeling*  
Mary Mitchell<sup>1</sup>, John Mendelson<sup>2</sup>, Jan Gryczynski<sup>1</sup>, Steve Carswell<sup>1</sup>, Robert Schwartz<sup>1</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>Friends Research Institute, San Francisco, CA
- 10:15 *Development of a Facebook intervention for depressed cannabis users*  
Suzette Glasner<sup>1</sup>, Danielle Ramo<sup>2</sup>, Frances Kay-Lambkin<sup>3</sup>, Alan Budney<sup>4</sup>, Helene Chokron Garneau<sup>5</sup>, Alexandra Venegas<sup>5</sup>, <sup>1</sup>Integrated Substance Abuse Programs (UCLA), Los Angeles, CA, <sup>2</sup>University of California San Francisco, San Francisco, CA, <sup>3</sup>University of Newcastle, Callaghan, <sup>4</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>5</sup>University of California Los Angeles, Los Angeles, CA
- 10:30 *Treating cannabis use disorder among young adults: A pilot randomized clinical trial of text vs. in-person delivered peer network counseling*  
Michael Mason<sup>1</sup>, Nikola Zaharakis<sup>2</sup>, <sup>1</sup>University of Tennessee, Knoxville, TN, <sup>2</sup>Arizona State University, Tempe, AZ
- 10:45 *What teens want: A mixed methods study on the use of mobile phones and its technology for substance use treatment*  
Stacy Ryan, Baylor University, Waco, TX

## SYMPOSIUM VI

Indigo D

### WHAT'S IN YOUR WEED? ASSESSING THE IMPACT OF CANNABIS PRODUCT SELECTION

10:00 - 11:00 AM

Chairs: Staci Gruber and Ryan Vandrey

- 10:00 *Variety of cannabis product type, dose, and route of administration in a patient registry of medicinal cannabis users*  
R. Vandrey, Behavioral Pharmacology Research Unit, Johns Hopkins Hospital, Baltimore, MD
- 10:20 *Cannabinoid preferences among veterans when barriers to medicinal cannabis are reduced*  
M. Loflin, Veterans Affairs San Diego Healthcare System, San Diego, CA
- 10:40 *Recipes for success? Exploring the cognitive and clinical impact of cannabinoid constituents and product selection*  
S. Gruber, McLean Hospital, Harvard Medical School, Belmont, MA

## ORAL COMMUNICATIONS 6

### TAKING SELFIES: PRECLINICAL SELF-ADMINISTRATION

Indigo H

10:00 - 12:00 PM

Chairs: Dustin Stairs and Lais Berro

- 10:00 *Cocaine self-administration under an IRT>t schedule of reinforcement in Sprague Dawley rats*  
Dustin Stairs, Rachel Busselman, Creighton University, Omaha, NE
- 10:15 *Sex differences in midazolam self-administration in rats*  
James Cook, Sally Huskinson, James Rowlett, University of Mississippi Medical Center, Jackson, MS
- 10:30 *Vaporized Δ9-tetrahydrocannabinol (THC) modulates intravenous oxycodone self-administration and natural food reward intake*  
Jacques Nguyen, Yanabel Grant, Kevin Creehan, Michael Taffe, The Scripps Research Institute, La Jolla, CA



- 10:45 *Sustained decreases in heroin self-administration in rhesus monkeys after a single administration of SH-1*  
David Maguire<sup>1</sup>, Lisa Gerak<sup>1</sup>, James Woods<sup>1</sup>, Stephen Husbands<sup>2</sup>, Alex Disney<sup>2</sup>, Charles France<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, San Antonio, TX, <sup>2</sup>University of Bath, Bath, United Kingdom
- 11:00 *Evaluation of mifepristone effects on alcohol seeking and self-administration*  
Elise Weerts, August Holtyn, Johns Hopkins University School of Medicine, Baltimore, MD
- 11:15 *Observable behavior predicts anxiolytic-like effects but not self-administration of benzodiazepine-type drugs in rhesus monkeys*  
Lais Berro<sup>1</sup>, Angela Duke<sup>2</sup>, Donna Platt<sup>3</sup>, John Atack<sup>4</sup>, Veera Tiruveedhula<sup>5</sup>, Guanguan Li<sup>5</sup>, Michael Stephen<sup>5</sup>, James Cook<sup>5</sup>, James Rowlett<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>Winston-Salem State University, Winston-Salem, NC, <sup>3</sup>Division of Neurobiology and Behavior Research, Jackson, MS, <sup>4</sup>Cardiff University, Cardiff, United Kingdom, <sup>5</sup>University of Wisconsin-Milwaukee, Milwaukee, WI
- 11:30 *Selective biphasic antagonism of intravenous d-methamphetamine self-administration by disulfiram in rhesus monkeys*  
Fernando de Moura<sup>1</sup>, Nathaniel Gillis<sup>2</sup>, Jessica Nardolillo<sup>2</sup>, Stephen Kohut<sup>1</sup>, Jack Bergman<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA
- 11:45 *Effect of abstinence and cue re-exposure on DNA methylation and mRNA expression after cocaine self-administration*  
Kyle Ploense<sup>1</sup>, Tod Kippin<sup>2</sup>, Timothy Bredy<sup>3</sup>, Karen Szumlinski<sup>2</sup>, <sup>1</sup>University of California Santa Barbara, Goleta, CA, <sup>2</sup>University of California Santa Barbara, Santa Barbara, CA, <sup>3</sup>Queensland Brain Institute, St. Lucia, Australia

#### **SYMPOSIUM IV DRUG ADDICTION TREATMENT WITH CLASSIC PSYCHEDELICS**

**Indigo A  
10:00 - 12:00 PM**

Chairs: Roland Griffiths and Matthew Johnson

- 10:00 *Enduring behavior change after psilocybin*  
R. Griffiths, Johns Hopkins University School of Medicine, Baltimore, MD
- 10:25 *Psilocybin treatment of cocaine use disorder*  
P. Hendricks, University of Alabama, Birmingham, AL
- 10:50 *Psilocybin treatment of tobacco use disorder*  
M. Johnson, Johns Hopkins University School of Medicine, Baltimore, MD
- 11:15 *Psilocybin treatment of alcohol use disorder*  
M. Bogenschutz, New York University, New York, NY
- 11:40 *Psychedelic treatment and neurochemical reductionism: A way forward*  
B. Adinoff, University of Texas Southwestern Medical Center, Dallas, TX

#### **SYMPOSIUM V THE HUMAN MOLECULAR GENETICS OF NICOTINE AND OPIATE ADDICTION**

**Indigo BF  
10:00 - 12:00 PM**

Chairs: Mary Jeanne Kreek and Laura Bierut

- 10:00 *Genetic lessons learned from the big studies and small studies of nicotine addiction*  
L. Bierut, Washington University School of Medicine, St. Louis, MO

- 10:25 *Heroin addiction: what have we learned from hypothesis-driven association studies in different populations*  
O. Levran, The Rockefeller University, New York, NY
- 10:50 *Reconsidering case and control phenotypes for genetic studies of opioid use disorder*  
E. Nelson, Washington University School of Medicine, St. Louis, MO
- 11:15 *The pharmacogenetics of opioid use disorder treatment*  
R. Crist, University of Pennsylvania, Philadelphia, PA
- 11:40 *Discussant*  
M. J. Kreek, The Rockefeller University, New York, NY

**ORAL COMMUNICATIONS 5**  
**ADDICTION PREDICTION: MACHINE**  
**LEARNING AND MODELING**

**Indigo E**  
**11:15 - 12:15 PM**

Chairs: Georgiy Bobashev and Sarah Yip

- 11:15 *Anhedonic symptoms of depression are related to cocaine use severity: A machine learning approach*  
Margaret Wardle<sup>1</sup>, Robert Suchting<sup>1</sup>, Jessica Vincent<sup>1</sup>, Scott Lane<sup>2</sup>, Joy Schmitz<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas, Houston, TX
- 11:30 *Application of machine learning to predict cocaine-use*  
Sarah Yip<sup>1</sup>, Dustin Scheinost<sup>1</sup>, Marc Potenza<sup>2</sup>, Kathleen Carroll<sup>2</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT
- 11:45 *Using support vector machine (SVM) to predict heroin addiction*  
Shaw-Ji Chen, Mackay Memorial Hospital, Taitung Branch, Taitung Taiwan, NP, Taiwan
- 12:00 *Heroin type, injecting behavior and HIV transmission: Evidence-based simulation model provides insights from the past into the future*  
Georgiy Bobashev<sup>1</sup>, Daniel Ciccarone, Sarah Mars<sup>2</sup>, William Zule<sup>1</sup>, Clinton Dreisbach<sup>3</sup>, Nicholas Murphy<sup>2</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC, <sup>2</sup>University of California San Francisco, San Francisco, CA, <sup>3</sup>RTI International, Durham, NC

**SYMPOSIUM VII**  
**LET'S SAVE THE BABY AND THE BATHWATER:**  
**IMPROVING NAS CARE FOR BABIES AND THEIR**  
**MOTHERS UTILIZING NOVEL METHODS**

**Indigo D**  
**11:15 - 12:15 PM**

Chairs: Dennis Hand and Yukiko Washio

- 11:15 *TRAC-ON preliminary results: Mobile application to educate nurses and assist in NAS scoring with an aggregated presentation system*  
Y. Washio, Christiana Care Health Services, University of Delaware, Media, PA
- 11:35 *Development of a primer and reference tool to assess and manage neonatal abstinence syndrome in the NICU*  
S. McPherson, Washington State University, Elson S. Floyd College of Medicine, Spokane, WA
- 11:55 *Fetally derived CNS extracellular vesicles: A novel non-invasive method for interrogating fetal brain response to perinatal opioid exposure*  
L. Goetzl, Lewis Katz School of Medicine at Temple University, Philadelphia, PA

**(BY INVITATION ONLY)**  
**CPDD EARLY CAREER INVESTIGATOR TRAVEL**  
**AWARDS LUNCHEON**

**Elevation**  
**12:00 - 2:00 PM**

## MEMBERS IN TRAINING MEETING

**Aqua C**  
**1:00 - 2:00 PM**

## ORAL COMMUNICATIONS 7 SEEING IS BELIEVING: IMAGING

**Indigo E**  
**2:00 - 3:00 PM**

Chairs: Stephen Kohut and Anna Rose Childress

- 2:00 *Altered resting-state functional connectivity in adolescent female nonhuman primates during acute and chronic exposure to the long-acting cannabinoid CB1 receptor agonist, AM2389*  
Stephen Kohut<sup>1</sup>, Brian Kangas<sup>2</sup>, Jessica Nardolillo<sup>3</sup>, David Jacobs<sup>3</sup>, Scott Lukas<sup>1</sup>, Jack Bergman<sup>1</sup>, Blaise Frederick<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>ADARC - McLean Hospital, Belmont, MA, <sup>3</sup>McLean Hospital, Belmont, MA
- 2:15 *Preliminary multimodal, multitask investigation of functional brain networks and D2/D3 receptor availability in cocaine use disorder*  
Patrick Worhunsky<sup>1</sup>, Gustavo Angarita<sup>1</sup>, David Matuskey<sup>2</sup>, Robert Malison<sup>1</sup>, Richard Carson<sup>2</sup>, Marc Potenza<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT
- 2:30 *Citalopram for controlling impulsivity in cocaine use disorder: Evidence from BOLD and DCM imaging*  
Andrew Snyder, F. Gerard Moeller, Joel Steinberg, Virginia Commonwealth University, Richmond, VA
- 2:45 *Aberrant functional connectivity in large-scale brain networks distinguishes cocaine patients from controls and is linked to drug-use outcomes*  
Paul Regier, Jieqiong Wang, H Rao, Yong Fan, Anna Rose Childress, University of Pennsylvania, Philadelphia, PA

## ORAL COMMUNICATIONS 8 W-EIGHTY ISSUES IN CRIMINAL JUSTICE

**Indigo H**  
**2:00 - 4:00 PM**

Chairs: Hilary Surratt and Leo Beletsky

- 2:00 *Pretreatment social networks and source of referral as predictors of retention in residential SUD treatment*  
Erin Kerrison<sup>1</sup>, Hortensia Amaro<sup>2</sup>, <sup>1</sup>University of California at Berkeley, Berkeley, CA, <sup>2</sup>ISC School of Social Work, Los Angeles, CA - Withdrawn
- 2:15 *Reducing heavy drinking and alcohol-involved crime with behavioral economics: Insights from 24/7 sobriety*  
Beau Kilmer, Greg Midgette, RAND Drug Policy Research Center, Santa Monica, CA
- 2:30 *How do marijuana decriminalization and legalization affect disparities in adolescent marijuana arrests? Evidence from Massachusetts, Washington and Maryland*  
Andrew Plunk<sup>1</sup>, Stephanie Peglow<sup>1</sup>, Paul Harrell<sup>1</sup>, Richard Grucza<sup>2</sup>, <sup>1</sup>Eastern Virginia Medical School, Norfolk, VA, <sup>2</sup>Washington University School of Medicine, St. Louis, MO
- 2:45 *Evaluating the epidemiological impact of a police education program among people who inject drugs in Tijuana, Mexico*  
Javier Cepeda<sup>1</sup>, Leo Beletsky<sup>2</sup>, Daniela Abramovitz<sup>1</sup>, Annick Borquez<sup>1</sup>, Steffanie Strathdee<sup>1</sup>, Natasha Martin<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>Northeastern University, Boston, MA

- 3:00 *Factors predicting arrest in a jail-based vs. a community-based methadone treatment study*  
Sharon Kelly<sup>1</sup>, Robert Schwartz<sup>1</sup>, Kevin O'Grady<sup>2</sup>, Shannon Mitchell<sup>1</sup>, Jan Gryczynski<sup>1</sup>, Jerome Jaffe<sup>1</sup>,  
<sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, College Park, MD
- 3:15 *Criminal justice referral to medication-assisted treatment among opioid treatment admissions, 2014*  
Shivani Mantha<sup>1</sup>, Pia Mauro<sup>2</sup>, Sara Abiola<sup>1</sup>, Silvia Martins<sup>2</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>Columbia University, New York, NY
- 3:30 *Patterns of buprenorphine use and risk for rapid re-arrest among highly vulnerable opioid-involved women released from jails in rural Appalachia*  
Hilary Surratt<sup>1</sup>, Michele Staton<sup>2</sup>, Carl Leukefeld<sup>1</sup>, Carrie Oser<sup>1</sup>, Matt Webster<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 3:45 *The economic impact of jail-based medication-assisted treatment: A cost-effectiveness analysis of a large jail-based methadone maintenance treatment program in New Mexico*  
Brady Horn<sup>1</sup>, Xiaoxue Li<sup>1</sup>, Barbara Mccrady<sup>1</sup>, Saleh Mamun<sup>1</sup>, Paul Guerrin<sup>1</sup>, Michael French<sup>2</sup>, <sup>1</sup>University of New Mexico, Albuquerque, NM, <sup>2</sup>University of Miami School of Law, Coral Gables, FL

## **SYMPOSIUM IX INNOVATOR SYMPOSIUM**

**Indigo A  
2:00 - 4:00 PM**

Chairs: Thomas Prisinzano

- 2:00 *Two is Better than one: Discovery of bifunctional ligands as treatments for substance abuse disorders*  
C. Cunningham, Concordia University Wisconsin School of Pharmacy, Mequon, WI
- 2:30 *Evaluation of Salvinorin A-analogues activating mu and kappa opioid receptors as novel drug abuse and pain therapeutics*  
B. Kivell, Victoria University of Wellington, Wellington, New Zealand
- 3:00 *Salvinorin analogs and KOP-r ligands as potential approaches in the treatment of substance use disorders*  
E. Butelman, The Rockefeller University, New York, NY
- 3:30 *Chemical approaches for the development of drug abuse therapies*  
T. Prisinzano, University of Kansas, Lawrence, KS

## **SYMPOSIUM VIII CANNABIS AND TOBACCO CO-USE: CURRENT FINDINGS ACROSS PRECLINICAL, GENETIC, EXPERIMENTAL AND EPIDEMIOLOGICAL SCIENCE**

**Indigo BF  
2:00 - 3:00 PM**

Chairs: Erica Peters and Arpana Agrawal

- 2:00 *Reciprocal relationships between cannabis and tobacco: A Mendelian randomization approach*  
A. Agrawal, Washington University School of Medicine, St. Louis, MO
- 2:20 *Co-use of cannabis and tobacco during pregnancy*  
V. Coleman-Cowger, Battelle Memorial Institute, Baltimore, MD
- 2:40 *Co-use of cannabis and tobacco among youth and young adults*  
E. Peters, Battelle Memorial Institute, Baltimore, MD

**SYMPOSIUM X  
NEONATAL ABSTINENCE SYNDROME:  
EFFECTS OF OPIOIDS ON THE  
DEVELOPING BRAIN**

**Indigo D  
2:00 - 4:00 PM**

Chairs: Henrietta Bada and Gary Peltz

- 2:00 *Fetal neurobehavioral development in buprenorphine exposed pregnancies*  
L. Jansson, Johns Hopkins University School of Medicine, Baltimore, MD
- 2:25 *Opioid versus non-opioid treatment for neonatal abstinence syndrome*  
H. Bada, University of Kentucky, College of Medicine, Lexington, KY
- 2:50 *Clinical and genomic risk factors of neonatal abstinence syndrome*  
J. Davis, Tufts Medical Center, Boston, MA
- 3:15 *Cellular and molecular basis of opiate drug-induced disruption of neuronal and glial maturation in the central nervous system*  
K. Hauser, Virginia Commonwealth University, Richmond, VA
- 3:40 *Current state and future opportunities and challenges in clinical and basic neurobiology of neonatal abstinence syndrome*  
G. Peltz, Stanford University, Stanford, CA

**PRESIDENT'S LECTURE**

**Indigo BCFG  
4:15 - 5:15 PM**

*Eyes wide shut: Social and structural process contributing to addiction and its health consequences*

President: Alan Budney, Geisel School of Medicine at Dartmouth

Jamila K. Stockman, University of California San Diego School of Medicine

Steffanie A. Strathdee, University of California San Diego School of Medicine

**PRE/POST-DOCS NETWORKING**

**Indigo Terrace  
5:30 - 7:00 PM**

**NIDA INTERNATIONAL FORUM  
INTERNATIONAL RESEARCH POSTER SESSION  
See Pages 96-116 for listing**

**Sapphire D/H/L/P  
7:00 - 9:00 PM**

*CPDD International Committee: Best research poster competition*

C. McCoy, Comprehensive Drug Research Center, Miami, FL

**WORKSHOP V  
NOT JUST ONE BUT TWO: IMPACT OF  
OPIOID EPIDEMIC ON ALCOHOL USE  
AMONG PREGNANT MOTHERS**

**Indigo D  
7:30 - 9:00 PM**

Chairs: Victoria Coleman-Cowger and Stacey Klamman

*Clinician's understanding in state of art: prenatal opioid and alcohol use and their pediatric consequences*

D. Coffa, University of California, San Francisco School of Medicine, San Francisco, CA  
*Potential interactive effects of the opioid and alcohol co-use on maternal, neonatal, and child outcomes*  
 S. Klamann, University of North Carolina at Chapel Hill, Chapel Hill, NC  
*Treating alcohol use disorder in the presence of opioid use disorder: clinical care of the mother-child dyad*  
 N. Poole, Centre of Excellence for Women's Health, Vancouver, BC, Canada  
*The prevalence and behavioral characteristics of prenatal exposure to alcohol and other drugs: results from the San Diego CoFASP study*  
 N. Akshoomoff, University of California San Diego, La Jolla, CA  
*Global prevalence of maternal drinking, FAS/FASD, and its economic cost*  
 S. Ondersma, Wayne State University School of Medicine, Detroit, MI

**WORKSHOP VI**  
**SUMI: A FREE INTERACTIVE WEB-BASED**  
**TOOL TO SELECT VALID SUBSTANCE USE**  
**MEASURES FOR HIV RESEARCH**

**Indigo A**  
**7:30 - 9:00 PM**

Chairs: Steffanie Strathdee and Steve Shoptaw

*Psychometric properties of substance use measures among key populations at risk for HIV*  
 G. Santos, University of California San Francisco, San Francisco, CA  
*SUMI Demonstration*  
 S. Chen, HIV Prevention and Trial Network, Rockville, MD  
*SUMI Applications*  
 S. Shoptaw, University of California Los Angeles, Los Angeles, CA

**WORKSHOP VII**  
**ANNUAL CPDD DESIGN AND ANALYSIS**  
**WORKSHOP**

**Indigo E**  
**7:30 - 9:00 PM**

Chairs: Sterling McPherson and Susan Mikulich-Gilbertson

*Systems biology (trans-omics) approaches to understanding substance use*  
 L. Saba, University of Colorado Anschutz Medical Campus, Aurora, CO  
*Indirect and direct pattern-mixture modeling for the handling of missing values in randomized clinical trials*  
 E. Burduli, Washington State University, Spokane, WA  
*Building predictive models for opioid treatment response using multi-center clinical trial datasets from the National Treatment Clinical Trials Network*  
 S. Luo, Columbia University, New York, NY  
*How to work collaboratively and effectively with your biostatistician*  
 S. Mikulich-Gilbertson<sup>1</sup>, S. McPherson<sup>2</sup>, <sup>1</sup>University of Colorado School of Medicine, Aurora, CO,  
<sup>2</sup>Washington State University, Elson S. Floyd College of Medicine, Spokane, WA

**Tuesday, June 12, 2018**

**CPDD OUTREACH EVENT - FATHER JOE'S**  
**VILLAGES**

**Offsite Venue**  
**6:00 - 9:00 AM**  
**Meet in lobby**

## POLICY FORUM

Chairs: M. Y. Iguchi and Sandra Comer

**Indigo BCFG**  
**8:00 - 9:45 AM**

*Update on activities and accomplishments of Friends of NIDA*

W. Dewey<sup>1</sup>, C. O'Keeffe<sup>2</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Virginia Commonwealth University, School of Medicine, Midlothian, VA

*Report from Capitol Hill – Implications for NIDA's research portfolio*

E. Long, Van Scoyoc Associates, Washington, DC

*Where is MAT available in the US and is it available where needed? A geographic review*

M. Iguchi, RAND Corporation, Santa Monica, CA

*Vermont's care alliance for opioid addiction -- Developing a public health approach to the opioid crisis*

B. Cimaglio, Retired, Burlington, VT

*State-level innovations in response to the opiate overdose crisis*

P. Korthuis, Oregon Health & Science University, Portland, OR

## SYMPOSIUM XII CLINICAL STUDIES OF BIOLOGICS TO TREAT SUBSTANCE USE DISORDERS

**Indigo D**  
**10:00 - 11:00 AM**

Chairs: Ivan Montoya and S. Michael Owens

10:00 *Phase 1 to 2a clinical studies of a monoclonal antibody for treating methamphetamine use disorders*  
W. Gentry, University of Arkansas for Medical Sciences, Little Rock, AK

10:20 *Clinical studies of an adenovirus-based anti-cocaine vaccine*  
R. Crystal, Weill Cornell Medical College, New York, NY

10:40 *Clinical evaluation of a nanoparticle-based nicotine vaccine*  
L. Johnston, Selecta Biosciences, Inc., Watertown, MA

## ORAL COMMUNICATIONS 10 CANNABLISS? CANNABINOIDS

**Indigo E**  
**10:00 - 12:00 PM**

Chairs: Dustin Lee and Rachel Tomko

10:00 *In-vitro to in-vivo translation for the cannabinoid-1 receptor: Value for derisking off-target cannabinoid receptor agonism liabilities in drug discovery*

Susan Goody<sup>1</sup>, Andy Mead<sup>2</sup>, <sup>1</sup>Pfizer, Inc., Groton, CT, <sup>2</sup>AstraZeneca, Cambridge

10:15 *Evaluation of purified cannabidiol (CBD) in rhesus monkeys that self-administer midazolam*

Royston Gray<sup>1</sup>, David Maguire<sup>2</sup>, Lisa Gerak<sup>2</sup>, Martin Javors<sup>2</sup>, Charles France<sup>2</sup>, <sup>1</sup>GW Pharmaceuticals PLC, Cambridge, <sup>2</sup>University of Texas Health Science Center, San Antonio, TX

10:30 *Randomized controlled trial of zolpidem as a pharmacotherapy for cannabis use disorder*

Dustin Lee<sup>1</sup>, Nicolas Schlienz<sup>1</sup>, Erin Martin<sup>1</sup>, Jeannie-Marie Leoutsakos<sup>1</sup>, Alan Budney<sup>2</sup>, Michael Smith<sup>1</sup>, D. Andrew Tompkins<sup>3</sup>, Aidan Hampson<sup>4</sup>, Ryan Vandrey<sup>5</sup>, <sup>1</sup>Johns Hopkins University School of Medicine,

- Baltimore, MD, <sup>2</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>3</sup>University of California San Francisco School of Medicine, San Francisco, CA, <sup>4</sup>National Institute of Drug Abuse, National Institutes of Health, Rockville, MD, <sup>5</sup>Behavioral Pharmacology Research Unit, Johns Hopkins Hospital, Baltimore, MD
- 10:45 *The effects of celecoxib on a human laboratory model of cannabis withdrawal and relapse*  
Caroline Arout<sup>1</sup>, Sachin Patel<sup>2</sup>, Ziva Cooper<sup>3</sup>, Gillinder Bedi<sup>4</sup>, Evan Herrmann<sup>5</sup>, Stephanie Reed<sup>4</sup>, Richard Foltin<sup>1</sup>, Margaret Haney<sup>1</sup>, <sup>1</sup>Columbia University Medical Center, New York, NY, <sup>2</sup>Vanderbilt University Medical Center, Nashville, TN, <sup>3</sup>Columbia University and NYSPI, New York, NY, <sup>4</sup>Columbia University, New York, NY, <sup>5</sup>Battelle Memorial Institute, Baltimore, MD
- 11:00 *N-acetylcysteine for adolescent cannabis use disorder: Do depressive symptoms moderate abstinence outcomes?*  
Rachel Tomko, Amanda Gilmore, Kevin Gray, Medical University of South Carolina, Charleston, SC
- 11:15 *A case series exploring the effect of twenty sessions of repetitive transcranial magnetic stimulation (rTMS) on cannabis use and craving*  
Gregory Sahlem<sup>1</sup>, Margaret Caruso<sup>2</sup>, Robert Malcolm<sup>1</sup>, Mark George<sup>1</sup>, Aimee McRae-Clark<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC
- 11:30 *Impact of three weeks of sustained abstinence on cognition in young adult cannabis users*  
Alexander Wallace, Kyle Jennette, Krista Lisdahl, University of Wisconsin-Milwaukee, Milwaukee, WI
- 11:45 *An examination of gender differences in adolescent marijuana use trends post- implementation of liberalized recreational cannabis policies in Washington State*  
Andrea Stone, University of Washington, Bothell, WA

## ORAL COMMUNICATIONS 11 BASICALLY OPIOIDS

**Indigo H**  
**10:00 - 12:00 PM**

Chairs: M. Foster Olive and Lisa Brents

- 10:00 *Quantifying G-protein and arrestin bias for structurally diverse KOR ligands*  
Jose Erazo, Amelia Dunn, Alexandra Dunn, Brian Reed, Mary Jeanne Kreek, The Rockefeller University, New York, NY
- 10:15 *Neuropharmacodynamic profile of NKTR-181: Correlation to low abuse potential*  
Laurie VanderVeen, Takahiro Miyazaki, Irene Choi, Michael Eldon, Hema Gursahani, Faye Hsieh, Aleksandrs Odinecs, Jonathan Zalevsky, Stephen Doberstein, Nektar Therapeutics, San Francisco, CA
- 10:30 *Chemogenetic approaches to restoring prosocial functioning in rats following opiate use*  
M. Foster Olive<sup>1</sup>, Seven Tomek<sup>2</sup>, Gabriela Stegmann<sup>1</sup>, <sup>1</sup>Arizona State University, Tempe, AZ, <sup>2</sup>Arizona State University, Phoenix, AZ
- 10:45 *Norbuprenorphine, an active metabolite of buprenorphine, induces opioid dependence in a rat model of neonatal abstinence syndrome*  
Lisa Brents<sup>1</sup>, Bryce Griffin<sup>1</sup>, Caitlin Caperton<sup>1</sup>, Lauren Russell<sup>1</sup>, Christian Cabalong<sup>1</sup>, Catheryn Wilson<sup>1</sup>, Kyle Urquhart<sup>1</sup>, Bradford Martins<sup>1</sup>, Amy Patton<sup>2</sup>, Alex Alund<sup>2</sup>, S. Michael Owens<sup>1</sup>, William Fantegrossi<sup>1</sup>, Jeffery Moran<sup>2</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AK, <sup>2</sup>PinPoint Testing, LLC, Little Rock, AR
- 11:00 *Pharmacological characterization of six synthetic opioids: Radioligand binding and analgesia activities*  
Takato Hiranita<sup>1</sup>, Aaron Janowsky<sup>2</sup>, Amy Eshleman<sup>3</sup>, Saki Fukuda<sup>4</sup>, Cassandra Prioleau<sup>5</sup>, Li Fang<sup>6</sup>, Srihari Tella<sup>7</sup>, Merle Paule<sup>8</sup>, William Fantegrossi<sup>4</sup>, <sup>1</sup>NCTR/FDA, Jefferson, AR, <sup>2</sup>University and VA Portland Health Care System, Portland, OR, <sup>3</sup>Oregon Health & Science University, Portland, OR, <sup>4</sup>University of Arkansas for Medical Sciences, Little Rock, AK, <sup>5</sup>Department of Justice, Springfield, VA, <sup>6</sup>Drug Enforcement



Administration, Washington, DC, <sup>7</sup>Drug and Chemical Evaluation Section, Arlington, VA, <sup>8</sup>U.S. Food and Drug Administration, Silver Spring, MD

11:15 *Rapid assessment of choice between fentanyl and liquid food in male and female rats*

Drew Townsend<sup>1</sup>, S. Stevens Negus<sup>1</sup>, Barak Caine<sup>2</sup>, Morgane Thomsen<sup>3</sup>, Matthew Banks<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>McLean Hospital, Belmont, MA, <sup>3</sup>University Hospital of Copenhagen, Copenhagen

11:30 *Oxycodone self-administration on a progressive-ratio schedule is reduced by contingent administration of the atypical kappa-opioid agonist, nalfurafine, in rhesus monkeys*

Carlos Zamarripa<sup>1</sup>, Sally Huskinson<sup>1</sup>, Thomas Prisinzano<sup>2</sup>, Christopher McCurdy<sup>3</sup>, Kevin Freeman<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>University of Kansas, Lawrence, KS, <sup>3</sup>University of Florida, Gainesville, FL

11:45 *Assessment of the priming strength of opioids before and during chronic naltrexone treatment in squirrel monkeys*

Sarah Withey<sup>1</sup>, Carol Paronis<sup>1</sup>, Jack Bergman<sup>2</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>Preclinical Pharmacology - McLean Hospital, Belmont, MA

## **SYMPOSIUM XI**

### **UNMET NEED FOR TREATMENT OF OPIOID USE DISORDER: AN INTERNATIONAL PERSPECTIVE**

#### **Indigo A**

**10:00 - 12:00 PM**

Chairs: Howard Chilcoat and Michelle Lofwall

10:00 *Unmet need for treatment for opioid use disorder in the United States*

M. Lofwall, University of Kentucky, College of Medicine, Lexington, KY

10:25 *Unmet need for opioid use disorder treatment: a European perspective*

M. Auriacombe, Université de Bordeaux, Bordeaux, France

10:50 *Universal unmet need in opioid use disorders: Spring training for getting a life*

W. Ling, University of California Los Angeles, Los Angeles, CA

11:15 *Unmet treatment need for OUD treatment in Australia*

R. Ali, University of Adelaide, Adelaide, SA, Australia

11:40 *Discussant: Addressing the global need for OUD treatment*

G. Woody, University of Pennsylvania, Philadelphia, PA

## **ORAL COMMUNICATIONS 9**

### **GREATEST AMERICAN HEROES: VETERANS AND MILITARY**

#### **Indigo D**

**11:15 - 12:15 PM**

Chairs: Erin Anderson Goodell and Stephen Baldassarri

11:15 *Brief counseling for veterans with musculoskeletal disorders, risky substance use and service-connection claims*

Marc Rosen<sup>1</sup>, Anne Black<sup>2</sup>, William Becker<sup>2</sup>, Steve Martino<sup>3</sup>, Ellen Edens<sup>1</sup>, Robert Kerns<sup>4</sup>, <sup>1</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>2</sup>Yale University, New Haven, CT, <sup>3</sup>Yale University Department of Psychiatry, New Haven, CT, <sup>4</sup>Yale University School of Medicine, West Haven, CT

11:30 *Incidence of newly diagnosed opioid use disorder in veterans with chronic pain prescribed opioids*

Tessa Rife, David Pennington, Katelyn Brady, Stephanie Cardoos, Payal Mapara, Tauheed Zaman, Steven Batki, San Francisco Veterans Affairs Health Care System, San Francisco, CA

- 11:45 *Nicotine dependence in us military veterans: Results from the national health and resilience in veterans study*  
Stephen Baldassarri<sup>1</sup>, Lorig Kachadourian<sup>2</sup>, Irina Esterlis<sup>1</sup>, Robert Pietrzak<sup>2</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>VA Connecticut Healthcare System, West Haven, CT
- 12:00 *Deployment, traumatic brain injury, and social influence on recent illicit drug use among U.S. Army Reserve and National Guard couples*  
Erin Anderson Goodell<sup>1</sup>, D. Lynn Homish<sup>2</sup>, Gregory Homish<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY

**MEDIA FORUM**  
**MEDIA FORUM 2018: WHAT'S HOT?**

**Indigo A**  
**12:15 - 1:45 PM**

Chairs: Margaret Chisolm and Bertha Madras

*Media Forum 2018: What's Hot*  
M. Chisolm, Johns Hopkins University School of Medicine, Baltimore, MD

**TOWN HALL**  
**ARE ABUSE-DETERRENT OPIOID FORMULATIONS**  
**THE ANSWER TO THE UNITED STATES OPIOID**  
**EPIDEMIC? A PERSPECTIVE FROM INDUSTRY,**  
**GOVERNMENT, AND ACADEMIA**

**Indigo D**  
**12:15 - 1:45 PM**

Chairs: Marco Pravetoni and Sidney Schnoll

*How epidemiologic data can inform the real world effects of abuse-deterrent opioid formulations*  
R. Dart, Rocky Mountain Poison & Drug Center, Denver, CO

*The reformulated OxyContin® and its effect on abuse epidemiology*  
P. Coplan, Purdue Pharma, University of Pennsylvania, Fort Washington, PA

*Food and Drug Administration post-marketing surveillance: What's needed for Category 4 labeling*  
J. McAninch, U.S. Food and Drug Administration, Bozeman, MT

*How does a new product with low market penetration meet Category 4 labeling*  
S. Passik, Collegium Pharmaceutical Inc., Canton, MA

*Discussant. Bringing together industry, academia, and government to evaluate and use abuse-deterrent opioid formulations*  
S. Schnoll, Pinney Associates, Inc., Stamford, CT

**MARIAN W. FISCHMAN MEMORIAL AWARD**  
**LECTURE**

**Indigo BCFG**  
**2:00 - 3:00 PM**

*Presentation of the Marian W. Fischman Award to Kenzie L. Preston*  
Introduction by George Bigelow  
*In the Footsteps of Fischman*  
Kenzie L. Preston

**ORAL COMMUNICATIONS 12**  
**CLUB DRUGS: PARTY LIKE IT'S 1929**

**Indigo E**  
**3:15 - 5:15 PM**

Chairs: Gregory Collins and Katharine Nelson

- 3:15 *Neuropharmacology of n-(2-methoxybenzyl)-2,5-dimethoxyphenethylamine (NBOMe) hallucinogens and their 2c counterparts in male rats*  
Michael Baumann<sup>1</sup>, Kenner Rice<sup>2</sup>, Agnes Sulima<sup>2</sup>, Ann Decker<sup>3</sup>, Bruce Blough<sup>3</sup>, John Partilla<sup>1</sup>, Joshua Elmore<sup>1</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>3</sup>RTI International, Research Triangle Park, NC
- 3:30 *In vitro and in vivo pharmacology of "bath salts" constituent 4-chloro-N-ethylcathinone: radioligand binding and locomotor stimulant effects*  
William Fantegrossi<sup>1</sup>, Aaron Janowski<sup>2</sup>, Amy Eshleman<sup>2</sup>, Saki Fukuda<sup>1</sup>, Jyoti Gogoi<sup>1</sup>, Lauren Russell<sup>1</sup>, Cassandra Prioleau<sup>3</sup>, Li Fang<sup>4</sup>, Srihari Tella<sup>5</sup>, Merle Paule<sup>6</sup>, Takato Hiranita<sup>7</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AK, <sup>2</sup>Oregon Health & Science University, Portland, OR, <sup>3</sup>Department of Justice, Springfield, VA, <sup>4</sup>Drug Enforcement Administration, Washington, DC, <sup>5</sup>Drug and Chemical Evaluation Section, Arlington, VA, <sup>6</sup>U.S. Food and Drug Administration, Silver Spring, MD, <sup>7</sup>NCTR/FDA, Jefferson, AR
- 3:45 *Stereoselective effects of the second generation 'bath salt'  $\alpha$ -pyrrolidinopentiophenone ( $\alpha$ -PVP): Assessments of aversion, locomotor activity and thermoregulation*  
Katharine Nelson<sup>1</sup>, Briana Hempel<sup>1</sup>, Madeline Crissman<sup>1</sup>, Claudia Woloshchuk<sup>1</sup>, Matthew Clasen<sup>1</sup>, Kenner Rice<sup>2</sup>, Anthony Riley<sup>1</sup>, <sup>1</sup>The American University, Washington, DC, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 4:00  *$\alpha$ -PVP alters the reinforcing value of activity wheel access in male wistar rats*  
Eric Harvey, Kevin Creehan, Mehrak Javadi-Paydar, Jacques Nguyen, Sophia A. Vandewater, Yanabel Grant, Tobin Dickerson, Michael Taffe, The Scripps Research Institute, La Jolla, CA
- 4:15 *Relative reinforcing effects of the synthetic cathinones MDPV and  $\alpha$ -PVP in rhesus monkeys*  
Gregory Collins<sup>1</sup>, Agnieszka Sulima<sup>2</sup>, Kenner Rice<sup>2</sup>, Charles France<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, San Antonio, TX, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 4:30 *Relative reinforcing effectiveness of the synthetic cathinones MDPV and methylone, administered alone and in combination with caffeine in rats*  
Brenda Gannon<sup>1</sup>, Agnieszka Sulima<sup>2</sup>, Kenner Rice<sup>2</sup>, Gregory Collins<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, San Antonio, TX, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 4:45 *Monoamine re-uptake inhibitors potentiate the discriminative stimulus effects of 3,4-methylenedioxypyrovalerone (MDPV) in male Sprague-Dawley rats*  
Lisa Baker, Harmony Risca, Western Michigan University, Kalamazoo, MI
- 5:00 *GHB in adolescent rat attenuates hippocampus-associated learning*  
Ratna Sircar, The City University of New York, New York, NY

**ORAL COMMUNICATIONS 13**  
**THIS IS YOUR BRAIN ON CYTOKINES:**  
**NEUROINFLAMMATION AND IMMUNE**

**Indigo D**  
**3:15 - 5:15 PM**

Chairs: Judith Tsui and Lee Anne Cannella

- 3:15 *Pathological changes in the corticostriatal pathway induced by experimental traumatic brain injury and subsequent rewarding effects of cocaine in rodents*  
Lee Anne Cannella<sup>1</sup>, Fionya Tran<sup>1</sup>, Allison Andrews<sup>2</sup>, Roshanak Razmpour<sup>1</sup>, Scott Rawls<sup>1</sup>, Servio Ramirez<sup>1</sup>, <sup>1</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA, <sup>2</sup>Temple University, Philadelphia, PA

- 3:30 *N-acetylcysteine-mediated restoration of GLT-1 and inhibition of neuroinflammation in the nucleus accumbens core attenuates cue-induced nicotine seeking*  
Mark Namba, Gregory Powell, Julianna Goenaga, Cassandra Gipson-Reichardt, Arizona State University, Tempe, AZ
- 3:45 *Granulocyte-colony stimulating factor mediates neuronal and behavioral responses to cocaine*  
Drew Kiraly, Arthur Godino, Emily Peck, Erin Calipari, Icahn School of Medicine at Mount Sinai, New York, NY
- 4:00 *HIV-1 Tat protein expression elevates dopamine levels and increases morphine consumption and conditioned place preference*  
Thomas Cirino<sup>1</sup>, Shainnel Eans<sup>1</sup>, Heather Stacy<sup>1</sup>, Marc Kaufman<sup>2</sup>, Jun Zhu<sup>3</sup>, Jay McLaughlin<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>McLean Hospital, Brain Imaging Center, Belmont, MA, <sup>3</sup>University of South Carolina, Charleston, SC
- 4:15 *Brain inflammation and cognitive bias in methamphetamine dependence*  
Ziwei Zhang<sup>1</sup>, Kyoji Okita<sup>1</sup>, Mark Mandelkern<sup>2</sup>, Andrew Dean<sup>1</sup>, Maritza Johnson<sup>1</sup>, Arthur Brody<sup>3</sup>, Judah Farahi<sup>4</sup>, Erika Nurmi<sup>1</sup>, Lauren Seaman<sup>1</sup>, Edythe London<sup>1</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>University of California Irvine, Irvine, CA, <sup>3</sup>University of California San Diego, La Jolla, <sup>4</sup>VA of Greater Los Angeles Health System, Los Angeles, CA
- 4:30 *Immune dysregulation among HIV-infected individuals with opioid-use disorders*  
Michelle Underwood, Lynn Kunkel, Thuan Nguyen, Erin Merrifield, Philip Todd Korthuis, Christina Lancioni, Oregon Health & Science University, Portland, OR
- 4:45 *Double dissociation of HIV and SUD effects on tasks dependent on striatal integrity*  
Eileen Martin<sup>1</sup>, Raul Gonzalez<sup>2</sup>, Jasmin Vassileva<sup>3</sup>, Jessica Fogel, Antoine Bechara<sup>4</sup>, <sup>1</sup>Rush University Medical Center, Chicago, IL, <sup>2</sup>Florida International University, Miami, FL, <sup>3</sup>Virginia Commonwealth University, Richmond, VA, <sup>4</sup>University of Southern California, Los Angeles, CA
- 5:00 *Opioid use disorder among persons with hepatitis C and HIV: Data from 8 health systems*  
Judith Tsui<sup>1</sup>, Gwen Lapham<sup>2</sup>, Denise Boudreau<sup>2</sup>, Eric Johnson<sup>2</sup>, Ingrid Binswanger<sup>3</sup>, Chinazo Cunningham<sup>4</sup>, Manu Thakral<sup>2</sup>, Julia Arnsten<sup>4</sup>, Andrew Saxon<sup>5</sup>, Joseph Merrill<sup>1</sup>, Jeffrey Samet<sup>6</sup>, Gavin Bart<sup>7</sup>, Cynthia Campbell<sup>8</sup>, Kathy Bradley<sup>2</sup>, <sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>Kaiser Permanente Washington Health Research Institute, Seattle, WA, <sup>3</sup>Kaiser Permanente Colorado, Denver, CO, <sup>4</sup>Montefiore Medical Center, Bronx, NY, <sup>5</sup>VA Puget Sound Healthcare System, Seattle, WA, <sup>6</sup>Boston University School of Medicine, Boston, MA, <sup>7</sup>University of Minnesota, Minneapolis, MN, <sup>8</sup>Kaiser Permanente North California Division of Research, Oakland, CA

## **ORAL COMMUNICATIONS 14 SERVING THE UNDERSERVED: HEALTH DISPARITIES**

**Indigo H  
3:15 - 5:15 PM**

Chairs: Scott Hadland and Hannah Carliner

- 3:15 *The opioid epidemic: Media attention to a white-death crisis*  
Stephanie Peglow<sup>1</sup>, Paul Harrell<sup>1</sup>, Richard Grucza<sup>2</sup>, Andrew Plunk<sup>1</sup>, Anna Davids<sup>1</sup>, <sup>1</sup>Eastern Virginia Medical School, Norfolk, VA, <sup>2</sup>Washington University School of Medicine, St. Louis, MO
- 3:30 *Racial/ethnic disparities in referral to substance use disorder screening among justice-involved children*  
Amy Elliott, Micah Johnson, Linda Cottler, University of Florida, Gainesville, FL
- 3:45 *Race/ethnicity and sex differences in heroin use among adolescents in 3 US cities: Baltimore, MD, Washington, DC, & Jacksonville, FL (2015)*  
Abenaa Jones<sup>1</sup>, Kristin Schneider<sup>2</sup>, Sherri-Chanelle Brighthaupt<sup>2</sup>, Julie Johnson<sup>1</sup>, Sabriya Linton<sup>1</sup>, Renee

- Johnson<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD
- 4:00 *Access to substance abuse treatments: Whites and Hispanics*  
Darlene Santiago, Chengli Shen, Darlene Santiago, University of Pittsburgh, Pittsburgh, PA
- 4:15 *Poly-product drug use disparities in adolescents of lower socioeconomic status: Emerging trends in nicotine products, marijuana products, and prescription drugs*  
Mariel Bello<sup>1</sup>, Rubin Khoddam<sup>1</sup>, Yoewon Yoon<sup>2</sup>, Matthew Stone<sup>3</sup>, Junhan Cho<sup>1</sup>, Jungeun Lee<sup>2</sup>, Adam Leventhal<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>University of Southern California Suzanne Dworak-Peck School of Social Work, Los Angeles, CA, <sup>3</sup>University of California San Diego, La Jolla, CA
- 4:30 *Evidence-based medication treatment among Medicaid-enrolled youth with opioid use disorder, 2014-2015*  
Scott Hadland<sup>1</sup>, Sarah Bagley<sup>1</sup>, Jonathan Rodean<sup>2</sup>, Sharon Levy<sup>3</sup>, Michael Silverstein<sup>1</sup>, Marc Larochelle<sup>1</sup>, Bonnie Zima<sup>4</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Children's Hospital Association, Lenexa, KS, <sup>3</sup>Boston Children's Hospital, Boston, MA, <sup>4</sup>University of California Los Angeles, Los Angeles, CA
- 4:45 *Neighborhood socioeconomic disadvantage, crime, and availability associated with binge drinking from adolescence into emerging adulthood*  
Brian Fairman<sup>1</sup>, Bruce Simons-Morton<sup>1</sup>, Denise Haynie<sup>1</sup>, Liu Danping<sup>1</sup>, Rise Goldstein<sup>2</sup>, Ralph Hingson<sup>3</sup>, Stephen Gilman<sup>1</sup>, <sup>1</sup>National Institute of Child Health and Human Development, Bethesda, MD, <sup>2</sup>Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, <sup>3</sup>National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD
- 5:00 *Non-medical prescription opioid use and disorder in midlife by race, gender, and poverty level in the united states*  
Hannah Carliner<sup>1</sup>, Luis Segura<sup>2</sup>, Julian Santaella-Tenorio<sup>2</sup>, Pia Mauro<sup>2</sup>, Shivani Mantha<sup>3</sup>, Deborah Hasin<sup>2</sup>, Silvia Martins<sup>2</sup>, <sup>1</sup>New York State Psychiatric Institute, New York, NY, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, New York, NY

## **SYMPOSIUM XIII**

### **NEXT GENERATION ANALGESICS**

**Indigo A**  
**3:15 - 5:15 PM**

Chairs: David McCann and Jane Acri

- 3:15 *PPL-103: A kappa partial agonist with potent antinociceptive activity, low abuse potential, and reduced risk of overdose*  
L. Toll, Florida Atlantic University, Boca Raton, FL
- 3:40 *Preclinical evaluation of AT-121, a novel bifunctional NOP/MOP receptor agonist, suggests dual analgesic and anti-opioid therapeutic action without risk of respiratory depression or abuse liability*  
N. Zaveri, Astraea Therapeutics, Mountain View, CA
- 4:05 *The combination of PF614 (an oxycodone prodrug) and MPAR technology to address risks from overdose*  
L. Kirkpatrick, Ensysce Biosciences Inc., San Diego, CA
- 4:30 *Biased ligands as a path to safer analgesics (oliceridine, TRV734 and TRV250)*  
J. Violin, Trevena, Chesterbrook, PA
- 4:55 *Discussant: New mechanisms to address pain and the future of NIH/NIDA support for pain research*  
N. Volkow, National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD

**SYMPOSIUM XIV**  
**POLYSUBSTANCE USE IS THE NORM: TIME FOR**  
**RESEARCH AND PRACTICE TO RECOGNIZE AND**  
**ADDRESS IT**

**Indigo BF**  
**3:15 - 5:15 PM**

Chairs: Richard Saitz and Carlos Blanco

- 3:15 *Use of multiple substances in general health settings: challenges for clinical research*  
R. Saitz, Boston University School of Public Health, Boston, MA
- 3:40 *Smoking and toking: Translationally relevant animal models*  
J. Marusich, RTI International, Research Triangle Park, NC
- 4:05 *Shared versus specific effects of treatment on multiple outcomes in clinical trials using latent variable modeling*  
M. Wall, Columbia University and NYSPI, New York, NY
- 4:30 *Public health policy and practice to reduce health consequences of polysubstance use*  
H. Kunins, NYC Department of Health and Mental Hygiene, Queens, NY
- 4:55 *Polysubstance use and addiction: Integrating treatment and research needs*  
C. Blanco, Columbia University, New York, NY

**WORKSHOP IX**  
**SUBSTANCE USE AMONG JUVENILE JUSTICE-**  
**INVOLVED ADOLESCENTS: IDENTIFYING AND**  
**ADDRESSING THE NEED FOR TREATMENT**  
**SERVICES/SASATE BUSINESS MEETING**

**Indigo A**  
**5:30 - 7:30 PM**

Chairs: Danica Knight and Michael Dennis

- JJ-TRIALS: A multi-site, collaborative initiative to improve substance use interventions for adolescents in the legal system*  
D. Knight, Texas Christian University, Fort Worth, TX
- Understanding the substance use treatment needs of justice-involved youth*  
S. Belenko, Temple University, Philadelphia, PA
- Demonstrating the need for and feasibility of applying a behavioral health services cascade framework in juvenile justice*  
M. Dennis, Chestnut Health Systems, Normal, IL
- Need identification and substance use service receipt among opioid-using justice-involved youth*  
T. Wiley, National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD

**WORKSHOP VIII**  
**EPIDEMIOLOGY AND PUBLIC**  
**HEALTH RESEARCH METHODS**

**Indigo BF**  
**5:30 - 7:30 PM**

Chairs: Howard Chilcoat and Georgiy Bobashev

- Integrating contagion and chronic disease models to study drug use epidemics*  
G. Bobashev, RTI International, Research Triangle Park, NC
- Epidemiological analysis of user-generated digital media*  
M. Gilbert, Booz Allen Hamilton, Portland, OR
- Using survey data to understand drug use epidemics*  
C. Mauro, Columbia University, New York, NY

*Uniformity of personalized treatment and individualized prediction of success. Example of naltrexone trials in Russia*

B. Carper, RTI International, Research Triangle Park, NC

**WORKSHOP X**  
**WOMEN IN ADDICTIONS TEN YEARS ON:**  
**REVIEWING PROGRESS AND DEVELOPING A**  
**RESEARCH AND IMPLEMENTATION ROADMAP**

**Indigo D**  
**5:30 - 7:30 PM**

Chairs: Wendee Wechsberg and Loretta Finnegan

*Management of pregnant women with comorbid substance use disorders and other psychiatric illness*

A. Hammond, Johns Hopkins University School of Medicine, Baltimore, MD

*Sex trafficking, HIV and substance use: Current agenda and future needs*

F. Browne, RTI International, Research Triangle Park, NC

*LGBT: A global perspective on substance use, treatment, and gaps in research*

C. Powell, University of Arizona Southwest Institute for Research on Women, Tucson, AZ

*Policy and structural barriers to women's engagement in substance use disorder treatment: A global scoping review*

M. Lawental, University of South Florida, Tampa, FL

*Discussant: What we know and future directions*

J. Meyer, Yale University School of Medicine, New Haven, CT

**WORKSHOP XI**  
**24TH ANNUAL CONTINGENCY MANAGEMENT**  
**WORKING GROUP**

**Indigo E**  
**5:30 - 7:30 PM**

Chairs: Diann Gaalema and August Holtyn

**WORKSHOP XII**  
**THE NIH CLINICAL TRIALS STEWARDSHIP**  
**INITIATIVE: NEW POLICIES AND PROCEDURES**  
**AND HOW TO IMPLEMENT THEM.**

**Indigo H**  
**5:30 - 7:30 PM**

Chairs: Katia Howlett and David White

*Doing human subject research? Changing NIH policies may impact you--overview, timeline, impact*

K. Howlett, National Institute of Drug Abuse, National Institutes of Health, Rockville, MD

*NIH clinical trials and transparency reforms & initiatives: Impact on applications and review*

I. Montoya, National Institutes of Health, Bethesda, MD

*Stewardship responsibilities for the investigator: Good clinical practice, registration and reporting, single IRB*

D. White, Medications Discovery and Toxicology Branch, Bethesda, MD

**Wednesday, June 13, 2018**

**CPDD/INRC PLENARY**

**Indigo BCFG  
8:00 - 9:00 AM**

*Welcome to INRC*

Alan Budney, CPDD President

Fred Nyberg, INRC President

*Report from the National Institute on Drug Abuse*

*Drug abuse & addiction research: Progress, priorities, & challenges*

Nora Volkow, Director, National Institute on Drug Abuse

**ORAL COMMUNICATIONS 15  
IS THERE A DOWNSIDE? HARM REDUCTION**

**Indigo D  
9:15 - 11:15 AM**

Chairs: Howard Chilcoat and Kirsten Smith

- 9:15 *"A lethal dose in every batch": New Hampshire opioid consumers' behavior in seeking fentanyl and drugs known to cause overdose*  
Andrea Meier<sup>1</sup>, Sarah Moore<sup>2</sup>, Elizabeth Saunders<sup>3</sup>, Stephen Metcalf<sup>2</sup>, Bethany McLeman<sup>4</sup>, Olivia Walsh<sup>5</sup>, Lisa Marsch<sup>2</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>2</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>3</sup>The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH, <sup>4</sup>Northeast Node of the CTN/Dartmouth College, Lebanon, NH, <sup>5</sup>Dartmouth College, Hanover, NH
- 9:30 *Rapid scale-up of low-threshold supervised consumption sites in response to a fentanyl-driven overdose crisis: A rapid ethnographic study in Vancouver, Canada*  
Ryan McNeil<sup>1</sup>, Samara Mayer<sup>2</sup>, Alexandra Collins<sup>2</sup>, Mary Clare Kennedy<sup>3</sup>, Jade Boyd<sup>3</sup>, <sup>1</sup>University of British Columbia, BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 9:45 *Kratom use patterns among opioid users in United States: A novel form of harm-reduction?*  
Kirsten Smith<sup>1</sup>, Amanda Bunting<sup>2</sup>, Robert Walker<sup>3</sup>, Martin Hall<sup>4</sup>, Olivia Castillo<sup>5</sup>, <sup>1</sup>University of Louisville, Versailles, KY, <sup>2</sup>University of Kentucky, Lexington, KY, <sup>3</sup>University of Kentucky, Center on Drug and Alcohol Research, Lexington, KY, <sup>4</sup>University of Louisville, Louisville, KY, <sup>5</sup>University of Miami School of Law, Coral Gables, FL
- 10:00 *Improved frequency of ART initiation and use of harm reduction services among HIV-positive PWID in Ukraine*  
Oleksandr Zeziulin<sup>1</sup>, Yuliia Sereda<sup>2</sup>, Pavlo Smyrnov<sup>3</sup>, Olga Denisiuk<sup>3</sup>, Tetiana Kiriazova<sup>2</sup>, Sergii Dvoriak<sup>2</sup>, Charles Vitek<sup>4</sup>, Trista Bingham<sup>5</sup>, Roksolana Kulchynska<sup>4</sup>, Kostyantyn Dumchev<sup>1</sup>, <sup>1</sup>Ukrainian Institute on Public Health Policy, Kyiv, Ukraine, <sup>2</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>3</sup>Alliance for Public Health, Kyiv, Ukraine, <sup>4</sup>The Centers for Disease Control and Prevention, Kyiv, Ukraine, <sup>5</sup>The Centers for Disease Control and Prevention, Atlanta, GA
- 10:15 *Who doesn't swab, and why? An analysis of correlates and reasons for not swabbing injection sites among Australians who regularly inject drugs*  
Sarah Larney<sup>1</sup>, Amy Peacock<sup>1</sup>, Daniel O'Keefe<sup>2</sup>, Kerryn Butler<sup>3</sup>, Raimondo Bruno<sup>4</sup>, <sup>1</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>2</sup>Burnet Institute, Melbourne, Australia, <sup>3</sup>National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia, <sup>4</sup>University of Tasmania, Sydney, Australia
- 10:30 *Global review of drug checking services 2017*  
Larissa Maier<sup>1</sup>, Alison Ritter<sup>2</sup>, Michala Kowalski<sup>3</sup>, Leigh Coney<sup>3</sup>, Danielle Ramo<sup>1</sup>, Monica Barratt<sup>2</sup>, <sup>1</sup>University of California San Francisco, San Francisco, CA, <sup>2</sup>National Drug and Alcohol Research Centre,



- Sydney, Australia, <sup>3</sup>NDARC Drug Policy Modelling Program, Randwick, Australia
- 10:45 *A retrospective case series of a hospital-based managed alcohol program in Vancouver, Canada*  
Christopher Fairgrieve<sup>1</sup>, Seonaid Nolan<sup>2</sup>, Jeffrey Samet<sup>3</sup>, <sup>1</sup>St. Paul's Hospital, Vancouver, BC, Canada,  
<sup>2</sup>University of British Columbia, Vancouver, BC, Canada, <sup>3</sup>Boston University School of Medicine, Boston, MA
- 11:00 *Stakeholder perspectives on delivering pre-exposure prophylaxis (PrEP) to people who inject drugs*  
Katie Biello<sup>1</sup>, Angela Bazzi<sup>2</sup>, Dea Biancarelli<sup>2</sup>, Alberto Edeza<sup>1</sup>, Peter Salhaney<sup>1</sup>, Matthew Mimiaga<sup>1</sup>, Mari-Lynn Drainoni<sup>2</sup>, <sup>1</sup>Brown University, Providence, RI, <sup>2</sup>Boston University School of Public Health, Boston, MA

**ORAL COMMUNICATIONS 16**  
**STIMULATING DISCOVERIES: COCAINE AND**  
**AMPHETAMINE MEDICATIONS DEVELOPMENT**

**Indigo E**  
**9:15 - 11:15 AM**

Chairs: William Stoops and Jessica Higginbotham

- 9:15 *Protein kinase C $\beta$  inhibitors alter responding for amphetamine in rats under different schedules of reinforcement*  
Rachel Altshuler, Margaret Gnegy, Emily Jutkiewicz, University of Michigan, Ann Arbor, MI
- 9:30 *GZ-11608-induced blockade of methamphetamine's reinforcing effect is not surmounted by increasing the dose of methamphetamine in male rats*  
Linda Dwoskin<sup>1</sup>, Na-Ra Lee<sup>1</sup>, Emily Denehy<sup>1</sup>, Gaungrong Zheng<sup>2</sup>, Peter Crooks<sup>2</sup>, Michael Bardo<sup>1</sup>,  
<sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Arkansas for Medical Sciences, Little Rock, AK
- 9:45 *The semi-synthetic kappa-agonist 16-Br-salvinorin A decreases the locomotor stimulant effects of cocaine in mice, without causing overt locomotor effects on its own*  
Eduardo Butelman<sup>1</sup>, Bryan McElroy<sup>1</sup>, Samuel Williamson<sup>2</sup>, Thomas Prinszano<sup>2</sup>, Mary Jeanne Kreek<sup>1</sup>, <sup>1</sup>The Rockefeller University, New York, NY, <sup>2</sup>University of Kansas, Lawrence, KS
- 10:00 *Bidirectional, CB1 receptor-mediated mechanisms of cocaine-memory reconsolidation and subsequent context-induced cocaine-seeking behavior*  
Jessica Higginbotham<sup>1</sup>, Nicole Jones<sup>1</sup>, Shi Min Tan<sup>1</sup>, Rong Wang<sup>1</sup>, Mark Presker<sup>1</sup>, Rita Fuchs<sup>2</sup>, <sup>1</sup>Washington State University, Pullman, WA, <sup>2</sup>Washington State University, Chapel Hill, NC
- 10:15 *Effects of chronic cocaine self-administration and N-acetyl cysteine treatment on cognitive behavior and cocaine reinstatement in nonhuman primates*  
Brian Kangas<sup>1</sup>, Rachel Doyle<sup>2</sup>, Stephen Kohut<sup>3</sup>, Timothy Gillis<sup>1</sup>, Jack Bergman<sup>3</sup>, Marc Kaufman<sup>4</sup>, <sup>1</sup>ADARC - McLean Hospital, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA, <sup>3</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>4</sup>McLean Hospital, Brain Imaging Center, Belmont, MA
- 10:30 *Influence of phendimetrazine maintenance on the reinforcing, subjective and physiological effects of intranasal cocaine*  
William Stoops<sup>1</sup>, Joseph Alcorn, Justin Strickland<sup>1</sup>, Hays Lon<sup>1</sup>, Abner Rayapati<sup>1</sup>, Joshua Lile<sup>2</sup>, Craig Rush<sup>1</sup>,  
<sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 10:45 *Topiramate-phentermine combinations as a pharmacotherapy for cocaine dependence*  
Craig Rush<sup>1</sup>, Anna Reynolds<sup>1</sup>, B. Levi Bolin<sup>1</sup>, William Stoops<sup>1</sup>, Joshua Lile<sup>2</sup>, Abner Rayapati<sup>1</sup>, Hays Lon<sup>1</sup>,  
<sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 11:00 *Extended release mixed amphetamine salts and topiramate for cocaine dependence: A replication trial with frequent users*  
Frances Levin<sup>1</sup>, John Mariani<sup>2</sup>, Martina Pavlicova<sup>3</sup>, C. Jean Choi<sup>1</sup>, Amy Mahony<sup>2</sup>, Daniel Brooks<sup>2</sup>, Adam Bisaga<sup>4</sup>, Elias Dakwar<sup>5</sup>, Kenneth Carpenter<sup>5</sup>, Nasir Naqvi<sup>5</sup>, Kyle Kampman<sup>6</sup>, <sup>1</sup>Columbia University and

NYSPI, New York, NY, <sup>2</sup>New York State Psychiatric Institute, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>4</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>5</sup>Columbia University, New York, NY, <sup>6</sup>University of Pennsylvania, Philadelphia, PA

## ORAL COMMUNICATIONS 17 TRAUMA

**Indigo H**  
**9:15 - 11:15 AM**

Chairs: Elizabeth Evans and Jeremy Kane

- 9:15 *Gender differences in associations between childhood adversity and mental health comorbidity among adults with opioid use disorders: Results from the 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC-III)*  
Elizabeth Evans<sup>1</sup>, Christine Grella<sup>2</sup>, <sup>1</sup>University of Massachusetts, Amherst, MA, <sup>2</sup>University of California, Chestnut Health Systems, Los Angeles, CA
- 9:30 *Measurement of the role of parental closeness in emerging adulthood in altering the association between childhood trauma and adulthood drug use*  
Kailyn Pearce<sup>1</sup>, Joy Scheidell<sup>1</sup>, MacRegga Severe<sup>1</sup>, Kelly Quinn<sup>2</sup>, Christopher Frueh<sup>3</sup>, Daniel Schatz<sup>4</sup>, Maria Khan<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>NYU Rory Meyers College of Nursing, New York, NY, <sup>3</sup>University of Hawaii at Hilo, Hilo, <sup>4</sup>New York University, New York, NY
- 9:45 *The effectiveness of trauma-focused cognitive behavioral therapy in reducing substance use among orphans and vulnerable children in Zambia*  
Jeremy Kane<sup>1</sup>, Paul Bolton<sup>1</sup>, Stephanie Skavenski van Wyk<sup>1</sup>, Christopher Akiba<sup>1</sup>, Saphira Munthali<sup>2</sup>, Ravi Paul<sup>3</sup>, Laura Murray<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Serenity Harm Reduction Programme Zambia, Lusaka, Zambia, <sup>3</sup>University of Zambia Teaching Hospital, Lusaka, Zambia
- 10:00 *Polyvictimization and women's risk of drug overdose*  
Janna Ataiants, Stephen Lankenau, Drexel University Dornsife School of Public Health, Philadelphia, PA
- 10:15 *Susceptibility to traumatic stress accelerates the development of cocaine-associated dopamine transients and drives cocaine use vulnerability*  
Zachary Brodnik, Rodrigo Espana, Drexel University College of Medicine, Philadelphia, PA
- 10:30 *Early trauma exposure, neural response inhibition, and risk for substance use disorders in adolescence and young adults: Trajectories of frontal oscillations during a Go/NoGo task*  
Jacquelyn Meyers<sup>1</sup>, Vivia McCutcheon<sup>2</sup>, Ashwini Pandey<sup>1</sup>, Chella Kamarajan<sup>1</sup>, Stacey Subbie<sup>1</sup>, David Chorlian<sup>1</sup>, Jessica Salvatore<sup>3</sup>, Victor Hesselbrock<sup>4</sup>, John Kramer<sup>5</sup>, Samuel Kuperman<sup>5</sup>, Arpana Agrawal<sup>2</sup>, Kathleen Bucholz<sup>2</sup>, Bernice Porjesz<sup>1</sup>, <sup>1</sup>State University of New York Downstate Medical Center, Brooklyn, NY, <sup>2</sup>Washington University School of Medicine, St. Louis, MO, <sup>3</sup>Virginia Commonwealth University, Richmond, VA, <sup>4</sup>University of Connecticut School of Medicine, Farmington, CT, <sup>5</sup>University of Iowa, Iowa City, IA
- 10:45 *Trauma-focused treatment for veterans in buprenorphine maintenance treatment for opioid use disorder*  
Sarah Meshberg-Cohen<sup>1</sup>, Anne Black<sup>2</sup>, Marc Rosen<sup>1</sup>, Ismene Petrakis<sup>1</sup>, <sup>1</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>2</sup>Yale University, New Haven, CT
- 11:00 *Experiences in emergency department settings among people who use drugs in Vancouver, Canada*  
Samara Mayer<sup>1</sup>, Verena Langheimer<sup>2</sup>, Will Small<sup>3</sup>, Ryan McNeil<sup>3</sup>, <sup>1</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>Goldcorp Addiction Medicine Fellowship, Vancouver, BC, Canada, <sup>3</sup>University of British Columbia, BC Centre on Substance Use, Vancouver, BC, Canada

## SYMPOSIUM XV

Indigo BCFG

### FENTANYL ABUSE: FROM MEDICINAL CHEMISTRY TO CLINICAL MANAGEMENT

9:15 - 11:15 AM

Chairs: Sandra Comer and Catherine Cahill

- 9:15 *Synthesis of fentanyl: A little goes a long way*  
F. Carroll, RTI International, Research Triangle Park, NC
- 9:40 *Behavioral pharmacology of fentanyl: Preclinical models*  
J. Woods, University of Texas Health Science Center, San Antonio, TX
- 10:05 *Illicitly made fentanyl overdose: Prevention and management in real-world settings*  
A. Walley, Boston University School of Medicine, Boston, MA
- 10:30 *Opioid use disorders: Vaccination as a therapeutic strategy*  
K. Janda, The Scripps Research Institute, La Jolla, CA
- 10:55 *Fentanyl: How did we get here and what do we do about it?*  
S. Comer, Columbia University and NYSPI, New York, NY

## SYMPOSIUM XVI

### GUT-BRAIN AXIS IN ADDICTIONS: PEPTIDES, LANCETS AND BUGS

Indigo A

9:15 - 11:15 AM

Chairs: Lorenzo Leggio and Rajita Sinha

- 9:15 *Gut hormones, stress and craving: Do they underlie the overlapping biology of addiction and obesity?*  
R. Sinha, Yale University School of Medicine, New Haven, CT
- 9:40 *Mesolimbic encoding of affective stimuli: Tuning by physiological state and its proxies*  
M. Roitman, University of Illinois, Chicago, IL
- 10:05 *A plausible role for gut-brain signaling in increased susceptibility to alcohol and opiate misuse following bariatric surgery*  
E. Orellana, Penn State University of Medicine, Hershey, PA
- 10:30 *The role of the microbiota-gut-brain axis in alcohol use disorder*  
D. Kiraly, Icahn School of Medicine at Mount Sinai, New York, NY
- 10:55 *Discussant*  
A. Hajnal, Penn State College of Medicine, Hershey, PA

## POSTER III

### NICOTINE ANIMAL BEHAVIOR

## LUNCH

## Sapphire ABC/EFG

11:30 - 1:30 PM

Odd numbered posters manned first hour; Even numbered, second hour

- 1 *N-Acetylcysteine exacerbates cue-induced reinstatement of nicotine seeking in an estrous cycle phase-dependent manner*  
Julianna Goenaga<sup>1</sup>, Jose Pina<sup>1</sup>, Sandy Phan<sup>1</sup>, Laura Vesala<sup>1</sup>, Amanda Ariola<sup>1</sup>, Jacqueline Moreno<sup>1</sup>, Jason Nguyen<sup>1</sup>, Gregory Powell<sup>1</sup>, Mark Namba<sup>1</sup>, Stephanie Koebele<sup>1</sup>, Alesia Prakapenka<sup>1</sup>, Erin McClure<sup>2</sup>, Heather Bimonte-Nelson<sup>1</sup>, Cassandra Gipson-Reichardt<sup>1</sup>, <sup>1</sup>Arizona State University, Tempe, AZ, <sup>2</sup>Medical University of South Carolina, Charleston, SC
- 2 *Stress- and drug priming-induced reinstatement of drug-seeking in rats: comparison of nicotine and cigarette smoke condensate*  
Seong Shoon Yoon<sup>1</sup>, In Soo Ryu<sup>2</sup>, Young-Eun Lee<sup>2</sup>, Zhan-Hui Li<sup>2</sup>, Eun Sang Choe<sup>3</sup>, Joung-Wook Seo<sup>2</sup>,  
<sup>1</sup>Korea Institute of Toxicology, Daejeon, Republic of Korea, <sup>2</sup>Korea Institute of Toxicology, Daejeon, Korea,

- <sup>3</sup>Pusan National University, Busan, Korea, Republic of
- 3 *Comparison of rewarding and reinforcing properties of nicotine and cigarette smoke condensate in rodents*  
In Soo Ryu<sup>1</sup>, Seong Shoon Yoon<sup>2</sup>, Young-Eun Lee<sup>1</sup>, Zhan-Hui Li<sup>1</sup>, Eun Sang Choe<sup>3</sup>, Joung-Wook Seo<sup>1</sup>,  
<sup>1</sup>Korea Institute of Toxicology, Daejeon, Korea, Republic of, <sup>2</sup>Korea Institute of Toxicology, Daejeon,  
Republic of Korea, <sup>3</sup>Pusan National University, Busan, Korea, Republic of
- 4 *Effects of dextromethorphan on nicotine-induced reward, behavioral sensitization, withdrawal signs, and drug seeking-related behavior in rats*  
Eagle Yi-Kung Huang<sup>1</sup>, Lok-Hi Chow<sup>2</sup>, Yuan-Hao Chen<sup>3</sup>, Ai-Lun Tsai<sup>1</sup>, <sup>1</sup>National Defense Medical Center, Taipei, Taiwan, <sup>2</sup>Taipei Veterans General Hospital, New Taipei City, Taiwan, <sup>3</sup>Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan
- 5 *E-cigarette based inhalation of nicotine increases locomotion in rats*  
Mehrak Javadi-Paydar, Sophia A. Vandewater, Michael Taffe, The Scripps Research Institute, La Jolla, CA

**POSTER III**  
**SEX/GENDER I**

**Sapphire ABC/EFG**  
**11:30 - 1:30 PM**

- 6 *Juvenile fluoxetine exposure induces an enduring anxiogenic-like behavioral profile in female c57bl/6 mice*  
Sergio Iñiguez<sup>1</sup>, Francisco Flores-Ramirez<sup>1</sup>, Arturo Zavala<sup>2</sup>, Anapaula Themann<sup>1</sup>, Minerva Rodriguez<sup>1</sup>,  
<sup>1</sup>University of Texas at El Paso, El Paso, TX, <sup>2</sup>California State University Long Beach, Long Beach, CA
- 7 *Sex differences in oxycodone preference choice task*  
Julian Gerson, University of California Santa Barbara, Goleta, CA
- 8 *Birth control knowledge and interest in reproductive health services in patients receiving treatment for opioid use disorder*  
Laura Lander<sup>1</sup>, Jonathan Stoltman<sup>1</sup>, Julie Hicks Patrick<sup>1</sup>, Mishka Terplan<sup>2</sup>, <sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>Virginia Commonwealth University, Richmond, VA
- 9 *Birth control use and talking with health professionals about birth control in female patients receiving treatment for opioid use disorder in rural Appalachia*  
Jonathan Stoltman<sup>1</sup>, Laura Lander<sup>1</sup>, Hendree Jones<sup>2</sup>, Julie Hicks Patrick<sup>1</sup>, Mishka Terplan<sup>3</sup>, <sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>University of North Carolina at Chapel Hill, Carrboro, NC, <sup>3</sup>Virginia Commonwealth University, Richmond, VA
- 10 *Sex differences among treatment-seeking men and women who use opioids*  
Tanya Saraiya<sup>1</sup>, Martina Pavlicova<sup>2</sup>, Mei-Chen Hu<sup>3</sup>, Denise Hien<sup>4</sup>, Edward Nunes<sup>5</sup>, Aimee Campbell<sup>5</sup>,  
<sup>1</sup>Adelphi University & The TRACC Program, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>Adelphi University, Garden City, NY, <sup>5</sup>Columbia University and NYSPI, New York, NY
- 11 *Sex differences among patients with opioid use disorder undergoing medically supervised withdrawal*  
Aimee Campbell<sup>1</sup>, Celestina Barbosa-Leiker<sup>2</sup>, Sarah Mennenga<sup>3</sup>, Martina Pavlicova<sup>4</sup>, Jennifer Scodes<sup>1</sup>, Shannon Mitchell<sup>5</sup>, Patricia Novo<sup>3</sup>, Tanya Saraiya<sup>6</sup>, Edward Nunes<sup>1</sup>, Shelly Greenfield<sup>7</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Washington State University College of Nursing, Spokane, WA, <sup>3</sup>New York University School of Medicine, New York, NY, <sup>4</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>5</sup>Friends Research Institute, Baltimore, MD, <sup>6</sup>Adelphi University & The TRACC Program, New York, NY, <sup>7</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 12 *Gender differences in opioid agonist treatment and outcomes among persons with opioid use disorder in the United States*  
Jennifer Manuel<sup>1</sup>, Dace Svikis<sup>2</sup>, Cristina Bares<sup>3</sup>, <sup>1</sup>New York University, New York, NY, <sup>2</sup>Virginia

- Commonwealth University, Richmond, VA, <sup>3</sup>University of Michigan, Ann Arbor, MI
- 13 *Gender differences in nonmedical prescription drug use trends among adolescents in three South American countries from 2007-2015*  
Alexander Perlmutter<sup>1</sup>, Ariadne Rivera-Aguirre<sup>2</sup>, Alvaro Castillo-Carniglia<sup>2</sup>, Pia Mauro<sup>1</sup>, Magdalena Cerda<sup>2</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>University of California Davis, Sacramento, CA
- 14 *Alcohol use among individuals with prescription opiate use disorder: The role of distress tolerance and gender*  
Amanda Gilmore, Jennifer Jones, Angela Moreland, Christine Hahn, Kathleen Brady, Sudie Back, Medical University of South Carolina, Charleston, SC
- 15 *Sex differences in sources and routes of non-medical prescription opioid use in youth*  
Vicki Osborne, Catherine Woodstock Striley, Linda Cottler, University of Florida, Gainesville, FL
- 16 *Male-female differences in heroin incidence*  
Samantha Bauer<sup>1</sup>, James Anthony<sup>2</sup>, <sup>1</sup>Michigan State University, East Lansing, MI, <sup>2</sup>Michigan State University, Lansing, MI
- 17 *Sex differences in risk factors for opioid overdose*  
Munachimso Amadife<sup>1</sup>, Jermaine Jones<sup>2</sup>, Sandra Comer<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY
- 18 *A gender paradox in overdose among young opioid users*  
Kelly Quinn<sup>1</sup>, Honoria Guarino<sup>2</sup>, Pedro Mateu-Gelabert<sup>2</sup>, <sup>1</sup>NYU Rory Meyers College of Nursing, New York, NY, <sup>2</sup>National Development and Research Institute, Inc., New York, NY

### POSTER III STIMULANTS: HUMAN STUDIES

**Sapphire ABC/EFG**  
**11:30 - 1:30 PM**

- 19 *Differential effects of crack-cocaine and crack-cocaine + cannabis on neurocognitive functioning*  
Hercilio Oliveira<sup>1</sup>, Priscila Dib Gonçalves<sup>2</sup>, Mariella Ometto<sup>3</sup>, Bernardo Santos<sup>3</sup>, André Malbergier<sup>3</sup>, Ricardo Amaral<sup>3</sup>, Sergio Nicastrì<sup>4</sup>, Arthur Andrade<sup>3</sup>, Paulo Jannuzzi Cunha<sup>5</sup>, <sup>1</sup>Universidade de Sao Paulo, Sao Paulo, Brazil, <sup>2</sup>University of São Paulo, São Paulo, Brazil, <sup>3</sup>University of Sao Paulo Medical School, São Paulo, Brazil, <sup>4</sup>Hospital Israelita Albert Einstein, Sao Paulo, Brazil, <sup>5</sup>University of Sao Paulo Medical School, São Paulo, Brazil
- 20 *Cognitive function in aging cocaine smokers*  
Thomas Chao<sup>1</sup>, Margaret Haney<sup>2</sup>, Ziva Cooper<sup>3</sup>, Gillinder Bedi<sup>4</sup>, <sup>1</sup>New York State Psychiatric Institute, New York, NY, <sup>2</sup>Columbia University Medical Center, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY, <sup>4</sup>Columbia University, New York, NY
- 21 *Personality and neurocognitive dimensions of impulsivity as candidate endophenotypes specific to heroin and amphetamine dependence*  
Elizabeth Long<sup>1</sup>, Georgi Vasilev<sup>2</sup>, Radka Kaneva<sup>3</sup>, F. Gerard Moeller<sup>1</sup>, Jasmin Vassileva<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Bulgarian Addictions Institute, Sofia, <sup>3</sup>Medical University - Sofia, Sofia, Bulgaria
- 22 *The serotonin-2C agonist lorcaserin potentiates the subjective effects of cocaine, but not its self-administration*  
Ken Grasing<sup>1</sup>, Thomas Newton<sup>2</sup>, <sup>1</sup>Kansas City VA Medical Center, Kansas City, MO, <sup>2</sup>Baylor College of Medicine, Houston, TX
- 23 *Exploring the actions of intranasal naloxone (INN) on limbic activation triggered by cocaine cues: a case series.*

- Kyle Kampman<sup>1</sup>, Kanchana Jagannathan<sup>1</sup>, Kimberly Young<sup>1</sup>, Paul Regier<sup>1</sup>, Stefanie Darnley<sup>1</sup>, Jesse Suh<sup>1</sup>, Elliott Berkowitz-Sturgis<sup>1</sup>, Michael Gawrysiak<sup>2</sup>, Regina Szucs-Reed<sup>1</sup>, Charles O'Brien<sup>3</sup>, Arvind Agrawal<sup>4</sup>, Roger Crystal, Tanya Ramey<sup>5</sup>, Anna Rose Childress<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>West Chester University of Pennsylvania, West Grove, PA, <sup>3</sup>University of Pennsylvania, VA Medical Center, Philadelphia, PA, <sup>4</sup>Opiant, Harrow, United Kingdom, <sup>5</sup>National Institutes of Health, Bethesda, MD
- 24 *The effects of stress and impulsivity on treatment retention and outcomes among Black and White cocaine users*  
Angela Haeny<sup>1</sup>, Brian Kiluk<sup>2</sup>, Charla Nich<sup>1</sup>, Donna LaPaglia<sup>1</sup>, Kathleen Carroll<sup>2</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT
- 25 *Considerations when assessing delay discounting among individuals with SUD: comparison of AUC, log k, and AUClog*  
Jin-Ho Yoon<sup>1</sup>, Matthew Weaver<sup>2</sup>, Richard De La Garza, II<sup>3</sup>, Thomas Newton<sup>3</sup>, Robert Suchting<sup>1</sup>, Gregory Brown<sup>4</sup>, Yasmine Omar<sup>5</sup>, Ilana Haliwa<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>Mercyhurst University, Erie, PA, <sup>3</sup>Baylor College of Medicine, Houston, TX, <sup>4</sup>University of Texas at Austin, Austin, TX, <sup>5</sup>Rutgers University, New Brunswick, NJ
- 26 *Neuroactive steroid and pregnenolone levels in men and women with cocaine use disorder*  
Verica Milivojevic<sup>1</sup>, Gustavo Angarita<sup>1</sup>, Jonathan Covault<sup>2</sup>, Rajita Sinha<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>University of Connecticut, Farmington, CT
- 27 *A study of occupational therapy-based cognitive rehabilitation to improve cognition in veterans with cocaine use disorder: Feasibility & tolerability*  
Rajkumar Kalapatapu<sup>1</sup>, Gordon Giles<sup>2</sup>, Steven Batki<sup>3</sup>, <sup>1</sup>University of California San Francisco, San Francisco, CA, <sup>2</sup>Samuel Merritt University, Oakland, CA, <sup>3</sup>San Francisco Veterans Affairs Health Care System, San Francisco, CA
- 28 *Methamphetamine-paired contexts acquire incentive salience: A human CPP study*  
Emma Childs, Joseph Lutz, Nia Sotto, University of Illinois, Chicago, IL
- 29 *Ecological momentary assessments optimize sexual risk reduction among gay and bisexual men enrolled in a methamphetamine abuse treatment program*  
Cathy Reback<sup>1</sup>, Dennie Rünger<sup>1</sup>, Jesse Fletcher<sup>1</sup>, Dallas Swendeman<sup>2</sup>, <sup>1</sup>Friends Research Institute, Los Angeles, CA, <sup>2</sup>University of California Los Angeles, Los Angeles, CA
- 30 *Sexual risk associated with having sex with men among men who use methamphetamine in a Mexico-US border city*  
Oralia Loza<sup>1</sup>, João Ferreira-Pinto<sup>1</sup>, Maria Elena Ramos Rodriguez<sup>2</sup>, Rebeca Ramos<sup>3</sup>, <sup>1</sup>University of Texas at El Paso, El Paso, TX, <sup>2</sup>Programa Compañeros, A.C., Ciudad Juárez, Mexico, <sup>3</sup>Alliance of Border Collaboratives, El Paso, TX
- 31 *Law enforcement reports of increasing methamphetamine use and associations with the opioid epidemic*  
Mance Buttram, Steven Kurtz, Nova Southeastern University, Miami, FL

## POSTER III POLICY

**Sapphire ABC/EFG  
11:30 - 1:30 PM**

- 32 *Linking DSM-V alcohol-use disorders with policy-relevant correlates in young adults: Implications for an evidence-informed national alcohol harm reduction policy*  
Sirine Anouti<sup>1</sup>, Lilian Ghandour<sup>2</sup>, <sup>1</sup>American University of Beirut, Beirut, Lebanon, <sup>2</sup>American University of Beirut, Beirut
- 33 *The impact of minimum legal drinking age (MLDA) laws on self-reported violent victimization among young people in Canada, 1988-2009: A regression-discontinuity approach.*

- Russell Callaghan<sup>1</sup>, Marcos Sanches<sup>2</sup>, Jodi Gatley<sup>3</sup>, Claire Benny<sup>4</sup>, <sup>1</sup>Northern Medical Program, Prince George, BC, Canada, <sup>2</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>3</sup>University of Northern British Columbia, Prince George, <sup>4</sup>University of British Columbia, Vancouver, BC, Canada
- 34 *Health reform and health insurance among persons who use drugs in eastern Kentucky: A prospective cohort analysis*  
Hannah Knudsen<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Sharon Walsh<sup>1</sup>, April Young<sup>3</sup>, Jennifer Havens<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>3</sup>University of Kentucky, College of Public Health, Lexington, KY
- 35 *Cost-effectiveness of expanding opioid agonist therapy in Ukraine: dynamic modeling analysis*  
Olga Morozova<sup>1</sup>, Forrest Crawford<sup>1</sup>, Sergii Dvoriak<sup>2</sup>, Frederick Alice<sup>3</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>3</sup>Yale University School of Medicine, New Haven, CT
- 36 *Naloxone training and distribution among users does not increase risky opioid use*  
Karen Cropsey, Samantha Schiavon, Richard Shelton, University of Alabama, Birmingham, AL
- 37 *State naloxone access laws and opioid overdose death rates*  
Laura Monico, Jan Gryczynski, Robert Schwartz, Shannon Mitchell, Friends Research Institute, Baltimore, MD
- 38 *Pharmaceutical industry marketing of opioid products to physicians and opioid prescribing: A national study*  
Brandon Marshall<sup>1</sup>, Magdalena Cerda<sup>2</sup>, Yu Li<sup>3</sup>, Scott Hadland<sup>4</sup>, <sup>1</sup>Brown School of Public Health, Providence, RI, <sup>2</sup>University of California Davis, Sacramento, CA, <sup>3</sup>Brown University School of Public Health, Providence, RI, <sup>4</sup>Boston University School of Medicine, Boston, MA
- 39 *Trends in opioid prescribing volume and risk indicators in the context of PDMP policy changes: 2010-2016*  
Jenna McCauley<sup>1</sup>, Sarah Ball<sup>1</sup>, Jingwen Zhang<sup>1</sup>, William Moran<sup>1</sup>, Kit Simpson<sup>1</sup>, Khosrow Heidari<sup>2</sup>, Kathleen Brady<sup>1</sup>, Patrick Mauldin<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>South Carolina Department of Health and Environmental Control, Columbia, SC
- 40 *The associations of neighborhood availability of marijuana dispensaries and buprenorphine treatment practitioners with hospital stays related to opioid analgesics*  
Di Liang, Yuyan Shi, University of California San Diego, La Jolla, CA
- 41 *Illicit drug use among young adult marijuana users in Los Angeles: a qualitative analysis of contextual factors, life events, and marijuana use*  
Ekaterina Fedorova<sup>1</sup>, Stephen Lankenau<sup>2</sup>, <sup>1</sup>Drexel University, Philadelphia, PA, <sup>2</sup>Drexel University Dornsife School of Public Health, Philadelphia, PA
- 42 *Do recreational marijuana laws impact state-level alcohol and tobacco use?*  
Christine Mauro<sup>1</sup>, Thomas Corbeil<sup>1</sup>, Daniel Giovenco<sup>1</sup>, Pia Mauro<sup>1</sup>, Magdalena Cerda<sup>2</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>University of California Davis, Sacramento, CA
- 43 *Marijuana and other drug use after becoming a medical marijuana patient: A mixed-method approach*  
Avat Kioumars<sup>1</sup>, Carolyn Wong<sup>2</sup>, Ellen Iverson<sup>2</sup>, Stephen Lankenau<sup>3</sup>, <sup>1</sup>Drexel University, Columbia, MD, <sup>2</sup>Children's Hospital Los Angeles, Los Angeles, CA, <sup>3</sup>Drexel University Dornsife School of Public Health, Philadelphia, PA
- 44 *A survey assessing drug legalization beliefs*  
Alexis Hammond, Kelly Dunn, Eric Strain, Johns Hopkins University School of Medicine, Baltimore, MD
- 45 *Professional students' knowledge attitudes and perceptions of the medical use of cannabis*  
Lynneice Bowen, Aimee McRae-Clark, Jeffrey Korte, Medical University of South Carolina, Charleston, SC
- 46 *Marijuana use and attitudes in the context of recreational cannabis legalization in California: Comparison of 2016 and 2017 in the California Adult Tobacco Survey*  
Danielle Ramo, Manpreet Kaur, Corie Apollonio, Laurie Jacobs, Joanne Spetz, Mandy Chan, Laura Schmidt, University of California San Francisco, San Francisco, CA

- 47 *Associations between state-level policy liberalism, cannabis use, and cannabis use disorder from 2004 to 2012: Looking beyond medical cannabis law status*  
Morgan Philbin<sup>1</sup>, Pia Mauro<sup>2</sup>, Julian Santaella-Tenorio<sup>2</sup>, Christine Mauro<sup>2</sup>, Elizabeth Kinnard<sup>1</sup>, Magdalena Cerda<sup>3</sup>, Silvia Martins<sup>2</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>University of California Davis, Sacramento, CA

## POSTER III PREVENTION

**Sapphire ABC/EFG**  
**11:30 - 1:30 PM**

- 48 *How do we measure craving? Intensive longitudinal assessment of craving and cannabis use among young adults with problematic use.*  
Matthew Enkema<sup>1</sup>, Adam Kuczynski<sup>1</sup>, Sarah Bowen<sup>2</sup>, Kristen Lindgren<sup>1</sup>, Kevin Hallgren<sup>1</sup>, Mary Larimer<sup>1</sup>, Christine Lee<sup>1</sup>, <sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>Pacific University, Forest Grove, OR
- 49 *Characteristics of patients using cannabis in a surgical cohort*  
Jenna Goesling, Stephanie Moser, Chad Brummett, Kevin Boehnke, Erin Bonar, University of Michigan, Ann Arbor, MI
- 50 *An unsanctioned supervised consumption service in the United States: Data from the first three years of operation*  
Peter Davidson<sup>1</sup>, Alex Kral<sup>2</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>RTI International, Research Triangle Park, NC
- 51 *Looking ahead: Syringe distribution at a rural syringe services program - Withdrawn*  
Sean Allen<sup>1</sup>, Allison O'Rourke<sup>2</sup>, Sherri-Chanelle Brighthaupt<sup>3</sup>, Michael Brumage<sup>4</sup>, Susan Sherman<sup>1</sup>, <sup>1</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>2</sup>George Washington University, Washington, DC, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>4</sup>Kanawha-Charleston Health Department, Charleston, WV
- 52 *Community members are Interested in Detera® drug deactivation pouches to dispose of unused medications*  
Linda Cottler<sup>1</sup>, Ayodeji Otufowora<sup>2</sup>, Dottie Baker<sup>3</sup>, Kathleen Egan<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, College of Public Health and Health Professions, Gainesville, FL, <sup>3</sup>Alachua County Health Promotion and Wellness Coalition, Gainesville, FL
- 53 *Perceived HIV risk mediates the relationship between HIV risk behavior and willingness to use pre-exposure prophylaxis (PrEP) among drug users*  
Roman Shrestha<sup>1</sup>, Michael Copenhaver<sup>2</sup>, <sup>1</sup>University of Connecticut, Branford, CT, <sup>2</sup>University of Connecticut, Storrs, CT
- 54 *Effect of a behavioral activation treatment on reductions in HIV sexual transmission risk behavior from pretreatment to a 1-year follow up*  
Catherine Paquette<sup>1</sup>, Jessica Magidson<sup>2</sup>, CJ Seitz-Brown<sup>3</sup>, Stacey Daughters<sup>1</sup>, <sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, <sup>2</sup>Massachusetts General Hospital, Harvard Medical School, Boston, MA, <sup>3</sup>University of Maryland, College Park, MD
- 55 *Evaluating the administration of naloxone in hospital settings*  
Kelly Barth, Genevieve Hayes, Keri Holmes-Maybank, Medical University of South Carolina, Charleston, SC
- 56 *Opioid education and naloxone distribution programs for residents and staff of abstinence only recovery homes may decrease risk of opioid overdose*  
Karen Ablondi<sup>1</sup>, Benjamin Howell<sup>1</sup>, Frank Buono<sup>1</sup>, Tamara Malm<sup>2</sup>, Ashton Gores<sup>3</sup>, Anthony Eller<sup>3</sup>, Declan Barry<sup>1</sup>, Curtis Bone<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>St. Joseph School of Pharmacy, Hartford, CT, <sup>3</sup>Yale School of Public Health, New Haven, CT
- 57 *Opportunities and challenges from a tenant-led overdose response intervention in single room occupancy*



hotels in Vancouver, Canada

Geoff Bardwell<sup>1</sup>, Taylor Fleming<sup>2</sup>, Alexandra Collins<sup>2</sup>, Jade Boyd<sup>3</sup>, Ryan McNeil<sup>1</sup>, <sup>1</sup>University of British Columbia, BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada

- 58 *Understanding the social geography of overdose prevention site utilization in Vancouver, Canada: Facilitators and barriers to engagement*

Alexandra Collins<sup>1</sup>, Jade Boyd<sup>2</sup>, Samara Mayer<sup>1</sup>, Mary Clare Kennedy<sup>2</sup>, Ryan McNeil<sup>3</sup>, <sup>1</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>University of British Columbia, BC Centre on Substance Use, Vancouver, BC, Canada

- 59 *Hardiness protects against future substance use in US Army Reserve/National Guard soldiers*

D. Lynn Homish<sup>1</sup>, Paul Bartone<sup>2</sup>, Rachel Hoopsick<sup>1</sup>, Bonnie Vest<sup>1</sup>, Gregory Homish<sup>1</sup>, <sup>1</sup>State University of New York at Buffalo, Buffalo, NY, <sup>2</sup>National Defense University, Washington, DC

- 60 *Acceptability of mindfulness-based relapse prevention for ethnically diverse women*

Tara Bautista<sup>1</sup>, Hortensia Amaro<sup>2</sup>, David Black<sup>3</sup>, <sup>1</sup>Arizona State University, Phoenix, AZ, <sup>2</sup>ISC School of Social Work, Los Angeles, CA, <sup>3</sup>University of Southern California, Los Angeles, CA

- 61 *A culturally adapted parenting intervention for Latino/a immigrant families: Integrating culture and evidence-based knowledge*

Jose Parra-Cardona<sup>1</sup>, Hsueh-Han Yeh<sup>2</sup>, James Anthony<sup>3</sup>, <sup>1</sup>University of Texas at Austin, Austin, TX, <sup>2</sup>Henry Ford Health System, Detroit, MI, <sup>3</sup>Michigan State University, Lansing, MI

- 62 *Substance use and high-risk firearm behaviors (HRFBs) among youth treated in an urban Emergency Department: Preliminary findings from Project IntERact*

Patrick Carter<sup>1</sup>, Maureen Walton<sup>2</sup>, James Cranford<sup>1</sup>, Marc Zimmerman<sup>1</sup>, Ken Resnicow<sup>3</sup>, Bethany Buschmann<sup>4</sup>, Rebecca Cunningham<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan, Addiction Center, Ann Arbor, MI, <sup>3</sup>University of Michigan School of Public Health, Ann Arbor, MI, <sup>4</sup>University of Michigan Injury Prevention Center, Ann Arbor, MI

- 63 *Pediatrician-initiated screening and referral to treatment (prevention) for 10- to 13-year-olds at high risk for substance use initiation before high school*

Ty Ridenour<sup>1</sup>, Maureen Reynolds<sup>2</sup>, Daniel Shaw<sup>2</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC, <sup>2</sup>University of Pittsburgh, Pittsburgh, PA

- 64 *The main barriers and facilitators to implement Adolescent Screening and Brief Intervention in primary care unit: a follow up from 17 years.*

Denise De Micheli<sup>1</sup>, Bruno Pinheiro<sup>2</sup>, <sup>1</sup>Federal University of São Paulo, Guarulhos, Brazil, <sup>2</sup>Universidade Federal de São Paulo, São Paulo, Brazil

- 65 *A missing voice: the consent practice in school-based drug prevention programs in Taiwan*

Chuan-Yu Chen<sup>1</sup>, Yu Lo<sup>1</sup>, Wenmay Rei<sup>1</sup>, Shao-You Fang<sup>2</sup>, Su-Hui Chang<sup>2</sup>, Joyce Yen Fen<sup>3</sup>, <sup>1</sup>National Yang-Ming University, Taipei, Taiwan, <sup>2</sup>National Taiwan University, Children and Family Research Center, Taipei, <sup>3</sup>Children and Family Research Center, Taipei, Taiwan

- 66 *Evaluating the translational potential of NIDA-sponsored behavioral clinical trials*

Stephen Magura, Brad Watts, Western Michigan University, Kalamazoo, MI

### POSTER III LITERATURE REVIEW

Sapphire ABC/EFG  
11:30 - 1:30 PM

- 67 *Clinical and toxicological profile of NBOMESs: A systematic review*

Nino Marchi<sup>1</sup>, Juliana Scherer<sup>2</sup>, Leticia Fara<sup>1</sup>, Lysa Remy<sup>3</sup>, Rafaela Ornell<sup>2</sup>, Monique Reis<sup>4</sup>, Amanda

- Zamboni<sup>4</sup>, Mariana Paim<sup>1</sup>, Tais Fiorentin<sup>3</sup>, Carlos Alberto Wayhs<sup>4</sup>, Lisia von Diemen<sup>2</sup>, Flavio Pechansky<sup>2</sup>, Felix Kessler<sup>2</sup>, Renata Limberger<sup>3</sup>, <sup>1</sup>Center for Drug and Alcohol Research, Porto Alegre, Brazil, <sup>2</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre, <sup>3</sup>Federal University of Rio Grande do Sul, Porto Alegre, <sup>4</sup>Labtoxico, Federal University, Porto Alegre, Brazil
- 68 *Efficacy of ketamine in the treatment of substance use disorders: A review of the literature*  
Jennifer Jones, Camilo Mateus, Robert Malcolm, Sudie Back, Medical University of South Carolina, Charleston, SC
- 69 *Examining the sensitivity of purchase tasks to individual differences in risk among substance users: A literature review*  
Ivori Zvorsky<sup>1</sup>, Tyler Nighbor<sup>2</sup>, Allison Kurti<sup>2</sup>, Stephen Higgins<sup>2</sup>, <sup>1</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT
- 70 *Sensation-seeking personality trait and its association to drug seeking behavior in adolescents: A systematic review of the literature*  
Thiago Fidalgo<sup>1</sup>, Nitasha Sharma<sup>2</sup>, Sheila C. Caetano<sup>1</sup>, Zila M. Sanchez<sup>1</sup>, Silvia Martins<sup>3</sup>, <sup>1</sup>Universidade Federal de Sao Paulo, São Paulo, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>3</sup>Columbia University, New York, NY
- 71 *Limited inclusion of women in functional neuroimaging studies of opioid-use disorder: A systematic review*  
Hestia Moningka<sup>1</sup>, Dustin Scheinost<sup>2</sup>, Sarah Yip<sup>2</sup>, <sup>1</sup>Yale Child Study Center and University College London, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT
- 72 *Pharmacogenetics of methadone adverse events*  
Francina Fonseca, Claudio Castillo, Gloria Marin, Claudio Tamarit, Lina Oviedo, Marta Torrens, Institut de Neuropsiquiatria i Addiccions, Barcelona, Spain
- 73 *The case for providing opioid agonist therapy in the hospital setting*  
Kelsey Priest, Oregon Health & Science University, Portland, OR
- 74 *Knowledge synthesis of the effectiveness of prescription monitoring programs*  
Beth Sproule, Centre for Addiction and Mental Health, Toronto, ON, Canada
- 75 *Effect of prescription drug monitoring programs on nonfatal and fatal drug overdoses: A systematic review*  
David Fink<sup>1</sup>, Julia Schleimer<sup>2</sup>, Aaron Sarvet<sup>3</sup>, Kiran Grover<sup>2</sup>, C Delcher<sup>4</sup>, June Kim<sup>5</sup>, Alvaro Castillo-Carniglia<sup>6</sup>, Ariadne Rivera-Aguirre<sup>6</sup>, Stephen Henry<sup>6</sup>, Silvia Martins<sup>2</sup>, Magdalena Cerda<sup>6</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Harvard Medical School, Boston, MA, <sup>4</sup>University of Florida, Gainesville, FL, <sup>5</sup>New York University, New York, NY, <sup>6</sup>University of California Davis, Sacramento, CA
- 76 *Transitional trends in women's prescription drug misuse: A systematic review*  
Bridgette Peteet, Cami Mosley, Brittany Miller-Roenigk, Caravella McCuistian, Shapree Dixon, University of Cincinnati, Cincinnati, OH
- 77 *Extremely low HIV incidence among PWID: Terminology, high/middle income settings, methodology, and addressing new outbreaks*  
Don Des Jarlais<sup>1</sup>, Risk Factors, DRIVE & Recent HIV Outbreaks Study Team<sup>2</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>2</sup>Mount Sinai School of Medicine, New York, NY
- 78 *Use of opioids and stimulants by people who inject drugs: A multi-stage systematic review and meta-analysis of global evidence*  
Amy Peacock<sup>1</sup>, Adam Trickey<sup>2</sup>, Sarah Larney<sup>1</sup>, Samantha Colledge<sup>1</sup>, Janni Leung<sup>3</sup>, Jason Grebely<sup>4</sup>, Evan Cunningham<sup>5</sup>, Miranda Cuming<sup>6</sup>, Jack Stone<sup>2</sup>, Peter Vickerman<sup>2</sup>, Louisa Degenhardt<sup>1</sup>, <sup>1</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>2</sup>Bristol University, Clifton, United Kingdom, <sup>3</sup>NDARC, UNSW, Australia, Brisbane, Australia, <sup>4</sup>The Kirby Institute, Sydney, Australia, <sup>5</sup>University of New South Wales, Sydney, Australia, <sup>6</sup>University of Bristol, Bristol

- 79 *Pre-exposure prophylaxis (PrEP) for people who inject drugs? A scoping review of HIV treatment adherence research*  
Angela Bazzi<sup>1</sup>, Mari-Lynn Drainoni<sup>1</sup>, Dea Biancarelli<sup>1</sup>, Josh Hartman<sup>1</sup>, Matthew Mimiaga<sup>2</sup>, Katie Biello<sup>2</sup>,  
<sup>1</sup>Boston University School of Public Health, Boston, MA, <sup>2</sup>Brown University, Providence, RI
- 80 *Factors associated with uptake or willingness to use pre-exposure prophylaxis (PrEP) among people who inject drugs (PWID): A systematic review*  
Yohansa Fernández, New York University, New York, NY
- 81 *Addiction-related characteristics of substances users in harm reduction settings: A systematic review*  
Charlotte Kervran<sup>1</sup>, Fuschia Serre<sup>1</sup>, Cecile Denis<sup>2</sup>, Perrine Roux<sup>3</sup>, Marie Jauffret-Roustide<sup>3</sup>, Laurence Lalanne<sup>4</sup>, Melina Fatseas<sup>5</sup>, Jean-Pierre Daulouede<sup>6</sup>, Marc Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>INSERM, Marseille, <sup>4</sup>University Hospital of Strasbourg, Strasbourg, <sup>5</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>6</sup>Bizia Addiction Clinic, Bayonne
- 82 *Variability in the definition of “daily use” of cannabis across three large U.S. epidemiological surveys*  
Chloe Lee, Silvia Martins, Pia Mauro, Columbia University, New York, NY
- 83 *Cannabis and cannabinoids for the treatment of people with chronic non-cancer pain conditions: A systematic review and meta-analysis*  
Emily Stockings<sup>1</sup>, Gabrielle Campbell<sup>2</sup>, Wayne Hall<sup>3</sup>, Suzanne Nielsen<sup>4</sup>, Dino Zagic<sup>5</sup>, Rakin Rahman<sup>5</sup>, Bridin Murnion<sup>6</sup>, Megan Weier<sup>4</sup>, Michael Farrell<sup>7</sup>, Louisa Degenhardt<sup>7</sup>, <sup>1</sup>National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia, <sup>2</sup>University of South Wales, Sydney, Australia, <sup>3</sup>University of Queensland, Brisbane, Australia, <sup>4</sup>University of New South Wales, Sydney, Australia, <sup>5</sup>University of New South Wales, Randwick, Australia, <sup>6</sup>University of Sydney, Sydney, Australia, <sup>7</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 84 *Medical marijuana laws and adolescent marijuana use in the United States: a systematic review and meta-analysis*  
Aaron Sarvet<sup>1</sup>, Melanie Wall<sup>2</sup>, David Fink<sup>3</sup>, Emily Greene<sup>4</sup>, Katherine Keyes<sup>5</sup>, Magdalena Cerda<sup>6</sup>, Deborah Hasin<sup>4</sup>, <sup>1</sup>New York State Psychiatric Institute, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>4</sup>Columbia University, New York, NY, <sup>5</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>6</sup>University of California Davis, Sacramento, CA
- 85 *Does liberalization of cannabis policy influence adolescents’ levels of use? A systematic review*  
Maria Melchior, Camille Bolze, Félix Hausfater, Murielle Mary-Krause, Marine Azevedo Da Silva, Pierre Louis Institute for Epidemiology and Public Health, Department of Social Epidemiology, Paris, France
- 86 *Analysis of existing problematic mobile phone and smartphone use scales*  
Bethany Harris, Sherecce Fields, Timothy Regan, Texas A&M University, College Station, TX
- 87 *Policing behaviors and HIV/drug-related risk behaviors among people who inject drugs – a literature review*  
Leo Beletsky<sup>1</sup>, Liliana Avalos<sup>2</sup>, Christopher Venegas<sup>2</sup>, Javier Cepeda<sup>2</sup>, Pieter Baker<sup>2</sup>, <sup>1</sup>Northeastern University, Boston, MA, <sup>2</sup>University of California San Diego, La Jolla, CA
- 88 *Heroin reigns as top treatment for opioid addiction, but are we ready for it?*  
Brittany Dennis<sup>1</sup>, Pavel Roshanov<sup>2</sup>, Ashley Bonner<sup>2</sup>, Leen Naji<sup>2</sup>, Monica Bawor<sup>2</sup>, James Paul<sup>2</sup>, Michael Varenbut<sup>3</sup>, Jeff Daiter<sup>3</sup>, Carolyn Plater<sup>3</sup>, Andrew Worster<sup>2</sup>, Guillaume Pare<sup>2</sup>, David Marsh<sup>4</sup>, Dipika Desai<sup>5</sup>, Lehana Thabane<sup>2</sup>, Zainab Samaan<sup>2</sup>, <sup>1</sup>Peter Boris Centre for Addictions Research, Hamilton, ON, Canada, <sup>2</sup>McMaster University, Hamilton, ON, Canada, <sup>3</sup>Canadian Addiction Treatment Centres, Markham, ON, Canada, <sup>4</sup>Northern Ontario School of Medicine, Sudbury, ON, Canada, <sup>5</sup>Population Health Research Institute, Hamilton, ON, Canada

## POSTER III

## Sapphire ABC/EFG

### ADOLESCENT DRUG ABUSE II

11:30 - 1:30 PM

- 89 *How do demographics, psychosocial factors, and access to care, lead to receiving treatment among adolescents and young adults at risk for a substance use disorder?*  
Jose Martinez, Emily Garcia, William Kazanis, Megan Curtis, Claudina Tami, Suyen Schneegans, Jennifer Sharpe Potter, University of Texas Health Science Center, San Antonio, TX
- 90 *Screening and brief intervention of drug use in adolescence from the professional perspective*  
Maria Angélica Alves da Silva<sup>1</sup>, Andre Luiz Monezi Andrade<sup>2</sup>, Bruno Pinheiro<sup>3</sup>, Denise De Micheli<sup>4</sup>,  
<sup>1</sup>Federal University of São Paulo, São Paulo, Brazil, <sup>2</sup>Universidade Federal de São Paulo, São Paulo,  
<sup>3</sup>Universidade Federal de São Paulo, São Paulo, Brazil, <sup>4</sup>Federal University of São Paulo, Guarulhos, Brazil
- 91 *Factors associated with injection initiation during adolescence*  
Sara Warfield<sup>1</sup>, Robin Pollini<sup>1</sup>, Jennifer Syverston<sup>2</sup>, Catherine Paquette<sup>3</sup>, <sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>University of California Riverside, Riverside, CA, <sup>3</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC
- 92 *Latent classes of internal assets and behavior problems in at-risk adolescents*  
Meeyoung Min<sup>1</sup>, Dalhee Yoon<sup>1</sup>, Sonia Minnes<sup>2</sup>, Lynn Singer<sup>1</sup>, <sup>1</sup>Case Western Reserve University, Cleveland, OH, <sup>2</sup>Case Western Reserve University, Jack, Joseph and Morton Mandel School of Applied Social Sciences, Cleveland, OH
- 93 *Body self-image, physical activity level and drug use in adolescence*  
Bruno Pinheiro<sup>1</sup>, Maria Angélica Alves da Silva<sup>2</sup>, Andre Luiz Monezi Andrade<sup>3</sup>, Denise De Micheli<sup>4</sup>,  
<sup>1</sup>Universidade Federal de São Paulo, São Paulo, Brazil, <sup>2</sup>Federal University of São Paulo, São Paulo, Brazil,  
<sup>3</sup>Universidade Federal de São Paulo, São Paulo, <sup>4</sup>Federal University of São Paulo, Guarulhos, Brazil
- 94 *What influences safe medication practices: Investigating the relationship between parents' intentions, self-efficacy, and knowledge*  
Emily Garcia, Jose Martinez, Megan Curtis, Claudina Tami, William Kazanis, Suyen Schneegans, Jennifer Sharpe Potter, University of Texas Health Science Center, San Antonio, TX
- 95 *Exploring cannabis-specific parenting as a mechanism of the intergenerational transmission of cannabis use and cannabis use disorder on offspring adolescent cannabis use*  
Ariel Sternberg, Melanie Hill, Hye Won Suk, Madeline Meier, Laurie Chassin, Arizona State University, Tempe, AZ
- 96 *Long-term effects of childhood's family and school capitals on subsequent alcohol drinking behaviors*  
Yu Lo<sup>1</sup>, Nadia Wang<sup>1</sup>, I-An Wang<sup>2</sup>, Wei-J Chen<sup>3</sup>, Chuan-Yu Chen<sup>1</sup>, <sup>1</sup>National Yang-Ming University, Taipei, Taiwan, <sup>2</sup>Center of Neuropsychiatric Research, National Health Research Institutes, Miaoli, <sup>3</sup>National Taiwan University, Taipei City
- 97 *U.S. national data on prevalence and correlates of 8th and 10th grade runaway youth, 2005-2016*  
Berenice Castillo, John Schulenberg, Cristina Bares, University of Michigan, Ann Arbor, MI
- 98 *Tolerance of deviance in early adolescents with prenatal cocaine exposure: Latent classes, irritability and risk behaviors*  
June-Yung Kim<sup>1</sup>, Sonia Minnes<sup>1</sup>, Ty Ridenour<sup>2</sup>, Lynn Singer<sup>3</sup>, <sup>1</sup>Case Western Reserve University, Jack, Joseph and Morton Mandel School of Applied Social Sciences, Cleveland, OH, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>Case Western Reserve University, Cleveland, OH
- 99 *Altered reward feedback processing in prenatally cocaine exposed adolescents: Evidence from theta and alpha oscillations*  
Kristen Morie<sup>1</sup>, Jia Wu<sup>1</sup>, Nicole Landi<sup>2</sup>, Marc Potenza<sup>3</sup>, Linda Mayes<sup>1</sup>, Michael Crowley<sup>1</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Haskins Laboratories, New Haven, CT, <sup>3</sup>Yale University School of Medicine, New Haven, CT

- 100 *Cortical gyrification as a potential predisposition biomarker of adolescent substance abuse*  
Arkadiy Maksimovskiy<sup>1</sup>, Anna Seraikas<sup>1</sup>, Emily Oot<sup>2</sup>, Maya Rieselbach<sup>1</sup>, Carolyn Caine<sup>1</sup>, Julia Cohen-Gilbert<sup>3</sup>, Jennifer Sneider<sup>3</sup>, Sion Harris<sup>4</sup>, Lisa Nickerson<sup>3</sup>, Marisa Silveri<sup>3</sup>, <sup>1</sup>McLean Hospital, Belmont, MA, <sup>2</sup>McLean Hospital, Boston University School of Medicine, Belmont, MA, <sup>3</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>4</sup>Harvard Medical School, Boston, MA
- 101 *Associations between anhedonia and substance use initiation among adolescent never users*  
Matthew Stone<sup>1</sup>, David Stong<sup>1</sup>, Adam Leventhal<sup>2</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>University of Southern California, Los Angeles, CA
- 102 *Adolescent risk and protective factors for substance use disorders in emerging adulthood*  
Angela Heads, University of Texas Health Science Center, McGovern Medical School, Houston, TX
- 103 *Does cannabis onset now trigger onset of drinking alcohol? An epidemiologic case-crossover approach*  
Villisha Gregoire<sup>1</sup>, Karl Alcover<sup>2</sup>, Hui Cheng<sup>2</sup>, James Anthony<sup>2</sup>, <sup>1</sup>Michigan State University, East Lansing, MI, <sup>2</sup>Michigan State University, Lansing, MI
- 104 *The interactive effects of perceived peer drinking and personality on adolescent drinking trajectories*  
Nina Pocuca<sup>1</sup>, Leanne Hides<sup>2</sup>, Catherine Quinn<sup>3</sup>, Melanie White<sup>2</sup>, Louise Mewton<sup>4</sup>, Nicola Newton<sup>5</sup>, Tim Slade<sup>6</sup>, Catherine Chapman<sup>6</sup>, Gavin Andrews<sup>6</sup>, Steve Allsop<sup>7</sup>, Nyanda McBride<sup>7</sup>, Louise Birrell<sup>6</sup>, Brad Shaw<sup>6</sup>, Nina Te Pas<sup>7</sup>, Maree Teesson<sup>5</sup>, <sup>1</sup>Queensland University of Technology, Brisbane, Australia, <sup>2</sup>University of Queensland, Brisbane, <sup>3</sup>University of Queensland, Brisbane, Australia, <sup>4</sup>Centre for Youth Substance Abuse Research, Herston, Australia, <sup>5</sup>University of New South Wales, Sydney, <sup>6</sup>University of New South Wales, Sydney, Australia, <sup>7</sup>Curtin University, Perth, Australia

## POSTER III POLY DRUG ABUSE II

**Sapphire ABC/EFG**  
**11:30 - 1:30 PM**

- 105 *Comparison of alcohol, opioid, and polysubstance-user performance on behavioral measures of impulsivity and risk taking*  
Randi Brown<sup>1</sup>, Thomas Schmidt<sup>2</sup>, David Pennington<sup>2</sup>, Timothy C Durazzo<sup>3</sup>, Dieter Meyerhoff<sup>2</sup>, <sup>1</sup>NCIRE, San Francisco, CA, <sup>2</sup>San Francisco Veterans Affairs Health Care System, San Francisco, CA, <sup>3</sup>Stanford University, Stanford, CA
- 106 *Comparing the acute cognitive effects of cannabis and alcohol: An exploratory analysis*  
Justin Matheson<sup>1</sup>, Robert Mann<sup>1</sup>, Bernard LeFoll<sup>1</sup>, Christine Wickens<sup>1</sup>, Bruna Brands<sup>2</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>Health Canada, Toronto, ON, Canada
- 107 *Which factors are associated with first opioid and first benzodiazepine prescription in the military health system?*  
Megan Curtis<sup>1</sup>, William Kazanis<sup>1</sup>, Christina Song<sup>2</sup>, Claudina Tami<sup>1</sup>, Donald McGeary<sup>1</sup>, Erin Finley<sup>2</sup>, Maj Joseph K. Maddry<sup>3</sup>, Vikhyat Bebart<sup>3</sup>, Col David H. Carnahan<sup>4</sup>, Jennifer Sharpe Potter<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, San Antonio, TX, <sup>2</sup>South Texas Veterans Health Care System, San Antonio, TX, <sup>3</sup>San Antonio Military Medical Center, University of Colorado, Fort Sam, <sup>4</sup>Defense Health Agency, University of Colorado, Boulder, CO
- 108 *Frequency of psychiatric disorders and impulsivity among drug-using drivers*  
Leticia Fara<sup>1</sup>, Juliana Scherer<sup>2</sup>, Daiane Silvello<sup>1</sup>, Vanessa Volpato<sup>1</sup>, Vinicius S. Roglio<sup>2</sup>, Felipe Ornell<sup>2</sup>, Lisia von Diemen<sup>2</sup>, Felix Kessler<sup>2</sup>, Flavio Pechansky<sup>2</sup>, <sup>1</sup>Center for Drug and Alcohol Research, Porto Alegre, Brazil, <sup>2</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre

- 109 *The effects of opioids and alcohol, alone and in combination, on simulated driving performance*  
Shanna Babalonis<sup>1</sup>, Marion Coe<sup>1</sup>, Paul Nuzzo<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Paul Sloan<sup>1</sup>, Laura Fanucchi<sup>2</sup>, Sharon Walsh<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 110 *Patterns of prescription opioid use and at-risk drinking among older women in north central Florida*  
Mirsada Serdarevic, Kelly Gurka, Catherine Woodstock Striley, Krishna Vaddiparti, Linda Cottler, University of Florida, Gainesville, FL
- 111 *Factors associated with discontinuation of methadone maintenance therapy (MMT) among persons who also use alcohol in Vancouver, Canada*  
Jan Klimas<sup>1</sup>, Ekaterina Nosova<sup>2</sup>, M. Eugenia Socias<sup>3</sup>, Seonaid Nolan<sup>3</sup>, Rupinder Brar<sup>3</sup>, Kanna Hayashi<sup>2</sup>, MJ Milloy<sup>4</sup>, Thomas Kerr<sup>4</sup>, Evan Wood<sup>4</sup>, <sup>1</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>University of British Columbia, Vancouver, BC, Canada, <sup>4</sup>University of British Columbia, Vancouver
- 112 *Effectiveness of combination pharmac-behavioral therapy for smoking cessation in people who heavily drink and smoke*  
Daniel Schatz<sup>1</sup>, Babak Tofighi<sup>2</sup>, Joshua Lee<sup>2</sup>, <sup>1</sup>New York University, New York, NY, <sup>2</sup>New York University School of Medicine, New York, NY
- 113 *Crossover associations of alcohol and smoking craving and withdrawal with biochemically-verified alcohol and nicotine use in heavy drinking smokers*  
Crystal Smith<sup>1</sup>, Ekaterina Burduli<sup>2</sup>, Michael Orr<sup>3</sup>, Samantha Martin<sup>4</sup>, Myles Finlay<sup>3</sup>, Oladunni Oluwoye<sup>4</sup>, Michael McDonell<sup>4</sup>, John Roll<sup>1</sup>, Sterling McPherson<sup>5</sup>, <sup>1</sup>Washington State University, Pullman, WA, <sup>2</sup>Washington State University, Spokane, WA, <sup>3</sup>Washington State University College of Nursing, Spokane, WA, <sup>4</sup>Washington State University, Program of Excellence in Addictions Research, Spokane, WA, <sup>5</sup>Washington State University, Elson S. Floyd College of Medicine, Spokane, WA
- 114 *Daily patterns of marijuana and alcohol co-use among individuals with alcohol and cannabis use disorders*  
Jane Metrik<sup>1</sup>, Rachel Gunn<sup>2</sup>, Kristina Jackson<sup>3</sup>, Alexander Sokolovsky<sup>3</sup>, Brian Borsari<sup>4</sup>, <sup>1</sup>Brown University School of Public Health, Providence, RI, <sup>2</sup>Brown University, Providence, RI, <sup>3</sup>Center for Alcohol and Addiction Studies, Providence, RI, <sup>4</sup>San Francisco Veterans Affairs Health Care System, San Francisco, CA
- 115 *Polydrug cannabis use and cannabis dependence: Toward a "latent class with distal outcome" approach*  
Karl Alcover, James Anthony, Michigan State University, Lansing, MI
- 116 *Co-use of marijuana and tobacco in blunts or spliffs among a sample of residential addiction treatment clients*  
Deborah Yip, Thao Le, Denise Williams, Noah Gubner, Joseph Guldish, University of California San Francisco, San Francisco, CA
- 117 *Varenicline for smoking cessation in patients with cocaine-use disorder: A proof-of-concept pilot trial*  
Anna Reynolds<sup>1</sup>, Justin Strickland<sup>1</sup>, William Stoops<sup>1</sup>, Joshua Lile<sup>2</sup>, Craig Rush<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 118 *Predicting opioid and cocaine-use trajectory with objective and subjective neighborhood measures*  
Samuel Stull<sup>1</sup>, Landhing Moran<sup>1</sup>, David Epstein<sup>1</sup>, Jennifer Schroeder<sup>2</sup>, Kenzie Preston<sup>1</sup>, Karran Phillips<sup>3</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>Schroeder Statistical Consulting, LLC, Ellicott City, MD, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 119 *Cannabis use increases cocaine dependence in female cocaine users but does not increase its progression speed*  
Yiyang Liu<sup>1</sup>, Micah Johnson<sup>1</sup>, Barry Setlow<sup>2</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida College of Medicine, Gainesville, FL
- 120 *Lifetime alcohol consumption conditionally relates to neurocognitive performance based on methamphetamine dependence*  
Rowan Saloner<sup>1</sup>, Emily Paolillo<sup>2</sup>, David Moore<sup>2</sup>, Robert Heaton<sup>2</sup>, Igor Grant<sup>3</sup>, Mariana Cherner<sup>2</sup>, <sup>1</sup>SDSU/UC

- San Diego Joint Doctoral Program in Clinical Psychology, San Diego, CA, <sup>2</sup>University of California San Diego, San Diego, CA, <sup>3</sup>University of California San Diego, La Jolla, CA
- 121 *Lifetime use of non-nicotine drugs in electronic cigarette devices among a sample of individuals in substance use treatment*  
Noah Gubner, Denise Williams, Joseph Guydish, University of California San Francisco, San Francisco, CA
- 122 *Venue-based sampling to assess risky behavior and risk factors for drug use among non-school based youths in Thailand.*  
kanittha thaikla, Chiang Mai University, Chiang Mai, Thailand, Thailand
- 123 *Are prior drug use behaviors associated with subsequent initiation of injection drug use?*  
Daniel Chu<sup>1</sup>, Alex Kral<sup>2</sup>, Lynn Wenger<sup>3</sup>, Ricky Bluthenthal<sup>1</sup>, <sup>1</sup>Keck School of Medicine University of Southern California, Los Angeles, CA, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>RTI International, San Francisco, CA
- 124 *Drug treatment seeking behavior subsequent to involuntary treatment among people who inject drugs in Tijuana, Mexico*  
Claudia Rafful<sup>1</sup>, MariaLuisa Zúñiga<sup>2</sup>, Ricadro Orozco<sup>3</sup>, Peter Davidson<sup>1</sup>, David Engstrom<sup>4</sup>, Gudelia Rangel<sup>5</sup>, Steffanie Strathdee<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>San Diego State University School of Social Work, San Diego, CA, <sup>3</sup>National Institute of Psychiatry, Mexico, Mexico City, Mexico, <sup>4</sup>San Diego State University, San Diego, CA, <sup>5</sup>Comision Binacional Fronteriza, Mexico
- 125 *Beyond alcohol: Client change talk about opioids, cannabis, and cocaine*  
Jon Houck, Brigitte Stevens, University of New Mexico, Albuquerque, NM
- 126 *Prevalence and correlates of multiple substance use disorders among adults in primary care: Results from a multisite study*  
William John<sup>1</sup>, He Zhu<sup>1</sup>, Paolo Mannelli<sup>1</sup>, Robert Schwartz<sup>2</sup>, Geetha Subramaniam<sup>3</sup>, Li-Tzy Wu<sup>1</sup>, <sup>1</sup>Duke University School of Medicine, Durham, NC, <sup>2</sup>Friends Research Institute, Baltimore, MD, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 127 *Are discussions about substance use in health care settings associated with substance use disorder treatment use and perception of treatment need?*  
Pia Mauro<sup>1</sup>, Hillary Samples<sup>2</sup>, Kathryn Klein<sup>1</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY
- 128 *Empirically-derived alcohol and drug use patterns of sexual minority groups presenting to an urban emergency department*  
Brooke Arterberry<sup>1</sup>, Alan Davis<sup>2</sup>, Erin Bonar<sup>1</sup>, Maureen Walton<sup>3</sup>, Frederic Blow<sup>3</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>3</sup>University of Michigan, Addiction Center, Ann Arbor, MI
- 129 *Quality of life and the state of health: Ambulatory treatment for substance use disorders in Argentina*  
Nicolás Poliansky<sup>1</sup>, Carolina Gorlero<sup>1</sup>, Damián Gemini<sup>1</sup>, Hendree Jones<sup>2</sup>, <sup>1</sup>Fundación Convivir, Buenos Aires, Argentina, <sup>2</sup>University of North Carolina at Chapel Hill, Carrboro, NC
- 130 *Women's and men's experiences in group therapy for substance use disorders: A mixed-methods analysis*  
Shelly Greenfield<sup>1</sup>, Dawn Sugarman<sup>2</sup>, Meghan Reilly<sup>2</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA

### POSTER III OPIOIDS: HUMAN STUDIES I

**Sapphire ABC/EFG**  
**11:30 - 1:30 PM**

- 131 *Phase 3 trial comparing depot buprenorphine (CAM2038) to sublingual buprenorphine/naloxone for OUD treatment: Subanalysis among persons with heroin as the primary opioid of abuse*

- Michael Frost<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Genie Bailey<sup>3</sup>, Sharon Walsh<sup>4</sup>, Mark Beacker<sup>5</sup>, Natalie Budilovsky-Kelley<sup>5</sup>, Fredrik Tiberg<sup>6</sup>, Erin Barone<sup>7</sup>, <sup>1</sup>The Frost Medical Group, Conshohocken, PA, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>3</sup>SSTAR: Stanley Street Treatment & Resources, Inc, Fall River, MA, <sup>4</sup>University of Kentucky, Lexington, KY, <sup>5</sup>Braeburn Pharmaceuticals, Princeton, NJ, <sup>6</sup>Camurus, Lund, Sweden, <sup>7</sup>Braeburn, Plymouth Meeting, PA
- 132 *A real-world efficacy and safety comparison of CAM2038 vs SL BPN/NX for the treatment of patients with OUD who inject opioids*  
Genie Bailey<sup>1</sup>, Michael Frost<sup>2</sup>, Michelle Lofwall<sup>3</sup>, Sharon Walsh<sup>4</sup>, Mark Beacker<sup>5</sup>, Natalie Budilovsky-Kelley<sup>5</sup>, Fredrik Tiberg<sup>6</sup>, Erin Barone<sup>7</sup>, <sup>1</sup>SSTAR: Stanley Street Treatment & Resources, Inc, Fall River, MA, <sup>2</sup>The Frost Medical Group, Conshohocken, PA, <sup>3</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>4</sup>University of Kentucky, Lexington, KY, <sup>5</sup>Braeburn Pharmaceuticals, Princeton, NJ, <sup>6</sup>Camurus, Lund, Sweden, <sup>7</sup>Braeburn, Plymouth Meeting, PA
- 133 *Buprenorphine/naloxone treatment: Dose-finding for prescription opioid dependence*  
Gabriela Garcia Vassallo<sup>1</sup>, Margaret Altemus<sup>2</sup>, Elizabeth Ralevski<sup>2</sup>, Jane Weiner<sup>2</sup>, Ismene Petrakis<sup>2</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>VA Connecticut Healthcare System, West Haven, CT
- 134 *Patient characteristics as moderators in the extended-release naltrexone versus buprenorphine-naloxone to prevent opioid relapse (XBOT, CTN-0051) trial: Who responds to which treatment?*  
Edward Nunes<sup>1</sup>, Joshua Lee<sup>2</sup>, Patricia Novo<sup>2</sup>, Genie Bailey<sup>3</sup>, John Rotrosen<sup>2</sup>, Marc Fishman<sup>4</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>New York University School of Medicine, New York, NY, <sup>3</sup>SSTAR: Stanley Street Treatment & Resources, Inc, Fall River, MA, <sup>4</sup>Mountain Manor Treatment Center, Baltimore, MD
- 135 *Research design and participant experience in clinical addictions randomized controlled trials: A nested qualitative exploration of the CTN-0055 CHOICES study*  
Lindsey Richardson<sup>1</sup>, Kaitlyn Jaffe<sup>1</sup>, Evan Wood<sup>2</sup>, Philip Todd Korthuis<sup>3</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>University of British Columbia, Vancouver, <sup>3</sup>Oregon Health & Science University, Portland, OR
- 136 *Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): A multicenter, open-label, randomized controlled trial*  
Patricia Novo<sup>1</sup>, Joshua Lee<sup>1</sup>, Edward Nunes<sup>2</sup>, Ken Bachrach<sup>3</sup>, Genie Bailey<sup>4</sup>, Snehal Bhatt<sup>5</sup>, SARAH FARKAS<sup>1</sup>, Marc Fishman<sup>6</sup>, Phoebe Gauthier<sup>7</sup>, Candace Hodgkins<sup>8</sup>, Jacqueline King<sup>9</sup>, Robert Lindblad<sup>9</sup>, David Liu<sup>10</sup>, Abigail Matthews<sup>9</sup>, Jeanine May<sup>9</sup>, K. Michelle Peavy<sup>11</sup>, Stephen Ross<sup>1</sup>, Dagmar Salazar<sup>9</sup>, Paul Schkolnik<sup>12</sup>, Dikla Blumberg<sup>9</sup>, Geetha Subramaniam<sup>10</sup>, John Rotrosen<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Tarzana Treatment Centers, Tarzana, CA, <sup>4</sup>SSTAR: Stanley Street Treatment & Resources, Inc, Fall River, MA, <sup>5</sup>University of New Mexico, Albuquerque, NM, <sup>6</sup>Mountain Manor Treatment Center, Baltimore, MD, <sup>7</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>8</sup>Gateway Community Services, Inc., Jacksonville, FL, <sup>9</sup>The Emmes Corporation, Rockville, MD, <sup>10</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>11</sup>Evergreen Treatment Services, Seattle, WA, <sup>12</sup>Maryhaven Addiction Research Institute, Columbus, OH
- 137 *Cost-effectiveness of extended-release naltrexone versus buprenorphine-naloxone to prevent opioid relapse among individuals initiating treatment in an inpatient detoxification setting*  
Sean Murphy<sup>1</sup>, Kathryn McCollister<sup>2</sup>, Jared Leff<sup>1</sup>, X. April Yang<sup>2</sup>, Philip Jeng<sup>1</sup>, Joshua Lee<sup>3</sup>, Edward Nunes<sup>4</sup>, Patricia Novo<sup>3</sup>, John Rotrosen<sup>3</sup>, Bruce Schackman<sup>1</sup>, <sup>1</sup>Weill Cornell Medical College, New York, NY, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>3</sup>New York University School of Medicine, New York, NY, <sup>4</sup>Columbia University and NYSPI, New York, NY



- 138 *Resources and associated costs of implementing pharmacotherapy for opioid dependence initiated in inpatient detoxification settings: Results from a multisite randomized clinical trial*  
Kathryn McCollister<sup>1</sup>, X. April Yang<sup>1</sup>, Sean Murphy<sup>2</sup>, Jared Leff<sup>2</sup>, Joshua Lee<sup>3</sup>, Edward Nunes<sup>4</sup>, Patricia Novo<sup>3</sup>, John Rotrosen<sup>3</sup>, Bruce Schackman<sup>2</sup>, <sup>1</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>2</sup>Weill Cornell Medical College, New York, NY, <sup>3</sup>New York University School of Medicine, New York, NY, <sup>4</sup>Columbia University and NYSPI, New York, NY
- 139 *Medication for opioid use disorder and mortality after inpatient opioid detoxification treatment*  
Alexander Walley<sup>1</sup>, Dana Bernson<sup>2</sup>, Thomas Land<sup>2</sup>, Marc Larochelle<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Massachusetts Department of Public Health, Boston, MA
- 140 *Impact of change in buprenorphine- naloxone formulation on prescription pattern, treatment adherence and patient satisfaction among patients on buprenorphine maintenance treatment: A cross-sectional study*  
Shalini Singh<sup>1</sup>, Yatan Pal Singh Balhara<sup>2</sup>, Siddharth Sarkar<sup>2</sup>, <sup>1</sup>All India Institute of Medical Sciences, New Delhi, <sup>2</sup>National Drug Dependence Treatment Centre, New Delhi, India
- 141 *Participants' preferences for BUP-NX or XR-NTX and associations with induction successes and relapse rates in the CTN-0051 opioid treatment trial*  
Jacqueline King<sup>1</sup>, Jeanine May<sup>1</sup>, Dagmar Salazar<sup>1</sup>, Anne Hoehn<sup>1</sup>, Dikla Blumberg<sup>1</sup>, Patricia Novo<sup>2</sup>, Yunhee Choi-Kuaea<sup>3</sup>, K. Michelle Peavy<sup>3</sup>, Rosson Wiebe<sup>4</sup>, John Rotrosen<sup>2</sup>, Joshua Lee<sup>2</sup>, <sup>1</sup>The Emmes Corporation, Rockville, MD, <sup>2</sup>New York University School of Medicine, New York, NY, <sup>3</sup>Evergreen Treatment Services, Seattle, WA, <sup>4</sup>Cowlitz Tribal Health, Tukwila, WA
- 142 *Baseline characteristics predictive of successful outpatient transition onto extended-release naltrexone*  
D. Andrew Tompkins<sup>1</sup>, Edward Nunes<sup>2</sup>, Antoine Douaihy<sup>3</sup>, Paolo Mannelli<sup>4</sup>, Miao Yu<sup>5</sup>, Narinder Nangia<sup>5</sup>, Maria Sullivan<sup>5</sup>, Abigail Zavod<sup>5</sup>, Sarah Akerman<sup>6</sup>, <sup>1</sup>University of California San Francisco School of Medicine, San Francisco, CA, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>University of Pittsburgh, Pittsburgh, PA, <sup>4</sup>Duke University School of Medicine, Durham, NC, <sup>5</sup>Alkermes, Inc., Waltham, MA, <sup>6</sup>Alkermes, Inc, Waltham, MA
- 143 *A five-day outpatient induction onto XR-naltrexone in patients with opioid use disorder*  
Mohammad Sibai<sup>1</sup>, Kaitlyn Mishlen<sup>1</sup>, Edward Nunes<sup>2</sup>, Adam Bisaga<sup>3</sup>, <sup>1</sup>New York State Psychiatric Institute, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Columbia University College of Physicians and Surgeons, New York, NY
- 144 *The effects of extended-release injectable naltrexone and incentives for opiate abstinence in heroin-dependent adults: A randomized trial*  
Brantley Jarvis<sup>1</sup>, August Holtyn<sup>2</sup>, Anthony DeFulio<sup>3</sup>, Mikhail Koffarnus<sup>4</sup>, Jeannie-Marie Leoutsakos<sup>2</sup>, Annie Umbricht<sup>2</sup>, Michael Fingerhood<sup>5</sup>, George Bigelow<sup>2</sup>, Kenneth Silverman<sup>6</sup>, <sup>1</sup>NorthTide, LLC, Dulles, VA, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Western Michigan University, Kalamazoo, MI, <sup>4</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>5</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>6</sup>Johns Hopkins Hospital, Baltimore, MD
- 145 *Symptoms of depression, anxiety and insomnia in opioid dependent individuals receiving either long-acting naltrexone injections or oral buprenorphine-naloxone. A randomized clinical trial.*  
Zill-E-Huma Latif, Akershus Universitetssykehus, Lørenskog, Akershus, Norway
- 146 *Circadian typology in patients in opioid agonist therapy: Associations with social jetlag and cocaine abstinence*  
Jeremiah Bertz<sup>1</sup>, Samuel Stull<sup>1</sup>, Bill Kowalczyk<sup>2</sup>, David Epstein<sup>1</sup>, Kenzie Preston<sup>1</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>Hartwick College, Oneonta, NY
- 147 *Motives for illicit buprenorphine/naloxone use among opioid consumers in New Hampshire*  
Elizabeth Saunders<sup>1</sup>, Sarah Moore<sup>2</sup>, Andrea Meier<sup>3</sup>, Bethany McLeman<sup>4</sup>, Stephen Metcalf<sup>2</sup>, Olivia Walsh<sup>5</sup>, Lisa Marsch<sup>2</sup>, <sup>1</sup>The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH, <sup>2</sup>Geisel School

- of Medicine at Dartmouth,<sup>3</sup>Hanover, NH, Geisel School of Medicine at Dartmouth,<sup>4</sup>Lebanon, NH, Northeast Node of the CTN/Dartmouth College, Lebanon, NH, <sup>5</sup>Dartmouth College, Hanover, NH
- 148 *Perceptions and practices addressing diversion among US buprenorphine prescribers*  
Lewei (Allison) Lin<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Sharon Walsh<sup>3</sup>, Adam Gordon<sup>4</sup>, Hannah Knudsen<sup>3</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>3</sup>University of Kentucky, Lexington, KY, <sup>4</sup>University of Utah, Salt Lake City, UT
- 149 *Effects of interim buprenorphine treatment for opioid use disorder for emerging adults*  
Kelly Peck<sup>1</sup>, Taylor Ochalek<sup>2</sup>, Gary Badger<sup>1</sup>, Stacey Sigmon<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT
- 150 *Within-subject evaluation of interim buprenorphine treatment during waitlist delays*  
Taylor Ochalek<sup>1</sup>, Kelly Peck<sup>2</sup>, Maria Parker<sup>2</sup>, Gary Badger<sup>2</sup>, Stephen Higgins<sup>2</sup>, Stacey Sigmon<sup>2</sup>, <sup>1</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT
- 151 *Integrating buprenorphine into peer-support: a qualitative study exploring motivators for engagement and retention in a community-based opioid treatment program in Baltimore City*  
Noa Krawczyk<sup>1</sup>, Masoumeh Dejman<sup>2</sup>, Christine Truong<sup>2</sup>, Simon Marshall-Shah<sup>2</sup>, Kayla Tormohlen<sup>2</sup>, Deborah Agus<sup>3</sup>, Judith Bass<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>3</sup>Behavioral Health Leadership Institute, Baltimore, MD
- 152 *Risk factors for premature discontinuation of buprenorphine treatment for opioid use disorder among Medicaid enrollees*  
Hillary Samples<sup>1</sup>, Arthur Robin Williams<sup>2</sup>, Sheree Neese-Todd<sup>3</sup>, Mark Olfson<sup>4</sup>, Stephen Crystal<sup>3</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>Columbia University Division on Substance Use Disorders, New York, NY, <sup>3</sup>Rutgers University, New Brunswick, NJ, <sup>4</sup>Columbia University and NYSPI, New York, NY
- 153 *Association of insurance coverage with specialty treatment, buprenorphine treatment, and stable primary care in a cohort of adults who have injected drugs.*  
Kenneth Feder<sup>1</sup>, Noa Krawczyk<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD
- 154 *Methadone maintenance for opioid dependent patients using pharmaceutical opioids (POs) versus heroin: Is there a difference?*  
Mohit Varshney<sup>1</sup>, Atul Ambekar<sup>2</sup>, Ravindra Rao<sup>1</sup>, Ashwani Mishra<sup>1</sup>, <sup>1</sup>National Drug Dependence Treatment Centre, New Delhi, India, <sup>2</sup>Professor, National Drug Dependence Treatment Centre, AIIMS, New Delhi, New Delhi, India
- 155 *Stigma associated with receiving methadone treatment: Reliability and validity of a theory-based stigma scale for opioid-using populations*  
Laramie Smith<sup>1</sup>, Maria Luisa Mittal<sup>2</sup>, Valerie Earnshaw<sup>3</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>University of California San Diego, Division of Infectious Diseases and Global Public Health, La Jolla, CA, <sup>3</sup>University of Delaware, Newark, DE

**ORAL COMMUNICATIONS 19**  
**OOPS, I DID IT AGAIN: IMPULSIVITY,**  
**DECISION MAKING AND CRAVING**

**Indigo E**  
**1:30 - 3:30 PM**

Chairs: R. Kathryn McHugh and Stephanie Wemm

1:30 *Self-perceived impaired control in alcohol use: An ecological momentary assessment study*

- Danielle Remmerswaal<sup>1</sup>, Joran Jongerling<sup>1</sup>, Ingmar Franken<sup>2</sup>, <sup>1</sup>Erasmus University Rotterdam, Rotterdam, Netherlands, <sup>2</sup>Erasmus University Rotterdam, Rotterdam
- 1:45 *Sex differences in the associations between stress reactivity, impulsivity, and problematic use in smokers and gamblers*  
Stephanie Wemm<sup>1</sup>, Edelgard Wulfert<sup>2</sup>, Rajita Sinha<sup>3</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>State University of New York at Albany, Albany, NY, <sup>3</sup>Yale University School of Medicine, New Haven, CT
- 2:00 *The effects of cocaine-dependence and aging on decision making performance and impulsivity*  
Sade Johns, F. Gerard Moeller, Virginia Commonwealth University, Richmond, VA
- 2:15 *The sterile injection equipment discounting task: A novel measure of infectious disease risk among injecting heroin users*  
Evan Herrmann<sup>1</sup>, Youssr Shaltout<sup>2</sup>, Sandra Comer<sup>3</sup>, <sup>1</sup>Battelle Memorial Institute, Baltimore, MD, <sup>2</sup>Columbia University Medical Center, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY
- 2:30 *Craving, non-opioid drugs and alcohol use by HIV-positive patients with opioid use disorder stabilized on naltrexone*  
Elena Blokhina<sup>1</sup>, Evgeny Krupitsky<sup>2</sup>, Edwin Zvartau<sup>1</sup>, Elena Vladimirovna Verbitskaya<sup>1</sup>, Dmitry Lioznov<sup>1</sup>, Tatiana Yaroslavtseva<sup>1</sup>, Natalia Bushara<sup>3</sup>, Vladimir Palatkin<sup>3</sup>, Sabrina Poole<sup>4</sup>, Robert Gross<sup>4</sup>, George Woody<sup>4</sup>, <sup>1</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russian Federation, <sup>2</sup>V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russian Federation, <sup>3</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, <sup>4</sup>University of Pennsylvania, Philadelphia, PA
- 2:45 *Lofexidine in combination with naltrexone improves control over opioid cravings: A pilot randomized, double-blind, placebo-controlled clinical trial*  
Gretchen Hermes<sup>1</sup>, Scott Hyman<sup>2</sup>, Thomas Kosten<sup>3</sup>, Rajita Sinha<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Carlos Albizu University, Miami, FL, <sup>3</sup>Baylor College of Medicine, Bellaire, TX
- 3:00 *Craving mediates behavioral economic risk for opioid use during prescription opioid addiction treatment*  
Matthew Worley<sup>1</sup>, Bryan Messina<sup>2</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>VA San Diego Healthcare System, San Diego, CA
- 3:15 *The role of sleep disruption in pain-related craving in adults with chronic pain and opioid misuse*  
R. Kathryn McHugh, Rachel Geyer, Monika Kolodziej, Roger Weiss, McLean Hospital, Belmont, MA

## **SYMPOSIUM XVII COMORBIDITY OF OPIOID ADDICTION AND OTHER PSYCHIATRIC DISORDERS**

**Indigo BCFG  
1:30 - 3:30 PM**

Chairs: Rita Valentino and Christopher Evans

- 1:30 *Buprenorphine: Opioid dependence and depression*  
T. Kosten, Baylor College of Medicine, Bellaire, TX
- 1:55 *Opioid receptors and diverse contributions to mood regulation*  
B. Kieffer, McGill University, Montreal, QC, Canada
- 2:20 *Kappa/dynorphin systems and anxiety states*  
C. Chavkin, University of Washington, Seattle, WA
- 2:45 *Co-occurrence of mental health and opioid use disorders*  
L. Degenhardt, National Drug and Alcohol Research Centre, Sydney, Australia, Australia
- 3:10 *Discussant: Comorbidity of opioid addiction and other psychiatric disorders*  
R. Valentino, National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD

**SYMPOSIUM XVIII  
LONG-ACTING MEDICATION  
REFORMULATIONS: A STRATEGY TO  
ADDRESS THE OPIOID EPIDEMIC**

**Indigo A  
1:30 - 3:30 PM**

Chairs: Brantley Jarvis and Philip Todd Korthuis

- 1:30 *Extended-release naltrexone versus buprenorphine for opioid treatment: Results from two comparative effectiveness trials*  
J. Lee, New York University School of Medicine, New York, NY
- 1:55 *Naltrexone implants for opioid use disorder: Relapse prevention, craving, anhedonia, and HIV prevention*  
E. Krupitsky, V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russia, Russian Federation
- 2:20 *Once-weekly and once-monthly injectable buprenorphine for opioid use disorder: Human laboratory findings*  
S. Walsh, University of Kentucky, Lexington, KY
- 2:45 *Recent clinical studies on a once-weekly and once-monthly injectable form of buprenorphine to treat opioid use disorder*  
E. Nunes, Columbia University and NYSPI, New York, NY
- 3:10 *Curbing the opioid epidemic with long-acting medications: Opportunities and ongoing research in treatment implementation*  
P. Korthuis, Oregon Health & Science University, Portland, OR

**ORAL COMMUNICATIONS 18  
THE PAIN AND STRAIN COMES  
MAINLY FROM THE BRAIN**

**Indigo D  
1:30 - 4:30 PM**

Chairs: Karsten Bartels and Declan Barry

- 1:30 *Assessment of drug abuse-related events with MADDERS in SUMMIT-07: A phase-3 study of NKTR-181 in patients with moderate to severe chronic low-back pain*  
Ryan Lanier<sup>1</sup>, John Markman<sup>2</sup>, Nathaniel Katz<sup>1</sup>, Jeffrey Gudin<sup>3</sup>, Richard Rauck<sup>4</sup>, Maitreyee Mohanty<sup>1</sup>, Harrison Elder<sup>1</sup>, Dolapo Lawal<sup>1</sup>, Joseph Gimbel<sup>5</sup>, Mary Tagliaferri<sup>6</sup>, Lin Lu<sup>6</sup>, Suresh Siddhanti<sup>6</sup>, Sidney Schnoll<sup>7</sup>, Jack Henningfield<sup>8</sup>, <sup>1</sup>Analgesic Solutions, Natick, MA, <sup>2</sup>University of Rochester School of Medicine and Dentistry, Rochester, NY, <sup>3</sup>Englewood Hospital and Medical Center, Englewood, NJ, <sup>4</sup>Carolinas Pain Institute and The Center for Clinical Research, Winston-Salem, NC, <sup>5</sup>Arizona Research Center, Phoenix, AZ, <sup>6</sup>Nektar Therapeutics, San Francisco, CA, <sup>7</sup>Pinney Associates, Inc., Stamford, CT, <sup>8</sup>Pinney Associates, Inc., Bethesda, MD
- 1:45 *Improvement in pain and retention in a large prospective open label randomized trial of buprenorphine versus methadone for opiate use disorder*  
Matisyau Shulman<sup>1</sup>, Aimee Campbell<sup>1</sup>, Martina Pavlicova<sup>2</sup>, Jennifer Scodes<sup>1</sup>, Sean Luo<sup>3</sup>, Andrew Saxon<sup>4</sup>, Edward Nunes<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>VA Puget Sound Healthcare System, Seattle, WA
- 2:00 *Opioid and non-opioid analgesic therapy after surgery*  
Karsten Bartels<sup>1</sup>, Katharine Mahoney<sup>1</sup>, Kristen Raymond<sup>1</sup>, Shannon McWilliams<sup>2</sup>, Lena Mayes<sup>1</sup>, Ana Fernandez-Bustamante<sup>1</sup>, Christian Hopfer<sup>2</sup>, Susan Mikulich-Gilbertson<sup>2</sup>, <sup>1</sup>University of Colorado, Aurora, CO, <sup>2</sup>University of Colorado School of Medicine, Aurora, CO

- 2:15 *Incisional injury and its recovery modulates morphine's rewarding properties*  
Chinwe Nwaneshiudu<sup>1</sup>, David Clark<sup>2</sup>, Xiao-Yu Shi<sup>3</sup>, <sup>1</sup>Stanford University School of Medicine, Redwood City, CA, <sup>2</sup>Stanford University School of Medicine, Palo Alto, CA, <sup>3</sup>Veterans Affairs Health System, Palo Alto, CA
- 2:30 *Analgesic effects of the g-protein biased mu-opioid receptor agonist, kurkinol*  
Amy Alder<sup>1</sup>, Rachel Crowley<sup>2</sup>, Thomas Prisinzano<sup>2</sup>, Bronwyn Kivell<sup>1</sup>, <sup>1</sup>Victoria University of Wellington, Wellington, New Zealand, <sup>2</sup>University of Kansas, Lawrence, KS
- 2:45 *The association of marijuana use and mental health symptoms with pain severity among persons living with HIV infection: Results from a community-recruited sample*  
Verlin Joseph<sup>1</sup>, Zachary Mannes<sup>1</sup>, Abenaa Jones<sup>2</sup>, Huiyin Lu<sup>1</sup>, Dominique Easterling<sup>1</sup>, Gladys Ibanez<sup>3</sup>, Christa Cook<sup>4</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>3</sup>Department of Epidemiology, Robert Stempel College of Public Health & Social Work, Miami, FL, <sup>4</sup>University of Florida, College of Nursing, Gainesville, FL
- 3:00 *The impact of psychological distress on pain volatility in adults with chronic pain and prescription opioid addiction*  
Bryan Messina<sup>1</sup>, Matthew Worley<sup>2</sup>, <sup>1</sup>VA San Diego Healthcare System, San Diego, CA, <sup>2</sup>University of California San Diego, La Jolla, CA
- 3:15 *Sex differences in co-occurring substance use, mental health and pain disorders, in primary care patients diagnosed with opioid use disorders*  
Celestina Barbosa-Leiker<sup>1</sup>, Aimee Campbell<sup>2</sup>, Mary Hatch-Maillette<sup>3</sup>, Gwen Lapham<sup>4</sup>, Denise Boudreau<sup>4</sup>, Manu Thakral<sup>4</sup>, Judith Tsui<sup>5</sup>, Bobbi Jo Yarborough<sup>6</sup>, Julia Arnsten<sup>7</sup>, Ingrid Binswanger<sup>8</sup>, Angela Stotts<sup>9</sup>, Amy Loree<sup>10</sup>, Jordan Braciszewski<sup>10</sup>, Joe Glass<sup>4</sup>, Viviana Horigian<sup>11</sup>, Rebecca Hutcheson<sup>5</sup>, Cynthia Campbell<sup>12</sup>, Gavin Bart<sup>13</sup>, Kathy Bradley<sup>4</sup>, <sup>1</sup>Washington State University College of Nursing, Spokane, WA, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>University of Washington Alcohol & Drug Abuse Institute, Seattle, WA, <sup>4</sup>Kaiser Permanente Washington Health Research Institute, Seattle, WA, <sup>5</sup>University of Washington, Seattle, WA, <sup>6</sup>Kaiser Permanente Northwest Center for Health Research, Portland, OR, <sup>7</sup>Montefiore Medical Center, Bronx, NY, <sup>8</sup>Kaiser Permanente Colorado, Denver, CO, <sup>9</sup>University of Texas Medical Branch, Houston, TX, <sup>10</sup>Henry Ford Health System, Detroit, MI, <sup>11</sup>University of Miami, Miami, FL, <sup>12</sup>Kaiser Permanente North California Division of Research, Oakland, CA, <sup>13</sup>University of Minnesota, Minneapolis, MN
- 3:30 *Effectiveness of self-management for the treatment of chronic pain and aberrant drug-related behavior: Patients' experiences with a web-based, cognitive behavior therapy intervention*  
Andrew Rosenblum<sup>1</sup>, Honoria Guarino<sup>2</sup>, Sarah Moore<sup>3</sup>, Lisa Marsch<sup>4</sup>, <sup>1</sup>NDRI, Metuchen, NJ, <sup>2</sup>National Development and Research Institute, Inc., New York, NY, <sup>3</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>4</sup>Geisel School of Medicine at Dartmouth, Hanover, NH
- 3:45 *A pilot randomized clinical trial of cognitive behavioral therapy for opioid use disorder and chronic pain*  
Declan Barry<sup>1</sup>, Mark Beitel<sup>2</sup>, Christopher Cutter<sup>3</sup>, David Fiellin<sup>1</sup>, Robert Kerns<sup>4</sup>, Brent Moore<sup>1</sup>, Lynn Madden<sup>5</sup>, Richard Schottenfeld<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, APT Foundation, New Haven, CT, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>Yale University School of Medicine, West Haven, CT, <sup>5</sup>APT Foundation, Inc., New Haven, CT
- 4:00 *Training addiction counselors to deliver a brief psychosocial intervention for chronic pain among patients in opioid agonist treatment: A pilot investigation*  
Jenna Butner<sup>1</sup>, Curtis Bone<sup>1</sup>, Mark Beitel<sup>2</sup>, Lynn Madden<sup>3</sup>, Madeline Bono<sup>4</sup>, Anthony Eller<sup>5</sup>, Declan Barry<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, APT Foundation, New Haven, CT, <sup>3</sup>APT Foundation, Inc., New Haven, CT, <sup>4</sup>New York University, New York, NY, <sup>5</sup>Yale School of Public Health, New Haven, CT
- 4:15 *Prevalence of pain conditions among persons with an opioid use disorder diagnosis in a primary care*

*population*

Manu Thakral<sup>1</sup>, Gwen Lapham<sup>1</sup>, Jennifer Bobb<sup>1</sup>, Judith Tsui<sup>2</sup>, Denise Boudreau<sup>1</sup>, Cynthia Campbell<sup>3</sup>, Julia Arnsten<sup>4</sup>, Jane Liebschutz<sup>5</sup>, Angela Stotts<sup>6</sup>, Jordan Braciszewski<sup>7</sup>, Andrew Saxon<sup>8</sup>, Kathy Bradley<sup>1</sup>, <sup>1</sup>Kaiser Permanente Washington Health Research Institute, Seattle, WA, <sup>2</sup>University of Washington, Seattle, WA, <sup>3</sup>Kaiser Permanente North California Division of Research, Oakland, CA, <sup>4</sup>Montefiore Medical Center, Bronx, NY, <sup>5</sup>University of Pittsburgh, Pittsburgh, PA, <sup>6</sup>University of Texas Medical Branch, Houston, TX, <sup>7</sup>Henry Ford Health System, Detroit, MI, <sup>8</sup>VA Puget Sound Healthcare System, Seattle, WA

**LATE-BREAKING RESEARCH NEWS**

**Indigo H**

**3:45 - 4:45 PM**

Chairs: William Stoops

- 3:45 *Driver alcohol detection system for safety (DADSS) – preliminary human testing results of two passive methods for detecting alcohol in tissue and breath compared to venous blood alcohol concentration*  
S. Lukas<sup>1</sup>, E. Ryan<sup>1</sup>, J. McNeil<sup>2</sup>, J. Shepherd<sup>1</sup>, K. Davis<sup>3</sup>, L. Bingham<sup>2</sup>, K. Ozdemir<sup>4</sup>, N. Dalal<sup>4</sup>, K. Pirooz<sup>4</sup>, M. Willis<sup>4</sup>, A. Zaouk<sup>4</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA, <sup>3</sup>Clean Hospital, Belmont, MA, <sup>4</sup>KEA Technologies, Inc, Marlborough, MA
- 3:50 *Opioid overdose detection using smartphones*  
J. Sunshine<sup>1</sup>, R. Nandakumar<sup>1</sup>, C. Banta-Green<sup>1</sup>, J. Buxton<sup>2</sup>, S. Gollakota<sup>1</sup>, <sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>University of British Columbia, Vancouver, BC, Canada
- 3:55 *Efficacy of oral naltrexone with buprenorphine for transitioning from buprenorphine to XR-NTX: A hybrid residential-outpatient randomized control trial*  
S. Comer<sup>1</sup>, P. Mannelli<sup>2</sup>, D. Alam<sup>3</sup>, A. Douaihy<sup>4</sup>, N. Nangia<sup>5</sup>, A. Zavod<sup>5</sup>, B. Silverman<sup>5</sup>, S. Akerman<sup>6</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Duke University School of Medicine, Durham, NC, <sup>3</sup>Neuroscience Research Institute, Winfield, IL, <sup>4</sup>University of Pittsburgh, Pittsburgh, PA, <sup>5</sup>Alkermes, Inc., Waltham, MA, <sup>6</sup>Alkermes, Inc, Waltham, MA
- 4:00 *Pre-clinical efficacy of vaccines for treatment of prescription opioid abuse using novel carrier proteins*  
A. Huseby Kelcher<sup>1</sup>, F. Baruffaldi<sup>1</sup>, C. Hassler<sup>2</sup>, A. Lees<sup>3</sup>, S. Runyon<sup>2</sup>, M. Pravetoni<sup>1</sup>, <sup>1</sup>Minneapolis Medical Research Foundation, Minneapolis, MN, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>Fina BioSolutions, Rockville, MD
- 4:05 *Modulation of M5 muscarinic acetylcholine receptors decreases stimulant and opioid self-administration and cue-induced reactivity without affecting oxycodone-induced analgesia in rats*  
R. Gould<sup>1</sup>, B. Gunter<sup>2</sup>, M. Bubser<sup>1</sup>, R. Matthews<sup>1</sup>, D. Winder<sup>1</sup>, C. Lindsley<sup>1</sup>, C. Jones<sup>1</sup>, <sup>1</sup>Vanderbilt University, Nashville, TN, <sup>2</sup>Vanderbilt University Medical Center, Nashville, TN
- 4:10 *Galantamine effects on opioid use from a placebo-controlled trial among cocaine-dependent methadone maintained individuals*  
K. Carroll<sup>1</sup>, M. Sofuoglu<sup>2</sup>, S. Yip<sup>2</sup>, E. DeVito<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT
- 4:15 *Substantial increases in methamphetamine use among a national sample of treatment-seeking opioid users*  
M. Ellis, Z. Kasper, T. Cicero, Washington University, St. Louis, MO
- 4:20 *Immune functioning markers relate to cognitive abilities in individuals with cocaine use disorder*  
S. Stamatovich<sup>1</sup>, L. Stertz<sup>1</sup>, C. Walss-Bass<sup>1</sup>, S. Lane<sup>2</sup>, C. Green<sup>3</sup>, J. Schmitz<sup>1</sup>, M. Wardle<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas, Houston, TX, <sup>3</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX
- 4:25 *Gene expression in the prefrontal cortex associated with impulsivity*

E. Vallender<sup>1</sup>, R. Gilmore<sup>1</sup>, S. Hutchins<sup>1</sup>, X. Zhang<sup>1</sup>, G. Mahajan<sup>1</sup>, A. Athey<sup>2</sup>, J. Overholser<sup>2</sup>, L. Dieter<sup>2</sup>, G. Jurjus<sup>3</sup>, G. Rajkowska<sup>1</sup>, C. Stockmeier<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>Case Western Reserve University, Cleveland, OH, <sup>3</sup>Louis Stokes Cleveland VA Medical Center, Cleveland, OH

4:30 *Weight gain and insulin resistance in mice lacking cannabinoid-2 receptor*

O. Alshaarawy<sup>1</sup>, E. Kurjan<sup>2</sup>, N. Truong<sup>2</sup>, L. Olson<sup>2</sup>, <sup>1</sup>Michigan State University, Lansing, MI, <sup>2</sup>Michigan State University, East Lansing, MI

4:35 *Key findings from an RCT of nabiximols for the treatment of cannabis dependence*

N. Lintzeris<sup>1</sup>, A. Dunlop<sup>2</sup>, J. Copeland<sup>3</sup>, D. Allsop<sup>4</sup>, A. Bhardwaj<sup>5</sup>, I. McGregor<sup>5</sup>, R. Bruno<sup>6</sup>, L. Mills<sup>5</sup>, <sup>1</sup>Drug and Alcohol Services, South Eastern Sydney Local Health District, Surry Hills, Australia, <sup>2</sup>Hunter New England Local Health District, Newcastle, Australia, <sup>3</sup>University of South Wales, Sydney, <sup>4</sup>University of New South Wales, Sydney, Australia, <sup>5</sup>University of Sydney, Sydney, Australia, <sup>6</sup>University of Tasmania, Sydney, Australia

4:40 *Prolonged exposure to reduced-nicotine cigarettes reduces behavioral economic demand for full- and reduced-nicotine cigarettes*

S. Dolan, M. Berry, M. Johnson, Johns Hopkins University School of Medicine, Baltimore, MD

**(MEMBERS ONLY)  
BUSINESS MEETING**

**Aqua C  
5:00 - 6:00 PM**

**DINNER/DANCING**

**Indigo Ballroom  
7:30 - 10:30 PM**

**Thursday, June 14, 2018**

**(PRE-REGISTRANTS ONLY)  
BREAKFAST WITH CHAMPIONS**

**Aqua 310/Terrace  
8:00 - 9:00 AM**

**CPDD/INRC PLENARY**

**Indigo BCFG  
9:00 - 10:00 AM**

*Deaths of Despair: Alcohol Misuse, Pain and Negative Reinforcement*

George Koob, Director, National Institute on Alcohol Abuse and Alcoholism

**ORAL COMMUNICATIONS 20  
NOVEL TREATMENTS STRATEGIES:  
OUT WITH THE OLD**

**Indigo D  
10:00 - 12:00 PM**

Chairs: Michael Mancino and Jae Kim

10:00 *New theranostic clathrin-nanoparticles efficiently deliver D3R-antibodies noninvasively to targeted dopamine*

*brain regions*

- Gordana Vitaliano<sup>1</sup>, Franco Vitaliano<sup>2</sup>, Martin Teicher<sup>3</sup>, Scott Lukas<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>EXQOR, Boston, MA, <sup>3</sup>McLean Hospital, Belmont, MA
- 10:15 *Targeted noninvasive delivery of novel clathrin-based superparamagnetic iron oxide nanoparticles for magnetic resonance imaging of dopamine transporters in mouse brain*  
Jae Kim<sup>1</sup>, Dionyssios Mintzopoulos<sup>2</sup>, Adam Christopher<sup>3</sup>, Scott Lukas<sup>1</sup>, Marc Kaufman<sup>2</sup>, Franco Vitaliano<sup>4</sup>, Gordana Vitaliano<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Brain Imaging Center, Belmont, MA, <sup>3</sup>McLean Hospital, Belmont, MA, <sup>4</sup>EXQOR, Boston, MA
- 10:30 *Nabiximols combined with motivational enhancement/cognitive behavioral therapy for the treatment of cannabis dependence: A pilot randomized clinical trial*  
M Trigo<sup>1</sup>, Alexandra Soliman<sup>1</sup>, Quilty Lena<sup>2</sup>, Benedikt Fischer<sup>3</sup>, Jürgen Rehm<sup>4</sup>, Peter Selby<sup>1</sup>, Allan Barnes<sup>5</sup>, Marilyn Huestis<sup>6</sup>, Tony George<sup>3</sup>, David Streiner<sup>7</sup>, Gregory Staios<sup>1</sup>, Bernard LeFoll<sup>1</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>Campbell Family Mental Health Research Institute, CAMH, Toronto, ON, Canada, <sup>3</sup>University of Toronto, Toronto, ON, Canada, <sup>4</sup>Institute for Mental Health Policy Research, CAMH, Toronto, ON, Canada, <sup>5</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>6</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>7</sup>Department of Psychiatry & Behavioural Neurosciences, McMaster University, Hamilton, ON, Canada
- 10:45 *Impact of buprenorphine taper and oral naltrexone induction schedules on successful outpatient transition to injectable naltrexone*  
Michael Mancino<sup>1</sup>, Edward Nunes<sup>2</sup>, Jeff Thostenson<sup>1</sup>, Joseph Guise<sup>1</sup>, Janette McGaugh<sup>1</sup>, Alison Oliveto<sup>1</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AK, <sup>2</sup>Columbia University and NYSPI, New York, NY
- 11:00 *Is risk-targeted, coping skills enhanced motivational interviewing (MI) more efficacious than MI alone in young people with alcohol related-injuries accessing emergency department and crisis support care?*  
Leanne Hides<sup>1</sup>, David Kavanagh<sup>2</sup>, Susan Cotton<sup>3</sup>, Jason Connor<sup>4</sup>, Mark Daglish<sup>5</sup>, Catherine Quinn<sup>6</sup>, Nina Pocuca<sup>2</sup>, Ross Young<sup>4</sup>, <sup>1</sup>University of Queensland, Centre for Youth Substance Abuse Research, Brisbane, Australia, <sup>2</sup>Queensland University of Technology, Brisbane, Australia, <sup>3</sup>Orygen The National Centre of Excellence in Youth Mental Health, University of Melbourne, Melbourne, Australia, <sup>4</sup>University of Queensland, Brisbane, <sup>5</sup>Royal Brisbane and Women's Hospital, Brisbane, Australia, <sup>6</sup>University of Queensland, Brisbane, Australia
- 11:15 *Stimulating future value: Episodic future thinking decreases delay discounting in recreational and chronic cocaine users*  
Sarah Snider<sup>1</sup>, Jamie K.<sup>2</sup>, Warren Bickel<sup>3</sup>, <sup>1</sup>Addiction Recovery Research Center, Roanoke, VA, <sup>2</sup>Virginia Tech Carilion Research Institute, Roanoke, <sup>3</sup>Virginia Tech Carilion Research Institute, Roanoke, VA
- 11:30 *Epigenetic detection of alcohol use disorder in a clinically ascertained sample*  
Allan Andersen, Robert Philibert, University of Iowa, Iowa City, IA
- 11:45 *The efficacy of lidocaine in disrupting cocaine cue-induced memory reconsolidation*  
Josh Becker<sup>1</sup>, Julianne Price<sup>2</sup>, David Leonard<sup>3</sup>, Alina Suris<sup>4</sup>, Enas Kandil<sup>1</sup>, Meredith Shaw<sup>4</sup>, Sven Kroener<sup>5</sup>, E Sherwood Brown<sup>1</sup>, Bryon Adinoff<sup>1</sup>, <sup>1</sup>University of Texas Southwestern Medical Center, Dallas, TX, <sup>2</sup>University of Florida, Gainesville, FL, <sup>3</sup>David Leonard Statistical Consulting, Wichita Falls, TX, <sup>4</sup>VA North Texas Health Care System, Dallas, TX, <sup>5</sup>University of Texas, Dallas, TX



**ORAL COMMUNICATIONS 21**  
**IT'S OKAY TO BE A QUITTER:**  
**NICOTINE AND E-CIGS**

Chairs: Maria Parker

**Indigo E**  
**10:00 - 12:00 PM**

- 10:00 *Flavor additives increase motivation for nicotine and nicotine-evoked dopamine release in rats*  
Amanda Smith, Matthew Palmatier, Curtis Bradley, Samantha Malone, Gerald Deehan, Jr., East Tennessee State University, Johnson City, TN
- 10:15 *Effects of sweet-flavored e-cigarettes on smoking reinstatement and tobacco withdrawal symptoms in nicotine-deprived smokers*  
Nicholas Goldenson, Matthew Kirkpatrick, Jessica Barrington-Trimis, Adam Leventhal, University of Southern California, Los Angeles, CA
- 10:30 *Associations between delay discounting, e-cigarette use, and cigarette smoking*  
Jeffrey Stein<sup>1</sup>, Elan Perry<sup>1</sup>, Bryan Heckman<sup>2</sup>, Derek Pope<sup>1</sup>, Warren Bickel<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>2</sup>Medical University of South Carolina, Charleston, SC
- 10:45 *Reinforcing efficacy of cigarettes vs. little cigars in smokers differing in socioeconomic status*  
Jennifer Tidey<sup>1</sup>, Mollie Miller<sup>2</sup>, Rachel Cassidy<sup>1</sup>, Rachel Denlinger-Apte<sup>3</sup>, <sup>1</sup>Brown University, Providence, RI, <sup>2</sup>Brown University Center for Alcohol and Addiction Studies, Providence, RI, <sup>3</sup>Brown University School of Public Health, Providence, RI
- 11:00 *Patterns and frequency of current e-cigarette use in U.S. adults, 2012-2013*  
Maria Parker, Stacey Sigmon, Andrea Villanti, University of Vermont, Burlington, VT
- 11:15 *Patterns of cigarette, e-cigarette, and cannabis use among adult smokers in primary care*  
Johannes Thrul, Maya Vijayaraghavan, Jason Satterfield, University of California San Francisco, San Francisco, CA
- 11:30 *Prevalence and correlates of adolescents' e-cigarette use frequency and dependence*  
Erin Vogel, Danielle Ramo, Mark Rubinstein, University of California San Francisco, San Francisco, CA
- 11:45 *Gender differences in use, attitudes, and intention to use tobacco products*  
Irene Pericot-Valverde, Diann Gaalema, University of Vermont, Burlington, VT

**SYMPOSIUM XIX**  
**INTERNATIONAL OPIOID GUIDELINES**

**Indigo BCFG**  
**10:00 - 12:00 PM**

Chairs: Fred Nyberg and Gabriele Fischer

- 10:00 *Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence within EU*  
G. Fischer, Medizinische Universität Wien, Wien, Austria
- 10:25 *The Nordic approach to opioid addiction; service provision and organization*  
T. Clausen, The Norwegian Institute of Public Health, Oslo, Norway, Norway
- 10:50 *Opioid use disorder clinical guidelines: A Canadian model*  
P. Voon, BC Centre on Substance Use, Vancouver, BC, Canada
- 11:15 *Methadone treatment guidelines development for states in Southeast Asia*  
G. Bart, University of Minnesota, Minneapolis, MN
- 11:40 *Opioid treatment programs – Aspects to deal with in the future perspective*  
F. Nyberg, Uppsala University, Faculty of Medicine & Pharmacy, Uppsala, Sweden, Sweden

## SYMPOSIUM XX

### KRATOM: BITTER NARCOTIC OR SWEET MEDICINE FOR PAIN AND OPIOID ADDICTION?

Chairs: Jay McLaughlin and Christopher McCurdy

Indigo A

10:00 - 12:00 PM

- 10:00 *History, chemistry and pharmacology of Kratom*  
C. McCurdy, University of Florida, Gainesville, FL
- 10:25 *Pharmacokinetics and analytical analysis of Kratom products and components*  
B. Avery, University of Florida, Gainesville, FL
- 10:50 *Evaluating the opioid-like discriminative stimulus effects of Kratom alkaloids*  
L. McMahon, University of Florida, Gainesville, FL
- 11:15 *Assessment of abuse liability of Kratom constituents, mitragynine and 7-hydroxymitragynine*  
S. Hemby, High Point University, Fred Wilson School of Pharmacy, High Point, NC
- 11:40 *Human clinical effects of Kratom*  
E. Boyer, Brigham and Women's Hospital, Boston, MA

## POSTER IV

## LUNCH

## Sapphire ABC/EFG

### OPIOID: HUMAN STUDIES II

12:00 - 2:00 PM

Odd numbered posters manned first hour; Even numbered, second hour

- 1 *Opioid use disorder rates and treatment retention after implementation of a primary care tiered-based approach*  
Steffani Bailey<sup>1</sup>, Rebecca Cantone<sup>1</sup>, Brian Garvey<sup>1</sup>, John Muench<sup>1</sup>, Joan Fleishman<sup>1</sup>, Bruin Rugge<sup>1</sup>, Allison O'Neill<sup>2</sup>, Deborah Cohen<sup>1</sup>, Dennis McCarty<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>OCHIN, Inc., Portland, OR
- 2 *The use of ketamine in opioid withdrawal: Case studies*  
Jérôme Bachellier<sup>1</sup>, Servane Barrault<sup>1</sup>, Paul Brunault<sup>2</sup>, Damien Maugé<sup>1</sup>, Ballon Nicols<sup>1</sup>, <sup>1</sup>CHRU de Tours, Clinique Psychiatrique Universitaire, Tours, France, <sup>2</sup>University Hospital of Tours, Tours, France
- 3 *Empirical evidence of different clinically meaningful opioid withdrawal phenotypes*  
Kelly Dunn<sup>1</sup>, Elise Weerts<sup>1</sup>, Andrew Huhn<sup>1</sup>, Jennifer Schroeder<sup>2</sup>, D. Andrew Tompkins<sup>3</sup>, George Bigelow<sup>1</sup>, Eric Strain<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Schroeder Statistical Consulting, LLC, Ellicott City, MD, <sup>3</sup>University of California San Francisco School of Medicine, San Francisco, CA
- 4 *Effect of lofexidine on cardiac repolarization (QTcF) during treatment of opioid withdrawal*  
Borje Darpo<sup>1</sup>, Mark Pirner<sup>2</sup>, James Longstreth<sup>3</sup>, Georg Ferber<sup>4</sup>, Charles Gorodetzky<sup>5</sup>, <sup>1</sup>Danderyd's Hospital, Stockholm, Sweden, <sup>2</sup>US WorldMeds, LLC, Louisville, KY, <sup>3</sup>Longstreth & Associates, Inc., Mundelein, IL, <sup>4</sup>Statistik Georg Ferber GmbH, Riehen, Switzerland, <sup>5</sup>Consultant, Kansas City, MO
- 5 *"Some hang themselves because the arosta is one thing that is unbearable": Experience of withdrawal among South Africans who use whoonga and its implications for intervention development*  
Griffin Tyree<sup>1</sup>, Nzwakie Mosery<sup>2</sup>, Elizabeth Closson<sup>3</sup>, Zonke Mabude<sup>2</sup>, Mxolisi Mathenjwa<sup>2</sup>, Sibusiso Sibiyi<sup>2</sup>, Tshana Watkins<sup>2</sup>, Carol du Toit<sup>4</sup>, David Bangsberg<sup>5</sup>, Steven Safren<sup>6</sup>, Kenneth Mayer<sup>7</sup>, Jennifer Smit<sup>2</sup>, Matthew Mimiaga<sup>8</sup>, David Grelotti<sup>9</sup>, <sup>1</sup>University of California San Diego, San Diego, CA, <sup>2</sup>MatCH Research, University of the Witwatersrand, Durban South Africa, Durban, South Africa, <sup>3</sup>The Fenway Institute, Boston, Boston, MA, <sup>4</sup>SANCA Durban Alcohol & Drug Centres, Durban, Berea, South Africa, <sup>5</sup>Oregon Health & Science University, Portland, OR, <sup>6</sup>University of Miami School of Law, Coral Gables, FL, <sup>7</sup>Harvard Medical School, Boston, MA, <sup>8</sup>Brown University, Providence, RI, <sup>9</sup>University of California San Diego, San Diego, Zimbabwe
- 6 *Developing and testing a novel prospective memory training program in opioid and polysubstance users across 15 and 30 sessions of training*  
Meredith Berry, Mary Sweeney, Lisa Mitchell, Matthew Johnson, Johns Hopkins University School of Medicine, Baltimore, MD
- 7 *Behavioral activation and right thalamic activation during monetary and environmental reward anticipation*

*among opiate users in detoxification*

Jennifer Yi, Ryan Bell, Anna Bartuska, Katlyn McKay, Jennifer Stein, Stacey Daughters, University of North Carolina at Chapel Hill, Chapel Hill, NC

8 *Benefits of long-term opioid agonist treatment participation for patients with opioid use disorder*

Kathryn Hawk<sup>1</sup>, Marek Chawarski<sup>2</sup>, Patrick O'Connor<sup>3</sup>, Patricia Owens<sup>1</sup>, Micheal Pantalon<sup>1</sup>, Steven Bernstein<sup>4</sup>, David Fiellin<sup>3</sup>, Gail D'Onofrio<sup>3</sup>, <sup>1</sup>Yale University Department of Emergency Medicine, New Haven, CT, <sup>2</sup>Yale University Department of Psychiatry, New Haven, CT, <sup>3</sup>Yale University School of Medicine, New Haven, CT, <sup>4</sup>Yale Department of Emergency Medicine, New Haven, CT

9 *12-month outcomes of methadone and buprenorphine maintained patients: A study in naturalistic conditions*

Melina Fatseas<sup>1</sup>, Fuschia Serre<sup>2</sup>, Cecile Denis<sup>3</sup>, Jean-Pierre Daulouede<sup>4</sup>, Marc Auriacombe<sup>2</sup>, <sup>1</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux, <sup>3</sup>University of Pennsylvania, Philadelphia, PA, <sup>4</sup>Bizia Addiction Clinic, Bayonne

10 *A care management approach to facilitate entry and retention in medically assisted treatment among women with opioid use disorder*

Dennis Hand, Alice Fischer, Kimberly McLaughlin, Diane Abatemarco, Thomas Jefferson University, Philadelphia, PA

11 *Methadone treatment programs may be a key venue to engage women with opioid use disorder in family planning*

Curtis Bone<sup>1</sup>, Lynn Madden<sup>2</sup>, Jeanette Tetrault<sup>3</sup>, Mishka Terplan<sup>4</sup>, Declan Barry<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>APT Foundation, Inc., New Haven, CT, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>Virginia Commonwealth University, Richmond, VA

12 *Familiarity, knowledge and barriers to long-acting reversible contraceptives among opioid-maintained women*

Catalina Rey, Heidi Melbostad, Stacey Sigmon, Lauren Macafee, Anne Dougherty, Sarah Heil, University of Vermont, Burlington, VT

13 *Contraceptive knowledge of men and women receiving medication-assisted treatment for opioid use disorder*

Heidi Melbostad, Catalina Rey, Stacey Sigmon, Lauren Macafee, Anne Dougherty, Sarah Heil, University of Vermont, Burlington, VT

14 *Factors associated with medication-assisted treatment adherence for offenders: The role of drug cravings and socialization*

Yang Yang<sup>1</sup>, Jennifer Pankow<sup>2</sup>, Pat Flynn<sup>2</sup>, Kevin Knight<sup>2</sup>, <sup>1</sup>University of Louisville, Lafayette, LA, <sup>2</sup>Texas Christian University, Fort Worth, TX

15 *Mobilizing community support for people who inject drugs: A network intervention*

Michael Kidorf<sup>1</sup>, Nicolas Schlienz<sup>2</sup>, Jessica Peirce<sup>2</sup>, Carl Latkin<sup>3</sup>, Robert Brooner<sup>2</sup>, <sup>1</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

16 *Documented prevalence of opioid use disorder and its treatment across 8 diverse health care systems in the U.S.*

Denise Boudreau<sup>1</sup>, Gwen Lapham<sup>1</sup>, Eric Johnson<sup>1</sup>, Jennifer Bobb<sup>1</sup>, Abigail Matthews<sup>2</sup>, Jennifer McCormack<sup>2</sup>, David Liu<sup>3</sup>, Cynthia Campbell<sup>4</sup>, Rebecca Rossom<sup>5</sup>, Ingrid Binswanger<sup>6</sup>, Bobbi Jo Yarborough<sup>7</sup>, Julia Arnsten<sup>8</sup>, Chinazo Cunningham<sup>8</sup>, Joe Glass<sup>1</sup>, Mark Murphy<sup>9</sup>, Paul Amoroso<sup>10</sup>, Mohammad Zare<sup>11</sup>, Rulin Hechter<sup>12</sup>, Brian Ahmedani<sup>13</sup>, Jordan Braciszewski<sup>13</sup>, Viviana Horigian<sup>14</sup>, Jose Szapocznik<sup>14</sup>, Jeffrey Samet<sup>15</sup>, Andrew Saxon, Kathy Bradley<sup>1</sup>, <sup>1</sup>Kaiser Permanente Washington Health Research Institute, Seattle, WA, <sup>2</sup>The Emmes Corporation, Rockville, MD, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>4</sup>Kaiser Permanente North California Division of Research, Oakland, CA, <sup>5</sup>Health Partners, Minneapolis, MN, <sup>6</sup>Kaiser Permanente Colorado, Denver, CO, <sup>7</sup>Kaiser Permanente Northwest Center for Health Research, Portland, OR, <sup>8</sup>Montefiore Medical Center, Bronx, NY, <sup>9</sup>MultiCare Tacoma Central,

Tacoma, WA, <sup>10</sup>MultiCare Institute for Research & Innovation, Tacoma, WA, <sup>11</sup>University of Texas Health Science Center, Houston, TX, <sup>12</sup>Kaiser Permanente Southern California, Pasadena, CA, <sup>13</sup>Henry Ford Health System, Detroit, MI, <sup>14</sup>University of Miami, Miami, FL, <sup>15</sup>Boston University School of Medicine, Boston, MA  
 MAVA Puget Sound Healthcare System, Seattle, WA

- 17 *Opioid-related hospitalizations in an integrated health system*  
 Pooja Lagisetty<sup>1</sup>, Lewei (Allison) Lin<sup>1</sup>, Dara Ganoczy<sup>2</sup>, Rebecca Haffajee<sup>1</sup>, Amy Bohnert<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>VA Government, Ann Arbor, MI
- 18 *Misperceptions towards opioid agonist therapies among residents and staff in community recovery homes may serve as barriers to uptake of evidence based treatment for opioid use disorder*  
 Benjamin Howell<sup>1</sup>, Karen Ablondi<sup>1</sup>, Frank Buono<sup>1</sup>, Tamara Malm<sup>2</sup>, Ashton Gores<sup>3</sup>, Anthony Eller<sup>3</sup>, Declan Barry<sup>1</sup>, Curtis Bone<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>St. Joseph School of Pharmacy, Hartford, CT, <sup>3</sup>Yale School of Public Health, New Haven, CT
- 19 *Experiences of burnout among drug counselors in a large opioid treatment program: A qualitative investigation*  
 Mark Beitel<sup>1</sup>, Lindsay Oberleitner<sup>2</sup>, Dharushana Muthulingam<sup>3</sup>, David Oberleitner<sup>4</sup>, Lynn Madden<sup>5</sup>, Ruthanne Marcus<sup>3</sup>, Anthony Eller<sup>6</sup>, Madeline Bono<sup>7</sup>, Declan Barry<sup>3</sup>, <sup>1</sup>Yale University, APT Foundation, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT, <sup>3</sup>Yale University School of Medicine, New Haven, CT, <sup>4</sup>University of Bridgeport, Bridgeport, CT, <sup>5</sup>APT Foundation, Inc., New Haven, CT, <sup>6</sup>Yale School of Public Health, New Haven, CT, <sup>7</sup>New York University, New York, NY
- 20 *Opioid recovery initiation: Pilot test of a peer outreach and modified recovery management checkup intervention for out-of-treatment opioid users*  
 Christy Scott, Christine Grella<sup>1</sup>, Lisa Nicholson<sup>2</sup>, Michael Dennis<sup>3</sup>, <sup>1</sup>University of California, Chestnut Health Systems, Los Angeles, CA, <sup>2</sup>Chestnut Health Systems, Chicago, IL, <sup>3</sup>Chestnut Health Systems, Normal, IL
- 21 *A more dangerous 'heroin': Lessons learned from anthropological research in four US heroin and fentanyl hotspots*  
 Daniel Ciccarone, Sarah Mars, Jeff Ondocsin, University of California San Francisco, San Francisco, CA

## POSTER IV OPIOIDS - PRECLINICAL

**Sapphire ABC/EFG**  
**12:00 - 2:00 PM**

- 22 *Modeling opioid maintenance therapy in rats: Effect of chronic buprenorphine on responding for drug-paired discrete cues in a non-drug context, context-induced reinstatement of drug seeking, and reacquisition of oxycodone self-administration*  
 Jennifer Hoots<sup>1</sup>, S. Stevens Negus<sup>2</sup>, Bruce Blough<sup>3</sup>, Gerta Cami-Kobeci<sup>4</sup>, Stephen Husbands<sup>4</sup>, Yavin Shaham<sup>1</sup>, Jennifer Bossert<sup>1</sup>, <sup>1</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>2</sup>Virginia Commonwealth University, Richmond, VA, <sup>3</sup>RTI International, Research Triangle Park, NC, <sup>4</sup>University of Bath, Bath, United Kingdom
- 23 *Samidorphan attenuates the effects of buprenorphine in rat models evaluating abuse potential*  
 Jacobi Cunningham<sup>1</sup>, Nikita Burke<sup>2</sup>, Mark Todtenkopf<sup>1</sup>, David Finn<sup>3</sup>, Michelle Roche<sup>3</sup>, John Kelly<sup>3</sup>, Connie Sanchez<sup>1</sup>, <sup>1</sup>Alkermes, Inc., Waltham, MA, <sup>2</sup>National University of Ireland, Galway, Ireland, <sup>3</sup>National University of Ireland, Galway, Galway, Ireland
- 24 *Oxycodone self-administration is altered by microbiome modulation in Copenhagen rats*  
 Sierra Simpson, Giordano De Guglielmo, Marsida Kallupi, Olivier George, The Scripps Research Institute, La Jolla, CA

- 25 *Differences in cognitive, motivational and/or sensorimotor processing preclude detection of substrain differences in oxycodone reward between 129P3/J and 129S1/SvImJ mice*  
Michal Coelho, Sami Ferdousian, Karen Szumlinski, University of California Santa Barbara, Santa Barbara, CA
- 26 *CXCR4 & CCR5 chemokine receptor antagonists significantly enhanced morphine-induced antinociception in female, but not male, mice in the formalin test*  
Xiaohong Chen<sup>1</sup>, Toby Eisenstein<sup>1</sup>, S. Inan<sup>1</sup>, Christopher Tallarida<sup>1</sup>, A. Cowan<sup>1</sup>, Ellen Geller<sup>2</sup>, J.J. Meissler<sup>1</sup>, Scott Rawls<sup>2</sup>, M.N. Watson<sup>1</sup>, Menahem Doura<sup>1</sup>, Martin Adler<sup>2</sup>, <sup>1</sup>Center for Substance Abuse Research, Lewis Katz School of Medicine of Temple University, Philadelphia, PA, <sup>2</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- 27 *A stable heroin analog that can serve as a vaccine hapten to induce antibodies that block the effects of heroin and its metabolites in rodents and that cross-react immunologically with related drugs of abuse*  
Gary Matyas<sup>1</sup>, Agnieszka Sulima<sup>2</sup>, Arthur Jacobson<sup>3</sup>, Oscar Torres<sup>4</sup>, Zoltan Beck<sup>4</sup>, Carl R Alving<sup>5</sup>, Kenner Rice<sup>2</sup>, <sup>1</sup>Walter Reed Army Institute of Research, Silver Spring, MD, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>3</sup>National Institutes of Health, Bethesda, MD, <sup>4</sup>Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, <sup>5</sup>Walter Reed Army Institute of Research, Sandy Spring, MD
- 28 *The effects of estradiol and progesterone on proestrus-induced decreases in heroin intake*  
Andrea Robinson, Sarah Ethridge, Huailin Zhang, Mark Smith, Davidson College, Davidson, NC
- 29 *Social influences on remifentanyl self-administration in male rats*  
Rebecca Hofford<sup>1</sup>, Paige Bond<sup>1</sup>, Shoshana Eitan<sup>2</sup>, Michael Bardo<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>Texas A&M University, College Station, TX
- 30 *Role of delta opioid receptors in modulating reward-related behaviors*  
Emily Jutkiewicz<sup>1</sup>, Ashleigh Matthews<sup>1</sup>, Kenner Rice<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 31 *Anti-cocaine and analgesic properties of MP1104, a mixed kappa & delta opioid receptor agonist in rats*  
Diana Atigari<sup>1</sup>, Rajendra Uprety<sup>2</sup>, Susruta Majumdar<sup>2</sup>, Bronwyn Kivell<sup>1</sup>, <sup>1</sup>Victoria University of Wellington, Wellington, New Zealand, <sup>2</sup>Memorial Sloan Kettering Cancer Center, New York, NY
- 32 *Quantification of unconditioned behaviors induced by kappa agonists in rhesus monkeys: Effects of signaling bias*  
Sally Huskinson<sup>1</sup>, Donna Platt<sup>2</sup>, Thomas Prisinzano<sup>3</sup>, Bruce Blough<sup>4</sup>, Kevin Freeman<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>Division of Neurobiology and Behavior Research, Jackson, MS, <sup>3</sup>University of Kansas, Lawrence, KS, <sup>4</sup>RTI International, Research Triangle Park, NC

#### **POSTER IV ABUSE LIABILITY**

**Sapphire ABC/EFG  
12:00 - 2:00 PM**

- 33 *Total synthesis of salvinorin A-inspired opioids*  
Samuel Williamson, Alexander Sherwood, Rachel Crowley, Thomas Prisinzano, University of Kansas, Lawrence, KS
- 34 *Characterization of mitragynine and an analog for analgesia, tolerance, physical dependence and reinforcing liabilities in mouse models*  
Jay McLaughlin<sup>1</sup>, Shainnel Eans<sup>1</sup>, Heather Stacy<sup>1</sup>, Rajendra Uprety<sup>2</sup>, Gavril Pasternak<sup>2</sup>, Susruta Majumdar<sup>2</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>Memorial Sloan Kettering Cancer Center, New York, NY
- 35 *Tradipitant, an NK-1 antagonist, does not substantively modify opioid abuse liability or self-administration in opioid-experienced individuals*  
Sharon Walsh<sup>1</sup>, Marion Coe<sup>1</sup>, Paul Nuzzo<sup>1</sup>, Michelle Lofwall<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY,

<sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

- 36 *NKTR-181 demonstrates low abuse potential in recreational opioid users in two double-blind, randomized crossover human abuse potential studies*

Jack Henningfield<sup>1</sup>, Lynn Webster<sup>2</sup>, Debra Kelsh<sup>3</sup>, Brad Vince, Lin Lu<sup>4</sup>, Janet Jobes<sup>4</sup>, August Buchhalter<sup>1</sup>, Suresh Siddhanti<sup>4</sup>, Margaret Ziola<sup>4</sup>, John Silowsky<sup>4</sup>, Aleksandrs Odinecs<sup>4</sup>, Sunny Xie<sup>4</sup>, Carlo Di Fonzo<sup>4</sup>, Michael Eldon<sup>4</sup>, Xue Snow Ge<sup>4</sup>, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>Lifetree Clinical Research, Salt Lake City, UT, <sup>3</sup>Vince and Associates, Malvern, PA, <sup>4</sup>Nektar Therapeutics, San Francisco, CA

- 37 *Considering “take drug again” as the primary endpoint in clinical studies of abuse deterrent formulations*  
Erik Hansen, Joya He, Lynn Webster, Ryan Turncliff, PRA Health Sciences, Salt Lake City, UT

- 38 *Abuse liability assessment of ENDS: What is the right level to support a public health benefit?*

Sarah Baxter<sup>1</sup>, Leanne Campbell<sup>1</sup>, Tao Jin<sup>1</sup>, Jack Henningfield<sup>2</sup>, Reginald Fant<sup>2</sup>, Stiles Mitchell<sup>1</sup>, <sup>1</sup>RAI Services Company, Winston-Salem, NC, <sup>2</sup>Pinney Associates, Inc., Bethesda, MD

- 39 *Assessing correspondence between subjective effects measures and concurrent choice data in a laboratory study evaluating the effects of cigarettes with varying levels of nicotine*

Cecilia Bergeria<sup>1</sup>, Sarah Heil<sup>1</sup>, Stacey Sigmon<sup>1</sup>, Jennifer Tidey<sup>2</sup>, Diann Gaalema<sup>1</sup>, John Hughes<sup>1</sup>, Maxine Stitzer<sup>3</sup>, Christopher Arger<sup>1</sup>, Mollie Miller<sup>4</sup>, Hanna Durand<sup>1</sup>, Janice Bunn<sup>1</sup>, Jeff Priest<sup>1</sup>, Danielle Davis<sup>1</sup>, Joanna Streck<sup>5</sup>, Joan Skelly<sup>1</sup>, Morgan Tromblee<sup>5</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Brown University, Providence, RI, <sup>3</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>4</sup>Brown University Center for Alcohol and Addiction Studies, Providence, RI, <sup>5</sup>Vermont Center on Behavior and Health, Burlington, VT

- 40 *Role of propylene glycol and vegetable glycerin concentration on the behavioral effects of electronic cigarette aerosol*

Arit Harvanko<sup>1</sup>, Catherine Martin<sup>1</sup>, Thomas Kelly<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

- 41 *Vaporization of marijuana among recreational users: A qualitative study*

Elizabeth Aston<sup>1</sup>, Samantha Farris<sup>2</sup>, Jane Metrik<sup>3</sup>, Rochelle Rosen<sup>4</sup>, <sup>1</sup>Center for Alcohol and Addiction Studies, Providence, RI, <sup>2</sup>Warren Alpert Medical School, Providence, RI, <sup>3</sup>Brown University School of Public Health, Providence, RI, <sup>4</sup>The Miriam Hospital, Centers for Behavioral & Preventive Medicine, Providence, RI

## POSTER IV SEDATIVE HYPNOTICS

## Sapphire ABC/EFG 12:00 - 2:00 PM

- 42 *Combination with pregnanolone increases the sedative effects of triazolam and zolpidem in rhesus macaques*  
Daniela Rüedi-Bettschen<sup>1</sup>, James Cook<sup>1</sup>, Lais Berro<sup>1</sup>, Donna Platt<sup>2</sup>, Barak Gunter<sup>3</sup>, James Rowlett<sup>1</sup>,

<sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>Division of Neurobiology and Behavior Research, Jackson, MS, <sup>3</sup>Vanderbilt University Medical Center, Nashville, TN

- 43 *Residual next-day effects of alprazolam on psychomotor performance and simulated driving in healthy normal volunteers*

Marion Coe<sup>1</sup>, Lindy Howe<sup>1</sup>, Paul Nuzzo<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Laura Fanucchi<sup>2</sup>, Shanna Babalonis<sup>1</sup>, Sharon Walsh<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

- 44 *Benzodiazepines use “to get high” in patients admitted for addiction treatment in Spain*

Marta Torrens<sup>1</sup>, Francina Fonseca<sup>1</sup>, Magí Farré<sup>2</sup>, Karin McBride<sup>3</sup>, Icro Maremmanni<sup>4</sup>, Marilena Guareschi<sup>4</sup>, Richard Dart<sup>5</sup>, <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Barcelona, Spain, <sup>2</sup>Hospital Universitari Germans Trias i Pujol, Badalona, Spain, <sup>3</sup>Denver Health Rocky Mountain Poison & Drug Center (RMPDC), Denver,

- CO, <sup>4</sup>Associazione per l'Utilizzo delle Conoscenze Neuroscientifiche a fini Sociali, Pietrasanta, Italy, <sup>5</sup>Rocky Mountain Poison & Drug Center, Denver, CO
- 45 *Inability to discontinue chronic hypnotic use*  
Timothy Roehrs, Henry Ford Health System, Detroit, MI
- 46 *How representative are insomnia clinical trials?*  
Thomas Roth, Timothy Roehrs, Henry Ford Health System, Detroit, MI
- 47 *A comparison between the ICD-10 and DSM-5 diagnostic criteria for sedative, hypnotic and anxiolytic use disorders*  
Daniela Curado<sup>1</sup>, Viviam de Barros<sup>2</sup>, Emérita Opaleye<sup>2</sup>, Ana Regina Noto<sup>3</sup>, <sup>1</sup>Federal University of São Paulo, São Paulo, Brazil, <sup>2</sup>Universidade Federal de São Paulo, São Paulo, Brazil, <sup>3</sup>Universidade Federal de São Paulo, São Paulo

## POSTER IV ALCOHOL

**Sapphire ABC/EFG**  
**12:00 - 2:00 PM**

- 48 *Ayahuasca blocks the development and expression of ethanol-induced conditioned place preference in mice: Role of DMT and  $\beta$ -carbolines*  
Elisangela Cata-Preta<sup>1</sup>, Yasmin Serra<sup>1</sup>, Eliseu Moreira Junior<sup>1</sup>, Henrique Reis<sup>1</sup>, Natali Kisaki<sup>1</sup>, Matheus Santos<sup>1</sup>, Raiany Silva<sup>1</sup>, Thaisa Santos<sup>1</sup>, Paulo Ribeiro-Barbosa<sup>1</sup>, Jose Costa<sup>2</sup>, Alexandre Oliveira-Lima<sup>1</sup>, Lais Berro<sup>3</sup>, Eduardo Marinho<sup>1</sup>, <sup>1</sup>Universidade Estadual de Santa Cruz, Ilheus, Brazil, <sup>2</sup>University of Campinas, Faculty of Pharmaceutical Sciences, Campinas, Brazil, <sup>3</sup>University of Mississippi Medical Center, Jackson, MS
- 49 *Does glucagon-like peptide 1 (GLP-1) receptor agonist stimulation reduce alcohol intake in patients with alcohol dependence?*  
Mette Klausen<sup>1</sup>, Nina Le Dous<sup>1</sup>, Mathias Jensen<sup>1</sup>, Kamilla Miskowiak<sup>1</sup>, Patrick Fischer<sup>2</sup>, Gerda Thomsen<sup>2</sup>, Henrik Rindom<sup>3</sup>, Thomas Fahmy<sup>3</sup>, Sabine Vollstädt-Klein<sup>4</sup>, Helene Benveniste<sup>5</sup>, Nora Volkow<sup>6</sup>, Ulrick Becker<sup>7</sup>, Claus Ekstrøm<sup>8</sup>, Gitte Knudsen<sup>2</sup>, Tina Vilsboell<sup>9</sup>, Anders Fink-Jensen<sup>1</sup>, <sup>1</sup>University Hospital of Copenhagen, Copenhagen, Denmark, <sup>2</sup>Copenhagen University Hospital and Center for Integrated Molecular Brain Imaging, Copenhagen, Denmark, <sup>3</sup>Novavi Outpatient Clinics, Copenhagen, Denmark, <sup>4</sup>Central Institute of Mental Health, Mannheim, Germany, <sup>5</sup>Yale University, New Haven, CT, <sup>6</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD, <sup>7</sup>National Institute of Public Health, University of Southern Denmark, Copenhagen, Denmark, <sup>8</sup>University of Copenhagen, Department of Public Health, Copenhagen, Denmark, <sup>9</sup>University of Copenhagen, Copenhagen, Denmark
- 50 *What drives us to drink? Examination of a novel progressive-ratio intravenous (IV) alcohol self-administration paradigm in humans*  
Bethany Stangl, Nia Byrd, Molly Zametkin, Vijay Ramchandani, National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD
- 51 *Intravenous alcohol self-administration in participants with alcohol use disorder: Piloting a progressive-ratio schedule*  
Christina Nona<sup>1</sup>, Chidera Chukwueke<sup>2</sup>, Matthew McPhee<sup>2</sup>, Laura Heath<sup>2</sup>, Saima Malik<sup>1</sup>, Isabelle Boileau<sup>1</sup>, Bernard LeFoll<sup>1</sup>, Christian Hendershot<sup>3</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>University of Toronto, Toronto, ON, Canada, <sup>3</sup>Center of Addiction and Mental Health, Toronto, ON, Canada
- 52 *The effects of the COMT inhibitor tolcapone and gender on alcohol consumption in individuals with alcohol use disorder (AUD)*  
Jennifer Mitchell, University of California San Francisco, San Francisco, CA  
*Neurobiological factors underlying risk for alcohol abuse in women*

- 53 *Neurobiological factors underlying risk for alcohol abuse in women*  
Jessica Weafer, Harriet de Wit, University of Chicago, Chicago, IL
- 54 *Direct correlations between breath and blood alcohol concentrations in six different real-world settings*  
Elizabeth Ryan<sup>1</sup>, Scott Lukas<sup>1</sup>, Justin Shepherd<sup>1</sup>, Jane McNeil<sup>2</sup>, Lucy Bingham<sup>2</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA
- 55 *Identifying predictors of high blood alcohol concentration (BAC) among those in a DUI program*  
Natasia Courchesne<sup>1</sup>, Conner Muth<sup>2</sup>, Melanie Barker<sup>3</sup>, Susan Woodruff<sup>3</sup>, <sup>1</sup>University of California San Diego, San Diego, CA, <sup>2</sup>Virginia Commonwealth University, Richmond, VA, <sup>3</sup>San Diego State University, San Diego, CA
- 56 *Repeated episodic future thinking produces cumulative reductions of delay discounting in current and former alcohol users*  
Alexandra Mellis<sup>1</sup>, Sarah Snider<sup>2</sup>, Warren Bickel<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>2</sup>Addiction Recovery Research Center, Roanoke, VA
- 57 *Willing to work but not to wait: Individuals with alcohol use disorder show increased delay discounting, but not effort discounting, compared to social drinkers*  
Quan Phung<sup>1</sup>, Sarah Snider<sup>2</sup>, Warren Bickel<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>2</sup>Addiction Recovery Research Center, Roanoke, VA
- 58 *Delay discounting and sequential decision making across the alcohol use and recovery spectrum*  
Lara Moody<sup>1</sup>, Allison Tegge<sup>2</sup>, Harhim Park<sup>3</sup>, Woo-Young Ahn<sup>3</sup>, Warren Bickel<sup>2</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Durham, NC, <sup>2</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>3</sup>Seoul National University, Seoul, Korea, Republic of
- 59 *Influence of impulsivity fluctuations on craving and substances use among patients beginning treatment for addiction: An ecological momentary assessment study*  
Louise Jakubiec<sup>1</sup>, Manon Chevalier<sup>1</sup>, Fuschia Serre<sup>2</sup>, Melina Fatseas<sup>3</sup>, Maud Dupuy<sup>1</sup>, Joel Swendsen<sup>1</sup>, Marc Auriacombe<sup>2</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux, <sup>3</sup>Centre Hospitalier Charles Perrons, Bordeaux, France
- 60 *Pre-loading effects on ad-libitum alcohol intake in binge drinkers*  
Kimberly A Bernosky, D'Youville College, Kenmore, NY
- 61 *Increases in binge drinking concentrated among cigarette smokers in the US, 2002-2014*  
Daniel Paulus<sup>1</sup>, Michael Zvolensky<sup>1</sup>, Steven Bell<sup>2</sup>, Deborah Hasin<sup>3</sup>, Misato Gbedemah<sup>4</sup>, Renee Goodwin<sup>5</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>Strangeways Research Laboratory, Cambridge, United Kingdom, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>5</sup>The City University of New York, New York, NY
- 62 *Effects of yoga on substance use and stress from an RCT during reentry*  
Alexandra Wimberly<sup>1</sup>, Malitta Engstrom<sup>2</sup>, Molly Layde<sup>3</sup>, James McKay<sup>2</sup>, <sup>1</sup>Columbia University, Baltimore, MD, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>PeaceCorps, Masasi, Tanzania
- 63 *Influence of comorbid drug use disorder on receipt of specialty addictions treatment for alcohol use disorder among VA patients with Hepatitis C*  
Emily Williams<sup>1</sup>, Madeline Frost<sup>1</sup>, Judith Tsui<sup>2</sup>, <sup>1</sup>Veterans Affairs Puget Sound Health Services Research & Development, Seattle, WA, <sup>2</sup>University of Washington, Seattle, WA
- 64 *Extended-release vs. oral naltrexone for alcohol dependence treatment in primary care*  
Mia Malone<sup>1</sup>, Alexandria Vittitow<sup>1</sup>, Ryan McDonald<sup>1</sup>, Babak Tofighi<sup>1</sup>, Ann Garment<sup>1</sup>, Daniel Schatz<sup>2</sup>, Eugene Laska<sup>1</sup>, Keith Goldfeld<sup>1</sup>, John Rotrosen<sup>1</sup>, Joshua Lee<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University, New York, NY
- 65 *Barriers to integrating the continuum of care for opioid and alcohol use disorders in primary care: A qualitative longitudinal study*  
Erik Storholm<sup>1</sup>, Allison Ober<sup>1</sup>, Sarah Hunter<sup>2</sup>, Katherine Watkins<sup>1</sup>, <sup>1</sup>RAND Corporation, Santa Monica, CA,



<sup>2</sup>RAND Corporation, Arlington, VA

- 66 *Intensive motivational interviewing for heavy drinking among women*  
Douglas Polcin<sup>1</sup>, Rachael Korcha<sup>2</sup>, Michelle Salinardi<sup>2</sup>, Madhabika Nayak<sup>2</sup>, Gantt Galloway, Shelia Pugh<sup>2</sup>,  
<sup>1</sup>Behavioral Health and Research Studies, Lafayette, CA, <sup>2</sup>Alcohol Research Group, Emeryville, CA
- 67 *Which client statements matter most in motivational interviewing? A meta-analysis of the relation between subtypes of change or sustain talk and addictive behavior outcome*  
Michael Bernstein, Brown University, Providence, RI
- 68 *A prospective study of alexithymia, negative mood and alcohol expectancies among alcohol-dependent treatment seekers*  
Fred Thorberg<sup>1</sup>, Ross Young<sup>2</sup>, Michael Lyvers<sup>3</sup>, Jason Connor<sup>2</sup>, Edythe London<sup>4</sup>, Gerald Feeney<sup>5</sup>, <sup>1</sup>Innlandet Hospital Trust, Brumunddal, Norway, <sup>2</sup>University of Queensland, Brisbane, <sup>3</sup>Bond University, Robina, Australia, <sup>4</sup>University of California Los Angeles, Los Angeles, CA, <sup>5</sup>Princess Alexandra Hospital, Queensland, Australia
- 69 *Opportunistic drinking refusal self-efficacy moderates the relationship between borderline personality traits and alcohol consequences*  
Rachel Zelenak<sup>1</sup>, Jennifer Ellis<sup>2</sup>, Emily Grekin<sup>2</sup>, <sup>1</sup>Wayne State University, Detroit, MI, Canada, <sup>2</sup>Wayne State University, Detroit, MI
- 70 *The role of violence and mental health in alcohol use disorders among Black women at risk for HIV in Baltimore, MD*  
Kiyomi Tsuyuki<sup>1</sup>, Noor Al-Alusi<sup>1</sup>, Jacquelyn Campbell<sup>2</sup>, Andrea Cimino<sup>2</sup>, Kristin Gundersen<sup>1</sup>, Jamila Stockman<sup>1</sup>, <sup>1</sup>University of California San Diego Department of Medicine, La Jolla, CA, <sup>2</sup>Johns Hopkins University, School of Nursing, Baltimore, MD
- 71 *Relationship between substance use and sexual network characteristics among men who have sex with men and transgender women in Tijuana, Mexico*  
Heather Pines<sup>1</sup>, Rudy Patrick<sup>1</sup>, Martina Morris<sup>2</sup>, Shirley Semple<sup>1</sup>, Alicia Vera<sup>1</sup>, James Fowler<sup>1</sup>, Gudelia Rangel<sup>3</sup>, Thomas Patterson<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>University of Washington, Seattle, WA, <sup>3</sup>Comision Binacional Fronteriza, Mexico
- 72 *Trajectories of repeated AUDIT-C scores as a phenotype for GWAS discovery*  
Rachel Vickers Smith<sup>1</sup>, Henry Kranzler<sup>2</sup>, Amy Justice<sup>3</sup>, Janet Tate<sup>3</sup>, <sup>1</sup>University of Louisville, School of Nursing, Louisville, KY, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>Yale University, New Haven, CT

#### **POSTER IV PSYCHIATRIC COMORBIDITY**

**Sapphire ABC/EFG  
12:00 - 2:00 PM**

- 73 *Social-ecological determinants of health contributing to co-occurring substance use and mental health problems: How do sexual and gender minority young adults' experiences differ from their heterosexual, cisgender counterparts?*  
Jennifer Felner<sup>1</sup>, Jennifer Wisdom<sup>2</sup>, Laura Katuska<sup>3</sup>, Hee Jin Jun<sup>1</sup>, Heather Corliss<sup>1</sup>, <sup>1</sup>San Diego State University, San Diego, CA, <sup>2</sup>The City University of New York, New York, NY, <sup>3</sup>Harvard Medical School, Boston, MA
- 74 *Perceptions of helpfulness of a mindfulness meditation program in women with PTSD and SUD*  
Therese Killeen<sup>1</sup>, Hayley Feigyl<sup>1</sup>, Mary Shaw<sup>1</sup>, Sarah Bowen<sup>2</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>Pacific University, Forest Grove, OR
- 75 *Drug craving and use in response to prolonged exposure for PTSD*  
Jessica Peirce<sup>1</sup>, Rebecca Schacht<sup>2</sup>, Michael Kidorf<sup>3</sup>, Van King<sup>4</sup>, Robert Brooner<sup>1</sup>, <sup>1</sup>Johns Hopkins University

- School of Medicine, Baltimore,<sup>2</sup>MD, University of Maryland, Baltimore,<sup>3</sup>MD, Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>4</sup>University of Texas Health Science Center, San Antonio, TX
- 76 *Current depressive symptoms are associated with drug craving and drug use in methadone-maintained patients*  
 Andrew Huhn<sup>1</sup>, Mary Sweeney<sup>1</sup>, Michael Kidorf<sup>2</sup>, D. Andrew Tompkins<sup>3</sup>, Robert Brooner<sup>1</sup>, Kelly Dunn<sup>1</sup>,  
<sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>3</sup>University of California San Francisco School of Medicine, San Francisco, CA
- 77 *The longitudinal association between substance use and depression from pre- to 1-year post substance use treatment*  
 Deepika Anand<sup>1</sup>, Anna Bartuska<sup>1</sup>, CJ Seitz-Brown<sup>2</sup>, Stacey Daughters<sup>1</sup>, <sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, <sup>2</sup>University of Maryland, College Park, MD
- 78 *Change talk in group motivational interviewing (GMI) predicts outcome among patients with substance use and co-existing psychiatric disorders*  
 Elizabeth Santa Ana<sup>1</sup>, Antonio Morgan-Lopez<sup>2</sup>, Kayla Lamb<sup>3</sup>, Steve Martino<sup>4</sup>, <sup>1</sup>University of South Carolina, Charleston, SC, <sup>2</sup>RTI International, Durham, NC, <sup>3</sup>Charleston VAMC, Charleston, SC, <sup>4</sup>Yale University School of Medicine, New Haven, CT
- 79 *Risk of substance use and mental health outcomes among military spouses and partners*  
 Jessica Kulak<sup>1</sup>, Jennifer Fillo<sup>2</sup>, D. Lynn Homish<sup>1</sup>, Linda Kahn<sup>1</sup>, Gregory Homish<sup>1</sup>, <sup>1</sup>State University of New York at Buffalo, Buffalo, NY, <sup>2</sup>Research Institute on Addictions, Buffalo, NY
- 80 *Prevalence of trauma exposure and post-traumatic stress disorder (PTSD) in rehabilitation center ANAS Le Courbat in France during first semester of 2016*  
 Damien Mauge<sup>1</sup>, Servane Barrault<sup>1</sup>, Kevin Lebigre<sup>1</sup>, Hussein el Ayoubi<sup>2</sup>, Paul Brunault<sup>3</sup>, Ballon Nicols<sup>1</sup>, Wissam El-Hage<sup>1</sup>, <sup>1</sup>CHRU de Tours, Clinique Psychiatrique Universitaire, Tours, France, <sup>2</sup>Centre Hospitalier Louis Sevestre, Tours, France, <sup>3</sup>University Hospital of Tours, Tours, France
- 81 *Current use of alcohol and marijuana among people with anxiety, depression, both or neither*  
 Ayodeji Otufowora<sup>1</sup>, Yiyang Liu<sup>2</sup>, Shivani Khan<sup>2</sup>, Catherine Woodstock Striley<sup>2</sup>, Deepthi Varma<sup>1</sup>, Linda Cottler<sup>2</sup>, <sup>1</sup>University of Florida, College of Public Health and Health Professions, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL
- 82 *Psychotic disorder and cannabis: Examining hospitalizations trends prior to legalization in Canada*  
 Bridget Hall, Sarah Wallingford, Matthew Young, Canadian Centre on Substance Abuse, Ottawa, ON, Canada
- 83 *Longitudinal evaluation of PTSD symptoms as a function of cannabis use status*  
 Megan Brunstetter<sup>1</sup>, Alexandra Simonian<sup>1</sup>, Meredith Kurtz<sup>1</sup>, Ryan Vandrey<sup>2</sup>, Hal Wortzel<sup>1</sup>, Marcel Bonn-Miller<sup>3</sup>, <sup>1</sup>Rocky Mountain MIRECC, VA Eastern Colorado Health Care System, Denver, CO, <sup>2</sup>Behavioral Pharmacology Research Unit, Johns Hopkins Hospital, Baltimore, MD, <sup>3</sup>University of Pennsylvania, Southmont, NC
- 84 *Cannabis use moderates associations between physical health and anxiety sensitivity and distress tolerance*  
 Kate Stewart<sup>1</sup>, Kristina Jackson<sup>2</sup>, Brian Borsari<sup>3</sup>, Jane Metrik<sup>1</sup>, <sup>1</sup>Brown University School of Public Health, Providence, RI, <sup>2</sup>Center for Alcohol and Addiction Studies, Providence, RI, <sup>3</sup>San Francisco Veterans Affairs Health Care System, San Francisco, CA
- 85 *Negative urgency mediates the relationship between depression and marijuana problems*  
 Rachel Gunn<sup>1</sup>, Kristina Jackson<sup>2</sup>, Brian Borsari<sup>3</sup>, Jane Metrik<sup>4</sup>, <sup>1</sup>Brown University, Providence, RI, <sup>2</sup>Center for Alcohol and Addiction Studies, Providence, RI, <sup>3</sup>San Francisco Veterans Affairs Health Care System, San Francisco, CA, <sup>4</sup>Brown University School of Public Health, Providence, RI
- 86 *Association between negative affect and symptoms of anxiety and depression in a cannabis cessation clinical trial.*  
 Kristen Morella, Brian Sherman, Nathaniel Baker, Gregory Sahlem, Amanda Wagner, Kevin Gray, Aimee

- McRae-Clark, Medical University of South Carolina, Charleston, SC
- 87 *Depression, anger, and drug use trajectory over one year in people who use marijuana, opioids, and stimulants*  
Landhing Moran<sup>1</sup>, Sara Hertz<sup>1</sup>, Jennifer Schroeder<sup>2</sup>, David Epstein<sup>1</sup>, Kenzie Preston<sup>1</sup>, Karran Phillips<sup>3</sup>,  
<sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>Schroeder Statistical Consulting, LLC, Ellicott City, MD, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 88 *Decreased cigarette demand among treatment-seeking smokers with depressive symptoms*  
Sara Weidberg<sup>1</sup>, Ángel García-Pérez<sup>1</sup>, Aris Grande-Gonsende<sup>1</sup>, Irene Pericot-Valverde<sup>2</sup>, Roberto Secades Villa<sup>1</sup>, <sup>1</sup>University of Oviedo, Oviedo, Spain, <sup>2</sup>University of Vermont, Burlington, VT
- 89 *Factors associated with psychiatric symptomatology among a cohort of people who inject drugs (PWID) in Haiphong, Vietnam and clinical implications*  
Laurent Michel<sup>1</sup>, Mai Le Sao<sup>2</sup>, Huong Duong Thi<sup>3</sup>, Oanh Khuat Thi Hai<sup>4</sup>, Delphine Rapoud<sup>5</sup>, Khuê Pham Minh<sup>3</sup>, Catherine Quillet<sup>6</sup>, Thanh Nham Thi Tuyet<sup>4</sup>, Giang Hoang Thi<sup>3</sup>, Jonathan Feelemyer<sup>7</sup>, Vinh Vu Hai<sup>8</sup>, Jean-Pierre Moles<sup>9</sup>, Didier Laureillard<sup>6</sup>, Don Des Jarlais<sup>7</sup>, Nicolas Nagot<sup>6</sup>, <sup>1</sup>Centre Pierre Nicole, Paris, France, <sup>2</sup>Mental Health Department, Hai Phong, Viet Nam, <sup>3</sup>Hai Phong University of Medicine and Pharmacy, Hai Phong, Viet Nam, <sup>4</sup>SCDI, Hanoi, Viet Nam, <sup>5</sup>Department of Medical Information, Montpellier, <sup>6</sup>University of Montpellier, Montpellier, France, <sup>7</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>8</sup>Infectious Diseases Department, Viet Tiep Hospital, Hai Phong, Viet Nam, <sup>9</sup>University of Montpellier, Montpellier
- 90 *Motivations for the misuse of prescription drugs related to many mental health problems*  
Tess Drazdowski, Oregon Social Learning Center, Eugene, OR
- 91 *The role of impulsivity in the relationship between prescription opioid use and borderline personality disorder features in a substance use disorder treatment sample*  
Noel Vest, Sarah Tragesser, Washington State University, Pullman, WA
- 92 *Problematic cybersexual behaviours: The implication of borderline personality disorder and childhood trauma*  
Servane Barrault<sup>1</sup>, Komlan Hegbé<sup>2</sup>, Robert Courtois<sup>1</sup>, Paul Brunault<sup>3</sup>, Jérôme Bachellier<sup>1</sup>, Damien Maugé<sup>1</sup>, Ballon Nicols<sup>1</sup>, <sup>1</sup>CHRU de Tours, Clinique Psychiatrique Universitaire, Tours, France, <sup>2</sup>Université Francois Rabelais de Tours, Tours, France, <sup>3</sup>University Hospital of Tours, Tours, France
- 93 *Externalizing and internalizing symptoms as common and specific candidate endophenotypes for heroin and amphetamine dependence*  
Jasmin Vassileva<sup>1</sup>, Elizabeth Long<sup>1</sup>, F. Gerard Moeller<sup>1</sup>, Radka Kaneva<sup>2</sup>, Kiril Bozgunov<sup>3</sup>, Elena Psederska<sup>3</sup>, Dimitar Nedelchev<sup>3</sup>, Georgi Vasilev<sup>3</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Medical University - Sofia, Sofia, Bulgaria, <sup>3</sup>Bulgarian Addictions Institute, Sofia
- 94 *Association between methamphetamine psychosis and facial emotion recognition*  
Shalini Arunogiri<sup>1</sup>, Rebecca McKetin<sup>2</sup>, Dan Lubman<sup>3</sup>, Antonio Verdejo-Garcia<sup>1</sup>, <sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>National Drug Research Institute, Perth, Australia, <sup>3</sup>Turning Point, Fitzroy, Australia
- 95 *Problem-gambling severity, suicidality and DSM-IV Axis I and II psychiatric disorders*  
Silvia Ronzitti<sup>1</sup>, Shane Kraus<sup>2</sup>, Rani Hoff<sup>3</sup>, Massimo Clerici<sup>4</sup>, Marc Potenza<sup>5</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>VISN 1 New England MIRECC, Edith Nourse Rogers Memorial Veterans Hospital, Bedford, MA, <sup>3</sup>Yale University Department of Psychiatry, West Haven, CT, <sup>4</sup>University of Milan-Bicocca, Monza, Italy, <sup>5</sup>Yale University School of Medicine, New Haven, CT
- 96 *Clinical and personality characteristics of problem and pathological gamblers with and without symptoms of adult ADHD*  
Molly Cairncross<sup>1</sup>, Aleks Milosevic<sup>2</sup>, Cara Struble<sup>3</sup>, Jennifer Ellis<sup>3</sup>, David Ledgerwood<sup>3</sup>, <sup>1</sup>University of Windsor, Windsor, ON, Canada, <sup>2</sup>Centre For Interpersonal Relationships, Ottawa, ON, Canada, <sup>3</sup>Wayne State University, Detroit, MI

**POSTER IV  
NICOTINE: HUMAN STUDIES**

**Sapphire ABC/EFG  
12:00 - 2:00 PM**

- 97 *Respiratory physiology of healthy smokers during distress intolerance testing*  
Annie Umbricht, Nicolas Schlienz, Martha Velez, Delcora Huggins, Johns Hopkins University School of Medicine, Baltimore, MD
- 98 *Promoting substitution of e-cigarettes for cigarettes through narratives: The Roles of authority and in-group biases in modulating narrative effectiveness*  
William DeHart, Aenia Amin, Warren Bickel, Virginia Tech Carilion Research Institute, Roanoke, VA
- 99 *E-cigarette smoking in Thailand*  
Chitlada Areesantichai<sup>1</sup>, Usaneya Perngparn<sup>1</sup>, Linda Cottler<sup>2</sup>, <sup>1</sup>Chulalongkorn University, Bangkok, Thailand, <sup>2</sup>University of Florida, Gainesville, FL
- 100 *Electronic nicotine delivery systems (ENDS) and social media use among young adult college students*  
Paul Harrell, Kelli Will, Andrew Plunk, Eastern Virginia Medical School, Norfolk, VA
- 101 *Comparison of combustible and electronic cigarette dependence severity between heterosexual and bisexual adolescents*  
Madalyn Liautaud, Jessica Barrington-Trimis, Rob McConnell, Raina Pang, University of Southern California, Los Angeles, CA
- 102 *Predicting initiation of vaporized nicotine products, frequency of use and ongoing use among daily smokers in longitudinal data from the International Tobacco Control (ITC) Four Country Survey*  
Gary Chan<sup>1</sup>, Kylie Morphett<sup>2</sup>, Coral Gartner<sup>2</sup>, Janni Leung<sup>3</sup>, Hua-Hie Yong<sup>4</sup>, Wayne Hall<sup>5</sup>, Ron Borland<sup>4</sup>, <sup>1</sup>Centre for Youth Substance Abuse Research, Herston, Australia, <sup>2</sup>School of Public Health, Brisbane, Australia, <sup>3</sup>NDARC, UNSW, Australia, Brisbane, Australia, <sup>4</sup>Cancer Council Victoria, Melbourne, Australia, <sup>5</sup>University of Queensland, Brisbane, Australia
- 103 *Frequency of tobacco use in emerging adults is associated with self-reported, but not a laboratory measure of, inattention*  
Timothy Regan, Bethany Harris, Sherece Fields, Texas A&M University, College Station, TX
- 104 *Effects of device voltage level on e-cigarette appeal differs by e-cigarette dependence*  
Elaine Qian<sup>1</sup>, Hannah Hardy<sup>2</sup>, Nicholas Goldenson<sup>2</sup>, Jessica Barrington-Trimis<sup>2</sup>, Raina Pang<sup>2</sup>, Adam Leventhal<sup>2</sup>, Matthew Kirkpatrick<sup>2</sup>, <sup>1</sup>University of Southern California, Dublin, CA, <sup>2</sup>University of Southern California, Los Angeles, CA
- 105 *Impact of mentholation as a moderator of nicotine dose on relative reinforcing and subjective effects*  
Danielle Davis<sup>1</sup>, Cecilia Bergeria<sup>1</sup>, Joanna Streck<sup>2</sup>, Mollie Miller<sup>3</sup>, Janice Bunn<sup>1</sup>, Diann Gaalema<sup>1</sup>, Sarah Heil<sup>1</sup>, Stacey Sigmon<sup>1</sup>, Maxine Stitzer<sup>4</sup>, Jennifer Tidey<sup>5</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>3</sup>Brown University Center for Alcohol and Addiction Studies, Providence, RI, <sup>4</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>5</sup>Brown University, Providence, RI
- 106 *Subjective effects of cigarettes varying in nicotine content among opioid-maintained individuals*  
Joanna Streck<sup>1</sup>, Stacey Sigmon<sup>2</sup>, Maria Parker<sup>2</sup>, Maxine Stitzer<sup>3</sup>, Jennifer Tidey<sup>4</sup>, Sarah Heil<sup>2</sup>, Diann Gaalema<sup>2</sup>, Cecilia Bergeria<sup>2</sup>, Danielle Davis<sup>2</sup>, Jeff Priest<sup>2</sup>, Anthony Barrows<sup>2</sup>, Matthew Rothman<sup>2</sup>, John Hughes<sup>2</sup>, Stephen Higgins<sup>2</sup>, <sup>1</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT, <sup>3</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>4</sup>Brown University, Providence, RI
- 107 *Learning and memory performance following acute intranasal insulin administration in abstinent smokers*  
Ajna Hamidovic, University of Illinois, Chicago, IL

- 108 *Characterizing tobacco use in a military sample*  
 Alexa Lopez<sup>1</sup>, Alexxa Bessey<sup>2</sup>, Julie Merrill<sup>1</sup>, Walter Sowden<sup>3</sup>, <sup>1</sup>US Army Medical Research Directorate-  
 West, Tacoma, WA, <sup>2</sup>Walter Reed Army Institute of Research, Washington, DC, <sup>3</sup>Walter Reed Army Institute  
 of Research, Silver Spring, MD 68
- 109 *California tobacco tax increase: Impact on a low-income drug treatment sample*  
 Denise Williams, Noah Gubner, Thao Le, Deborah Yip, Joseph Guydish, University of California San  
 Francisco, San Francisco, CA
- 110 *An examination of psychological distress, healthcare coverage, and poly-tobacco product use among gay and  
 bisexual men*  
 Raymond Moody<sup>1</sup>, Christian Grov<sup>2</sup>, Jeffrey Parsons<sup>3</sup>, <sup>1</sup>Graduate Center and CHEST, New York, NY, <sup>2</sup>CUNY  
 Graduate School of Public Health and Health Policy, New York, NY, <sup>3</sup>Hunter College, CUNY, New York  
 City, NY
- 111 *Anxiety sensitivity in relation to smoking variables and other substance use in African-American smokers*  
 Megan Kelly<sup>1</sup>, Casey Guillot<sup>1</sup>, Nathan Kearns<sup>1</sup>, Michael Zvolensky<sup>2</sup>, Norman Schmidt<sup>3</sup>, <sup>1</sup>University of North  
 Texas, Denton, TX, <sup>2</sup>University of Houston, Houston, TX, <sup>3</sup>Florida State University, Tallahassee, FL
- 112 *Anxiety sensitivity as a predictor of the acute subjective effects of smoking in African-Americans during non-  
 abstinence*  
 Sage Luna<sup>1</sup>, Casey Guillot<sup>1</sup>, Megan Kelly<sup>1</sup>, Sara Hartigan<sup>1</sup>, Raina Pang<sup>2</sup>, Michael Zvolensky<sup>3</sup>, Adam  
 Leventhal<sup>2</sup>, <sup>1</sup>University of North Texas, Denton, TX, <sup>2</sup>University of Southern California, Los Angeles, CA,  
<sup>3</sup>University of Houston, Houston, TX
- 113 *Anxiety sensitivity moderates the association of relationship status with cigarette smoking heaviness and  
 dependence*  
 Casey Guillot<sup>1</sup>, Eileen Quinn<sup>1</sup>, Megan Kelly<sup>1</sup>, Aurora Brown<sup>1</sup>, Casey Horani<sup>1</sup>, Noah Phillips<sup>1</sup>, Yuqing Liu<sup>1</sup>,  
 Adam Leventhal<sup>2</sup>, <sup>1</sup>University of North Texas, Denton, TX, <sup>2</sup>University of Southern California, Los Angeles,  
 CA
- 114 *Amplitude of demand predicts abstinence among treatment-seeking smokers with elevated depressive  
 symptoms: Further evidence of its internal structure*  
 Carla López Núñez<sup>1</sup>, Alba González-Roz<sup>2</sup>, Ángel García-Pérez<sup>3</sup>, Sara Weidberg<sup>3</sup>, Víctor Martínez-Loredo<sup>2</sup>,  
 Roberto Secades Villa<sup>3</sup>, <sup>1</sup>Universidad Loyola Andalucía, Sevilla, Spain, <sup>2</sup>University of Oviedo, Addictive  
 Behaviors Group, Oviedo, Spain, <sup>3</sup>University of Oviedo, Oviedo, Spain
- 115 *Relationship of trait anger among smokers with SUD to nicotine dependence, barriers to quitting smoking,  
 intolerance for discomfort, smoking, craving and compliance with smoking cessation medication*  
 Damaris Rohsenow<sup>1</sup>, Rosemarie Martin<sup>1</sup>, Suzanne Colby<sup>2</sup>, Shelley Gresko<sup>1</sup>, Jennifer Tidey<sup>1</sup>, <sup>1</sup>Brown  
 University, Providence, RI, <sup>2</sup>Brown University Center for Alcohol and Addiction Studies, Providence, RI
- 116 *Validation of a brief behavioral economic assessment of demand among cigarette smokers*  
 Liqa Athamneh<sup>1</sup>, Jeffrey Stein<sup>1</sup>, Michael Amlung<sup>2</sup>, Warren Bickel<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research  
 Institute, Roanoke, VA, <sup>2</sup>Peter Boris Centre for Addictions Research, Hamilton, ON, Canada
- 117 *A novel delayed cigarette purchase task: Associations with craving and smoking urges*  
 Mikhail Koffarnus, Brent Kaplan, Virginia Tech Carilion Research Institute, Roanoke, VA
- 118 *Predictors of smoking cessation during pregnancy*  
 Lauren Micalizzi<sup>1</sup>, Leslie Brick<sup>1</sup>, Valerie Knopik<sup>2</sup>, <sup>1</sup>Brown University, Providence, RI, <sup>2</sup>Purdue University,  
 West Lafayette, IN
- 119 *Improving equity and consistency In hospital administration of smoking cessation pharmacotherapy*  
 Alex Ramsey<sup>1</sup>, Donna Prentice<sup>2</sup>, Ellis Ballard<sup>3</sup>, Melanie Houston<sup>3</sup>, Hannah Kramer<sup>3</sup>, Sophie Cheng<sup>3</sup>, Li-  
 Shiun Chen<sup>1</sup>, Laura Bierut<sup>1</sup>, <sup>1</sup>Washington University School of Medicine, St. Louis, MO, <sup>2</sup>Barnes-Jewish

- Hospital, St. Louis, MO, <sup>3</sup>Washington University, St. Louis, MO
- 120 *Utilization of smoking cessation interventions during VA Medical Center initial visits*  
David Friedrich, James Walker, Shalika Whig, Karen Hartwell, Medical University of South Carolina, Charleston, SC
- 121 *Impact of an employee-focused program for tobacco addiction treatment among employees of a French healthcare institution*  
Marie Thérèse Ceccato<sup>1</sup>, Jacques Dubernet<sup>2</sup>, Jean-Marc Alexandre<sup>2</sup>, Fuschia Serre<sup>2</sup>, Marc Auriacombe<sup>2</sup>,  
<sup>1</sup>University of Bordeaux, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux

## POSTER IV SEX/GENDER II

**Sapphire ABC/EFG**  
**12:00 - 2:00 PM**

- 122 *Cannabis dependence: Measurement equivalence by age and sex*  
Christopher Thompson<sup>1</sup>, Karl Alcover<sup>2</sup>, James Anthony<sup>2</sup>, <sup>1</sup>Theo Pediatric Health, Lansing, MI, <sup>2</sup>Michigan State University, Lansing, MI
- 123 *Dimensions of negative consequences in regular marijuana users differ by sex*  
Cara Struble<sup>1</sup>, Jennifer Ellis<sup>1</sup>, Molly Cairncross<sup>2</sup>, Leslie Lundahl<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>University of Windsor, Windsor, ON, Canada
- 124 *Sex-differences in the associations between social support and frequency of use and severity of cannabis dependence: A secondary data analysis*  
Kechna Cadet<sup>1</sup>, Lesia M. Ruglass<sup>2</sup>, <sup>1</sup>CUNY School of Medicine, New York, NY, <sup>2</sup>The City University of New York, New York, NY
- 125 *Gender differences in emotional reactions to cigarette warning labels in teens*  
Amanda Quisenberry, Elizabeth Klein, Ellen Peters, Ohio State University, Columbus, OH
- 126 *Effects of gender on affect during acute tobacco abstinence differ between African-American and White smokers*  
Raina Pang, Mariel Bello, Madalyn Liautaud, Adam Leventhal, University of Southern California, Los Angeles, CA
- 127 *Gender differences in utilization of quitline services and tobacco cessation among callers at a state quitline*  
Alicia Allen, Nicole Yuan, Betsy Wertheim, Laurie Krupski, Melanie Bell, Uma Nair, University of Arizona, Tucson, AZ
- 128 *Cocaine exposure and caregiving quality: Sex differences and effects on child behavior problems*  
Ariana Roman<sup>1</sup>, Rina Eiden<sup>2</sup>, Shannon Shisler<sup>1</sup>, <sup>1</sup>Research Institute on Addictions, Buffalo, NY, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY
- 129 *Mood, meth, and sex: Latent growth curve modeling results from a randomized trial*  
Eileen Pitpitan, University of California San Diego, La Jolla, CA
- 130 *The impacts of childhood sexual and physical abuse on adulthood sex trade involvement in the US: Evaluating gender differences in associations and mediation*  
MacRegga Severe<sup>1</sup>, Kriupa Samson<sup>2</sup>, Joy Scheidell<sup>1</sup>, Christopher Frueh<sup>3</sup>, Jarrett Williams<sup>1</sup>, Kailyn Pearce<sup>1</sup>, Maria Khan<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University, College of Nursing, New York, NY, <sup>3</sup>University of Hawaii at Hilo, Hilo
- 131 *Gender differences in HIV, anti-HCV and HBsAg prevalence among people who inject drugs – A multi-stage systematic review and meta-analysis of global evidence*  
Janni Leung<sup>1</sup>, Amy Peacock<sup>2</sup>, Samantha Colledge<sup>2</sup>, Jason Grebely<sup>3</sup>, Evan Cunningham<sup>4</sup>, Matthew Hickman<sup>5</sup>, Peter Vickerman<sup>6</sup>, Jack Stone<sup>6</sup>, Adam Trickey<sup>6</sup>, Kostyantyn Dumchev<sup>7</sup>, Michael Lynskey<sup>8</sup>, Lindsey Hines<sup>8</sup>, Paul Griffiths<sup>9</sup>, Richard Mattick<sup>4</sup>, Sarah Larney<sup>2</sup>, Louisa Degenhardt<sup>2</sup>, <sup>1</sup>NDARC, UNSW, Australia, Brisbane,

- Australia, <sup>2</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>3</sup>The Kirby Institute, Sydney, Australia, <sup>4</sup>University of New South Wales, Sydney, Australia, <sup>5</sup>NIHR School of Public Health, Bristol, <sup>6</sup>Bristol University, Clifton, United Kingdom, <sup>7</sup>Ukrainian Institute on Public Health Policy, Kyiv, Ukraine, <sup>8</sup>King's College, London, United Kingdom, <sup>9</sup>EMCDDA, Lisbon, Portugal
- 132 *Gender differences in the provision of injection initiation assistance: A comparison of three North American settings*  
Stephanie Meyers<sup>1</sup>, Ayden Scheim<sup>1</sup>, Sonia Jain<sup>1</sup>, Shelly Sun<sup>1</sup>, M-J Milloy<sup>2</sup>, Kora DeBeck<sup>3</sup>, Kanna Hayashi<sup>4</sup>, Richard S Garfein<sup>1</sup>, Steffanie Strathdee<sup>1</sup>, Dan Werb<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, <sup>4</sup>Simon Fraser University, Vancouver, BC, Canada
- 133 *A re-evaluation of the KMSK scales, rapid dimensional measures of exposure to specific drugs*  
Carina Chen, Eduardo Butelman, Rebecca Fry, Rachel Kimani, Joel Correa da Rosa, Mary Jeanne Kreek, The Rockefeller University, New York, NY

## POSTER IV THEORETICAL COMMENTARY

**Sapphire ABC/EFG**  
**12:00 - 2:00 PM**

- 134 *FDA and other US agency roles in the drug scheduling process for substances assessed under our international drug control treaties*  
James Hunter, U.S. Food and Drug Administration, Silver Spring, MD
- 135 *How drugs without abuse potential are removed from control under the controlled substances act*  
Katherine Bonson, U.S. Food and Drug Administration, Silver Spring, MD
- 136 *Developing hallucinogenic drugs as therapeutic agents: Regulatory framework*  
Silvia Calderon<sup>1</sup>, Joshua Hunt<sup>2</sup>, Michael Klein<sup>3</sup>, <sup>1</sup>U.S. Food and Drug Administration, Silver Spring, MD, <sup>2</sup>FDA/CDER/OCD/CSS, Silver Spring, MD, <sup>3</sup>Controlled Substance Scientific Solutions LLC, Chevy Chase, MD
- 137 *Category 1 assessment of opioid vaping: A focus of FDA advisory committee interest*  
August Buchhalter<sup>1</sup>, Edward Cone<sup>1</sup>, Christopher Altomare<sup>2</sup>, Anthony Costantino<sup>2</sup>, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>DRUGSCAN, Horsham, PA
- 138 *Kratom and its mitragynines in the opioid crisis: A path to or away from opioids?*  
Jack Henningfield<sup>1</sup>, Robert Raffa, Albert Garcia-Romeu<sup>2</sup>, Tina Doshi, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD
- 139 *Pain treatment with buprenorphine as a strategy to reduce the epidemic of opioid abuse and overdose*  
Reginald Fant<sup>1</sup>, Sidney Schnoll<sup>2</sup>, Lisa Zapawa<sup>1</sup>, Karen Gerlach<sup>1</sup>, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>Pinney Associates, Inc., Stamford, CT
- 140 *Solutions to financial barriers to pharmacy-based naloxone access*  
Jeffrey Bratberg<sup>1</sup>, Traci Green<sup>2</sup>, Alexander Walley<sup>2</sup>, <sup>1</sup>University of Rhode Island, College of Pharmacy, Attleboro, MA, <sup>2</sup>Boston University School of Medicine, Boston, MA
- 141 *The landscape of bundled payment: Where does addiction fit in?*  
Maureen Stewart<sup>1</sup>, Constance Horgan<sup>2</sup>, Jennifer Perloff<sup>2</sup>, Alexandra Kritikos<sup>2</sup>, Amity Quinn<sup>3</sup>, <sup>1</sup>Brandeis University, Waltham, MA, <sup>2</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>3</sup>University of Calgary, Calgary, AB, Canada
- 142 *Rewarding value in substance use treatment: What are the unique challenges?*  
Constance Horgan<sup>1</sup>, Maureen Stewart<sup>2</sup>, Dominic Hodgkin<sup>1</sup>, Alexandra Kritikos<sup>1</sup>, <sup>1</sup>Brandeis University, Heller

- School for Social Policy and Management, Waltham, MA,<sup>2</sup> Brandeis University, Waltham, MA
- 143 *Statistical considerations on pharmacodynamic assessment*  
Ling Chen, U.S. Food and Drug Administration, Silver Spring, MD
- 144 *How is the abuse potential of opioids affected by drugs used concomitantly with opioids?*  
Greg Hawkins<sup>1</sup>, Shalini Bansil<sup>2</sup>, <sup>1</sup>U.S. Food and Drug Administration, Silver Spring, MD, <sup>2</sup>FDA/CSS, Silver Spring, MD
- 145 *Tobacco product abuse liability: State of the science and major challenges*  
Stacey Sigmon<sup>1</sup>, Dorothy Hatsukami<sup>2</sup>, Chad Reissig<sup>3</sup>, Mark Lesage<sup>4</sup>, Eric Donny<sup>5</sup>, Andrea Villanti, Jack Henningfield<sup>6</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Minnesota Medical School, Minneapolis, MN, <sup>3</sup>FDA Center for Tobacco Products, Sandy Spring, MD, <sup>4</sup>Minneapolis Medical Research Foundation, Minneapolis, MN, <sup>5</sup>Wake Forest University School of Medicine, Winston-Salem, NC, <sup>6</sup>Pinney Associates, Inc., Bethesda, MD
- 146 *Adjusting for sampling bias in cross-sectional surveys*  
Olga Vselvolozhskaya<sup>1</sup>, James Anthony<sup>2</sup>, Dmitri Zaykin<sup>3</sup>, <sup>1</sup>College of Public Health, Lexington, KY, <sup>2</sup>Michigan State University, Lansing, MI, <sup>3</sup>NIEHS, Research Triangle Park, NC
- 147 *Childhood trauma matters for addiction, STI/HIV, and criminal justice: Where do we go from here?*  
Maria Khan<sup>1</sup>, Christopher Frueh<sup>2</sup>, Joy Scheidell<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>University of Hawaii at Hilo, Hilo
- 148 *Medical licensing application questions and physician reluctance*  
Paige Marnell, Bryon Adinoff, University of Texas Southwestern Medical Center, Dallas, TX
- 149 *Changing career opportunities for trainees and early career professionals in the field of drug abuse science*  
Betha Kleykamp<sup>1</sup>, Katherine Saulsgiver<sup>2</sup>, Cassandra Gipson-Reichardt<sup>3</sup>, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>BetterUp Inc., San Francisco, CA, <sup>3</sup>Arizona State University, Tempe, AZ
- 150 *Video enhancements to a virtual self-administration laboratory*  
Adithya Kashyap<sup>1</sup>, Harika Mandela<sup>1</sup>, Vladimir Tsibulsky<sup>1</sup>, Andrew Norman<sup>2</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University of Cincinnati, College of Medicine, Cincinnati, OH

## ORAL COMMUNICATIONS 22 GETTING ON THE WAGON: ALCOHOL

**Indigo E**  
**2:00 - 3:00 PM**

Chairs: Rajita Sinha

- 2:00 *Human kappa opioid receptor (KOP-r) partial agonist nalmefene and agonist nalfurafine reduce excessive and "relapse" alcohol drinking in C57BL/6J mice*  
Yan Zhou, Mary Jeanne Kreek, The Rockefeller University, New York, NY
- 2:15 *Paternal alcohol exposure reduces operant alcohol self-administration in adult male and female offspring*  
Steven Nieto<sup>1</sup>, Cana Quave<sup>1</sup>, Sergio Sanchez<sup>1</sup>, Tamara Shan<sup>1</sup>, Richard Meisch<sup>2</sup>, Therese Kosten<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>University of Texas Health Science Center, Houston, TX
- 2:30 *Translocator protein expression in alcoholism: a [11C]PBR28 PET study in humans and rats*  
Corinde Wiers<sup>1</sup>, Sunny Kim<sup>1</sup>, Ryan Tyler<sup>1</sup>, Ehsan Shokri Kojori<sup>2</sup>, Luke Park<sup>3</sup>, Jei-San Liow<sup>4</sup>, Nancy Diazgranados<sup>2</sup>, Leandro Vendruscolo<sup>5</sup>, George Koob<sup>2</sup>, Robert Innis<sup>4</sup>, Dardo Tomasi<sup>2</sup>, Gene-Jack Wang<sup>1</sup>, Nora Volkow<sup>5</sup>, <sup>1</sup>NIH, NIAAA, Bethesda, MD, <sup>2</sup>National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD, <sup>3</sup>National Institutes of Health Clinical Center, Bethesda, MD, <sup>4</sup>National Institute of Mental Health, Bethesda, MD, <sup>5</sup>National Institute of Drug Abuse, National Institutes of Health, Bethesda, MD
- 2:45 *Ethanol reinforcement elicits a novel response inhibition behavior in a model of ethanol dependence*  
Sucharita Somkuwar<sup>1</sup>, Leon Quach<sup>2</sup>, Jacqueline Quigley<sup>3</sup>, Dvijen Purohit<sup>4</sup>, Chitra Mandyam<sup>4</sup>, <sup>1</sup>Veterans



Medical Research Foundation, San Diego, CA, <sup>2</sup>Veterans Affairs San Diego Healthcare System, San Diego, CA, <sup>3</sup>University of Michigan, Ann Arbor, MI, <sup>4</sup>University of California San Diego, La Jolla, CA

**ORAL COMMUNICATIONS 23**  
**OVERDOSE: TOO MUCH OF A BAD THING**

**Indigo H**  
**2:00 - 4:00 PM**

Chairs: Alexander Walley and Erika Pike

- 2:00 *A novel platform to generate opioid-specific monoclonal antibodies to counteract opioid overdose*  
Carly Baehr<sup>1</sup>, Christine Robinson<sup>2</sup>, Marco Pravetoni<sup>2</sup>, <sup>1</sup>University of Minnesota, Department of Veterinary Medicine, Vadnais Heights, MN, <sup>2</sup>Minneapolis Medical Research Foundation, Minneapolis, MN
- 2:15 *Gender-specific facilitators and barriers to accessing an overdose prevention intervention: A rapid ethnographic study*  
Jade Boyd<sup>1</sup>, Samara Mayer<sup>2</sup>, Alexandra Collins<sup>2</sup>, Ryan McNeil<sup>3</sup>, <sup>1</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>University of British Columbia, BC Centre on Substance Use, Vancouver, BC, Canada
- 2:30 *Injectable naltrexone, oral naltrexone, and buprenorphine/naloxone and overdose among individuals treated for opioid use disorder in a United States commercially insured population*  
Jake Morgan<sup>1</sup>, Bruce Schackman<sup>2</sup>, Zoe Weinstein<sup>1</sup>, Alexander Walley<sup>1</sup>, Benjamin Linas<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Weill Cornell Medical College, New York, NY
- 2:45 *Opioid overdoses and suicidality in an emergency setting*  
A Srivastava<sup>1</sup>, Randi Foraker<sup>2</sup>, Evan Schwarz<sup>3</sup>, Anne Glowinski<sup>2</sup>, Mark Gold<sup>2</sup>, Laura Bierut<sup>2</sup>, <sup>1</sup>Department of Psychiatry, Washington University School of Medicine, Saint Louis, Missouri, <sup>2</sup>Washington University School of Medicine, St. Louis, MO, <sup>3</sup>Washington University School of Medicine Division of Emergency Medicine, St. Louis, MO
- 3:00 *Overdose experiences increase risk for injection drug use following incarceration in rural women who use opioids*  
Erika Pike<sup>1</sup>, Amanda Bunting<sup>1</sup>, Michele Staton<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 3:15 *Naloxone laws facilitate the establishment of overdose education and naloxone distribution programs in the US*  
Barrot Lambdin<sup>1</sup>, Corey Davis<sup>2</sup>, Eliza Wheeler<sup>3</sup>, Jennifer Lorvick<sup>4</sup>, Alex Kral<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC, <sup>2</sup>Network for Public Health Law, Edina, MN, <sup>3</sup>Harm Reduction Coalition, Oakland, CA, <sup>4</sup>RTI International, San Francisco, CA
- 3:30 *Touchpoints to identify individuals at high risk for opioid overdose death*  
Marc Laroche<sup>1</sup>, Dana Bernson<sup>2</sup>, Thomas Land<sup>2</sup>, Thomas Stopka<sup>3</sup>, Adam Rose<sup>4</sup>, Jane Liebschutz<sup>5</sup>, Alexander Walley<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Massachusetts Department of Public Health, Boston, MA, <sup>3</sup>Tufts University School of Medicine, Boston, MA, <sup>4</sup>RAND Corporation, Boston, MA, <sup>5</sup>University of Pittsburgh, Pittsburgh, PA
- 3:45 *"Generally, you get 86'ed because you're a liability." Social consequences of frequent overdoses among drug using networks*  
Jeanette Bowles<sup>1</sup>, Karla Wagner<sup>2</sup>, Silvia Verdugo<sup>1</sup>, Peter Davidson<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>University of Nevada, Reno, NV

**SYMPOSIUM XXI**  
**NEW TARGETS FOR DRUG ABUSE THERAPY**

**Indigo BCFG**  
**2:00 - 4:00 PM**

Chairs: Thomas Prisinzano and Nurulain Zaveri

- 2:00 *Progress towards the development of novel therapeutics for drug dependence*  
N. Cosford, NCI-Designated Cancer Center, LaJolla, CA
- 2:25 *NOP receptor-targeted agonists as non-addictive analgesics and potential anti-opioid treatment in primates*  
M. Ko, University of Michigan, Ann Arbor, MI
- 2:50 *Dissecting the neuropeptide S system and its role in substance abuse*  
S. Runyon, RTI International, Research Triangle Park, NC
- 3:15 *Small molecule TLR modulators targeting neurological diseases*  
H. Yin, University of Colorado, Aurora, CO
- 3:40 *The synthesis, optimization and biological characterization of a novel series of D4 antagonists as a potential new treatment for drug abuse*  
C. Hopkins, University of Nebraska Medical Center, Omaha, NE

**SYMPOSIUM XXII**  
**SEX AND GENDER IMPLICATIONS FOR**  
**EMERGING DRUG POLICY**

**Indigo D**  
**2:00 - 4:00 PM**

Chairs: Sherry McKee and Cora Lee Wetherington

- 2:00 *Sex-dependent therapeutic and adverse effects of cannabis and cannabinoids*  
Z. Cooper, Columbia University and NYSPI, New York, NY
- 2:25 *Why gender matters in opioid drug policy*  
H. Jones, University of North Carolina at Chapel Hill, Carrboro, NC
- 2:50 *Sex differences in nicotine and non-nicotine determinant of smoking and tobacco product regulation*  
E. Donny, Wake Forest University School of Medicine, Winston-Salem, NC
- 3:15 *The epidemiology of gender differences in drinking and related problems*  
D. Hasin, Columbia University, New York, NY
- 3:40 *Discussant: Sex and gender-based science informs basic, translational, clinical and policy relevant research*  
S. Greenfield, McLean Hospital, Harvard Medical School, Belmont, MA

**ORAL COMMUNICATIONS 24**  
**DOUBLE JEOPARDY: COMORBIDITY**

**Indigo E**  
**3:15 - 4:15 PM**

Chairs: Mark Ilgen

- 3:15 *Associations between PTSD, alcohol poisoning, and drug overdose among individuals in residential treatment*  
Kipling Bohnert<sup>1</sup>, Rebecca Sripada<sup>2</sup>, Mark Ilgen<sup>2</sup>, Maureen Walton<sup>1</sup>, Frederic Blow<sup>1</sup>, Amy Bohnert<sup>2</sup>,  
<sup>1</sup>University of Michigan, Addiction Center, Ann Arbor, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI
- 3:30 *Receipt of opioid medications and other treatments among soldiers with post-traumatic stress disorder (PTSD)*  
Mary Jo Larson, Rachel Adams, Mayada Saadoun, Sue Lee, Mark Bauer, Brandeis University, Heller School for Social Policy and Management, Waltham, MA
- 3:45 *Embedding tobacco dependence treatment within addictions treatment settings: Substance use co-morbidity and other predictors of cessation*  
Laurie Zawertailo, Peter Selby, Centre for Addiction and Mental Health, Toronto, ON, Canada
- 4:00 *Hospital stay in patients with bipolar disorder, schizophrenia, and other psychotic disorders is negatively associated with synthetic cannabinoid or marijuana use*

Huiqiong (Joan) Deng<sup>1</sup>, Pratikkumar Desai<sup>2</sup>, Satyajit Mohite<sup>2</sup>, David Nielsen<sup>3</sup>, Olaoluwa Okusaga<sup>2</sup>, Thomas Kosten<sup>4</sup>, <sup>1</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX, <sup>2</sup>Department of Psychiatry and Behavioral Sciences, McGovern Medical School at the University of Texas Health Sciences Center, Houston, TX, <sup>3</sup>Baylor College of Medicine, Montgomery, TX, <sup>4</sup>Baylor College of Medicine, Bellaire, TX

**SWEEPSTAKES DRAWING**

**Indigo A**  
**4:15 - 5:15 PM**

HAVE A SAFE TRIP HOME!  
SEE YOU IN SAN ANTONIO, TEXAS  
JUNE 15 - 20, 2019

**Friday, June 15, 2018**

**CPDD/INRC/RSA**

**Aqua DEF**  
**1:00 - 3:00 PM**

Chairs: Sherry McKee

*Translating the molecular underpinnings of alcohol and tobacco interactions towards effective treatment*  
Presenters: John A. Dani, Marissa Ehinger, Sherry McKee, Dieter Meyerhoff and David Lovinger

**CPDD/INRC/RSA**

**Aqua DEF**  
**3:00 - 5:00 PM**

Chairs: Lara Ray

*Pharmacogenetics of addiction treatment*  
Presenters: Lara Ray, Danielm Roche, Jermaine Jones, Eric Otto Johnson and Jonathan Pollock

**Basic Science**

*100 Repeated exposure to toluene alters the intrinsic excitability of layer V pyramidal neurons in the prefrontal cortex of adolescent rats in a dependent concentration manner*

M. Armenta-Resendiz. Cinvestav, Mexico

*101 MP1104, a potent and long-acting analgesic with mixed kappa and delta opioid receptor agonist activities attenuates cocaine self-administration and drug-seeking behavior in rats*

D. Atigari<sup>1</sup>, R. Uprety<sup>2</sup>, S. Majumdar<sup>2</sup>, B. Kivell<sup>1</sup>. <sup>1</sup>Centre for Biodiscovery and School of Biological Sciences, Victoria University of Wellington, New Zealand; <sup>2</sup>Department of Neurology, Memorial Sloan Kettering Cancer Center, United States

*102 Morphine and fentanyl co-administration increases lethality and serotonin toxicity in mice*

S. Cruz, C. Carranza-Aguilar, A. Hernández-Mendoza, C. López-Rubalcava. Departamento de Farmacobiología, Cinvestav, Mexico

*103 Gray matter volume alterations among cocaine users: A voxel-based morphometry study*

C.V. de Mello<sup>1</sup>, P.D. Gonçalves<sup>2</sup>, F. Duran<sup>3</sup>, H. Oliveira<sup>2</sup>, D. Lima<sup>1</sup>, M. Serpa<sup>1</sup>, A. Malbergier<sup>2</sup>, N. Costa<sup>3</sup>, M. Ometto<sup>1</sup>, R. Amaral<sup>2</sup>, M. Zanetti<sup>3</sup>, T. Chaim<sup>3</sup>, L. Ferreira<sup>3</sup>, M. Cavalett<sup>3</sup>, S. Nicastri<sup>2</sup>, A. De Andrade<sup>2</sup>, G. Busatto<sup>1</sup>, P. Cunha<sup>1</sup>. <sup>1</sup>Departamento de Psiquiatria, Faculdade de Medicina, Universidade de São Paulo (FMUSP), Brazil; <sup>2</sup>Grupo Interdisciplinar de Estudos de Álcool e Drogas, Instituto de Psiquiatria (IPq), Hospital das Clinicas (HC), FMUSP, Brazil; <sup>3</sup>Laboratorio de Neuroimagem, IPq, HC, FMUSP, Brazil

*104 Drug discrimination studies in rats: Impact of the route of administration*

C. Froger-Colléaux, S. Paillard, K. Davoust, S. Pedron, V. Castagné. Porsolt SAS, France

*105 Resting state functional connectivity among inpatients reporting crack use versus snorted cocaine use*

P.D. Gonçalves, L. Sanchez, P. Rosa, H. Oliveira, Jr., D. Lima, C. Mello, R. Amaral, M. Foigel, M. Ometto, L. Sant'Ana, A. Malbergier, S. Nicastri, A. Andrade, G. Busatto, P. Cunha. Institute of Psychiatry, School of Medicine, University of São Paulo, Brazil

*106 Does dopamine transporter activity predict the risk of opioid use disorder or mediate the relationship between novelty seeking and cognitive flexibility in opioid addiction?*

S-Y. Huang<sup>1</sup>, C-S. Liang<sup>2,3</sup>. <sup>1</sup>Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center, Taiwan; <sup>2</sup>Department of Psychiatry, Beitou Branch, Tri-Service General Hospital, Taiwan; <sup>3</sup>Graduate Institute of Medical Sciences, National Defense Medical Center, Taiwan

*107 Striatal functional connectivity in chronic ketamine users: Sex differences and impulsivity*

C-C. Hung<sup>1,2</sup>, S. Zhang<sup>3</sup>, C-M. Chen<sup>4</sup>, J-R. Duann<sup>4,5,6</sup>, C-P. Lin<sup>2</sup>, C-S.R. Li<sup>3,7,8</sup>, T.S-H. Lee<sup>9</sup>. <sup>1</sup>Bali Psychiatric Center, Ministry of Health and Welfare, Taiwan; <sup>2</sup>Institute of Neuroscience, National Yang Ming University, Taiwan; <sup>3</sup>Department of Psychiatry, Yale University, United States; <sup>4</sup>Department of Radiology, China Medical University Hospital, Taiwan; <sup>5</sup>Institute of Cognitive Neuroscience, National Central University, Taiwan; <sup>6</sup>Institute for Neural Computation, University of California San Diego, United States; <sup>7</sup>Department of Neuroscience, Yale University, United States; <sup>8</sup>Beijing Huilongguan Hospital, China; <sup>9</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan

*108 Memantine attenuates reinstatement of heroin seeking induced by heroin or cues in an animal model of relapse*

M. Lai, H. Liu, F. Zhang, W. Zhou. Laboratory of Behavioral Neuroscience, Ningbo Addiction Research and Treatment Center, Ningbo University School of Medicine, China

*109 The effects of chronic ketamine exposure on brain morphology and functional changes in adolescence-onset users*

T. S-H. Lee<sup>1</sup>, C-C. Hung<sup>2,3</sup>, Y.H. Liu<sup>2</sup>, C-C. Huang<sup>2</sup>, C-M. Chen<sup>4</sup>, J-R. Duann<sup>5,6</sup>, C-S.R. Li<sup>7,8</sup>, N.G. Muggleton<sup>5,9,10,11</sup>, W-T. Chen<sup>12</sup>, C-P. Lin<sup>13</sup>. <sup>1</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan; <sup>2</sup>Institute of Neuroscience, National Yang Ming University, Taiwan; <sup>3</sup>Bali Psychiatric Center, Ministry of Health and Welfare, Taiwan; <sup>4</sup>Department of Radiology, China Medical University Hospital, Taiwan; <sup>5</sup>Institute of Cognitive Neuroscience, National Central University, Taiwan; <sup>6</sup>Institute for Neural Computation, University of California San Diego, United States; <sup>7</sup>Department of Psychiatry, Yale University, United States; <sup>8</sup>Department of Neuroscience, Yale University, United States; <sup>9</sup>Brain Research Center, College of Health Science and Technology, National Central University, Taiwan; <sup>10</sup>Institute of Cognitive Neuroscience, University College London, United Kingdom; <sup>11</sup>Goldsmiths, University of London, United Kingdom; <sup>12</sup>School of Nursing, University of California Los Angeles, United States; <sup>13</sup>Brain Research Center, National Yang-Ming University, Taiwan

*110 Disrupted small-world networks in chronic ketamine users*

Y. Liao, J. Tang. Department of Psychiatry, Second Xiangya Hospital of Central South University, China

*111 The orexin (hypocretin) receptor 2 gene polymorphism Val308Ile associated with nicotine dependence*

D. Nishizawa<sup>1</sup>, S. Kasai<sup>1</sup>, J. Hasegawa<sup>1</sup>, N. Sato<sup>2,3</sup>, H. Yamada<sup>3</sup>, F. Tanioka<sup>4</sup>, M. Nagashima<sup>5</sup>, H. Ujike<sup>6,7</sup>, R. Hashimoto<sup>8,9</sup>, T. Arai<sup>10</sup>, S. Mori<sup>11</sup>, M. Sawabe<sup>12</sup>, M. Naka-Mieno<sup>13</sup>, Y. Yamada<sup>14</sup>, M. Yamada<sup>15</sup>, N. Sato<sup>15</sup>, M. Muramatsu<sup>15</sup>, M. Tanaka<sup>16,17</sup>, M. Hayashida<sup>18</sup>, H. Sugimura<sup>3</sup>, K. Ikeda<sup>1,7</sup>. <sup>1</sup>Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Japan; <sup>2</sup>Department of Clinical Nursing, School of Medicine, Hamamatsu University, Japan; <sup>3</sup>Department of Tumor Pathology, School of Medicine, Hamamatsu University, Japan; <sup>4</sup>Department of Pathology, Iwata City Hospital, Japan; <sup>5</sup>Department of Surgery, Sakura Medical Center, Toho University, Japan; <sup>6</sup>Ujike Nishiguchi Clinic, Japan; <sup>7</sup>Japanese Genetics Initiative for Drug Abuse, Japan; <sup>8</sup>Department of Psychiatry, Graduate School of Medicine, Osaka University, Japan; <sup>9</sup>Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, Osaka University, Kanazawa University, Hamamatsu University, Chiba University, and Fukui University, Japan; <sup>10</sup>Department of Pathology, Tokyo Metropolitan Geriatric Hospital, Japan; <sup>11</sup>Center for Promotion of Clinical Investigation, Tokyo Metropolitan Geriatric Hospital, Japan; <sup>12</sup>Department of Molecular-Genetic Sciences, Division of Biomedical Laboratory Sciences, Graduate School of Health Care Sciences, Tokyo Medical and Dental University, Japan; <sup>13</sup>Department of Medical Informatics, Center for Information, Jichi Medical University, Japan; <sup>14</sup>Department of Human Functional Genomics, Life Science Research Center, Mie University, Japan; <sup>15</sup>Department of Molecular Epidemiology, Medical Research Institute, Tokyo Medical and Dental University, Japan; <sup>16</sup>Department of Genomics for Longevity and Health, Tokyo Metropolitan Institute of Gerontology, Japan; <sup>17</sup>Department of Clinical Laboratory, Tokyo Metropolitan Geriatric Hospital, Japan; <sup>18</sup>Department of Anesthesiology and Pain Medicine, Juntendo University School of Medicine, Japan

*112 Looking beyond primary reinforcement to examine self-medication of nicotine in schizophrenia*  
M. Shoaib. Institute of Neuroscience, Medical School, Newcastle University, United Kingdom

*113 The effects of synthetic cannabinoids on executive function and related brain activity in fMRI*  
A. Weinstein<sup>1</sup>, A. Livny<sup>2</sup>, K. Cohen<sup>1</sup>, N. Tik<sup>2</sup>, P. Rosca<sup>3</sup>. <sup>1</sup>Department of Behavioral Science, Ariel University, Israel; <sup>2</sup>The MRI Unit, Department of Diagnostic Imaging, Sheba Medical Center, Israel; <sup>3</sup>Department for the Treatment of Substance Abuse, Ministry of Health, Israel

*114 Tat-GluR23Y peptide disrupts methamphetamine-associated memory and reduces long-term relapse*

C. Yang<sup>1,2,\*</sup>, C. Dong<sup>3,\*</sup>, Y.T. Wang<sup>4</sup>, X. Zhang<sup>1,2</sup>, W. Hao<sup>1,2</sup>. <sup>1</sup>Department of Psychiatry, The Second Xiangya Hospital, Central South University, China; <sup>2</sup>Mental Health Institute of the Second Xiangya Hospital, Central South University, Chinese National Clinical Research Center on Mental Disorders (Xiangya), Chinese National Technology Institute on Mental Disorders, Hunan Key Laboratory of Psychiatry and Mental Health, China; <sup>3</sup>Tianjin Mental Health Centre, Tianjin Anding Hospital, China; <sup>4</sup>Brain Research Center, The University of British Columbia, Canada. \*These authors contributed equally to this work.

115 *Linking cell types defined by epigenetic profiling to neural circuits*

Z.Z. Zhang<sup>1\*</sup>, E.J. Kim<sup>2\*</sup>, J. Zhou<sup>1,3</sup>, D. Le<sup>1,4</sup>, T. Ito-Cole<sup>2</sup>, M.C. Ku<sup>5</sup>, R. Castanon<sup>1</sup>, M. Hu<sup>4</sup>, J.R. Nery<sup>1</sup>, M. Jacobs<sup>2</sup>, E.M. Callaway<sup>2\*</sup>, J.R. Ecker<sup>1,6\*</sup>. <sup>1</sup>Genomic Analysis Laboratory, The Salk Institute for Biological Studies, United States; <sup>2</sup>Systems Neurobiology Laboratories, The Salk Institute for Biological Studies, United States; <sup>3</sup>Bioinformatics Program, University of California San Diego, United States; <sup>4</sup>Division of Biological Sciences, University of California San Diego, United States; <sup>5</sup>Next Generation Sequencing Core, The Salk Institute for Biological Studies, United States; <sup>6</sup>Howard Hughes Medical Institute, The Salk Institute for Biological Studies, United States. \*These authors contributed equally to this work.

**Epidemiology**

200 *Cognitive impairment and tramadol dependence*

M. Abdelghani, M. Bassiony, U. Youssef, M. Said, G. Salah Eldeen, H. El-Gohary, A. Abdalla, D. Ibrahim. Department of Psychiatry, Zagazig University, Egypt

201 *Khat (Catha edulis) use and the occurrence of psychotic symptoms in the general population in southwestern Ethiopia: Suggestive evidence for sensitization by traumatic experiences*

K. Adorjan<sup>1,2,3</sup>, M. Odenwald<sup>4,5</sup>, M. Widmann<sup>4,5</sup>, M. Tesfaye<sup>6</sup>, F. Tessema<sup>7</sup>, S. Toennes<sup>8</sup>, S. Suleman<sup>9</sup>, S. Papiol<sup>1</sup>, M. Soboka<sup>6</sup>, Z. Mekonnen<sup>10</sup>, B. Rockstroh<sup>4</sup>, M. Rietschel<sup>11</sup>, O. Pogarell<sup>2</sup>, E. Susser<sup>12,13</sup>, T.G. Schulze<sup>1</sup>. <sup>1</sup>Institute of Psychiatric Phenomics and Genomics, Germany; <sup>2</sup>Department of Psychiatry and Psychotherapy, Ludwig Maximilians University Munich, Germany; <sup>3</sup>Center for International Health, Ludwig Maximilians University Munich, Germany; <sup>4</sup>Department of Psychology, University of Konstanz, Germany; <sup>5</sup>Vivo International e.V., Germany; <sup>6</sup>Department of Psychiatry, Jimma University, Ethiopia; <sup>7</sup>Department of Epidemiology, Jimma University, Ethiopia; <sup>8</sup>Department of Forensic Toxicology, Goethe University, Germany; <sup>9</sup>School of Pharmacy, Jimma University Institute of Health, Ethiopia; <sup>10</sup>Department of Medical Laboratory Sciences and Pathology, Jimma University, Ethiopia; <sup>11</sup>Department of Genetic Epidemiology in Psychiatry, Central Institute of Mental Health, Medical Faculty Mannheim, University of Heidelberg, Germany; <sup>12</sup>Mailman School of Public Health, Columbia University, United States; <sup>13</sup>New York State Psychiatric Institute, United States

202 *An exploratory analysis of gender differences of smokable cocaine users accessing treatment at 4-month post-treatment follow-up*

G. Ahumada<sup>1</sup>, M. Hynes<sup>2</sup>. Red Latinoamericana de Investigadores en Drogas (REDLA), Inter-American Observatory on Drugs, Inter-American Drug Abuse Control Commission (CICAD), Argentina; <sup>2</sup>Organization of American States, CICAD, United States

203 *Knowledge, attitudes, and practices of shisha (hookah) smoking among female smokers in Gaza Strip (Palestinian Territories)*

M.F. AlAfifi<sup>1</sup>, M. Saqqa<sup>2</sup>, M. Shihada<sup>1</sup>. <sup>1</sup>Substance Abuse Research Center, Gaza, Palestinian Territories; <sup>2</sup>Al-Azhar University–Gaza, Palestinian Territories

204 *Prevalence of alcohol, tobacco, and other drug use among university students in Mexico City*

M. Azcárraga-Quiza<sup>1</sup>, D. Aguilar<sup>2</sup>, E. García<sup>1</sup>, A. Villa<sup>3</sup>, G. Obrador<sup>2</sup>. <sup>1</sup>Centro Universitario de Salud y Bienestar, Universidad Panamericana, Mexico; <sup>2</sup>Facultad de Ciencias de la Salud, Universidad Panamericana, Mexico; <sup>3</sup>Public Health Department, Universidad Panamericana, Mexico

- 205 *Assessing perceptions on drug policies: Insights from a population-based national household survey*  
F.I. Bastos<sup>1</sup>, C. Coutinho<sup>1</sup>, L. Toledo<sup>1</sup>, J. Corrêa<sup>1</sup>, N.B. Reis<sup>2</sup>, M.T.L. Vasconcellos<sup>3</sup>, R. De Boni<sup>4</sup>. <sup>1</sup>Health Information Laboratory, Institute of Communication and Technological Information in Health, Oswaldo Cruz Foundation (FIOCRUZ), Brazil; <sup>2</sup>National Institute of Cancer, Ministry of Health, Brazil; <sup>3</sup>National School of Statistical Sciences, Brazilian Institute of Geography and Statistics, Brazil; <sup>4</sup>National Institute of Infectology Evandro Chagas, FIOCRUZ, Brazil
- 206 *Assessment of substance use among Ambo University students, Ethiopia*  
T.F. Bedane. School of Psychology, College of Education and Behavioral Studies, Addis Ababa University, Ethiopia; Ambo University, Ethiopia
- 207 *Substance use problems among residents living in the slums of New Delhi*  
S. Bhattacharjee. Society for Promotion of Youth and Masses, India; Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States
- 208 *Relationship between psychopathy, anxiety, and anxiety sensitivity in a sample of heroin and amphetamine users*  
K. Bozgunov<sup>1</sup>, E. Psederska<sup>1</sup>, G. Vasilev<sup>1</sup>, D. Nedelchev<sup>1</sup>, J. Vassileva<sup>2</sup>. <sup>1</sup>Bulgarian Addictions Institute, Bulgaria; <sup>2</sup>Departments of Psychiatry and Psychology, Institute for Drug and Alcohol Studies, Virginia Commonwealth University, United States
- 209 *Hepatitis C virus status and psychiatric burden of opioid-dependent adults and young offenders in Austrian prisons*  
L. Brandt<sup>1</sup>, M. Silbernagl<sup>2</sup>, R. Slamanig<sup>2</sup>, G. Fischer<sup>2</sup>. <sup>1</sup>Department for Applied Psychology, University of Vienna, Austria; <sup>2</sup>Center for Public Health, Medical University of Vienna, Austria
- 210 *Relationship between cannabis use and mental health conditions as recorded in electronic health records of Community Health Centre patients*  
A. Campbell<sup>1</sup>, D. McCarty<sup>2</sup>, S.R. Bailey<sup>3</sup>. <sup>1</sup>Queens University Belfast, United Kingdom; <sup>2</sup>Oregon Health & Science University (OHSU)–Portland State University School of Public Health, United States; <sup>3</sup>School of Family Medicine, OHSU, United States
- 211 *Hepatitis screening through the analysis of liver enzymes in drug users*  
O. Campollo<sup>1,2</sup>, A. Panduro<sup>2</sup>, S. Roman<sup>2</sup>, G. Hernández<sup>1</sup>. <sup>1</sup>Centro de Estudios de Alcoholismo y Adicciones, Departamento Clínicas Médicas, CUCS, Universidad de Guadalajara, Mexico; <sup>2</sup>Departamento Biología Molecular, Antiguo Hospital Civil de Guadalajara, Mexico
- 212 *HIV/hepatitis C virus risk in Colombia among people who inject drugs and their networks*  
S. Campos<sup>1</sup>, P. Mateu-Gelabert<sup>2</sup>, K. Quinn<sup>1</sup>. <sup>1</sup>Rory Meyers College of Nursing, New York University, United States; <sup>2</sup>National Development and Research Institutes, Inc., United States
- 213 *County-level association between medical marijuana laws and prescription opioid overdose deaths in the United States*  
A. Castillo-Carniglia<sup>1</sup>, W. Ponicki<sup>2</sup>, P. Gruenewald<sup>2</sup>, J. Santaella-Tenorio<sup>3</sup>, J.H. Kim<sup>3</sup>, D.S. Fink<sup>3</sup>, C. Davis<sup>4</sup>, S.S. Martins<sup>3</sup>, V. Pear<sup>1</sup>, S.G. Henry<sup>5</sup>, G.J. Wintemute<sup>1</sup>, K.M. Keyes<sup>3</sup>, M. Cerdá<sup>1</sup>. <sup>1</sup>Violence Prevention Research Program, University of California Davis, United States; <sup>2</sup>Prevention Research Center, Pacific Institute for Research and Evaluation, United States; <sup>3</sup>Department of Epidemiology, Columbia University, United States; <sup>4</sup>Network for Public Health Law, United States; <sup>5</sup>Department of Internal Medicine, University of California Davis, United States



- 214 *Nonfatal overdose prevalence among people who inject drugs: A multistage systematic review and meta-analysis of recent evidence*  
S. Colledge<sup>1</sup>, A. Peacock<sup>1</sup>, J. Leung<sup>1</sup>, J. Grebely<sup>2</sup>, M. Hickman<sup>3</sup>, M. Farrell<sup>1</sup>, S. Larney<sup>1</sup>, L. Degenhardt<sup>1</sup>. <sup>1</sup>National Drug and Alcohol Research Centre, University of New South Wales, Australia; <sup>2</sup>Kirby Institute, University of New South Wales, Australia; <sup>3</sup>University of Bristol, United Kingdom
- 215 *Sociodemographic profile of crack users in National Household Survey on Substance Use: Brazil, 2015*  
C. Coutinho<sup>1</sup>, L. Toledo<sup>1</sup>, J. Corrêa<sup>1</sup>, N.B. Reis<sup>2</sup>, R. De Boni<sup>3</sup>, M.T.L. Vasconcellos<sup>4</sup>, F.I. Bastos<sup>1</sup>. <sup>1</sup>Health Information Laboratory, Institute of Communication and Technological Information in Health, Oswaldo Cruz Foundation (FIOCRUZ), Brazil; <sup>2</sup>National Institute of Cancer, Ministry of Health, Brazil; <sup>3</sup>National Institute of Infectology Evandro Chagas, FIOCRUZ, Brazil; <sup>4</sup>National School of Statistical Sciences, Brazilian Institute of Geography and Statistics, Brazil
- 216 *Noninjected substance use and HIV status in the III Brazilian Household Survey on Substance Use*  
R. De Boni<sup>1</sup>, M.T.L. Vasconcellos<sup>2</sup>, P.N. Silva<sup>2</sup>, N. Bertoni<sup>3</sup>, C.F.S. Coutinho<sup>4</sup>, J.C. Mota<sup>4</sup>, A.N. Silva<sup>2</sup>, L.A. Matzenbacher<sup>2</sup>, F.I. Bastos<sup>4</sup>. <sup>1</sup>National Institute of Infectology Evandro Chagas, Oswaldo Cruz Foundation (FIOCRUZ), Brazil; <sup>2</sup>National School of Statistical Sciences, Brazilian Institute of Geography and Statistics, Brazil; <sup>3</sup>Brazilian National Cancer Institute, Ministry of Health, Brazil; <sup>4</sup>Institute of Communication and Technological Information in Health, FIOCRUZ, Brazil
- 217 *Marijuana use and dependence rates in adolescent residents of Brazil and the United States*  
F. De Conto<sup>1</sup>, C.S. Madruga<sup>2</sup>, R. de Cerqueira Campos<sup>3</sup>, R. Laranjeira<sup>4</sup>, D. Svikis<sup>5</sup>. <sup>1</sup>Florianopolis City Department of Health, Brazil; <sup>2</sup>Federal University of São Paulo, Brazil; <sup>3</sup>Mental Health Department, Brazil; <sup>4</sup>Federal University of São Paulo, Brazil; <sup>5</sup>Virginia Commonwealth University, United States
- 218 *Prevalence of substance use and suicide attempts among adolescent girls in an institutional setting*  
P. Dolezalova, L. Kazmer, B. Orlíkova, L. Csemy. National Institute of Mental Health in Klecany, Czech Republic
- 219 *Linking Global Youth Tobacco Survey data to the World Health Organization Framework Convention on Tobacco Control: The case for Egypt*  
O. El-Shahawy<sup>1,2,3</sup>, N. Nicksic<sup>4,5</sup>, C. Ramôa<sup>2</sup>, M. Jawad<sup>6</sup>, R. Niaura<sup>7</sup>, D. Abrams<sup>7</sup>, S. Sherman<sup>1,2,7</sup>. <sup>1</sup>Department of Population Health, School of Medicine, New York University, United States; <sup>2</sup>Public Health Research Center, New York University-Abu Dhabi, United Arab Emirates; <sup>3</sup>Faculty of Medicine, Ain Shams University, Egypt; <sup>4</sup>Department of Health Behavior and Policy, Virginia Commonwealth University (VCU), United States; <sup>5</sup>Department of Psychology, Center for the Study of Tobacco Products, VCU, United States; <sup>6</sup>Public Health Policy Evaluation Unit, School of Public Health, Imperial College London, United Kingdom; <sup>7</sup>College of Global Public Health, New York University, United States

- 220 *Frequency of psychiatric disorders and impulsivity among drug-using drivers*  
L. Fara, J. Scherer, D. Silvello, V. Volpato, V. Roglio, F. Ornell, L. von Diemen, F. Kessler, F. Pechansky. Center for Drug and Alcohol Research, Collaborating Center on Alcohol and Drugs – HCPA/SENAD, Hospital de Clínicas de Porto Alegre, Federal University of Rio Grande do Sul, Brazil
- 221 *Using the Network for the Improvement of Addiction Treatment (NIATx) for performance improvement in Ukraine*  
T. Fomenko<sup>1</sup>, A. Meteliuk<sup>1</sup>, A. Mazhnaya<sup>1</sup>, L. Madden<sup>2,3</sup>, S. Farnum<sup>2</sup>, R. Marcus<sup>3</sup>, S. Filippovych<sup>1</sup>, T. Grytsenko<sup>4</sup>, F.L. Altice<sup>3,5</sup>. <sup>1</sup>ICF “Alliance for Public Health,” Ukraine; <sup>2</sup>APT Foundation, United States; <sup>3</sup>AIDS Program, Section of Infectious Diseases, Yale School of Medicine, United States; <sup>4</sup>Public Health Center of the Ministry of Health of Ukraine, Ukraine; <sup>5</sup>Division of Epidemiology of Microbial Diseases, Yale School of Public Health, United States
- 222 *Frequency of drug-associated injuries in adult patients presenting to Komfo Anokye Teaching Hospital Department of Emergency Medicine in Ghana*  
P. Forson<sup>1,2</sup>, G. Oduro<sup>1,2</sup>, J. Bonney<sup>1,2</sup>, S. Cobbolt<sup>2</sup>, J. Sarfo-Frimpong<sup>2</sup>, C. Boyd<sup>3</sup>, R. Maio<sup>3</sup>. <sup>1</sup>Department of Emergency Medicine, Komfo Anokye Teaching Hospital (KATH), Ghana; <sup>2</sup>Emergency Medicine Research Office, KATH, Ghana; <sup>3</sup>Injury Prevention Centre, University of Michigan, United States
- 223 *Recent cannabis use and advanced liver fibrosis among HIV-infected heavy drinkers*  
D. Fuster<sup>1</sup>, K. So-Armah<sup>2</sup>, D.M. Cheng<sup>2,3</sup>, S.M. Coleman<sup>4</sup>, N. Gnatenko<sup>2</sup>, D. Lioznov<sup>5</sup>, E.M. Krupitsky<sup>6</sup>, M.S. Freiberg<sup>7</sup>, J.H. Samet<sup>2</sup>. <sup>1</sup>Internal Medicine Service, Addiction Unit, Hospital Universitari Germans Trias I Pujol, Universitat Autònoma de Barcelona, Spain; <sup>2</sup>Clinical Addiction Research and Education Unit, General Internal Medicine Division, Boston Medical Center, Boston University, United States; <sup>3</sup>Biostatistics Department, School of Public Health, Boston University, United States; <sup>4</sup>Data Coordinating Center, School of Public Health, Boston University, United States; <sup>5</sup>Department of Infectious Diseases and Epidemiology, First Pavlov State Medical University of St. Petersburg, Russia; <sup>6</sup>Laboratory of Clinical Psychopharmacology of Addictions, First Pavlov State Medical University of St. Petersburg, Russia; <sup>7</sup>Cardiovascular Medicine Division, Vanderbilt University Medical Center, United States
- 224 *HIV risk and treatment engagement among users of the heroin-based street drug whoonga in South Africa*  
D. Grelotti<sup>1</sup>, C. du Toit<sup>2</sup>, L. Obermeit<sup>3</sup>, S. Ramcharan<sup>2</sup>, D. Pillai<sup>2</sup>, N. Mosery<sup>4</sup>, J. Smit<sup>4</sup>, P. Smith<sup>5</sup>, D. Bangsberg<sup>6</sup>, S. Safren<sup>7</sup>, K. Mayer<sup>8</sup>, M. Mimiaga<sup>9</sup>. <sup>1</sup>Department of Psychiatry, University of California San Diego, United States; <sup>2</sup>SANCA Durban Alcohol and Drug Centres, South Africa; <sup>3</sup>Department of Psychiatry, Massachusetts General Hospital, United States; <sup>4</sup>MatCH Research, University of the Witwatersrand, South Africa; <sup>5</sup>Department of Medicine, University of Cape Town, South Africa; <sup>6</sup>Oregon Health & Science University–Portland State University School of Public Health, United States; <sup>7</sup>Department of Psychology, University of Miami, United States; <sup>8</sup>Department of Medicine, Harvard Medical School, United States; <sup>9</sup>Department of Epidemiology, Brown University, United States

- 225 *Hepatitis C virus status awareness and confirmation of test results among people who inject drugs in Ukraine*  
 O. Iakunchykova<sup>1</sup>, A. Meteliuk<sup>1</sup>, A. Zelenev<sup>2</sup>, A. Mazhnaya<sup>1,3</sup>, M. Tracy<sup>4</sup>, F. Altice<sup>2,5,6</sup>. <sup>1</sup>ICF “Alliance for Public Health,” Ukraine; <sup>2</sup>Section of Infectious Diseases, Yale School of Medicine, United States; <sup>3</sup>Department of Health, Behavior and Society, Bloomberg School of Public Health, Johns Hopkins University, United States; <sup>4</sup>Department of Epidemiology and Biostatistics, School of Public Health, State University of New York at Albany, United States; <sup>5</sup>Division of Epidemiology of Microbial Diseases, Yale School of Public Health, United States; <sup>6</sup>Centre of Excellence on Research in AIDS, University of Malaya, Malaysia
- 226 *Gabapentin and pregabalin abuse among EUROPAD subjects*  
 J. Iwanicki<sup>1</sup>, M. Hennessy<sup>1</sup>, S. Severtson<sup>1</sup>, K. McBride<sup>1</sup>, J. Schwarz<sup>1</sup>, N. Scherbaum<sup>2</sup>, D. Hill<sup>3</sup>, R. Dart<sup>1</sup>, I. Maremmanni<sup>4,5</sup>. <sup>1</sup>RADARS® System, Rocky Mountain Poison and Drug Center, Denver Health and Hospital Authority, United States; <sup>2</sup>LVR-Hospital Essen, Department of Addictive Behaviour and Addiction Medicine, University of Duisburg-Essen, Germany; <sup>3</sup>National Health Service Lanarkshire, Motherwell, United Kingdom; <sup>4</sup>Associazione per l’Utilizzo delle Conoscenze Neuroscientifiche a fini Sociali, Italy; <sup>5</sup>Department of Neurosciences, Santa Chiara University Hospital, Italy
- 227 *Is suicidality linked to prescription drug abuse in U.S. adults with a history of chronic pain?*  
 A. Kenawy<sup>1</sup>, M. Abdelghani<sup>2</sup>. <sup>1</sup>Department of Anesthesia and Pain Management, College of Medicine, Zagazig University, Egypt; <sup>2</sup>Department of Psychiatry, College of Medicine, Zagazig University, Egypt
- 228 *Meta-analysis and systematic review of the dimensions of anger in users of psychoactive substances*  
 H.V. Laitano, F. Pechansky, F.H.P. Kessler, T. Hartmann. Hospital de Clínicas de Porto Alegre, Federal University of Rio Grande do Sul, Brazil
- 229 *National population sizes of people who inject drugs living with HIV*  
 S. Larney<sup>1</sup>, J. Leung<sup>1</sup>, A. Peacock<sup>1</sup>, S. Colledge<sup>1</sup>, J. Grebely<sup>2</sup>, E. Cunningham<sup>2</sup>, L. Degenhardt<sup>1</sup>. <sup>1</sup>National Drug and Alcohol Research Centre, University of New South Wales (UNSW), Australia; <sup>2</sup>Kirby Institute, UNSW, Australia
- 230 *Polydrug use among heroin injectors in Hanoi, Vietnam*  
 G.M. Le<sup>1</sup>, T. Dao<sup>1</sup>, G. Yu<sup>2</sup>, D. Feaster<sup>3</sup>, L. Rosen-Metsch<sup>4</sup>. <sup>1</sup>Center for Training and Research on Substance Abuse-HIV, Hanoi Medical University, Vietnam; <sup>2</sup>Center for Drug Use and HIV Research, College of Nursing, New York University, United States; <sup>3</sup>Department of Public Health Sciences, Miller School of Public Health, University of Miami, United States; <sup>4</sup>Department of Sociomedical Sciences, Mailman School of Public Health, Columbia University, United States

- 231 *Gender differences in HIV, anti-hepatitis C virus, and hepatitis B virus surface antigen prevalence among people who inject drugs: A multistage systematic review and meta-analysis of global evidence*  
J. Leung<sup>1</sup>, A. Peacock<sup>1</sup>, S. Colledge<sup>1</sup>, J. Grebely<sup>2</sup>, E.B. Cunningham<sup>2</sup>, M. Hickman<sup>3</sup>, P. Vickerman<sup>3</sup>, J. Stone<sup>3</sup>, A. Trickey<sup>3</sup>, K. Dumchev<sup>4</sup>, M. Lynskey<sup>5</sup>, L. Hines<sup>5</sup>, P. Griffiths<sup>6</sup>, R.P. Mattick<sup>1</sup>, S. Larney<sup>1</sup>, L. Degenhardt<sup>1</sup>. <sup>1</sup>National Drug and Alcohol Research Centre, University of New South Wales (UNSW), Australia; <sup>2</sup>Kirby Institute, UNSW, Australia; <sup>3</sup>University of Bristol, United Kingdom; <sup>4</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>5</sup>King's College London, United Kingdom; <sup>6</sup>European Monitoring Centre for Drugs and Drug Addiction, Portugal
- 232 *Sexual risk associated with having sex with men who use methamphetamines in a Mexico-U.S. border city*  
O. Loza<sup>1</sup>, J. Ferreira-Pinto<sup>2</sup>, M.E. Ramos Rodriguez<sup>3</sup>, R. Ramos<sup>4</sup>. <sup>1</sup>Department of Public Health Sciences, The University of Texas at El Paso, United States; <sup>2</sup>Center for Interdisciplinary Health Research and Evaluation, The University of Texas at El Paso, United States; <sup>3</sup>Programa Compañeros, A.C., Mexico; <sup>4</sup>Alliance of Border Collaboratives, United States
- 233 *Drug-related mortality by immigration status in Sweden: A national longitudinal registry study*  
L. Lundgren<sup>1</sup>, M. Padyab<sup>2</sup>, B. Armelius<sup>3</sup>, K. Armelius<sup>3</sup>, N. Lucero<sup>1</sup>, A. Gronlund<sup>4</sup>, S. Nyström<sup>5</sup>, I. Krull<sup>1</sup>. <sup>1</sup>Graduate School of Social Work, Butler Institute for Families, University of Denver, United States; <sup>2</sup>Department of Statistics, Umeå University, Sweden; <sup>3</sup>Department of Psychology, Umeå University, Sweden; <sup>4</sup>Department of Social Work, Umeå University, Sweden; <sup>5</sup>National Board of Health and Welfare-Stockholm, Sweden
- 234 *Latent impulsivity subtypes in substance use disorders and interactions with internalizing and externalizing co-occurring disorders*  
R. Marín-Navarrete<sup>1,2</sup>, A. Toledo-Fernández<sup>2</sup>, L. Villalobos-Gallegos<sup>2</sup>, C. Roncero<sup>3,4</sup>, N. Szerman<sup>4,5</sup>, M.E. Medina-Mora<sup>1</sup>. <sup>1</sup>National Institute of Psychiatry Ramón de la Fuente Muñiz, México; <sup>2</sup>Clinical Trials Unit on Addiction and Mental Health, National Institute of Psychiatry Ramón de la Fuente Muñiz, México; <sup>3</sup>Psychiatric Service, Health Care Complex and Institute of Biomedicine of Salamanca, University of Salamanca, Spain; <sup>4</sup>Spanish Society on Dual Disorders, Spain; <sup>5</sup>Gregorio Marañón University Hospital, Spain
- 235 *Drug use during incarceration in Ukraine: A myth or a hotbed of hepatitis C virus?*  
A. Meteliuk<sup>1</sup>, M. Tracy<sup>2</sup>, A. Mazhnaya<sup>3</sup>, A. Zelenev<sup>4</sup>, S. Filippovych<sup>1</sup>, F.L. Altice<sup>4,5</sup>. <sup>1</sup>ICF "Alliance for Public Health," Ukraine; <sup>2</sup>Department of Epidemiology and Biostatistics, School of Public Health, State University of New York, United States; <sup>3</sup>Department of Health, Behavior and Society, Bloomberg School of Public Health, Johns Hopkins University, United States; <sup>4</sup>AIDS Program, Section of Infectious Diseases, Yale School of Medicine, United States; <sup>5</sup>Division of Epidemiology of Microbial Diseases, Yale School of Public Health, United States
- 236 *HIV, hepatitis C virus, and other risks associated with hard drug use among young drug users in St. Petersburg, Russia: Results of a pilot study*  
P. Meylakhs<sup>1</sup>, A. Meylakhs<sup>1</sup>, S.R. Friedman<sup>2</sup>, D.C. Ompad<sup>3</sup>. <sup>1</sup>International Centre for Health Economics, Management and Policy, Higher School of Economics, National Research University, Russia; <sup>2</sup>National Development and Research Institutes, Inc., United States; <sup>3</sup>New York University, United States

- 237 *Drug abuse and unsafe abortion among teenage girls in Nigeria*  
I. Molobe. Unified Initiative for a Drug-Free Nigeria, Nigeria
- 238 *Cost-effectiveness of expanding opioid agonist therapy in Ukraine: Dynamic modeling analysis*  
O. Morozova<sup>1</sup>, F.W. Crawford<sup>1,2</sup>, S. Dvoriak<sup>3</sup>, F.L. Altice<sup>1</sup>. <sup>1</sup>Yale School of Public Health and Yale School of Medicine, United States; <sup>2</sup>Yale School of Management, United States; <sup>3</sup>Ukrainian Institute for Public Health Policy, Ukraine
- 239 *Prevalence of substance use in male and female students in government and private schools in Karachi*  
F. Naveed, N. Aslam. Drug Free Pakistan Foundation, Pakistan
- 240 *Factors influencing the appearance of methamphetamine-related psychosis*  
L. Nie<sup>1</sup>, Z. Zhao<sup>2</sup>, X. Wen<sup>3</sup>, W. Luo<sup>3</sup>, T. Ju<sup>4</sup>, A. Ren<sup>3</sup>, B. Wu<sup>4</sup>, E.D. London<sup>5</sup>. <sup>1</sup>Mental Health Center, West China Hospital of Sichuan University, China; <sup>2</sup>Detoxification and Narcotics Control Department of Sichuan Province, China; <sup>3</sup>Sichuan Provincial Compulsory Drug Addiction Treatment Agency for Males, China; <sup>4</sup>Hospital of Sichuan Provincial Compulsory Drug Addiction Treatment Agency for Females, China; <sup>5</sup>Department of Psychiatry and Biobehavioral Sciences, Department of Molecular and Medical Pharmacology, and the Brain Research Institute, David Geffen School of Medicine, University of California Los Angeles, United States
- 241 *Cigarette smoking and quality of life among women attending an HIV outpatient clinic in Lagos*  
A.M. Ojo<sup>1</sup>, A.O. Ajayi<sup>2</sup>, A.O. Adegbohun<sup>3</sup>. <sup>1</sup>Substance Abuse Treatment Unit, Federal Neuro-Psychiatric Hospital-Yaba, Nigeria; <sup>2</sup>Psychology Department, Federal Neuro-Psychiatric Hospital-Yaba, Nigeria; <sup>3</sup>General Adult Psychiatry, Federal Neuro-Psychiatric Hospital-Yaba, Nigeria
- 242 *Psychological well-being and substance use among adolescents in a public senior secondary school in Lagos, Nigeria*  
C. Okonkwo. Federal Neuro-Psychiatric Hospital-Yaba, Nigeria
- 243 *Concurrent polydrug use of alcohol and other drugs among public-sector employees in Kenya: Prevalence, correlates, and consequences*  
P. Okwarah<sup>1,2</sup>, R. Gakunju<sup>2</sup>, S. Adhiambo<sup>3</sup>, M. Ngethe<sup>2</sup>, P. Gaku<sup>2</sup>. <sup>1</sup>Department of Public Health, Jomo Kenyatta University of Agriculture and Technology, Kenya; <sup>2</sup>Research and Policy Department, Movement Against Substance Abuse in Africa, Kenya; <sup>3</sup>Clinical Department, Kenya Institute of Business and Counselling Studies, Kenya
- 244 *Differential effects of crack cocaine and crack cocaine plus cannabis on neurocognitive functioning*  
H. Oliveira<sup>1,2</sup>, P.D. Gonçalves<sup>1,2,3</sup>, M. Ometto<sup>2</sup>, B. Santos<sup>4</sup>, A. Malbergier<sup>1</sup>, R. Amaral<sup>1</sup>, S. Nicastri<sup>2</sup>, A. Andrade<sup>1</sup>, P. Cunha<sup>1,2</sup>. <sup>1</sup>Interdisciplinary Group of Studies on Alcohol and Drugs, Institute of Psychiatry (IPq), School of Medicine, University of São Paulo (USP), Brazil; <sup>2</sup>Laboratory of Psychiatric Neuroimaging, Department of Psychiatry, School of Medicine, USP, Brazil; <sup>3</sup>Psychology and Neuropsychology Service, IPq, School of Medicine, USP, Brazil; <sup>4</sup>School of Nursing, USP, Brazil
- 245 *Trajectories of injection drug use and related risks among people who inject drugs in Northern Mexico*  
A. Ospina-Escobar<sup>1</sup>, F. Juárez<sup>1</sup>, C. Magis<sup>2</sup>, S. Strathdee<sup>3</sup>, D. Werb<sup>3</sup>. <sup>1</sup>El Colegio de Mexico, Mexico; <sup>2</sup>Centro Nacional para la Prevención y Control del SIDA (CENSIDA), Mexico; <sup>3</sup>Division of Global Public Health, University of California San Diego, United States

- 246 *Use of opioids and stimulants by people who inject drugs: A multistage systematic review and meta-analysis of global evidence*  
A. Peacock<sup>1</sup>, A. Trickey<sup>2</sup>, S. Larney<sup>1</sup>, S. Colledge<sup>1</sup>, J. Leung<sup>3</sup>, J. Grebely<sup>4</sup>, E.B. Cunningham<sup>4</sup>, M. Hickman<sup>2</sup>, J. Stone<sup>1</sup>, P. Vickerman<sup>2</sup>, L. Degenhardt<sup>1</sup>. <sup>1</sup>National Drug and Alcohol Research Centre, University of New South Wales (UNSW), Australia; <sup>2</sup>School of Social and Community Medicine, University of Bristol, United Kingdom; <sup>3</sup>School of Public Health, University of Queensland, Australia; <sup>4</sup>Kirby Institute, UNSW, Australia
- 247 *User experience of four point-of-collection oral fluid devices by Brazilian traffic agents: Preliminary findings*  
F. Pechansky, J. Scherer, V. Roglio, Y. Telles, J. Schuch, R. Silvestrin, T. Sousa. Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Brazil
- 248 *Relationship between substance use and sexual network characteristics among men who have sex with men and transgender women in Tijuana, Mexico*  
H. Pines<sup>1</sup>, R. Patrick<sup>1</sup>, M. Morris<sup>2</sup>, S. Semple<sup>3</sup>, A. Harvey-Vera<sup>1</sup>, J. Fowler<sup>1</sup>, G. Rangel<sup>4</sup>, T. Patterson<sup>3</sup>. <sup>1</sup>Department of Medicine, University of California San Diego, United States; <sup>2</sup>Departments of Sociology and Statistics, University of Washington, United States; <sup>3</sup>Department of Psychiatry, University of California San Diego, United States; <sup>4</sup>U.S.-Mexico Border Health Commission, Mexico
- 249 *Personality correlates of HIV risk behaviors among women with substance use disorders*  
E. Psederska<sup>1</sup>, K. Bozgunov<sup>1</sup>, G. Vasilev<sup>1</sup>, D. Nedelchev<sup>1</sup>, J. Vassileva<sup>2</sup>. <sup>1</sup>Bulgarian Addictions Institute, Bulgaria; <sup>2</sup>Departments of Psychiatry and Psychology, Institute for Drug and Alcohol Studies, Virginia Commonwealth University, United States
- 250 *Substance use and suicidal ideation among patients reporting to psychiatric clinic of a district hospital in Sikkim, India*  
T.K. Rai<sup>1</sup>, S. Rasaily<sup>2</sup>. <sup>1</sup>Sikkim Anti-Drugs Unit, Department of Health, Government of Sikkim, India; <sup>2</sup>District Hospital-Singtam, India
- 251 *HIV and drug use among women in prison in Azerbaijan, Kyrgyzstan, and Ukraine*  
Y.S. Ranjit<sup>1</sup>, L. Azbel<sup>2</sup>, A. Krishnan<sup>3</sup>, J.P. Meyer<sup>1</sup>, F.L. Altice<sup>1</sup>. <sup>1</sup>AIDS Program, Yale School of Medicine, United States; <sup>2</sup>London School of Hygiene and Tropical Medicine, United Kingdom; <sup>3</sup>Department of Communication, State University of New York, Albany, United States
- 252 *Severity of drug use in a sample of young Brazilian club-goers with anxiety and depression symptoms*  
L. Remy<sup>1</sup>, H. Surratt<sup>2,3</sup>, S.P. Kurtz<sup>2</sup>, J. Scherer<sup>1</sup>, V. Roglio<sup>1</sup>, F. Pechansky<sup>1</sup>. <sup>1</sup>Center for Drug and Alcohol Studies, Federal University of Rio Grande do Sul, Brazil; <sup>2</sup>Center for Applied Research on Substance Use and Health Disparities, Nova Southeastern University, United States; <sup>3</sup>Center for Health Services Research, College of Medicine, University of Kentucky, United States
- 253 *Changing patterns of marijuana use disorders among users of different types of marijuana in Chile, 2014–2016*  
N. Rodríguez<sup>1</sup>, J.D. Marin<sup>1</sup>, E. Pizarro<sup>2</sup>, A. Castillo-Carniglia<sup>3</sup>, P.P. Seguel<sup>4</sup>. <sup>1</sup>Pontificia Universidad Católica de Chile, Chile; <sup>2</sup>Universidad de Chile, Chile; <sup>3</sup>Violence Prevention Research Program, Department of Emergency Medicine, School of Medicine, University of California Davis, United States; <sup>4</sup>The University of Texas at Austin, United States

- 254 *Men who have sex with men and inject drugs in a Canadian setting*  
A. Scheim<sup>1</sup>, R. Knight<sup>2</sup>, H. Shulha<sup>2</sup>, E. Nosova<sup>2</sup>, K. Hayashi<sup>2,3</sup>, M.J. Milloy<sup>2,4</sup>, T. Kerr<sup>2,4</sup>, K. DeBeck<sup>2,5</sup>. <sup>1</sup>Division of Infectious Diseases and Global Public Health, School of Medicine, University of California San Diego, United States; <sup>2</sup>British Columbia Centre on Substance Use, St. Paul's Hospital, Canada; <sup>3</sup>Faculty of Health Sciences, Simon Fraser University, Canada; <sup>4</sup>Department of Medicine, University of British Columbia, Canada; <sup>5</sup>School of Public Policy, Simon Fraser University, Canada
- 255 *Tobacco use in correctional facilities in Zambia*  
A. Shula<sup>1</sup>, F.M. Goma<sup>2</sup>. <sup>1</sup>School of Public Health, University of Zambia, Zambia; <sup>2</sup>School of Medicine, University of Zambia, Zambia
- 256 *High-intensity cannabis use is associated with retention in opioid agonist treatment: A longitudinal analysis*  
M.E. Socias<sup>1,2,3</sup>, E. Wood<sup>1,2,3</sup>, S. Lake<sup>1,2</sup>, S. Nolan<sup>1,2,3</sup>, N. Fairbairn<sup>1,2,3</sup>, K. Hayashi<sup>1,2,4</sup>, S. Liu<sup>1,2</sup>, T. Kerr<sup>1,2,3</sup>, M-J. Milloy<sup>1,2,3</sup>. <sup>1</sup>British Columbia Centre on Substance Use, Canada; <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, St. Paul's Hospital, Canada; <sup>3</sup>Department of Medicine, University of British Columbia, Canada; <sup>4</sup>Faculty of Health Sciences, Simon Fraser University, Canada
- 257 *Double stigma among HIV-positive people who inject drugs in Russia and health care outcomes*  
M.V. Vetrova<sup>1</sup>, K. Lunze<sup>2</sup>, D.M. Cheng<sup>2</sup>, C. Lloyd-Travaglini<sup>2</sup>, E. Blokhina<sup>1</sup>, S. Bendiks<sup>2</sup>, N. Gnatienco<sup>2</sup>, J. Luoma<sup>3</sup>, E. Krupitsky<sup>1,4</sup>, D. Lioznov<sup>5</sup>, J.H. Samet<sup>2</sup>. <sup>1</sup>Valdman Institute of Pharmacology, First Pavlov State Medical University of St. Petersburg, Russia; <sup>2</sup>Boston University Medical Center, United States; <sup>3</sup>Portland Psychotherapy Clinic, Research, and Training Centre, United States; <sup>4</sup>Department of Addictions, St. Petersburg Bekhterev Research Psychoneurological Institute, Russia; <sup>5</sup>Department of Infectious Diseases, First Pavlov State Medical University of St. Petersburg, Russia
- 258 *Comparison of symptoms in methamphetamine-associated and primary psychoses*  
M. Yang<sup>1,2\*</sup>, C. Yang<sup>1\*</sup>, T. Liu<sup>3</sup>, E.D. London<sup>2,4</sup>. <sup>1</sup>Department of Drug Dependence, Shenzhen Kangning Hospital, Medicine Division of Shenzhen University, China; <sup>2</sup>Department of Psychiatry and Biobehavioral Sciences, University of California Los Angeles, United States; <sup>3</sup>Department of Administration, Shenzhen Kangning Hospital, Medicine Division of Shenzhen University, China; <sup>4</sup>Department of Molecular and Medical Pharmacology, University of California Los Angeles, United States. \*These authors contributed equally.
- 259 *Prevalence of smoking among doctors and dentists and its associated factors in Erbil city*  
R. Yasein. Ministry of Health, Iraq

## Informational

### 300 *Adapting an addiction technology transfer model to address HIV and injection drug use in Eastern Europe, Southeast Asia, and South Africa*

A. Blyum<sup>1,2,3</sup>, G. Bart<sup>4,5</sup>, S. Becker<sup>6,7</sup>, D. Grelotti<sup>2</sup>, I. Koutsenok<sup>1,2,8</sup>, C. Kuo<sup>6</sup>, S. Larkins<sup>1,8,9</sup>, I. Pinchuk<sup>10,11</sup>, Y. Yachnik<sup>10,11</sup>. <sup>1</sup>International Addiction Technology Transfer Center-Ukraine, United States; <sup>2</sup>School of Medicine, University of California San Diego, United States; <sup>3</sup>School of Social Work, San Diego State University, United States; <sup>4</sup>Division of Addiction Medicine, Hennepin County Medical Center, United States; <sup>5</sup>University of Minnesota, United States; <sup>6</sup>Center for Alcohol and Addictions Studies, Brown University, United States; <sup>7</sup>New England Addiction Technology Transfer Center, Brown University, United States; <sup>8</sup>South East Asia Addiction Technology Transfer Center, United States; <sup>9</sup>School of Medicine, University of California Los Angeles, United States; <sup>10</sup>Ukrainian Research Institute of Social and Forensic Psychiatry and Drug Abuse, Ukraine; <sup>11</sup>International Addiction Transfer Center, Ukraine

### 301 *Challenges in the evaluation of the regulation of the cannabis market in Uruguay*

M.E. Cabrera. National Drug Board of Uruguay, Uruguay

### 302 *Australian Centre for Cannabinoid Clinical and Research Excellence: A novel multidisciplinary approach to evidence development and translation*

J. Copeland<sup>1</sup>, N. Solowij<sup>2</sup>, J. Martin<sup>3</sup>. <sup>1</sup>Cannabis Information and Support, Australia; <sup>2</sup>University of Wollongong, Australia; <sup>3</sup>University of Newcastle, Australia

### 303 *The Hubert H. Humphrey Fellowship Program at Virginia Commonwealth University*

J.R. Koch, R.L. Balster, A. Breland, W.L. Kliwer, H. Ashton. Virginia Commonwealth University, United States

## Prevention

### 400 *A binational cultural adaptation of the substance use prevention program, keepin' it REAL, for adolescents in Mexico*

F.F. Marsiglia<sup>1</sup>, M. Medina-Mora<sup>2</sup>, G. Alderson<sup>1</sup>, B. Nuño-Gutiérrez<sup>3</sup>, D. Corona Lozano<sup>4</sup>, M. Mendoza-Meléndez<sup>2</sup>, G. Quezada<sup>5</sup>, X. Flores Gómez<sup>6</sup>, M. Harthun<sup>1</sup>, A. Gonzalvez<sup>1</sup>, S. Kulis<sup>1</sup>, S. Ayers<sup>1</sup>. <sup>1</sup>Global Center for Applied Health Research, Arizona State University, United States; <sup>2</sup>Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, Mexico; <sup>3</sup>Centro de Estudios e Investigaciones en Comportamiento, Universidad de Guadalajara, Mexico; <sup>4</sup>Departamento de Enfermería, Universidad Autónoma de Nuevo León, Mexico; <sup>5</sup>Instituto Milton G. Erickson, Mexico; <sup>6</sup>Salud Pública del Municipio de San Pedro, Nuevo León, Mexico

### 401 *Implementation of a school-based life skills prevention program in the United Arab Emirates*

A. AlHosani. National Rehabilitation Centre, United Arab Emirates; Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States

### 402 *The intersection of violence and substance use among Mexican adolescents*

F.F. Marsiglia, S. Ayers, M. Arevalo Avalos, O. Cutrín, S. Kulis. Global Center for Applied Health Research, Arizona State University, United States

### 403 *Opioid maintenance treatment conducted by primary care providers facilitates prevention measures*

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404 *Community-campus partnerships for substance abuse prevention among minority young adults in a U.S.-Mexico Border City*

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405 *Tobacco use among Belgian university students between 2005, 2009, and 2013: Does gender matter?*

L. Jacobs<sup>1</sup>, G. Van Hal<sup>2</sup>. <sup>1</sup>Rhodes University, South Africa; <sup>2</sup>University of Antwerp, Belgium

406 *Double stigma among HIV-positive people who inject drugs in Ukraine and care integration*

T. Kiriazova<sup>1</sup>, O. Makarenko<sup>1</sup>, Y. Sereda<sup>1</sup>, A. Chybisov<sup>2</sup>, S. Bendiks<sup>3</sup>, B. Idrisov<sup>4</sup>, A. Dutta<sup>5</sup>, J. Carroll<sup>2</sup>, N. Rybak<sup>6</sup>, F. Gillani<sup>6</sup>, J. Samet<sup>3</sup>, T. Flanighan<sup>6</sup>, K. Lunze<sup>3</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>School of Public Health, Brown University, United States; <sup>3</sup>Clinical Addiction Research and Education Unit, Boston Medical Center, United States; <sup>4</sup>Department of Infectious Diseases, Bashkir State Medical University, Russia; <sup>5</sup>EMCARE Hospital, India; <sup>6</sup>Warren Alpert Medical School, Brown University, United States

407 *Protective factors and biological sex differentiate profiles of teen substance users in Burma (Myanmar)*

W. Kliewer<sup>1</sup>, N.M.A. Wan<sup>2</sup>, B. Parham<sup>1</sup>, Z. Ring<sup>3</sup>. <sup>1</sup>Department of Psychology, Virginia Commonwealth University, United States; <sup>2</sup>National Drug Abuse Control Program, Drug Dependence Treatment and Research Unit, Mental Health Hospital Yangon, Department of Medical Services, Ministry of Health and Sports, Burma (Myanmar); <sup>3</sup>Kachin State Public Health Department, Burma (Myanmar)

408 *Global review of drug-checking services 2017*

L.J. Maier<sup>1</sup>, A. Ritter<sup>2</sup>, M. Kowalski<sup>2</sup>, L. Coney<sup>2</sup>, D. Ramo<sup>3</sup>, M.J. Barratt<sup>2</sup>. <sup>1</sup>University of Zurich, Switzerland; <sup>2</sup>Drug Policy Modelling Program, National Drug and Alcohol Research Centre, University of New South Wales, Australia; <sup>3</sup>Department of Psychiatry and Weill Institute for Neurosciences, University of California San Francisco, United States

409 *Validation of the Substance Use Risk Profile Scale in the Bulgarian population*

S. Milcheva (Borisova)<sup>1</sup>, E. Long<sup>2</sup>, G. Vasilev<sup>3</sup>, K. Bozgunov<sup>3</sup>, E. Psederska<sup>3</sup>, D. Nedelchev<sup>3</sup>, N. Gillespie<sup>4</sup>, J. Vassileva<sup>2</sup>. <sup>1</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>Institute for Drug and Alcohol Studies, Virginia Commonwealth University, United States; <sup>3</sup>Bulgarian Addictions Institute, Bulgaria; <sup>4</sup>Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, United States

410 *Analysis affecting community involvement and enabling environment of prevention and treatment of drug abuse in Burma (Myanmar)*

R. Myint, W.W. Lwin. Myanmar Anti-Narcotic Association, Burma (Myanmar)

411 *Development of a brief screening tool to identify prescription opioid dependence in primary care*

S. Nielsen<sup>1</sup>, B. Larance<sup>1</sup>, C. Campbell<sup>1</sup>, L. Degenhardt<sup>1</sup>, N. Lintzeris<sup>2</sup>, F. Blyth<sup>2</sup>, M. Cohen<sup>1</sup>, M. Farrell<sup>1</sup>, R. Mattick<sup>1</sup>, R. Bruno<sup>3</sup>. <sup>1</sup>University of New South Wales, Australia; <sup>2</sup>University of Sydney, Australia; <sup>3</sup>University of Tasmania, Australia

- 412 *Opioid misuse among Latino primary care patients in Los Angeles*  
L. Gelberg<sup>1,2</sup>, M. Rico<sup>1</sup>, C. Okafor<sup>1</sup>. <sup>1</sup>Department of Family Medicine, David Geffen School of Medicine, University of California Los Angeles, United States; <sup>2</sup>Department of Health Policy and Management, Fielding School of Public Health, University of California Los Angeles, United States
- 413 *Six-month outcomes of a randomized controlled trial among South African township men engaged in soccer and vocational training*  
M. Tomlinson<sup>1</sup>, M.J. Rotheram-Borus<sup>2</sup>, J. Stewart<sup>1</sup>, S. Gordon<sup>1</sup>, J. Bantjes<sup>1</sup>, E. Amilor<sup>2</sup>.  
<sup>1</sup>Stellenbosch University, South Africa; <sup>2</sup>University of California Los Angeles, United States
- 414 *Substance-abusing South African men: Are where you live or your daily habits associated with being arrested?*  
J. Christodoulou<sup>1</sup>, L. Stokes<sup>2</sup>, J. Bantjes<sup>3</sup>, M. Tomlinson<sup>3</sup>, M.J. Rotheram-Borus<sup>1</sup>.  
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- 415 *Measuring the CHOICE-10 effect on vocational school freshmen who participated in a prevention program*  
V. Ryabukha. Prevention Center, "Choice," Ukraine
- 416 *School model for the integral prevention of risk behaviors: Cluster randomized trial*  
R. Sanchez Ramos, N. Amador, M.L. Gutiérrez, J.A. Villatoro, M.E. Medina-Mora. National Institute of Psychiatry, Mexico
- 417 *Mobile phone detection of simulated opioid overdose events*  
J. Sunshine<sup>1</sup>, R. Nandakumar<sup>2</sup>, S. Gollakota<sup>2</sup>. <sup>1</sup>Department of Anesthesiology and Pain Medicine, School of Medicine, University of Washington, United States; <sup>2</sup>Paul G. Allen School of Computer Science and Engineering, University of Washington, United States
- 418 *Guidelines for community-based noncommunicable disease programs in indigenous communities in Brazil*  
Z.Z. Taveira. Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States
- 419 *Double stigma among HIV-positive people who inject drugs in Russia and HIV care: A qualitative study*  
O. Toussova<sup>1</sup>, M. Vetrova<sup>1</sup>, E. Blokhina<sup>1</sup>, N. Bushara<sup>1</sup>, S. Bendiks<sup>2</sup>, N. Gnatienco<sup>2</sup>, E. Krupitsky<sup>1,3</sup>, D. Lioznov<sup>1</sup>, J.H. Samet<sup>2</sup>, K. Lunze<sup>2</sup>. <sup>1</sup>First Pavlov State Medical University of St. Petersburg, Russia; <sup>2</sup>Boston Medical Center and School of Medicine, Boston University, United States; <sup>3</sup>St. Petersburg Bekhterev Research Psychoneurological Institute, Russia
- 420 *A step toward understanding how family cohesion and exposure to family life education curriculum influence depression and substance use among Jamaican adolescents*  
J. Wynter. Northern Caribbean University, Jamaica

#### Treatment

- 500 *Profile of adolescents and young adults in substance abuse treatment in Nigeria*  
M. Agwogie. National Drug Law Enforcement Agency, Nigeria; Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States

- 501 *Creation of the Recovery Club: Promoting recovery and strengthening reintegration*  
A. Ashraf. Sunny Trust International, Addiction Treatment and Rehabilitation Center, Pakistan; Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States
- 502 *Experience of art therapy in adults with substance use disorders and sexual problems: A qualitative inquiry*  
A. Bayat<sup>1</sup>, Y. Bazargan<sup>2</sup>, E. Merghati-Khoei<sup>2</sup>. <sup>1</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>Iranian National Center for Addiction Studies, Iranian Institute for Reduction of High-Risk Behaviors, Tehran University of Medical Sciences, Iran
- 503 *Craving, drugs, and alcohol use by HIV-positive patients with opioid use disorder stabilized on naltrexone*  
E. Blokhina<sup>1</sup>, E. Krupitsky<sup>1,2</sup>, E. Zvartau<sup>1</sup>, E. Verbitskaya<sup>1</sup>, D. Lioznov<sup>1</sup>, T. Yaroslavlseva<sup>1</sup>, N. Bushara<sup>1</sup>, V. Palatkin<sup>1</sup>, S. Poole<sup>3</sup>, R. Gross<sup>3</sup>, G. Woody<sup>3</sup>. <sup>1</sup>First Pavlov State Medical University of St. Petersburg, Russia; <sup>2</sup>St. Petersburg Bekhterev Research Psychoneurological Institute, Russia; <sup>3</sup>Perelman School of Medicine, University of Pennsylvania, United States
- 504 *Rising incidence of aging opioid users within the European Union-wide treatment demand indicator: Irish opioid epidemic, 1996–2014*  
A. Carew, C. Comiskey. School of Nursing and Midwifery, Trinity College Dublin, The University of Dublin, Ireland
- 505 *Tolerance to the analgesic effects of morphine and fentanyl is inhibited by minocycline*  
C.J. Carranza-Aguilar, S.L. Cruz. Department of Pharmacobiology, Cinvestav, Mexico
- 506 *Validity of opiate use self-reports in three opiate treatment program studies in Asia*  
S. Chhatre<sup>1</sup>, C. Denis<sup>1</sup>, Jakpro Project<sup>2</sup>, HPTN 058 Project<sup>3</sup>, Opioid Integrated Treatment in Ho Chi Minh City Project<sup>4</sup>, D. Metzger<sup>1</sup>. <sup>1</sup>University of Pennsylvania, United States; <sup>2</sup>RSKO Hospital-Jakarta, Indonesia; <sup>3</sup>Chinese Center for Disease Control and Prevention, China; <sup>4</sup>Expertise France, Vietnam
- 507 *Does race moderate the association between substance use stigma and methadone treatment success in the United States?*  
B. D'Ambrosio<sup>1</sup>, V. Earnshaw<sup>2</sup>, M. Copenhaver<sup>3</sup>, L.R. Smith<sup>1</sup>. <sup>1</sup>Division of Global Public Health, University of California San Diego, United States; <sup>2</sup>Department of Human Development and Family Sciences, University of Delaware, United States; <sup>3</sup>Department of Allied Health Sciences, University of Connecticut, United States
- 508 *The impact of service dogs in the lives of military veterans who problematically use substances*  
C.A. Dell<sup>1</sup>, C. Arratoon<sup>2</sup>, M. Lapointe<sup>3</sup>, C. Lohnes<sup>3</sup>. <sup>1</sup>Department of Sociology and School of Public Health, University of Saskatchewan, Canada; <sup>2</sup>Canadian Centre on Substance Use and Addiction, Canada; <sup>3</sup>AUDEAMUS, Canada
- 509 *Evaluation of results-based financing in medication-assisted treatment programs in Ukraine: Patient survey results*  
K. Dumchev<sup>1</sup>, V. Akbirova<sup>2</sup>, I. Pykalo<sup>1</sup>, P. Smyrnov<sup>2</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>ICF "Alliance for Public Health," Ukraine
- 510 *Emerging role of noninvasive brain stimulation in addiction medicine: A review of ongoing studies*  
A. Elaghoury. Abbassia Hospital for Mental Health, Ministry of Health, Egypt

*511 Pharmacogenetics of methadone adverse events*

F. Fonseca<sup>1,2,3</sup>, C. Castillo<sup>1,2</sup>, G. Marín<sup>1,2</sup>, C. Tamarit<sup>1,2</sup>, L. Oviedo<sup>1,2</sup>, M. Torrens<sup>1,2,3</sup>. <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Spain; <sup>2</sup>Hospital del Mar Medical Research Institute-IMIM, Spain; <sup>3</sup>School of Medicine, Universitat Autònoma Barcelona, Spain

*512 Minority women-centered test-treat-retain substance use disorder and HIV intervention on the U.S.-Mexico border*

R. Gallegos<sup>1</sup>, T. Mangadu<sup>1</sup>, J. Ferreira-Pinto<sup>2</sup>, M. Orezza<sup>3</sup>, R. Robles<sup>4</sup>, D. Delgado<sup>1</sup>, T. Ferdous<sup>1</sup>, A. Arce<sup>1</sup>, V. Cobos<sup>1</sup>. <sup>1</sup>Department of Public Health, The University of Texas at El Paso (UTEP), United States; <sup>2</sup>Center for Interdisciplinary Health Research and Evaluation, UTEP, United States; <sup>3</sup>Department of Social Sciences, Florida Memorial University, United States; <sup>4</sup>Aliviane, Inc., United States

*513 Personality traits differentiate Pakistani males in recovery versus relapse from substance use disorders*

R. Hanif<sup>1,2</sup>, W. Kliever<sup>1</sup>. <sup>1</sup>Department of Psychology, Virginia Commonwealth University, United States; <sup>2</sup>Department of Psychology, University of Karachi, Pakistan

*514 Atypical versus typical antipsychotics for the treatment of addiction: A systematic review and meta-analytic study*

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*515 Intranasal delivery of CRISPR-oxytocin to treat morphine addiction in HIV patients by gene editing*

R.D. Jayant<sup>1</sup>, P. Kuehl<sup>2</sup>, H.S. Chand<sup>1</sup>, M. Nair<sup>1</sup>. <sup>1</sup>Center for Personalized Nanomedicine, Department of Immunology, Herbert Wertheim College of Medicine, Florida International University, United States; <sup>2</sup>Lovelace Biomedical and Environmental Research Institute, United States

*516 Not in my neighborhood: An analysis of the distribution of alcohol and drug psychosocial care centers in Rio de Janeiro*

A.O. Kiepper. Science and Technology in Biomodels Institute, Oswaldo Cruz Foundation, Brazil; Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States

*517 Urinalysis frequency and health outcomes for persons on opioid agonist therapy: A policy and literature review*

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*518 Extended-release long-acting naltrexone implant for opioid use disorders: How long is long enough?*

E. Krupitsky<sup>1,2</sup>, E. Zvartau<sup>1</sup>, E. Blokhina<sup>1</sup>, E. Verbitskaya<sup>1</sup>, V. Palatkin<sup>1</sup>, T. Yaroslavl'tseva<sup>1</sup>, N. Bushara<sup>1</sup>, G. Woody<sup>3</sup>. <sup>1</sup>Department of Pharmacology, First Pavlov State Medical University of St. Petersburg, Russia; <sup>2</sup>Department of Addictions, V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, Russia; <sup>3</sup>Department of Psychiatry, University of Pennsylvania, United States

- 519 *Cognitive functioning, cocaine use patterns, and clinical severity among addicted inpatients: A prospective study*  
D.R. Lima<sup>1</sup>, P.D. Gonçalves<sup>1</sup>, M. Ometto<sup>1</sup>, A. Malbergier<sup>1</sup>, R.A. Amaral<sup>1</sup>, B. dos Santos<sup>2</sup>, S. Nicastri<sup>1</sup>, A. Guerra de Andrade<sup>1</sup>, G.F. Busatto<sup>1</sup>, P.J. Cunha<sup>1</sup>. <sup>1</sup>Institute of Psychiatry, School of Medicine, University of São Paulo, Brazil; <sup>2</sup>School of Nursing, University of São Paulo, Brazil
- 520 *A pilot study on methadone take-home service in the context of the Internet in Yuxi, Yunnan Province, China*  
W. Liu<sup>1</sup>, Y. Ma<sup>2</sup>, T. Wei<sup>1</sup>, S-H. Yang<sup>2</sup>, D-I. Yang<sup>3</sup>, R. Pu<sup>1</sup>, S. Huang<sup>1</sup>, X-B. Zhu<sup>1</sup>. <sup>1</sup>Kunming Medical University, China; <sup>2</sup>The Center for Disease Prevention and Control of Hongta District, China; <sup>3</sup>Yuxi Office of AIDS Care, China
- 521 *Amplitude of demand predicts abstinence among treatment-seeking smokers with elevated depressive symptoms: Further evidence of its internal structure*  
C. López-Núñez<sup>1</sup>, A. González-Roz<sup>2</sup>, Á. García-Pérez<sup>2</sup>, S. Weidberg<sup>2</sup>, V. Martínez-Loredo<sup>2</sup>, R. Secades-Villa<sup>2</sup>. <sup>1</sup>Department of Psychology, Universidad Loyola Andalucía, Spain; <sup>2</sup>Department of Psychology, University of Oviedo, Spain
- 522 *Correlates of medication-assisted treatment completion among people who inject drugs in China*  
L. Ma<sup>1</sup>, C. Denis<sup>2</sup>, S. Chhatre<sup>2</sup>, L. Fu<sup>3</sup>, J. Ma<sup>3</sup>, B. Rui<sup>3</sup>, L. Wei<sup>4</sup>, J. Huang<sup>5</sup>, Y. Ruan<sup>1</sup>, Y. Shao<sup>1</sup>, D. Metzger<sup>2</sup>. <sup>1</sup>National Center for AIDS Prevention and Control, Chinese Center for Disease Control and Prevention (CDC), China; <sup>2</sup>University of Pennsylvania, United States; <sup>3</sup>Xinjiang CDC, China; <sup>4</sup>Guangxi CDC, China; <sup>5</sup>Heng County CDC, China
- 523 *Use of Behavior and Symptom Identification Scale-24 measurements for opioid agonist treatment self-assessments in Ukraine*  
R. Marcus<sup>1</sup>, L. Madden<sup>1,2</sup>, T. Fomenko<sup>3</sup>, S. Farnum<sup>2</sup>, D. Barry<sup>2</sup>, A. Meteliuk<sup>3</sup>, F.L. Altice<sup>1</sup>. <sup>1</sup>Yale School of Medicine, United States; <sup>2</sup>APT Foundation, United States; <sup>3</sup>ICF “Alliance for Public Health,” Ukraine
- 524 *Substance use in children in Afghanistan: Gender differences at treatment entry and in response to treatment: Afghanistan Symptom Checklist*  
A.S. Momand<sup>1</sup>, E. Mattfeld<sup>2</sup>, G. Gerra<sup>2</sup>, B. Morales<sup>3</sup>, T. Browne<sup>4</sup>, M. Ul Haq<sup>5</sup>, K.E. O’Grady<sup>6</sup>, H.E. Jones<sup>7</sup>. <sup>1</sup>United Nations Office on Drugs and Crime (UNODC), Afghanistan; <sup>2</sup>UNODC, Austria; <sup>3</sup>Bureau of International Narcotics and Law Enforcement, U.S. Department of State, United States; <sup>4</sup>Colombo Plan, Sri Lanka; <sup>5</sup>UNODC, Pakistan; <sup>6</sup>Department of Psychology, University of Maryland, College Park, United States; <sup>7</sup>UNC Horizons, Department of Obstetrics and Gynecology, University of North Carolina at Chapel Hill, United States
- 525 *Treatment retention of patients with cannabis use disorder*  
I. Rivas<sup>1</sup>, A. Sanvisens<sup>2</sup>, M. Rodriguez<sup>3</sup>, D. Fuster<sup>2</sup>, P. Zuluaga<sup>2</sup>, R. Muga<sup>2</sup>. <sup>1</sup>Municipal Center for Substance Abuse Treatment, IMSP, Spain; <sup>2</sup>Department of Internal Medicine, Hospital Universitari Germans Trias i Pujol-Badalona, Universitat Autònoma de Barcelona, Spain; <sup>3</sup>Department of Pharmacy, Metropolitan Barcelona Health District, Catalan Health Service, Spain

- 526 *Effectiveness of an addiction treatment program integrated in an HIV clinic: Results of a 4-year program in Ho Chi Minh City, Vietnam*  
C. Denis<sup>1,2</sup>, H. Tran<sup>3</sup>, L. Nguyen<sup>3</sup>, T. Nguyen<sup>3</sup>, L. Huang<sup>3</sup>, V. Trias<sup>3</sup>, M. Auriacombe<sup>1,2</sup>, A. Voisin<sup>4</sup>, S. Mai Thi Hoai<sup>5</sup>, G. Le Truong<sup>5</sup>, J-P. Daulouède<sup>3,4</sup>, D. Metzger<sup>1</sup>, C. O'Brien<sup>1</sup>.  
<sup>1</sup>University of Pennsylvania, United States; <sup>2</sup>CNRS USR 3413 SANPsy, University of Bordeaux, France; <sup>3</sup>Expertise France, France; <sup>4</sup>Bizia Addiction Clinic, France; <sup>5</sup>Ho Chi Minh City AIDS Committee, Vietnam
- 527 *Marijuana users seeking treatment in Uruguay: A clinical characterization in the frame of cannabis market regulation*  
A. Pascale<sup>1,2</sup>, C. Bares<sup>3</sup>, L. Oliver<sup>1</sup>, O. Binagi<sup>1</sup>, M. Valdez<sup>1</sup>, C. Herrera<sup>1</sup>, A. Usher<sup>1</sup>, C. López<sup>1</sup>, C. Mediza<sup>1</sup>, L. Oliver<sup>1</sup>, E. Varela<sup>1</sup>. <sup>1</sup>Grupo de Cavia Outpatient Treatment Clinic, Uruguay; <sup>2</sup>REDLA Network (Red Latinoamericana de Investigadores en Drogas), Uruguay; <sup>3</sup>School of Social Work, University of Michigan, United States
- 528 *Knowledge, attitudes, and practices of marijuana use among adolescents and youth who are on antiretroviral treatment: A cross-sectional study among the double orphan raised by foster parents and an orphanage in Nepal*  
P. Pokharel<sup>1</sup>, S.L. Acharya<sup>2</sup>, S. Paudel<sup>3</sup>. <sup>1</sup>Chitwan Plus, Nepal; <sup>2</sup>Tribhuvan University, Nepal; <sup>3</sup>Western Sydney University, Australia
- 529 *Quality of life and the state of health: Ambulatory treatment for substance use disorders in Argentina*  
N. Poliansky<sup>1</sup>, C. Gorlero<sup>1</sup>, D. Gemini<sup>1</sup>, H.E. Jones<sup>2</sup>. <sup>1</sup>Fundación Convivir, Argentina; <sup>2</sup>UNC Horizons, University of North Carolina at Chapel Hill, United States
- 530 *Predictors of retention in people who inject drugs in extended-release naltrexone treatment in Ukraine*  
I. Pykalo<sup>1</sup>, I. Makarenko<sup>2</sup>, S. Dvoriak<sup>1</sup>, F.L. Altice<sup>3,4</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Family Medicine Department, McGill University, Canada; <sup>3</sup>AIDS Program, Section of Infectious Diseases, Yale School of Medicine, United States; <sup>4</sup>Division of Epidemiology of Microbial Diseases, Yale School of Public Health, United States
- 531 *United Nations Office on Drugs and Crime-World Health Organization multisite study on community management of opioid overdose, including emergency naloxone*  
G. Gerra<sup>1</sup>, V. Poznyak<sup>2</sup>, R. McDonald<sup>3</sup>, N. Clark<sup>2</sup>, A. Busse<sup>1</sup>, E. Saenz<sup>1</sup>, W. Kashino<sup>1</sup>, J. Strang<sup>3</sup>. <sup>1</sup>Drug Prevention and Health Branch, Prevention, Treatment and Rehabilitation Section, United Nations Office on Drugs and Crime, Austria; <sup>2</sup>Department of Mental Health and Substance Abuse, World Health Organization, Switzerland; <sup>3</sup>Addictions Department, King's College London, United Kingdom
- 532 *Brief intervention for referral to opioid agonist treatment in probation settings in Ukraine: Preliminary results*  
N. Saichuk, S. Dvoriak, K. Dumchev, E. Gryshayev, O. Chernova, J. Rozanova, F.L. Altice. Ukrainian Institute on Public Health Policy, Ukraine; Yale School of Medicine, United States
- 533 *Urdu translation and psychometric properties of the stigma scale among patients with substance use disorders in Pakistan*  
S. Shahzad<sup>1</sup>, N. Begum<sup>2</sup>. <sup>1</sup>Institute of Clinical Psychology, University of Karachi, Pakistan; <sup>2</sup>Area Study Center for Europe, University of Karachi, Pakistan

- 534 *Consolidating efforts for drug demand reduction in districts Quetta, Pishin and Killa Abdullah of Balochistan Province, Pakistan*  
 U. Shamim<sup>1,2</sup>, A. Rashid<sup>2</sup>. <sup>1</sup>Kuchlak Welfare Society, International Narcotics Law, Pakistan; <sup>2</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States
- 535 *Buprenorphine maintenance with minimal dosage for abstinent heroin users in China*  
 W. Shen<sup>1</sup>, Q. Wang<sup>1</sup>, W. Ping<sup>2</sup>, J. Zhang<sup>2</sup>, W. Ye<sup>2</sup>, Q. Hu<sup>2</sup>, J. Zhang<sup>1</sup>, W. Zhou<sup>1,2</sup>. <sup>1</sup>Ningbo Addiction Research and Treatment Center, China; <sup>2</sup>School of Medicine, Ningbo University, China
- 536 *Ibero-American initiative for dual disorders to improve public treatment programs*  
 N. Szerman<sup>1</sup>, L. Alfonso-Bello<sup>2</sup>, R. Marín-Navarrete<sup>3</sup>, E. Arribas-Ibar<sup>2</sup>, A. Pérez-Lopez<sup>3</sup>, F. Babín<sup>4</sup>, M.E. Medina-Mora<sup>3</sup>. <sup>1</sup>Spanish Society of Dual Disorders, Spain; <sup>2</sup>Pan-American Health Organization, United States; <sup>3</sup>National Institute of Psychiatry, Mexico; <sup>4</sup>Government Delegation for the Spanish National Drug Plan, Spain
- 537 *Integrated care on leaving hospital against medical advice among patients with substance use disorders and HIV infection*  
 M. Torrens<sup>1,2,3</sup>, G. Vallecillo<sup>1,2</sup>, C. Tamarit<sup>1,2</sup>, F. Fonseca<sup>1,2,3</sup>. <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Spain; <sup>2</sup>Hospital del Mar Medical Research Institute-IMIM, Spain; <sup>3</sup>School of Medicine, Universitat Autònoma Barcelona, Spain
- 538 *Recovery in addiction treatment: Revolution and challenges in Vietnam*  
 T.H.H. Tran<sup>1,2</sup>. <sup>1</sup>Haiphong Union of Science and Technology Associations, Vietnam; <sup>2</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States
- 539 *Nabiximols combined with motivational enhancement/cognitive behavioral therapy for the treatment of cannabis dependence: A pilot randomized clinical trial*  
 J.M. Trigo<sup>1</sup>, A. Soliman<sup>1</sup>, L.C. Quilty<sup>2,3</sup>, B. Fischer<sup>3,4,5,6</sup>, J. Rehm<sup>3,4,5,7,8</sup>, P. Selby<sup>3,9,10</sup>, A.J. Barnes<sup>11</sup>, M.A. Huestis<sup>11</sup>, T.P. George<sup>3,9,12</sup>, D.L. Streiner<sup>3,13</sup>, G. Staïos<sup>1</sup>, B. Le Foll<sup>1,9</sup>.  
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- 540 *Sleep disorders in opioid-dependent patients maintained on buprenorphine*  
 R. Tripathi, R. Rao, A. Dhawan, R. Jain. Department of Psychiatry and National Drug Dependence Treatment Center, All India Institute of Medical Sciences, India

- 541 *Association of oxidative stress and inflammatory markers with inhalant use among treatment-seeking adolescents*  
A. Verma<sup>1</sup>, R. Jain<sup>1</sup>, A. Dhawan<sup>1</sup>, R. Lakshmy<sup>2</sup>. <sup>1</sup>Department of Psychiatry, National Drug Dependence Treatment Centre, All India Institute of Medical Sciences, India; <sup>2</sup>Department of Cardiac Biochemistry, All India Institute of Medical Sciences, India
- 542 *Antiretroviral therapy adherence among opiate-addicted patients treated with naltrexone: Oral and implantable*  
T. Yaroslavtseva<sup>1</sup>, E. Blokhina<sup>1</sup>, E. Krupitsky<sup>1,2</sup>, E. Verbitskaya<sup>1</sup>, E. Zvartau<sup>1</sup>, V. Palatkin<sup>1</sup>, N. Bushara<sup>1</sup>, R. Gross<sup>3</sup>, G. Woody<sup>3</sup>, S. Poole<sup>3</sup>. <sup>1</sup>First Pavlov State Medical University of St. Petersburg, Russia; <sup>2</sup>Bekhterev Research Psychoneurological Institute, Russia; <sup>3</sup>Perelman School of Medicine, University of Pennsylvania, United States
- 543 *Improved frequency of antiretroviral therapy initiation and use of harm reduction services among HIV-positive people who inject drugs in Ukraine*  
O. Zeziulin<sup>1</sup>, Y. Sereda<sup>2</sup>, P. Smyrnov<sup>3</sup>, O. Denisiuk<sup>3</sup>, T. Kiriazova<sup>1</sup>, S. Dvoriak<sup>1</sup>, C. Vitek<sup>4</sup>, T. Bingham<sup>5</sup>, R. Kulchynska<sup>4</sup>, K. Dumchev<sup>1</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Independent Researcher, Ukraine; <sup>3</sup>ICF “Alliance for Public Health,” Ukraine; <sup>4</sup>Division of Global HIV and Tuberculosis, Centers for Global Health, U.S. Centers for Disease Control and Prevention (CDC), Ukraine; <sup>5</sup>Division of Global HIV and Tuberculosis, Centers for Global Health, CDC, United States



## SYMPOSIA

**Sunday, June 10**

I.

### *Wearable/Biosensors in Addiction Medicine—Future Vistas*

Chairs: Scott Lukas and Stephanie Carreiro

This symposium presents how biosensors are used in preclinical and clinical populations to track the physiological, behavioral, kinetic, and physical location of subjects during addiction. Dr. Paronis will report on how biosensors are used to record real time changes and identify spontaneous cannabinoid withdrawal in mice. Dr. Carriero has used biosensors to provide noninvasive, real-time physiologic correlates of addiction, and will report that they are widely accepted and can identify early problematic responses to drugs, addiction, overdose, and treatment response. Dr. Sazonov has led the development of wearable biosensors that capture real-time smoking frequency and comprehensive metrics of smoke exposure. He will report on the use of the Personal Automatic Cigarette Tracker (PACT), which relies on behavioral and physiological manifestations of cigarette smoking and to detect and characterize smoking events. Dr. Kirchner will highlight geographically explicit EMA (GEMA) systems that link momentary experience sampling to objective measures of socio-ecological context in time and place, including their potential as a unifying core within a more general, theoretically based research framework for transdisciplinary collaboration. Finally, Dr. Lukas will discuss how biosensors are integrated with other metrics such as laboratory studies, behavioral assessments, psychomotor performance and subjective reports, highlight their limitations and then provide a construct for the future applications and how biosensors contribute to the "Neuron to Neighborhood" Construct of Addiction.

II.

### *Marijuana: The Changing Legal Landscape and Its Impact on Opioid Use*

Chairs: Marsha Lopez and Heather Kimmel

Marijuana continues to be illegal under US federal law, but more than half the states in the nation have moved to decriminalize or legalize it in some form. Public opinion about marijuana use has rapidly become more permissive, and while we are beginning to learn about some short-term effects of these controversial policy changes, many questions remain unanswered about the longer term public health impacts as well as other social and economic effects. Concurrently the US is experiencing an opioid crisis, with unprecedented levels of use and overdose. Pain relief is one therapeutic reason reported by both users of opioids and users of marijuana, which begs the question of how marijuana use impacts the use and misuse of opioids in states with legalized marijuana policies as well as those that do not. This symposium will present evolving research addressing this question of great public health importance, shedding light on our understanding of opioid use and consequences in the context of marijuana legislation.

III.

### *Novel Psychoactive Substance—A Translational Science Approach*

Chairs: Aviv Weinstein and William Fantegrossi

The misuse of novel psychoactive drugs (NPS), like synthetic cannabinoids and synthetic stimulants, represents a worldwide public health threat. In response to the NPS problem, many research laboratories are now examining the pharmacological and psychological effects of these drugs, as well as developing methods for their forensic detection. In this translational scientific symposium, a panel of leading experts will present new data from preclinical and clinical studies on the biological effects of two common types of NPS, namely synthetic cannabinoids and stimulants. Dr. Brian F. Thomas from Wake Forest University will describe pharmacological effects of synthetic cannabinoids and their pyrolysis products in animal models, whereas Dr. Aviv Weinstein from Ariel University in Israel, will present studies on impaired executive function and brain imaging in human synthetic cannabinoid users. Next, Dr. Michael Bauman from NIDA/IRP will describe preclinical studies on the pharmacology of synthetic cathinones and newer non-cathinone compounds, while Dr. Magi Farre from the University of Barcelona will present the effects of synthetic cathinones after administration to humans under controlled laboratory conditions. Finally, Dr. William Fantegrossi from the University of Arkansas will summarize the findings presented and suggest ideas for future research to address the ongoing NPS phenomenon

## SYMPOSIA

**Monday, June 11**

IV.

### *Drug Addiction Treatment with Classic Psychedelics*

Chairs: Roland Griffiths and Mathew Johnson

Research investigating classic psychedelic drugs as treatments for drug addiction began in the 1950s but was subsequently terminated in response to concerns about nonmedical use and a misunderstanding of the risks of these compounds. Meaningful conclusions about the efficacy such treatment were uncertain because of experimental design and control group considerations. However, a 2012 meta-analysis of six randomized controlled trials assessing LSD treatment of alcohol misuse demonstrated significant decreases in alcohol use relative to comparison treatments. This symposium will review recent and ongoing research with the classic psychedelic psilocybin. Roland Griffiths will begin the session by reviewing past and recent data showing that both healthy volunteers and psychologically distressed cancer patients report positive changes in moods, attitudes and behavior lasting at least 6 months after psilocybin treatment. Peter Hendricks will present preliminary observations from an ongoing double-blind placebo-controlled trial of psilocybin in the treatment of cocaine use disorder. Matthew Johnson will review outcomes from a previous pilot study of psilocybin treatment of cigarette smoking (tobacco use disorder), and preliminary findings from an ongoing study comparing psilocybin with nicotine-replacement treatment of cigarette smoking. Michael Bogenschutz will review data from a previous pilot study of psilocybin treatment of alcohol use disorder, and an ongoing double-blind study comparing psilocybin with diphenhydramine treatment. Bryon Adinoff will discuss the promising results of these early trials and the implications for future research with psilocybin and other classic psychedelics for treatment of drug addiction.

V.

### *The Human Molecular Genetics of Nicotine and Opiate Addiction*

Chairs: Mary Jeanne Kreek and Laura Bierut

Nicotine and opiate addictions are the major addictive diseases resulting in the greatest morbidity and mortality in our country today. Diverse epidemiologic and other studies have predicted that 25% to 70% of the relative risk of developing a specific addictive disease once self-exposed is dependent on the combination of large numbers of gene variants, which can increase the vulnerability (or, in some cases, decrease the vulnerability) of developing an addiction to a drug of abuse, such as nicotine or short-acting opiates. Studies of human molecular genetics of each of these two addictive diseases, considered individually, are providing specific information which further elucidates the pathophysiology and molecular neurobiology of each of these diseases of the brain. Further, human molecular genetic studies in the future may contribute to the development of novel approaches, both behavioral and specific pharmacological, for both early intervention and chronic treatment of these addictive diseases. The most enduring and informative human molecular genetic studies are those which combine extensive phenotyping, conducted by highly skilled persons, frequently including clinicians, coupled with excellent molecular genetics work (widely available in 2018) and, of great importance, insightful input by a genetics statistician. Very large studies have value, and very small studies with highly defined populations also have value. Each of these types have been replicated to a modest extent. Five experts in addictive diseases, along with human molecular genetics, will present their research work, followed by discussion of the implications of genetics for diagnosis, early intervention, and treatment of the addictive diseases.

## VI.

### *What's in Your Weed? Assessing the Impact of Cannabis Product Selection*

Chairs: Staci Gruber and Ryan Vandrey

Rates of cannabis use are rising, yet many questions remain regarding the impact of use on cognitive, clinical, and behavioral health outcomes. These questions are, at least in part, due to the varied chemical composition of cannabis, which is not a single entity but is comprised of a myriad of constituents. Consumers often choose products based on cannabinoid concentrations or constituent ratios; however, little research has been dedicated to clarifying the unique effects of specific cannabinoids or cannabinoid ratios. While previous work in animals and humans has demonstrated that *acute* administration of individual cannabinoids leads to differential effects on a variety of measures, this symposium will focus on studies which examine products that cannabis consumers *are actually using*, underscoring the importance of cannabinoid constituent analyses. Dr. Vandrey will present product selection data from a large, longitudinal patient registry database as well as studies testing the accuracy of product dose labeling. Dr. Loflin will discuss data that highlights the discrepancy between product selection and therapeutic potential in a sample of veterans. Finally, Dr. Gruber will present longitudinal clinical and neurocognitive data from individuals electing to use primarily THC-dominant vs. CBD-dominant products. “What’s in your weed?” is an increasingly popular question among both researchers and consumers. Research shared in this symposium, while still in its infancy, will help garner a better understanding of how cannabinoid content contributes to the varied outcomes experienced by recreational and medical consumers, and also highlight important knowledge gaps and methodological challenges to be addressed in future studies.

## VII.

### *Let's Save the Baby and Bathwater: Improving NAS Care for Babies and Their Mothers Utilizing Novel Methods*

Chairs: Dennis Hand and Yukiko Washio

Epidemic rates of opioid use disorder among pregnant women have highlighted the need for innovative behavioral and technological methods to improve maternal/neonatal care. Observer-rated scoring is currently the only method for assessing neonatal abstinence syndrome (NAS), and differences in scorers’ education and experiential background can result in substantial variation in scores. Variability in scoring can impact: 1) initiation of pharmacotherapy 2) dosage changes during stabilization and weaning 3) length of stay and 4) health care costs. Novel innovations are needed to deliver education to improve scoring standardization and conveyance of clinically useful aggregated scoring results. In addition, there is a growing need to work antenatally with mothers in medication-assisted treatment to coordinate care and to prepare/counsel them around their neonate’s postpartum course. Exosome-based biomarkers indicative of fetal brain responses to opioid exposure may help both by providing individualized risk assessments to mothers antenatally and by augmenting observer-rated assessments of NAS to guide pharmacologic treatment decisions. This mini-symposium will contain data from state-of-the-art studies on NAS assessment and treatment by postpartum floor nurses utilizing novel experimental technologies, novel methods of care and counselling for mothers who are receiving medication-assisted treatment, and maternal plasma exosome measures of fetal brain morphine receptors ( $\mu$ OR). Recently developed mobile technology to provide additional tools to improve the quality of practice and provider-coordinated antenatal care will also be discussed.

## SYMPOSIA

**Monday, June 11**

VIII.

*Cannabis and Tobacco Co-Use: Current Findings Across  
Preclinical, Genetic, Experimental and Epidemiological Science*

Chairs: Erica Peters and Arpana Agrawal

Tobacco and cannabis have overlapping genetic, environmental and neural influences perpetuating their co-use. This symposium will bring together a multidisciplinary group of investigators to share current findings on the co-use of tobacco and cannabis. Dr. Agrawal will use a series of loci and polygenic risk scores identified from some of the largest genomewide association studies of cannabis and tobacco to examine whether genetic liability to one drug contributes to vulnerability for the other and, further, whether evidence for shared genetic liability is indicative of causality via Mendelian Randomization. Dr. Coleman-Cowger will present on the prevalence and correlates of biochemically verified co-use of cannabis and tobacco in a racially diverse convenience sample of pregnant women presenting to two urban prenatal clinics, and compare birth outcomes (NICU admissions, birth weight, length, gestational age at birth, APGAR 5-minute score, presence of any birth defect) by co-use of cannabis and tobacco status. Dr. Peters will show the prevalence and correlates of co-use of cannabis and tobacco in youth and in young adults from two population-based surveys in the US. This symposium will enhance our understanding of tobacco and cannabis co-use and areas of future investigation.

IX.

*Innovator Symposium*  
Chair: Thomas Prisinzano

This symposium will highlight the synergistic roles of chemistry and pharmacology aimed at developing novel treatments for drug abuse and pain. Among the topics covered will be chemical synthesis, molecular pharmacology, and behavioral pharmacology, all aimed at identifying novel compounds that retain biological activity at drug abuse targets but have reduced side effects.

X.

*Neonatal Abstinence Syndrome: Effects of Opioids on the Developing Brain*  
Chairs: Henrietta Bada and Gary Peltz

Opioid abuse and dependence during pregnancy has become a significant public health problem in the United States, amid the current opioid epidemic. Maternal opioids exposure to embryos and fetuses likely results in brain and behavioral disorders in infants. The incidence of neonatal abstinence syndrome (NAS) has increased approximately 400% nationally, from 1.2 per 1,000 hospital births in 2000 to 5.8 in 2012, with some states reporting more than 30 per 1,000 hospital births. In 2012, 22,000 infants born were diagnosed with NAS, a five-fold increase for that decade where data is available. Meanwhile, infants diagnosed with NAS are treated with opioids, and/or their agonists and antagonists, for opioid withdrawal. Remarkably, little is known on how maternal opioid exposure causes embryonic and fetal brain disorders; nor how, in treating NAS, opioids, opioid agonists and antagonists affect the developing brains of newborns. This symposium will address the current state of clinical and basic science of NAS. Dr. Jansson will present new discoveries on fetal neurobehavioral development in buprenorphine exposed pregnancies. Dr. Bada will present translational research on the treatment of NAS with non-opioid drugs as supported by animal studies. Dr. Davis will talk about his research on the diagnosis and treatment of NAS, as well as his endeavors in identifying the genetic and genomic risk factors of NAS. Finally, Dr. Hauser will discuss the cellular and molecular mechanisms of how opioids affect neural and glial differentiations that adversely impact the white matter of the developing brain.

## SYMPOSIA

**Tuesday, June 12**

XI.

*Unmet Need for Treatment of Opioid Use Disorder: An International Perspective*

Chairs: Howard Chilcoat and Michelle Lofwall

Opioid use disorder (OUD) is a global problem that affects over 15 million individuals worldwide and is a major contributor to morbidity, mortality, and disability. Despite the extensive need for treatment and availability of efficacious treatments, most of those with OUD never get treated or only receive treatment after several years after onset of the disorder. Although the problem of OUD is widespread, there is considerable variation in the nature of the problem, how it is treated, and the access to treatment. This symposium examines the nature of the OUD (eg, prevalence, types of drugs involved, routes of administration and extent of unmet need for OUD treatment using an international perspective from 5 regions: Europe, Asia, Australia, Russia, and the United States. Each talk will discuss the level of need for OUD treatment, availability of various treatment modalities, and barriers to treatment access that contribute to unmet need. Presentations will address systems of treatment delivery and will explore approaches that have been successful in overcoming barriers to treatment and reducing unmet need that lessen the public health burden of OUD. The discussion will address similarities and differences across regions and discuss how learning can be shared to reduce unmet treatment need for OUD globally. Future directions for treating the global epidemic of OUD will also be explored.

XII.

*Clinical Studies of Biologics to Treat Substance Use Disorders*

Chairs: Ivan Montoya and S. Michael Owens

There is a major public health need for safe and effective treatments for Substance Use Disorders. Immunotherapies, such as vaccines and monoclonal antibodies, are opening a new window of possibilities to treat these disorders. The mechanism of action of immunotherapies is a pharmacokinetic antagonism that prevents or retards the access of the drug of abuse to the central nervous system. Thus, immunotherapies appear to prevent the neurotoxic effects, including the effects on the central reward system, of the drugs of abuse. The anti-drug vaccines can stimulate the immune system to produce antibodies specifically against the drug of abuse. The anti-drug monoclonal antibodies are obtained by different methods that do not require the immune system of the host. Several immunotherapies have been investigated in clinical trials but none of them have met the efficacy endpoints to obtain approval by the Food and Drug Administration (FDA). New methods of production and new immunotherapies that appear more effective are being investigated. The purpose of this symposium is to provide an overview of the new generation of immunotherapies that recently started to be evaluated in clinical trials. They include presentations by Dr. Ronald Crystal of an adenovirus-based anti-cocaine vaccine, Dr. Lloyd Johnston of a nanoparticle-based anti-nicotine vaccine, and Dr. W. Brooks Gentry of a chimeric anti-methamphetamine monoclonal antibody. At the end of the symposium, it is expected that participants gain knowledge about the status of the clinical studies and future research directions of immunotherapies for Substance Use Disorders.

### XIII.

#### *Next Generation Analgesics* Chairs: David McCann and Jane Acri

No single action can solve the ongoing opioid crisis in the United States. New education and prevention initiatives, efforts to increase patient access to effective treatments for opioid use disorder (OUD) and opioid overdose, and the development of new and improved therapies for OUD and opioid overdose prevention and treatment will be extremely important. In addition, because many cases of OUD stem from the use of oxycodone and other “traditional” opioids in the medical management of pain, the discovery and development of safer and less addictive analgesics represents an important role for NIH-funded science in addressing the opioid crisis (Volkow and Collins, NEJM 377: 391-394, 2017). Research to be presented in this symposium will highlight advances from four different research groups in developing safer and/or less addictive opioid analgesics. The discussant will put the presentations in context by highlighting the efforts of other research groups to develop non-opioid alternatives for analgesia, and will present a vision of NIH/NIDA support for future pain research. The overall goal of the symposium is to encourage future research on pain and the development of safer/less addictive analgesics by focusing the attention of meeting attendees on recent advances and gap areas of knowledge in this field of research.

### XIV.

#### *Polysubstance Use is the Norm: Time for Research and Practice to Recognize and Address it* Chairs: Richard Saitz and Carlos Blanco

The majority of research on substance use and disorders focuses on single substances, whereas the majority of people who use, use multiple substances. Studying multiple substance use is challenging for many reasons, which may be precluding advances. Issues range from the desire to isolate specific drug effects in animal models, viewing multiple substances as messy confounded research, screening and assessment tools that focus on individual substances or lump many together, interventions designed for individual substances, methods that limit our ability to understand multiple substance use and policies that focus on individual substances. In this translational symposium we take these issues head on. First we will set the stage for the symposium by examining data on polysubstance use in general and clinical populations, and the ability of ‘best practice’ tools to adequately (or not) characterize them in clinical research. The next presentation will address the development of animal models to investigate the combined effects of delta-9-tetrahydrocannabinol and nicotine with a translational eye to developing studies in humans. Methods for handling and understanding use of multiple substances in study design and in measuring outcomes relevant to polysubstance use will be presented. Finally, policy, its frequent focus on single substances and the potential to address multiple substances will be addressed. The NIDA discussant will address the current state of research on polysubstance use, treatment, and potential future directions. The symposium will open a new conversation on how to address polysubstance use successfully in research with a translational focus on impacting policy and practice.

## SYMPOSIA

**Wednesday, June 13**

XV.

*Fentanyl Abuse: From Medicinal Chemistry to Clinical Management*

Chairs: Sandra Comer and Catherine Cahill

Opioid use disorder (OUD) and its associated morbidity and mortality currently are at epidemic levels in the U.S. Beginning in the early 1990's, the increased incidence of OUD was mostly attributed to abuse of prescribed opioids, but an increase in heroin use has been observed in recent years. Despite concentrated efforts to address the problem, the rate of opioid overdose deaths is surging nationwide. This surge is due in part to the introduction of illicitly made fentanyl and its analogs. Despite the fact that fentanyl has been used in clinical settings for decades, its abuse liability, toxicity, and responsiveness to treatment medications are not well characterized. In the current symposium, Dr. Ivy Carroll will describe the ease of synthesizing fentanyl and its analogs relative to that of obtaining natural opioids and their analogs, as well as the relative in vitro and in vivo properties of fentanyl. Dr. James Woods will describe the behavioral pharmacology of fentanyl in preclinical models, as well as the ability of opioid antagonists and partial agonists to reduce its effects. Dr. Alex Walley will describe the observed course of fentanyl-related overdoses and the utility of naloxone to reverse them in real-world settings. Dr. Kim Janda will describe a fentanyl vaccine as a potential novel therapeutic approach to treating fentanyl abuse. Dr. Sandra Comer will serve as the Discussant. This symposium should provide a broad overview of the chemistry and pharmacology of fentanyl, as well as the clinical characteristics of fentanyl overdose and opportunities for treatment.

XVI.

*Gut-Brain Axis in Addictions: Peptides, Lancets and Bugs*

Chairs: Lorenzo Leggio and Rajita Sinha

In this symposium, senior and junior investigators will present innovative preclinical, translational and clinical research, mostly unpublished, on the role of the gut-brain-axis in addictions. Dr. Sinha will highlight adaptations in gut and stress hormones associated with increased food craving and intake and brain reward in response to highly palatable foods. Data showing altered gut hormones in substance-abusing individuals and their prediction of craving/relapse will also be presented. Dr. Roitman will follow up on the role of dopamine on reward processing in food- and drug-seeking behaviors. His rodent work demonstrates phasic, high concentration increases in dopamine evoked by food, cues predicting food, and cocaine infusions. He will also discuss the role of neuropeptides in phasic dopamine signals under different physiological states, suggesting that hunger and satiety signals operate on circuitry critical for reinforcement and motivation. Ms. Orellana will present studies showing that, in obese rats RYGB increases the rewarding effects of morphine and alcohol independently from postoperative weight loss; strongly suggesting a biological cause. Furthermore, she will present data on differences in alcohol preference and sensitivity to ghrelin antagonism following RYGB versus sleeve gastrectomy. Dr. Kiraly will show significant differences found in the microbial diversity and abundance in alcohol-dependent rats versus controls. She will further present results from ongoing case-control studies investigating the gut microbiota in a non-human primate model of binge alcohol drinking (baboons) and in alcohol-dependent patients, providing cross-species information on the role of the gut microbiota in alcoholism. Dr. Hajnal will serve as the symposium discussant.



## XVII.

### *Comorbidity of Opioid Addiction and Other Psychiatric Disorders*

Chairs: Rita Valentino and Christopher Evans

Psychiatric disorders, including post-traumatic stress disorder and depression, often accompany opioid use disorder (OUD). Chronic pain syndromes are also comorbid with anxiety and depressive disorders and individuals in pain are more likely to be using opioids, creating a direct pathway to OUD in comorbid patients. The symposia will merge both clinical and basic research perspectives on the role of different opioid systems, namely mu, kappa and delta, in both contributing to, and relieving mood-related disorders. Dr. Kosten will first review clinical data on depression and opiate dependence, highlighting results from treatment with the kappa antagonist/partial mu agonist buprenorphine. Dr. Kieffer will then review basic research on the role of different opioid receptors in mood, and present her more recent work on the contribution of mu-receptors in selective cell-types to aversive behaviors triggered during opiate withdrawal. Dr. Chavkin will discuss how stress-induced activation of the dynorphin-kappa opioid receptor system can produce dysphoric and anxiety-like states that increase the rewarding valence of addictive drugs, promote drug seeking behaviors, and trigger relapse of drug-seeking in abstinent animals. Finally, Dr. Louisa Degenhardt will discuss the clinical implications of co-morbidity in cohorts she has studied in Australia. Questions in the symposia will address the salience of opioid drugs to individuals with mental disorders and/or pain and the issue of self-medication combined with distress during withdrawal states. Insights into contributions of different opioid receptors to mediating or alleviating symptoms exhibited in various comorbid mental states with OUD could guide future treatment strategies.

## XVIII.

### *Long-Acting Medication Reformulations: A Strategy to Address the Opioid Epidemic*

Chairs: Brantley Jarvis and Philip Todd Korthuis

Many patients suffering from opioid use disorder (OUD) require long-term and in some cases life-long medication-assisted treatment to address its chronic and relapsing nature. Reformulating existing medication delivery methods with long-acting preparations aligns these medications with the long-term disorder they treat, eliminates diversion, increases adherence, and may facilitate engagement in long-term care by stabilizing patients for longer durations early in their treatment course. This approach was recently proposed by the NIH as an innovative short-term strategy to address the opioid epidemic. This symposium features new research on investigational and FDA-approved long-acting medications and discusses their role, potential, and challenges in treating OUD. Dr. Joshua Lee will present findings from the CTN-0051 X:BOT trial--the first head-to-head comparative effectiveness study of injectable extended-release naltrexone and buprenorphine-naloxone. Dr. Evgeny Krupitsky will discuss the use of implantable naltrexone to prevent opioid relapse and its collateral impacts on mood and HIV treatment in Russia. Dr. Sandra Comer will summarize recent work carried out in the human laboratory setting on once-weekly and once-monthly injectable buprenorphine formulations. Dr. Edward Nunes will provide an update on results from recent clinical treatment trials of injectable buprenorphine formulations. Finally, our discussant and co-chair, Dr. Todd Korthuis, will place these presentations within the broader context of OUD treatment and lead a discussion of the opportunities for integrating long-acting medications into treatment and highlight ongoing research studies on treatment implementation.



## SYMPOSIA

**Thursday, June 14**

XIX.

### *International Opioid Guidelines*

Chairs: Fred Nyberg and Gabriele Fischer

Over the past decade, the prescribing of opioids has increased dramatically in Western countries and in particular in North America. In parallel, increases in opioid addiction, overdose, and associated deaths have been seen. A similar situation occurs in Europe. According to the EMCDDA assessment of the drug-induced deaths, next to Estonia, Sweden is the country with the most drug-induced deaths per million population in Europe. From 2006 to 2014 a 40% increase in drug-related deaths has been recorded in Sweden, mainly due to opioids. This increase has been seen in both sexes. Moreover, it should be noted that a great part of the increase is seen in opioid deaths combined with benzodiazepines. Although opioid addiction is effectively treated using a multidisciplinary approach including agonist opioid treatment and psychosocial intervention there are some difficulties. Misuse and diversion of pain medicines, like fentanyl and buprenorphine comprise a significant problem in Sweden, but also in other Nordic countries with some of the highest frequencies in Europe. These inconveniences are associated with poor treatment compliance and increases in risk of blood-borne infections, crime, and mortality. To address this problem, changes in medicines used in treatment in Finland and Iceland have already been implemented and considerations are under way in Norway and Sweden. At this symposium, international well-known speakers will highlight current perspectives on Guidelines for opioid treatment as well as opioid overdoses and related deaths in Nordic countries but also in other countries within EU, North America and in Southeast Asia.

XX.

### *Kratom: Bitter Narcotic or Sweet Medicine for Pain and Opioid Addiction?*

Chairs: Jay McLaughlin and Christopher McCurdy

In August 2016, the DEA announcement to place Kratom and component alkaloids into Schedule I sparked unprecedented public backlash. Although a drug of abuse concern for over a decade touted as a “legal high” and linked to 16 deaths, over 23,000 public comments on the DEA action demonstrate wide use of Kratom to control pain, opioid addiction and opioid withdrawal with limited liabilities. In lieu of a fuller scientific understanding of this natural product, the DEA suspended their intention to schedule Kratom, but retains the right to do so. This symposium will seek to fill the gap, bringing together expert scientists to review the current knowledge of the chemistry, pharmacology, toxicology, behavioral effects and epidemiology of Kratom and two alkaloid components, mitragynine and 7-hydroxymitragynine. Dr. McCurdy will review the history, chemistry and pharmacology of *Mitragyna speciosa*. Dr. Avery will detail what is known about the pharmacokinetics and toxicology of both the natural product and currently available commercial formulations. Dr. Boyer will review the epidemiology, use and putative abuse of Kratom in patient populations. Finally, a detailed review of the reinforcing and abuse-related effects of Kratom, mitragynine and 7-hydroxymitragynine and major components of the natural product will be offered with the self-administration studies of Dr. Hemby and drug-discrimination studies of Dr. McMahon. Upon the conclusion of these presentations, a discussion section will evaluate both benefits and detriments attributed to this controversial natural product, with an attempt to educate the research and regulatory community and forge consensus on future research directions.

XXI.

*New Targets for Drug Abuse Therapy*

Chairs: Thomas Prisinzano and Nurulain Zaveri

This symposium will highlight new and emerging therapeutic approaches for the treatment of drug abuse. Among the topics covered will be receptor modulators, neuropeptide S receptor antagonists, toll-like receptor modulators, and dopamine receptor antagonists.

XXII.

*Sex and Gender Implications for Emerging Drug Policy*

Chairs: Sherry McKee and Cora Lee Wetherington

Alcohol and tobacco use are highly co-morbid and interact across many levels of analysis including cross-tolerance, cross-cue reactivity, pharmacological, neurochemical, electrophysiological, molecular, genetic, and environmental levels. Understanding the molecular basis of alcohol and tobacco interactions can provide novel insights towards the treatment of alcohol and tobacco use, and their co-use. This symposium will present interdisciplinary and translational research highlighting alcohol-tobacco/nicotine interactions, focusing on implications for treatment development. Dr. John Dani will present preclinical findings demonstrating that stress and nicotine converge onto midbrain GABAergic circuitry, altering the pharmacological action of alcohol on mesolimbic dopamine circuitry and increasing alcohol self-administration behavior. Dr. Marissa Ehringer will address how variants in the genes for nicotinic acetylcholine receptors have been widely replicated to be associated with risk for tobacco, alcohol, other drug behaviors, identifying the functional molecular mechanisms underlying these associations. Dr. Dieter Meyerhoff will present cross-sectional and longitudinal neuroimaging research demonstrating that biomarkers reveal untoward effects of smoking on brain structure, blood flow, metabolite concentrations and their changes during recovery from chronic alcohol consumption. Dr. Sherry McKee will present human behavioral pharmacological findings examining whether medications targeting nicotinic receptors or stress pathophysiology may be effective for both alcohol and tobacco use. Dr. David Lovinger will serve as Discussant to integrate and synthesize findings across the speakers, highlighting that a molecular understanding of alcohol and tobacco/nicotine interactions is critical for the effective treatment of either alcohol or tobacco use.

## WORKSHOP

**Sunday, June 10**

### I.

#### *Therapeutic Applications and Abuse Liability Assessment of Cannabidiol*

Chairs: Royston Gray and Charles France

The growing interest in the therapeutic application of cannabinoids to the treatment of disease has been paralleled by significant progress in the deconvolution of the pharmacology of the non-psychoactive, plant-based cannabinoid molecules e.g. cannabidiol (CBD). CBD is a non-psychoactive plant derived cannabinoid with a diverse poly-pharmacology which possesses no appreciable activity at cannabinoid receptors (CB1 & CB2). The ability to purify CBD and other botanically derived cannabinoids such as cannabidivarin (CBDV) to pharmaceutical grade has enabled researchers to define the pharmacology of these molecules, identify the mechanism of action and assess efficacy in preclinical models and clinical trials. The aim of the workshop is to (i). Introduce the fascinating poly-pharmacology (beyond cannabinoid receptors) of botanically derived purified cannabinoids. The molecular targets engaged by CBD and other cannabinoids are diverse in their physiological role, expression and molecular structure and include monoamine transporters, 7-transmembrane G-protein-coupled receptors, ion channels, enzymes and other intracellular targets. (ii). Describe the efficacy of plant-derived cannabinoids in preclinical models of disease and in the clinic. CBD is efficacious in a wide range of pre-clinical models of seizure. Recently, the efficacy of CBD was evaluated in Ph III trials in Dravet and Lennox-Gastaut syndromes, both intractable, catastrophic pediatric epilepsies. (iii). Describe the preclinical and clinical studies conducted in accordance with FDA guidance for the assessment of abuse potential of CBD; Drug discrimination, i.v. self-administration, non-precipitated withdrawal, in vitro assessment of abuse-related target engagement. (iv). Provide an insight into the development of novel cannabinoid therapeutics based upon the current regulatory and legal frameworks.

### II.

#### *Charting the Future of HIV Research Among Racial/Ethnic Substance Users: The Next Generation of Researchers Speak*

Chairs: A. Kathleen Burlew and Carmen Masson

Despite advances in HIV prevention and treatment, racial/ethnic disparities persist in HIV care, engagement, and outcomes. African American and Hispanic persons living with HIV (PLWH) are identified later in the course of HIV disease progression, less likely to be engaged in medical care, and less likely to achieve viral suppression than White PLWH. These troubling statistics highlight the need for more research to address HIV health disparities among racial/ethnic minorities. Fortunately, the next generation of racial/ethnic minority scholars are engaged in meaningful HIV research. The objective of this workshop is to present the research of several early career scientists being mentored in either the Minority Interest Group of the NIDA CTN or LEAD, a R25 training program using the CTN platform. Danni Lanaway will share research examining the measurement equivalence of a 14- vs a 15-item version of the Condom Use Self-Efficacy Scale (CUSES) across multiple racial and gender groups of substance users. Caravella McCuistian will present research examining the relationship of age and gender to condom barriers and unprotected sex among African American substance users. Sabrina Assoumou will compare the proportion of test result deliveries between rapid testing (i.e., finger stick) and laboratory-based testing (venipuncture specimen) for HIV. In addition, her research examines racial/ethnic differences on these testing methods. Finally, the co-chairs, Drs. Kathy Burlew and Carmen Masson will facilitate a discussion of this work's implications for next steps in HIV research among substance-using individuals from racial/ethnic minority groups.

### III.

#### *The Adolescent Brain Cognitive Development (ABCD) Study: Emerging Findings on Substance Use, Risk and Protective Factors, and Neuroimaging*

Chairs: Mary Heitzeg and Krista Lisdahl

The Adolescent Brain Cognitive Development (ABCD) study is a large multi-site longitudinal study supported by the National Institutes of Health and the Center for Disease Control and Prevention to increase our understanding of how diverse experiences during adolescence interact with changing biology to influence brain, cognitive, and social/emotional development. Adolescence is a time of dramatic increases in rates of substance experimentation and use. Identifying the trajectories and effects of substance use and other variables, such as sleep, physical activity, screen time, etc. on child and adolescent development is critically important, as these experiences may have enduring effects on brain maturation, and behavioral, health, and psychological outcomes. The ABCD study launched in 2015 and data collection began in the fall of 2016. The study is combining measures of developmental psychology, neuroimaging, cognitive neuroscience, genetics, and epidemiology with advanced techniques in bioassays, bioinformatics, and mobile assessment to follow ~11,500 9-10 year olds recruited at 21 sites around the country. This symposium brings together representatives from the ABCD Research Consortium to present the goals of the study and its design, a description of the demographic characteristics of the emerging cohort, and a first look at baseline data on the first 4500+ children recruited, including measures of 1) substance knowledge, use and attitudes; 2) cultural and environmental risk and protective factors; and 3) brain imaging measures, with a focus on resting state fMRI and early findings from task-related activation measures of reward, emotion and cognitive control.

### IV.

#### *Navigating Key Stages of a Career in Addiction Science*

Chairs: Denise Vidot and Pia Mauro

The proposed workshop will focus on issues specific to three key stages in a researcher's career: 1) pre-doctoral, 2) post-doctoral, 3) early career faculty, and 4) early career outside of academia. Each presentation will outline steps that can be taken to maximize their career stage-specific experience and make themselves competitive job applicants for the next stage. Examples of topics included are as follows: striking a balance between executing your mentors vision and demonstrating your capacity to be an independent scientist, publishing amidst other responsibilities and long-term studies, grant-writing experience, applying for awards, establishing your niche and conveying its importance to potential employers, collaborating and networking, deciding whether to teach, different NIH funding mechanisms most appropriate for early career investigators, how to find a set of mentors, how to narrow down an innovative and significant research question, and organizing your time. Each talk will have a centered theme of the value of having mentors help along the process and the importance of being receptive to incorporating mentor feedback at all career stages. This workshop has added a stage (careers outside of academia) based on feedback from last year's session.

### **Monday, June 11**

### V.

#### *Not Just One but Two: Impact of Opioid Epidemic on Alcohol Use Among Pregnant Mothers*

Chairs: Victoria Coleman-Cowger and Stacey Klamann

The epidemic of opioid use among women of childbearing age in the U.S. has contributed to increase of opioid use among pregnant women and of neonatal abstinence syndrome (NAS) incidents. Pregnant women who report substance use often engage in other substance and alcohol use as polysubstance use. Drinking alcohol during pregnancy is also one of the leading modifiable risk factors for behavioral, neurocognitive, and intellectual disabilities, including fetal alcohol spectrum disorders (FASD). Recent evidence suggests that FASD is far more prevalent among children in the U.S. and globally than was previously thought. The specific aims of this session are to (1) present the epidemiological evidence on the prevalence of substance co-use among pregnant mothers, especially opioid and alcohol co-use; (2) present clinical evidence of the co-use effects on birth and child outcomes; and (3) explore with clinical and neurodevelopmental insights on potential interactive effects of the co-use on maternal, neonatal, and child outcomes.

## VI.

### *SUMI: A Free Interactive Web-Based Tool to Select Valid Substance Use Measures for HIV Research*

Chairs: Steffanie Strathdee and Steve Shoptaw

HIV prevention researchers who seek to assess and quantify substance use are often faced with difficult decisions about which measure(s) to adopt. The task is complicated further by the ways that some subgroups may integrate substance use with behaviors that affect relevant HIV outcomes. We undertook a systematic literature review and meta-analysis of substance use measures in validation and reliability studies to inform the development of an interactive web-based tool to aid in this task. The tool, called the Substance Use Measurement Identification (SUMI), helps researchers select substance use measures with known psychometric properties and are relevant to HIV prevention for specific substance classes, populations, geographies and cultures. This workshop will report findings from the meta-analysis, showcase SUMI's web-based platform and demonstrate how the tool can be used in an interactive manner, whereby the user can select search parameters that meet their needs. Through examples, we will demonstrate the types of studies the SUMI tool can be applied to. SUMI is a free, web-based tool for substance use and HIV prevention researchers, accessible from anywhere globally and compatible with desktop and mobile computing platforms. The algorithm and database of measures of SUMI will be updated by the SUSC to support additional substance use measures in the future. For more information, see: <https://hptn.org/researchtools>

## VII.

### *Annual CPDD Design and Analysis Workshop*

Chairs: Sterling McPherson and Susan Mikulich-Gilbertson

In this fourth Annual CPDD design and analysis workshop, the primary goal is to expose attendees to multiple state-of-the-art analytic methods relevant to substance use research. Our specific aims are to present overviews with real-world examples on the following topics: 1) how to use omics data for prediction and discovery within novel substance use domains; 2) how to utilize missing data to inform your analytic approach by examining multiple direct and indirect patterns of missing data to inform treatment efficacy; 3) predictive models for opioid treatment response using data from the Clinical Trials Network; and finally, 4) how to effectively communicate with a statistician to get the most out of your data and approach and to facilitate collaborative opportunities. Our last presentation is designed to help investigators who need to enlist the support of a methodologist. Each of these topics is timely and important for multiple domains of substance use research. All presentations will be in a non-technical, accessible fashion in an effort to generate discussion among presenters and audience members around considerations such as the applicability of the methods to various situations, potential limitations, resources for additional information, and future directions among others. As in the prior Design and Analysis Workshops, our intent is to address key issues raised during this informal workshop and to empower other researchers by disseminating state-of-the-art methods as applied to real-world examples. The overall goal is to raise awareness and the level of quality in the methods that prevail throughout substance use research.

## WORKSHOP

**Tuesday, June 12**

### VIII.

#### *Epidemiology and Public Health Research Methods*

Chairs: Howard Chilcoat and Georgiy Bobashev

This workshop is focused on epidemiologic research approaches to study drug use epidemics. A series of presentations will explore different methods to understand the emergence and course of these epidemics, which a focus on the recent epidemic of opioid use disorders. The first presentation describes how drug use has features of both infectious diseases (contagion model of initiation) and chronic disease (natural history of disease progression and relapsing nature of recovery) and considers a model that integrates features of both. The next presentation will discuss approaches to epidemiological analysis of user-generated digital media, including methods for the identification of emerging drugs, measurement of the emergence and prevalence of specific practices, and segmentation/identification of social network clusters where drug use is widely discussed. Data and analytical insights from online forums, markets and social media networks represent assets that can complement traditional pharmacovigilance methods, and offer opportunities for rapid, scalable and automated analysis of epidemics as they evolve. The third presentation will cover the use of survey data to understand epidemic patterns of drug use. The presenter will show examples of use of survey data to explore trends in drug use prevalence, use of retrospective survey data, use of survey data to understand age-period –cohort effects as well use of survey data to understand transitions across stages of drug involvement.

### IX.

#### *Substance Use Among Juvenile Justice-Involved Adolescents: Identifying and Addressing the Need for Treatment Services/SASATE Business Meeting*

Chair: Danica Knight and Michael Dennis

An estimated 70% of justice-involved adolescents have used illicit substances and 33% have substance use (SU) disorders. Given that over 900,000 youth are arrested annually, the juvenile justice (JJ) system is well positioned to intervene with this vulnerable population through identification and triage into SU services. The purpose of this symposium is to present data from Juvenile Justice—Translational Research on Interventions for Adolescents in the Legal System (JJ-TRIALS), a NIDA-funded cooperative research project to improve delivery of evidence-based practices for substance-involved youth. Dr. Knight provides an overview of the study, describing the rationale, aims, design, and protocol using data from 20,000 youth in 7 states. Dr. Belenko examines rates of SU and explores relationships with co-occurring conditions, offense type (misdemeanor/felony), and recidivism risk. Dr. Dennis examines receipt of services among a subset of 18,000 youth in the JJ system for a minimum of 90 days, documenting movement through the Behavioral Health (BH) Services Cascade. Findings indicate 64% receive substance use screening, 24% receive a clinical assessment, and 41% are identified as needing treatment. Of those in need, 48% are referred to treatment; of those referred, only 32% initiate treatment. Individual differences in patterns of service receipt (e.g., sex and race/ethnic) are also discussed. Dr. Wiley examines data from a subset of 500 youth with a positive urine screen for opioids. Relationships among criminal history, criminogenic needs, opiate use, and movement through the BH Cascade are described. The symposium will conclude with discussion of implications and a SASATE business meeting.

X.

*Women in Addictions Ten Years on: Reviewing Progress and Developing a  
Research and Implementation Roadmap*

Chairs: Wendee Wechsberg and Loretta Finnegan

For the past 10 years, research in the field of addictions in women has expanded into a wide range of topics. There have been a number of significant research accomplishments over this time including managing pregnant women with substance use disorders; caring for infants in opioid withdrawal; addressing psychiatric disorders; greater acceptance and treatment options for LGBT communities; gendered instrumentation; and gender-focused HIV interventions for adolescent girls and women. Most importantly, we have learned that women who use drugs often experience other comorbid medical conditions (e.g. HCV, HIV), contextual confounders (e.g. intimate partner violence exposure, homelessness) and social expectations (e.g. caretakers) that must be addressed as part of integrated comprehensive care to effectively address women's unique needs. This symposium will address these issues, including the recent emergence of the opioid epidemic and increasing injecting practices among women globally, and how new perspectives have evolved to reach and treat women who use drugs. Structural barriers to treatment for women who inject drugs and policies that stigmatize women including lesbian, bisexual and transgender women in many countries create an environment of discriminatory practices toward women who use drugs and who often have limited access to health and social services. The presenters will review progress made in the last ten years in the research on addictions in women, adolescents, and families, identify research and implementation gaps and outline recommendations for the next generation of research. We will then facilitate a discussion with the audience to prioritize the topics.

XI.

*24th Annual Contingency Management Working Group*

Chairs: Diann Gaalema and August Holtyn

The Contingency Management (CM) Working Group, held annually during the CPDD convention, is an opportunity for the discussion and dissemination of current research regarding the use of CM interventions to promote behavior change and reduce drug use. CM is a behavioral treatment that has demonstrated consistent success in promoting abstinence from a wide range of drugs and across many different treatment populations. It is also being used to promote change in behaviors impacting the course of other chronic diseases (e.g., obesity, diabetes). At the 24th annual meeting of the CM Working Group, junior and senior researchers will present preliminary data from ongoing studies involving CM. The goal for this working group is to provide an informal outlet for discussion of ongoing CM research, with an emphasis on developing or improving research strategies by seeking audience input, and providing opportunities for junior and senior researchers to interact.

XII.

*The NIH Clinical Trials Stewardship Initiative: New Policies and Procedures  
and How to Implement Them*

Chairs: Katia Howlett and David White

The National Institutes of Health (NIH) has launched the Clinical Trials Stewardship Initiatives to improve the quality, accountability, and transparency of clinical research and clinical trials funded by the NIH. The new policies and procedures apply to the full lifecycle of clinical trials --from concept development to reporting of results. They cover 1) Good Clinical Practice (GCP) training--required for NIH staff and highly encouraged for extramural researchers; 2) Funding Opportunity Announcements (FOAs)--all applications must be submitted to FOAs that specifically allow clinical trials (CT-optional or CT-only); 3) terms specific to clinical trials research in Notices of Award (NoA) to remind awardees of their responsibilities, 4) requirements for registration and reporting of results in the [ClinicalTrials.gov](https://clinicaltrials.gov) database; 5) use of Single IRB for all multisite trials (whether or not they are clinical trials); and 6) as appropriate, a recommendation to use a clinical trial protocol template that was developed in collaboration with FDA. To support these efforts, new application forms were designed to facilitate the collection of information pertinent to human subjects and clinical trials research that reduce duplication of information. NIH is also developing a standardized electronic system for management and oversight of NIH-funded clinical trials. This workshop will help investigators understand the policies and procedures that apply to clinical trials funded by NIH and learn the most efficient ways to comply and implement them at their institutions. It will also be an opportunity for researchers to provide feedback regarding burdens/advantages of the new Initiatives.



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## NOTES

## NOTES

