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# CPDD 81<sup>ST</sup> ANNUAL SCIENTIFIC MEETING PROGRAM

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June 15 - 19, 2019

J.W. Marriott Hill Country Resort & Spa  
San Antonio, Texas



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## **Please Note**

**Badges must be worn at all sessions.**

**No photography permitted without the express permission of the authors.**

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**Friday, June 14, 2019**

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**PRE-MEETING SATELLITES**

**IN WOMEN'S CONFERENCE**

**8:30 AM - 5:00 PM  
Cibolo 8/9**

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**Saturday, June 15, 2019**

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**ISGIDAR**

**Grand Oaks RS  
8:00 AM - 5:30 PM**

**NIDA INTERNATIONAL FORUM**

**Grand Oaks KL 8:30  
AM - 4:45 PM**

**NIDA GRANT-WRITING**

**Grand Oaks OP  
1:00 PM - 5:00 PM**

**REGISTRATION**

**Conference Center  
Registration Desk  
1:30 PM - 5:30 PM**

**OPENING RECEPTION**

**Lawn (outside  
Crooked Branch  
Lobby Bar)  
7:00 PM - 9:00 PM**

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## Sunday, June 16, 2019

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### PLENARY PROGRAM

**Grand Oaks Ballroom K/L/M**  
**8:00 - 11:00 AM**

- 8:00      *Welcome* - CPDD President Meg Haney
- 8:15      Report from the National Institute on Drug Abuse: *Drug Abuse and Addiction Research: Progress, Priorities and Challenges*  
Nora D. Volkow, Director, NIDA
- 8:45      Report from the National Institute on Alcohol Abuse and Alcoholism: *A Heuristic Domain Framework for Understanding the Prevention, Diagnosis, and Treatment of Alcohol Use Disorders*  
George F. Koob, Director, NIAAA
- 9:15      *Presentation of the Stephen G. Holtzman Travel Award for Preclinical Investigators to Jacques D. Nguyen*  
Introduction by Michael Taffe
- 9:20      *Presentation of the CPDD/NIDA Media Award to Elaine McMillon Sheldon*  
Introduction by Meg Chisolm
- 9:35      *Presentation of the Martin & Toby Adler Distinguished Service Award to Charles O’Keeffe*  
Introduction by Loretta Finnegan
- 9:40      *Presentation of the Joseph Cochin Young Investigator Award to Stephen Kohut*  
Introduction by Scott Lukas
- 9:45      *Presentation of the Mentorship Award to Linda Cottler*  
Introduction by Catherine Woodstock Striley
- 9:50      *Presentation of the Innovator Award to Bertha K. Madras*  
Introduction by Loretta Finnegan
- 10:00     *Presentation of the Nathan B. Eddy Award to Maxine Stitzer*  
Introduction by Eric Strain
- 10:15     Nathan B. Eddy Lecture: *My Brilliant Career: Behavioral Pharmacology, Contingency Management and More*  
Maxine Stitzer, Johns Hopkins Bayview Medical Center

## POSTER SESSION I

## Lunch

Cibolo Ballroom  
11:00 - 1:00 PM

**Odd-numbered posters manned first hour; Even-numbered, second hour**  
**Set-up time begins Saturday, 3:00 PM; Must be removed by Sunday, 2:30 PM**

### OPIOIDS - HUMAN STUDIES I

- 1     *β-arrestin2 single nucleotide polymorphism associated with long-term consequences of opioid use*  
K. Karavidha<sup>1</sup>, S. Perrine<sup>1</sup>, M. Burmeister<sup>2</sup>, M. Greenwald<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI
- 2     *The hidden harm: Child academic performance is negatively impacted by heroin-using parents*  
Q. Ain<sup>1</sup>, T. Lee<sup>1</sup>, M. Dahar<sup>2</sup>, <sup>1</sup>National Taiwan Normal University, Taipei, Taiwan, <sup>2</sup>PMAS, Arid Agriculture University Rawalpindi, Pakistan
- 3     *The prevalence of heroin use, nonmedical opioid use, and associations with violent injury offending among US high school students, 1975-2016*  
E. Jorgenson<sup>1</sup>, S. Martins<sup>1</sup>, E. Nesoff<sup>1</sup>, C. Branas<sup>1</sup>, T. Mielenz<sup>2</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY
- 4     *Pathways into opioid use disorder (examination across three chronological cohorts)*  
E. Zhang, R. Sterling, A. Rannazzisi, E. Loscalzo, Thomas Jefferson University, Philadelphia, PA
- 5     *Negative health behaviors contribute to the development of opioid use disorder*  
C. Butrus<sup>1</sup>, K. Green<sup>1</sup>, J. Ickes<sup>1</sup>, M. Reynolds<sup>2</sup>, L. Kirisci<sup>1</sup>, R. Tarter<sup>2</sup>, <sup>1</sup>University of Pittsburgh School of Pharmacy, Pittsburgh, PA, <sup>2</sup>University of Pittsburgh, Pittsburgh, PA
- 6     *Prescribing opioids as motivational incentives to promote health-related behaviors in patients*  
A. Dunbar<sup>1</sup>, E. Aston<sup>2</sup>, K. Guthrie<sup>3</sup>, J. Merlin<sup>4</sup>, J. Champion<sup>5</sup>, K. Claborn<sup>1</sup>, <sup>1</sup>University of Texas Dell Medical School, Austin, TX, <sup>2</sup>Center for Alcohol and Addiction Studies, Providence, RI, <sup>3</sup>The Miriam Hospital, Providence, RI, <sup>4</sup>University of Alabama, Birmingham, AL, <sup>5</sup>The University of Texas at Austin, Austin, TX
- 7     *Latent classes of opioid misuse motives across the US population*  
T. Schepis<sup>1</sup>, A. De Nadai<sup>1</sup>, J. Ford<sup>2</sup>, S. McCabe<sup>3</sup>, <sup>1</sup>Texas State University, San Marcos, TX, <sup>2</sup>University of Central Florida, Orlando, FL, <sup>3</sup>University of Michigan, Ann Arbor, MI
- 8     *Identifying opioid use disorder: Diagnosis code vs. natural language processing*  
V. Zhu, L. Lenert, K. Barth, K. Simpson, H. Li, K. Brady, Medical University of South Carolina, Charleston, SC

- 9      *A mixed-methods analysis of prevalence and motivations of kratom use in a sample of chronic opioid users*  
M. Ellis, Z. Kasper, T. Cicero, Washington University, St. Louis, MO
- 10     *How to quit heroin and injection drug use – a cross-sectional study across 14 countries*  
L. Maier<sup>1</sup>, M. Barratt<sup>2</sup>, J. Ferris<sup>3</sup>, A. Winstock<sup>4</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>University of Queensland, Brisbane, Australia, <sup>4</sup>Global Drug Survey Ltd., London
- 11     *A qualitative investigation of addiction counselor experiences and perspectives on the implementation of an open-access medication-assisted treatment model*  
L. Oberleitner<sup>1</sup>, L. Madden<sup>2</sup>, D. Muthulingam<sup>3</sup>, R. Marcus<sup>3</sup>, D. Oberleitner<sup>4</sup>, M. Beitel<sup>2</sup>, D. Barry<sup>3</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University, APT Foundation, New Haven, CT, <sup>3</sup>Yale University School of Medicine, New Haven, CT, <sup>4</sup>University of Bridgeport, Bridgeport, CT
- 12     *The mind of the addiction counselor: A qualitative exploration of their social identity, perceived stigma, and work motivations*  
D. Oberleitner<sup>1</sup>, R. Marcus<sup>2</sup>, M. Beitel<sup>3</sup>, D. Muthulingam<sup>2</sup>, L. Oberleitner<sup>4</sup>, L. Madden<sup>3</sup>, D. Barry<sup>2</sup>, <sup>1</sup>University of Bridgeport, Bridgeport, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University, APT Foundation, New Haven, CT, <sup>4</sup>Yale University, New Haven, CT
- 13     *The hospitalist role to engage patients with opioid use disorder in treatment*  
S. Calcaterra, University of Colorado, Aurora, CO
- 14     *Initiation of opioid agonist treatment for opioid use disorder (OUD) among hospital patients seen by a substance use disorder (SUD) consultation service*  
C. Nordeck<sup>1</sup>, J. Gryczynski<sup>1</sup>, R. Schwartz<sup>1</sup>, S. Mitchell<sup>1</sup>, C. Welsh<sup>2</sup>, K. O’Grady<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>University of Maryland, College Park, MD
- 15     *Same-and-next-day access improves linkage to outpatient MOUD care post-discharge*  
P. Roy<sup>1</sup>, S. Choi<sup>2</sup>, R. Price<sup>1</sup>, E. Bernstein<sup>1</sup>, C. Cunningham<sup>3</sup>, A. Walley<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Boston University School of Public Health, Boston, MA, <sup>3</sup>Montefiore Medical Center, Bronx, NY
- 16     *Who avoids formal treatment? Characterizing a group of opioid-dependent individuals*  
S. Silverstein<sup>1</sup>, R. Daniulaityte<sup>2</sup>, R. Nahhas<sup>2</sup>, R. Carlson<sup>2</sup>, <sup>1</sup>Boonshoft School of Medicine Wright State University, Kettering, OH, <sup>2</sup>Wright State University, Dayton, OH
- 17     *Recruitment and treatment exposure of participants with opioid use disorder in a national drug abuse trial network*  
M. Lewis<sup>1</sup>, L. Hu<sup>1</sup>, C. Rosa<sup>2</sup>, P. Wakim<sup>3</sup>, D. Blumberg<sup>1</sup>, <sup>1</sup>The Emmes Corporation, Rockville, MD, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>3</sup>The National Institutes of Health Clinical Center, Bethesda, MD

- 18 *Baseline characteristics of the population enrolled in, “comparing interventions for opioid-dependent patients presenting in medical EDs (ED-SBCM)”*  
A. Regis<sup>1</sup>, S. Meyers-Ohki<sup>1</sup>, S. Mennenga<sup>1</sup>, R. McCormack<sup>1</sup>, R. Rapp<sup>2</sup>, P. Greco<sup>1</sup>, R. Glisker<sup>1</sup>, R. Kolaric<sup>1</sup>, M. Bogenschutz<sup>3</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Wright State University, Dayton, OH, <sup>3</sup>New York University, New York, NY
- 19 *How long should pharmacotherapy last for the treatment of opioid use disorder? Results from a 12-month observational study*  
W. Ling<sup>1</sup>, V. Nadipelli<sup>2</sup>, N. Ronquest<sup>2</sup>, A. Aldridge<sup>3</sup>, C. Solem<sup>4</sup>, N. Peiper<sup>3</sup>, S. Learned<sup>2</sup>, C. Heidbreder<sup>2</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>Indivior, Inc., Richmond, VA, <sup>3</sup>RTI International, Research Triangle Park, NC, <sup>4</sup>Pharmerit International, Bethesda, MD
- 20 *Long-term impact of medications for opioid use disorder on mortality and re-infection among those with infective endocarditis*  
J. Suzuki<sup>1</sup>, J. Johnson<sup>1</sup>, M. Montgomery<sup>1</sup>, M. Hayden<sup>2</sup>, C. Price<sup>1</sup>, J. Schnipper<sup>1</sup>, J. Liebschutz<sup>3</sup>, R. Weiss<sup>4</sup>, <sup>1</sup>Brigham and Women’s Hospital, Boston, MA, <sup>2</sup>Harvard Medical School, Belmont, MA, <sup>3</sup>University of Pittsburgh, Pittsburgh, PA, <sup>4</sup>McLean Hospital, Belmont, MA
- 21 *Non-drug pleasure in patients on opioid agonist treatment: Consummatory and anticipatory pleasure and the relationship to clinical and demographic characteristics*  
S. Stull<sup>1</sup>, J. Bertz<sup>1</sup>, D. Epstein<sup>1</sup>, L. Panlilio<sup>1</sup>, B. Kowalczyk<sup>2</sup>, P. Finan<sup>3</sup>, K. Preston<sup>4</sup>,  
<sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>Hartwick College, Oneonta, NY, <sup>3</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>4</sup>National Institute of Drug Abuse Intramural Research Program, Baltimore, MD
- 22 *Use of tramadol for long-term treatment of opioid dependence in resource-poor settings with regulatory hurdles for obtaining OST*  
M. Varshney<sup>1</sup>, S. Sarkar<sup>2</sup>, R. Lal<sup>3</sup>, Y. Singh Balhara<sup>2</sup>, <sup>1</sup>DM Addiction, New Delhi, India, <sup>2</sup>National Drug Dependence Treatment Centre, New Delhi, India, <sup>3</sup>All India Institute of Medical Sciences, New Delhi
- 23 *Dose-dependent naloxone-induced morphine withdrawal symptoms in opioid-dependent males — a double-blinded, randomized study*  
L. Brandt<sup>1</sup>, S. Weisshaar<sup>2</sup>, B. Litschauer<sup>2</sup>, S. Sheik-Rezaei<sup>2</sup>, L. Moser<sup>2</sup>, E. Kühberger<sup>3</sup>, U. Bauer<sup>3</sup>, C. Firbas<sup>2</sup>, G. Gouya<sup>2</sup>, M. Wolzt<sup>2</sup>, G. Fischer<sup>4</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Department of Clinical Pharmacology, Medical University of Vienna, Vienna, Austria, <sup>3</sup>G. L. Pharma GmbH, Lannach, Austria, <sup>4</sup>Medizinische Universität, Wien, Austria
- 24 *Emergency department utilization and cost comparison among people with opioid use disorder prior to, during and after opioid agonist therapy*  
N. Jones<sup>1</sup>, S. Larney<sup>2</sup>, T. Dobbins<sup>2</sup>, L. Degenhardt<sup>2</sup>, M. Montebello<sup>2</sup>, M. Shanahan<sup>2</sup>, N. Gisev<sup>2</sup>, <sup>1</sup>NDARC, UNSW, Sydney, Australia, <sup>2</sup>National Drug and Alcohol Research Centre, Sydney, Australia

- 25 *Abstinence-contingent wage supplements to promote employment and abstinence in unemployed adults with opioid use disorder*  
A. Holtyn<sup>1</sup>, M. Arellano<sup>1</sup>, M. Fingerhood<sup>2</sup>, K. Silverman<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD

### POLICY

- 26 *Pain town: An agent-based model of opioid policy effects in a small community*  
G. Bobashev, W. Zule, J. Frank, RTI International, Research Triangle Park, NC
- 27 *Testing an epidemiologic theory of policy-shaped drug use onset curves*  
B. Montgomery, J. Anthony, Michigan State University, East Lansing, MI
- 28 *Varying the timing and frequency of income assistance to reduce escalations in drug use coinciding with government payments: Results of a randomized controlled trial*  
L. Richardson<sup>1</sup>, A. Laing<sup>1</sup>, E. Nosova<sup>2</sup>, M. Milloy<sup>1</sup>, J. Singer<sup>1</sup>, E. Wood<sup>3</sup>, T. Kerr<sup>1</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 29 *A statewide pharmacy-based naloxone purchase trial in Massachusetts*  
R. Pollini<sup>1</sup>, Z. Xuan<sup>2</sup>, T. Green<sup>3</sup>, A. Walley<sup>3</sup>, <sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>Boston University School of Public Health, Boston, MA, <sup>3</sup>Boston University School of Medicine, Boston, MA
- 30 *Mandated substance use disorder treatment for women: Associations with treatment retention*  
D. Rivera<sup>1</sup>, H. Amaro<sup>2</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>Florida International University, Miami, FL
- 31 *National guidelines for long-term opioid therapy from around the world: A comparison with USA CDC national guidelines*  
P. Sloan, University of Kentucky, Lexington, KY
- 32 *Trends in overdose and suicide following Florida's opioid-prescribing reform*  
K. Feder, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 33 *Qualitative evaluation of a health justice partnership in inner-city Sydney, Australia*  
M. Moensted<sup>1</sup>, H. Coupland<sup>2</sup>, R. Sharon<sup>3</sup>, B. White<sup>2</sup>, C. Day<sup>3</sup>, <sup>1</sup>Discipline of Addiction Medicine, Faculty of Medicine and Health, University of Sydney, Sydney, Australia, <sup>2</sup>Drug Health Services, Sydney Local Health District, Camperdown, Australia, <sup>3</sup>University of Sydney, Sydney, Australia

## PSYCHIATRIC COMORBIDITY

- 34 *Cigarette use, ENDS use, and co-use among persons with mental health problems in the US, 2014-2017: Will ENDS use impact the persistence of disparities in cigarette use by mental health status?*  
A. Weinberger<sup>1</sup>, J. Zhu<sup>2</sup>, R. Goodwin<sup>2</sup>, <sup>1</sup>Yeshiva University, New York, NY, <sup>2</sup>The City University of New York, New York, NY
- 35 *Characteristics of patients with severe mental disorders who accept and decline a quitline intervention*  
C. Martínez<sup>1</sup>, A. Feliu<sup>1</sup>, M. Ballbè<sup>1</sup>, G. Nieva<sup>2</sup>, N. Torres<sup>1</sup>, C. Pinet<sup>3</sup>, A. Raich<sup>4</sup>, S. Mondon<sup>5</sup>, P. Barrio<sup>5</sup>, R. Hernández-Ribas<sup>6</sup>, J. Vicens<sup>7</sup>, S. Subirà<sup>7</sup>, S. Costa<sup>3</sup>, J. Vilaplana<sup>8</sup>, L. Alastrue<sup>1</sup>, E. Vilalta<sup>1</sup>, E. Bruguera<sup>2</sup>, J. Suelves<sup>9</sup>, M. Flores<sup>4</sup>, J. Bonet<sup>4</sup>, J. Guydish<sup>10</sup>, E. Fernández<sup>1</sup>, <sup>1</sup>Catalan Institute of Oncology, L'Hospitalet, Spain, <sup>2</sup>Hospital Vall d'Hebron, Barcelona, Spain, <sup>3</sup>Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, <sup>4</sup>Althaia Xarxa Assistencial Universitària, Manresa, Spain, <sup>5</sup>Hospital Clínic, Barcelona, Spain, <sup>6</sup>Hospital Universitari de Bellvitge, L'Hospitalet, Spain, <sup>7</sup>Hestia Duran i Reynals, L'Hospitalet, Spain, <sup>8</sup>Universitat de Lleida, Lleida, Spain, <sup>9</sup>Public Health Agency of Catalonia, Barcelona, Spain, <sup>10</sup>University of California San Francisco, San Francisco, CA
- 36 *Anxiety sensitivity and smoking among Spanish-speaking Latinx adult smokers: The explanatory role of anxiety and depression*  
J. Shepherd, J. Bakhshaie, M. Zvolensky, University of Houston, Houston, TX
- 37 *Impact of first episode psychosis treatment programs on heavy cannabis use among patients with psychosis*  
K. Alcover<sup>1</sup>, O. Oluwoye<sup>2</sup>, L. Kriegel<sup>1</sup>, S. McPherson<sup>3</sup>, M. McDonell<sup>2</sup>, <sup>1</sup>Washington State University, Spokane, WA, <sup>2</sup>Washington State University, Program of Excellence in Addictions Research, Spokane, WA, <sup>3</sup>Washington State University, Elson S. Floyd College of Medicine, Spokane, WA
- 38 *Cannabis use disorder and its comorbidity with other mental health disorders*  
M. Jacobs-Elliott<sup>1</sup>, L. Cottler<sup>1</sup>, A. Otufowora<sup>2</sup>, J. Ball<sup>3</sup>, A. Elliott<sup>1</sup>, G. Nicolette<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, College of Public Health, Gainesville, FL, <sup>3</sup>University of Florida, Department of Epidemiology, Gainesville, FL
- 39 *The relationship between life-time history of physical and sexual trauma with cannabis use in individuals with psychosis*  
A. Bassir Nia<sup>1</sup>, C. Mann<sup>2</sup>, S. Spriggs<sup>2</sup>, D. DeFransosco<sup>2</sup>, C. Perkel<sup>2</sup>, I. Galyunker<sup>2</sup>, Y. Hurd<sup>2</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Icahn School of Medicine at Mount Sinai, New York, NY

- 40 *Factors associated with recent involuntary emergency commitment due to mental illness among a cohort of people who inject drugs (PWID) in Los Angeles and San Francisco, CA*  
K. Simpson<sup>1</sup>, L. Wenger<sup>2</sup>, J. Goldshear<sup>1</sup>, A. Kral<sup>2</sup>, R. Bluthenthal<sup>1</sup>, <sup>1</sup>Keck School of Medicine, Los Angeles, CA, <sup>2</sup>RTI International, San Francisco, CA
- 41 *Association of adverse childhood experiences on depression of substance abusers with comorbid medical illness recruited during hospitalization*  
H. Philogene-Khalid<sup>1</sup>, E. Cunningham<sup>1</sup>, K. Nagayoshi<sup>1</sup>, A. Brooks<sup>2</sup>, M. Morrison<sup>1</sup>, <sup>1</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA, <sup>2</sup>Treatment Research Institute, Philadelphia, PA
- 42 *Consideration of substance use in compensation and pension examinations of veterans filing PTSD claims*  
R. Jankowski<sup>1</sup>, A. Black<sup>2</sup>, C. Lazar<sup>2</sup>, B. Brummett<sup>3</sup>, M. Rosen<sup>2</sup>, <sup>1</sup>Department of Veterans Affairs, Leeds, MA, <sup>2</sup>Yale University/VA Connecticut Healthcare System, New Haven, CT, <sup>3</sup>Northampton VA Medical Center, Leeds, MA
- 43 *Risk of suicide attempts among veterans seeking pain care: Comorbid opioid use disorders and psychiatric disorders*  
L. Ashrafioun, T. Bishop, P. Britton, VA VISN 2 Center of Excellence for Suicide Prevention, Canandaigua, NY
- 44 *Post-traumatic stress disorder and risk of prescription pain reliever misuse among World Trade Center Health Registry enrollees, 2015-2016*  
E. Takemoto<sup>1</sup>, R. Brackbill<sup>1</sup>, S. Martins<sup>2</sup>, M. Farfel<sup>1</sup>, M. Jacobson<sup>1</sup>, <sup>1</sup>New York City Department of Health and Mental Hygiene, New York, NY, <sup>2</sup>Columbia University, New York, NY
- 45 *Do generous unemployment benefits moderate deaths of despair?*  
E. Bruzelius<sup>1</sup>, A. Baum<sup>2</sup>, S. Martins<sup>3</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>Arnhold Institute for Global Health, New York, NY, <sup>3</sup>Columbia University, New York, NY
- 46 *Medical problems in women with comorbid PTSD and SUD by various substances use categories*  
T. Killeen, C. Vrana, H. Feigl, M. Shaw, Medical University of South Carolina, Charleston, SC
- 47 *The prevalence of polysubstance use among psychiatric and emergency department patients in West Virginia*  
J. Mahoney<sup>1</sup>, J. Berry<sup>2</sup>, L. Lander<sup>2</sup>, E. Winstanley<sup>2</sup>, P. Marshalek<sup>2</sup>, M. Haut<sup>2</sup>, S. Hodder<sup>2</sup>, W. Kimble<sup>2</sup>, M. Armistead<sup>2</sup>, <sup>1</sup>West Virginia University School of Medicine, Morgantown, WV, <sup>2</sup>West Virginia University, Morgantown, WV

- 48 *Screening, brief intervention, and referral to treatment (SBIRT) to reduce alcohol and drug use: Results from a randomized-controlled trial in outpatient mental health clinics*  
S. Spear<sup>1</sup>, S. Glasner<sup>2</sup>, R. Rawson<sup>3</sup>, C. Grella<sup>2</sup>, R. Saitz<sup>4</sup>, M. Karno<sup>3</sup>, <sup>1</sup>California State University Northridge, Northridge, CA, <sup>2</sup>University of California, Los Angeles, Los Angeles, CA, <sup>3</sup>UCLA Integrated Substance Abuse Programs, Los Angeles, CA, <sup>4</sup>Boston University School of Public Health, Boston, MA
- 49 *The relationship between post-traumatic stress disorder symptoms and alcohol problems is moderated by Criterion A, trauma type, and traumatic load in young adults*  
N. Phillips, H. Lucke, M. Kelly, A. Cotton, N. Vora, C. Guillot, University of North Texas, Denton, TX
- 50 *Associations between post-traumatic stress and alcohol use and alcohol use motives among firefighters: The role of distress tolerance*  
M. Zegel, A. Vujanovic, University of Houston, Houston, TX
- 51 *PTSD symptom severity and alcohol use in firefighters: The mediating role of anxiety sensitivity*  
A. Lebeaut, A. Vujanovic, University of Houston, Houston, TX
- 52 *BDNF relations with and BDNF  $\times$  stress interactions on symptoms of emotional disorders and associated features*  
D. Poe<sup>1</sup>, C. Guillot<sup>1</sup>, M. Kelly<sup>1</sup>, N. Phillips<sup>1</sup>, T. Liang<sup>2</sup>, M. Berman<sup>3</sup>, <sup>1</sup>University of North Texas, Denton, TX, <sup>2</sup>Indiana University School of Medicine, Indianapolis, IN, <sup>3</sup>Mississippi State University, Mississippi State, MS
- 53 *Purpose in life mediating the relationship between depression and problematic drinking in post-treatment among individuals with alcohol use disorders*  
D. Knoblach, C. DiClemente, University of Maryland, Baltimore, MD
- 54 *Cluster B personality disorder symptoms are indirectly associated with hazardous drinking through positive alcohol expectancies*  
H. Lucke<sup>1</sup>, C. Guillot<sup>1</sup>, M. Berman<sup>2</sup>, <sup>1</sup>University of North Texas, Denton, TX, <sup>2</sup>Mississippi State University, Mississippi State, MS
- 55 *Substance use disorder risk in individuals with autism spectrum disorder*  
A. Yule, Partners Health Care, Boston, MA
- 56 *The relationship between hallucinogen use and cognitive empathy*  
J. Armstrong<sup>1</sup>, M. Pena<sup>1</sup>, K. Moroney<sup>1</sup>, C. Clark<sup>1</sup>, K. Cropsey<sup>2</sup>, <sup>1</sup>Wichita State University, Wichita, KS, <sup>2</sup>University of Alabama, Birmingham, AL
- 57 *Mixed drug intake as predictor of mental health status, Bahir-Dar, north west Ethiopia*  
A. Dagnew, University of Gondar, Gondar, Ethiopia

### STIMULANTS

- 58 *Perspectives on stimulant use among 10- to 17- year-olds in six cities in the US*  
D. Varma, P. Chaudhari, M. Johnson, K. Vaddiparti, C. Woodstock Striley, L. Cottler, University of Florida, Gainesville, FL
- 59 *Diversion of prescription stimulant drugs among 10-17-year-olds*  
C. Woodstock Striley, M. Johnson, Y. Liu, N. Smith, K. Vaddiparti, L. Cottler, University of Florida, Gainesville, FL
- 60 *Past 30-day oral and non-oral prescription stimulant use and associated risk factors among youth aged 10-18 years-old*  
Y. Liu, N. Smith, S. Lloyd, K. Vaddiparti, C. Woodstock Striley, L. Cottler, University of Florida, Gainesville, FL
- 61 *Differences in stimulant misuse motives between education level*  
A. Peterkin, A. Haas, Palo Alto University, Palo Alto, CA
- 62 *Methamphetamine injection behaviors in Central Appalachia: Implications for rural harm reduction programs*  
A. Young<sup>1</sup>, H. Cooper<sup>2</sup>, T. Green<sup>3</sup>, C. VanMeter<sup>3</sup>, <sup>1</sup>University of Kentucky, College of Public Health, Lexington, KY, <sup>2</sup>Emory University, Atlanta, GA, <sup>3</sup>University of Kentucky, Lexington, KY
- 63 *Direct relationship between family functioning and methamphetamine use among opioid injection drug users in Hanoi, Vietnam*  
T. Dao<sup>1</sup>, G. Le<sup>1</sup>, T. Nguyen<sup>1</sup>, T. Nguyen<sup>2</sup>, L. Metsch<sup>3</sup>, D. Feaster<sup>4</sup>, <sup>1</sup>Hanoi Medical University, Hanoi, Viet Nam, <sup>2</sup>Vietnam Ministry of Health, Hanoi, Viet Nam, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>University of Miami Miller School of Medicine, Miami, FL
- 64 *Severity of methamphetamine use among methadone patients in Vietnam: Prevalence and correlates*  
G. Le<sup>1</sup>, T. Dao<sup>1</sup>, E. Okafor<sup>2</sup>, M. Li<sup>2</sup>, T. Nguyen<sup>1</sup>, T. Nguyen<sup>3</sup>, S. Shoptaw<sup>2</sup>, <sup>1</sup>Hanoi Medical University, Hanoi, Viet Nam, <sup>2</sup>University of California Los Angeles, Los Angeles, CA, <sup>3</sup>Vietnam Ministry of Health, Hanoi, Viet Nam
- 65 *Contingency management treatment for methamphetamine use disorder in Cape Town, South Africa*  
E. Okafor, S. Shoptaw, University of California Los Angeles, Los Angeles, CA
- 66 *Nested case-control analysis of real world healthcare data evaluating medications to be repurposed for stimulant use disorders*  
E. Hankosky<sup>1</sup>, D. Harris<sup>1</sup>, L. Cottler<sup>2</sup>, G. Zhang<sup>1</sup>, H. Bush<sup>1</sup>, P. Freeman<sup>1</sup>, J. Talbert<sup>1</sup>, L. Dwoskin<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Florida, Gainesville, FL

- 67 *Safety of oral lisdexamfetamine in adults with methamphetamine dependence: A dose-escalating phase-2 study*  
N. Ezard<sup>1</sup>, A. Dunlop<sup>2</sup>, B. Clifford<sup>1</sup>, R. Bruno<sup>3</sup>, K. Siefried<sup>4</sup>, A. Carr<sup>1</sup>, N. Lintzeris<sup>5</sup>, <sup>1</sup>St. Vincent's Hospital / UNSW, Darlinghurst, Australia, <sup>2</sup>Hunter New England Local Health District, Newcastle, Australia, <sup>3</sup>University of Tasmania, Hobart, Australia, <sup>4</sup>The National Centre for Clinical Research on Emerging Drugs, Sydney, Australia, <sup>5</sup>South Eastern Sydney Local Health District, Surry Hills, Australia
- 68 *High-energy phosphates restoration after eight weeks of creatine supplementation in female methamphetamine users*  
Y. Sung, X. Shi, L. Scholl, D. Kondo, D. Yurgelun-Todd, P. Renshaw, The University of Utah, Salt Lake City, UT
- 69 *Prevalence and correlates of problematic caffeine use in a US nationwide sample*  
M. Sweeney<sup>1</sup>, D. Weaver<sup>1</sup>, K. Vincent<sup>2</sup>, A. Arria<sup>2</sup>, R. Griffiths<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>University of Maryland, School of Public Health, College Park, MD
- 70 *Caffeine enhances sustained attention among adolescents*  
R. Cooper<sup>1</sup>, S. Lawson<sup>1</sup>, W. Phyto<sup>1</sup>, M. Jusko<sup>2</sup>, S. Tonkin<sup>1</sup>, A. Ziegler<sup>1</sup>, J. Temple<sup>1</sup>, L. Hawk<sup>1</sup>, <sup>1</sup>University at Buffalo, Buffalo, NY, <sup>2</sup>University at Buffalo, Miami, FL

### THEORETICAL / COMMENTARY

- 71 *Information on the rising rates of cocaine and amphetamine interdiction, trafficking, use, and overdose deaths*  
D. Carise, Recovery Centers of America & University of Pennsylvania, Conshohocken, PA
- 72 *Considerations in opioid comparator selection in epidemiology studies evaluating the effectiveness of abuse-deterrent opioids*  
N. Sessler<sup>1</sup>, R. Rodriguez<sup>1</sup>, R. Kapil<sup>1</sup>, S. Baldridge<sup>1</sup>, S. Schnoll<sup>2</sup>, R. Dart<sup>3</sup>, M. Bigal<sup>1</sup>, <sup>1</sup>Purdue Pharma LP, Stamford, CT, <sup>2</sup>Pinney Associates, Inc., Bethesda, MD, <sup>3</sup>Rocky Mountain Poison & Drug Center, Denver, CO
- 73 *Examining opioid prescription patterns in safety-net clinics using electronic health records*  
J. Muench, S. Bailey, D. Hartung, G. Barker, D. Wright, N. Huguet, C. Tillotson, J. O'Malley, R. Voss, M. Ukhanova, I. Chamine, Oregon Health & Science University, Portland, OR
- 74 *Family interventions addressing expressed emotions in opioid substitution therapy (OST)*  
V. Singh, G. Kaloiya, A. Ambekar, R. Rao, A. Mishra, National Drug Dependence Treatment Centre, New Delhi, India
- 75 *Some issues of concept, theory, and approach in research on heroin use and mood disturbances*  
A. Vanderziel, J. Anthony, Michigan State University, East Lansing, MI
- 76 *Carisoprodol: Concomitant use and abuse with opioids*  
G. Hawkins, N. Horner, S. Bansil, US Food and Drug Administration, Silver Spring, MD

- 77 *Naltrexone as a novel treatment strategy for nitrous oxide use disorder*  
S. Ickowicz, R. Brar, S. Nolan, University of British Columbia, Vancouver, BC, Canada
- 78 *Increasing access to naloxone: The scientific strategy needed to bring naloxone over-the-counter*  
J. Ashworth<sup>1</sup>, M. Hufford<sup>2</sup>, B. Simone<sup>1</sup>, S. Schnoll<sup>1</sup>, E. Cone<sup>1</sup>, A. Arthur<sup>1</sup>, J. Pinney<sup>1</sup>, J. Henningfield<sup>1</sup>, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>Harm Reduction Therapeutics, Pittsburgh, PA
- 79 *Mechanisms of action of most interest to the National Institute on Drug Abuse for the potential treatment of opiate use disorder*  
D. White, J. Acri, K. Rasmussen, National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD
- 80 *Pay for outcomes: How it might work in substance use disorder treatment*  
D. Hodgkin<sup>1</sup>, C. Horgan<sup>1</sup>, D. Garnick<sup>2</sup>, A. Busch<sup>3</sup>, M. Stewart<sup>2</sup>, S. Reif<sup>1</sup>, <sup>1</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>2</sup>Brandeis University, Waltham, MA, <sup>3</sup>Department of Health Care Policy, Harvard Medical School, Boston, MA
- 81 *Multi-site clinical trials and use of a single IRB: A case study from CTN 0067*  
C. Nichols<sup>1</sup>, L. Kunkel<sup>1</sup>, R. Baker<sup>1</sup>, E. Jelstrom<sup>2</sup>, M. Addis<sup>3</sup>, K. Hoffman<sup>1</sup>, D. McCarty<sup>1</sup>, P. Korthuis<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>The Emmes Corporation, Alexandria, VA, <sup>3</sup>Kaiser Permanente Washington Health Research Institute, Seattle, WA
- 82 *Scheduling synthetic cathinone substances under the Controlled Substances Act*  
K. Bonson<sup>1</sup>, D. Chiapperino<sup>2</sup>, <sup>1</sup>US Food and Drug Administration, Silver Spring, MD, <sup>2</sup>U.S. Food and Drug Administration, Silver Spring, MD
- 83 *A suggestion for the design of qualification phase in human abuse potential studies*  
L. Chen, US Food and Drug Administration, Silver Spring, MD
- 84 *Increasing minority participation and diversity in CPDD and ACNP meetings and membership: 2019 status and recommendations*  
J. Henningfield<sup>1</sup>, L. Brown<sup>2</sup>, S. Comer<sup>3</sup>, A. Garcia-Romeu<sup>4</sup>, D. Hatsukami<sup>5</sup>, D. Furr-Holden<sup>6</sup>, <sup>1</sup>Pinney Associates, Inc., Bethesda, MD, <sup>2</sup>START Treatment & Recovery Centers, Brooklyn, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY, <sup>4</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>5</sup>University of Minnesota Medical School, Minneapolis, MN, <sup>6</sup>Michigan State University, East Lansing, MI
- 85 *A streamlined approach to the acquisition, analysis and databasing of data from drug self-administration sessions*  
H. Wetzel<sup>1</sup>, A. Norman<sup>2</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University of Cincinnati, College of Medicine, Cincinnati, OH
- 86 *Considerations for the use of male and female animals in behavioral abuse potential studies during drug development*  
J. Randall-Thompson, G. Hawkins, S. Calderon, D. Chiapperino, US Food and Drug Administration, Silver Spring, MD

- 87 *Drug discrimination cannabinoid validation in the female Lister hooded rat*  
S. Rowton, Covance Laboratories, Harrogate, North Yorkshire, United Kingdom

### BEHAVIOR

- 88 *Ovarian hormones mediate acquisition of nicotine self-administration and accumbens glutamatergic plasticity*  
J. Jackson, J. Pina, H. Ulangkaya, H. Bimonte-Nelson, C. Gipson-Reichardt, Arizona State University, Tempe, AZ
- 89 *Effects of a blueberry flavor reinforcer on nicotine self-administration in rats*  
M. Palmatier<sup>1</sup>, A. Smith<sup>1</sup>, C. Ponder-Cepeda<sup>1</sup>, D. Harryman<sup>1</sup>, C. Majors<sup>1</sup>, J. Marusich<sup>2</sup>, <sup>1</sup>East Tennessee State University, Johnson City, TN, <sup>2</sup>RTI International, Research Triangle Park, NC
- 90 *Investigating the sensitivity to  $\alpha 4\beta 2$  compounds using nicotine drug discrimination in enriched and impoverished rats*  
D. Stairs, K. Holter, W. Ramsey, M. Hamersky, Creighton University, Omaha, NE
- 91 *A novel metabotropic glutamate receptor 2 positive allosteric modulator, SBI-0069330, attenuates nicotine taking and nicotine seeking in rats*  
X. Li<sup>1</sup>, N. Cosford<sup>2</sup>, G. Velicelebi<sup>2</sup>, R. Gadiant<sup>2</sup>, J. Hutchinson<sup>2</sup>, R. Dhanya<sup>2</sup>, D. Sheffler<sup>2</sup>, R. Anthenelli<sup>3</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA, <sup>3</sup>University of California San Diego, La Jolla
- 92 *The role of accumbens serotonin transport and GluN2B-containing NMDA receptors in nicotine relapse*  
J. Jackson, J. Pina, J. McCallum, H. Ulangkaya, C. Gipson-Reichardt, Arizona State University, Tempe, AZ
- 93 *An investigation of the reinforcing potential of PN6047 by conditioned place preference testing in rats*  
J. Palandri<sup>1</sup>, D. Heal<sup>2</sup>, C. Bailey<sup>1</sup>, D. Kendall<sup>3</sup>, <sup>1</sup>University of Bath, Bath, United Kingdom, <sup>2</sup>RenaSci Ltd, Nottingham, United Kingdom, <sup>3</sup>PharmNovo AB, Kungshamn, Sweden
- 94 *A novel neuropeptide decreases opioid self-administration*  
J. Kasper, K. Cunningham, J. Hommel, University of Texas Medical Branch, Galveston, TX
- 95 *Molecular mechanisms underlying incubation of morphine craving in Long Evans rats*  
H. Mayberry<sup>1</sup>, S. Downey<sup>1</sup>, S. Bhakta<sup>1</sup>, A. Bongiovanni<sup>1</sup>, A. Ellis<sup>2</sup>, A. Toussaint<sup>1</sup>, M. Wimmer<sup>1</sup>, <sup>1</sup>Temple University, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA
- 96 *Behavioral characterization of voluntary heroin vapor exposure in female rats*  
A. Gutierrez, J. Nguyen, M. Taffe, The Scripps Research Institute, La Jolla, CA
- 97 *Development of a human Pavlovian conditioned approach paradigm*  
L. Cope<sup>1</sup>, A. Gheidi<sup>2</sup>, T. Allerton<sup>1</sup>, A. Drumheller<sup>1</sup>, H. Khalil<sup>1</sup>, J. Morrow<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan Medical School, Ann Arbor, MI

- 98 *Development and initial validation of the TERM: A temporally extended reinforcer measure*  
A. Mellis<sup>1</sup>, W. Bickel<sup>2</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>2</sup>Fralin Biomedical Research Institute at VTC, Roanoke, VA

### SEX/GENDER

- 99 *Acquisition of remifentanyl self-administration: Assessing the role of sex and stress exposure in male and female rats*  
D. Thorpe<sup>1</sup>, R. Lacy<sup>2</sup>, <sup>1</sup>Stony Brook University, Lake Grove, NY, <sup>2</sup>Franklin and Marshall College, Lancaster, PA
- 100 *Characterization of oxycodone self-administration and withdrawal-associated negative affect in male and female rats*  
S. Guha<sup>1</sup>, N. Constantino<sup>2</sup>, E. Chartoff<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA
- 101 *An evidence-based evaluation of the possible influence of gender on results from abuse and dependence liability testing in rats*  
D. Heal, J. Gosden, S. Smith, RenaSci Ltd, Nottingham, United Kingdom
- 102 *Childhood sensation-seeking and problem gambling in young adulthood: Sex matters*  
N. Levy<sup>1</sup>, C. Duarte<sup>2</sup>, L. Segura<sup>3</sup>, J. Santaella-Tenorio<sup>1</sup>, M. Okuda Benavides<sup>2</sup>, M. Wall<sup>2</sup>, C. Chen<sup>2</sup>, M. Ramos-Olazagasti<sup>2</sup>, G. Canino<sup>4</sup>, H. Bird<sup>4</sup>, S. Martins<sup>3</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, <sup>4</sup>University of Puerto Rico, San Juan, Puerto Rico
- 103 *Sex differences in subjective effects of cigarette-smoking following nicotine patch*  
Y. Zakiniaieiz, Yale University, New Haven, CT
- 104 *Women-reported barriers and facilitators of adherence to medications for opioid use disorder*  
A. Fiddian-Green, E. Evans, University of Massachusetts Amherst School of Public Health and Health Sciences, Amherst, MA
- 105 *Current unmet addiction treatment needs among reproductive-aged women*  
C. Martin, A. Scialli, M. Terplan, Virginia Commonwealth University, Richmond, VA
- 106 *Unmet addiction treatment need in the US: Is there a gender difference?*  
C. Martin, A. Scialli, M. Terplan, Virginia Commonwealth University, Richmond, VA
- 107 *Meta-analysis of sex differences in completed NIDA Clinical Trials Network studies*  
S. Mennenga<sup>1</sup>, S. Greenfield<sup>2</sup>, D. Feaster<sup>3</sup>, M. Bogenschutz<sup>4</sup>, J. Rotrosen<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>3</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>4</sup>New York University, New York, NY

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## Sunday, June 16, 2019

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- 108 *The role of age and sex in patients on medication assisted therapy for opiate use disorder*  
G. Hermes<sup>1</sup>, R. Sinha<sup>1</sup>, L. Madden<sup>2</sup>, D. Barry<sup>1</sup>, V. Milivojevic<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, APT Foundation, New Haven, CT
- 109 *Sex differences in injecting drug use among newly incident users of cocaine and heroin in the US (2002-2016)*  
M. Chandra<sup>1</sup>, J. Anthony, East Lansing, MI, <sup>1</sup>Michigan State University, East Lansing, MI
- 110 *Time of escalation of drug use in persons dually diagnosed with opioid and cocaine dependence: Gender differences and dimensional correlates*  
K. Brown, C. Chen, R. Conybeare, E. Butelman, M. Kreek, The Rockefeller University, New York, NY
- 111 *Examining the relationship between trait resilience, sex and addiction severity among individuals with opioid use disorder*  
S. Martinez<sup>1</sup>, J. Jones<sup>2</sup>, D. Hien<sup>3</sup>, S. 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, <sup>3</sup>Center of Alcohol Studies, Rutgers University-New Brunswick, Piscataway, NJ
- 112 *Sexual risk among substance using African Americans with a main partner*  
C. McCuistian, B. Peteet, A. Burlew, B. Miller-Roenigk, University of Cincinnati, Cincinnati, OH
- 113 *Sex differences in prescription (Rx) opioid use patterns among community members in north central Florida*  
M. Serdarevic, C. Woodstock Striley, K. Gurka, R. Leeman, L. Cottler, University of Florida, Gainesville, FL
- 114 *Sex differences in driving under the influence of marijuana: The role of medical and recreational marijuana use*  
S. Lloyd, C. Lopez-Quintero, C. Woodstock Striley, University of Florida, Gainesville, FL

### **PRESIDENT'S SYMPOSIUM**

#### **IMPACT OF TOBACCO USE ON SUBSTANCE USE DISORDERS: MECHANISM TO EPIDEMIOLOGY**

**Grand Oaks K/L  
1:00 - 2:00 PM**

*Tobacco smoking associated with increased risk of cannabis relapse*  
Margaret Haney, Columbia University Irving Medical Center

*Tobacco use and the progression, persistence and relapse  
of substance use disorders: An epidemiologic perspective*  
Renee Goodwin, CUNY School of Public Health and Health Policy

*From one experience to another, a molecular analysis of smoking and subsequent drug use*  
Amir Levine, Columbia University Irving Medical Center

*Discussant - Jennifer Tidey, Brown University*

## LATE BREAKING I

**Grand Oaks K/L**  
**2:15 - 3:15 PM**

Chair: William Stoops

- 2:15 *Association between current opioid agonist therapy use and positive urine drug screen for fentanyl*  
S. Young<sup>1</sup>, K. Hayashi<sup>2</sup>, T. Kerr<sup>3</sup>, M. Milloy<sup>3</sup>, K. DeBeck<sup>4</sup>, E. Nosova<sup>3</sup>, E. Wood<sup>5</sup>, N. Fairbairn<sup>3</sup>, <sup>1</sup>Research in Addiction Medicine Scholars Program, Vancouver, BC, Canada, <sup>2</sup>Simon Fraser University, Vancouver, BC, Canada, <sup>3</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>4</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>5</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 2:20 *Injectable weekly and monthly buprenorphine in the outpatient treatment of fentanyl users with opioid use disorder (OUD)*  
E. Nunes<sup>1</sup>, S. Comer<sup>2</sup>, M. Lofwall<sup>3</sup>, S. Walsh<sup>4</sup>, S. Peterson<sup>5</sup>, N. Budilovsky-Kelley<sup>6</sup>, F. Tiberg<sup>5</sup>, S. Kim<sup>6</sup>, <sup>1</sup>Columbia University and New York State Psychiatric Institute, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>4</sup>University of Kentucky, Lexington, KY, <sup>5</sup>Camurus, Lund, Sweden, <sup>6</sup>Braeburn, Plymouth Meeting, PA
- 2:25 *ED-initiated buprenorphine in low-resource, high-need emergency departments (NIDA CTN-0079)*  
R. McCormack<sup>1</sup>, J. Rotrosen<sup>1</sup>, G. D'Onofrio<sup>2</sup>, P. Gauthier<sup>3</sup>, D. Fiellin<sup>2</sup>, L. Marsch<sup>3</sup>, E. Edelman<sup>2</sup>, E. Coupet<sup>2</sup>, R. Knight<sup>4</sup>, W. Goodman<sup>5</sup>, P. Novo<sup>1</sup>, S. Farkas<sup>1</sup>, D. Liu<sup>6</sup>, K. Huntley<sup>6</sup>, K. Hawk<sup>7</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>4</sup>Valley Regional Hospital, Claremont, NH, <sup>5</sup>Catholic Medical Center, Manchester, NH, <sup>6</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>7</sup>Yale University Department of Emergency Medicine, New Haven, CT
- 2:30 *Community pharmacy-led intervention for opioid medication misuse*  
G. Cochran<sup>1</sup>, F. Craig<sup>2</sup>, V. Hruschak<sup>3</sup>, A. Seybert<sup>3</sup>, A. Gordon<sup>1</sup>, R. Tarter<sup>3</sup>, <sup>1</sup>University of Utah, Salt Lake City, UT, <sup>2</sup>University of Texas, El Paso, El Paso, TX, <sup>3</sup>University of Pittsburgh, Pittsburgh, PA
- 2:35 *Butyrylcholinesterase inhibitors exhibit efficacy in patients against-opioid induced overdose events*  
A. Williams, E. Hankosky, C. Zhan, J. Talbert, University of Kentucky, Lexington, KY

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## Sunday, June 16, 2019

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- 2:40 *A large-scale reward-related brain network abnormality in treatment-seeking prescription opioid-dependent individuals*  
S. Ray<sup>1</sup>, R. Mill<sup>1</sup>, E. Winfield<sup>1</sup>, M. Cole<sup>1</sup>, D. Hien<sup>2</sup>, <sup>1</sup>Rutgers University, Newark, NJ, <sup>2</sup>Center of Alcohol Studies, Rutgers University-New Brunswick, Piscataway, NJ
- 2:45 *Brain reward system response to infant portraits is correlated with mother-child bonding in women with opioid use disorder*  
Z. Shi<sup>1</sup>, J. Padley<sup>2</sup>, C. Aronowitz<sup>2</sup>, A. Wang<sup>2</sup>, A. Childress<sup>3</sup>, D. Hand<sup>4</sup>, D. Abatemarco<sup>4</sup>, D. Langleben<sup>5</sup>, <sup>1</sup>Department of Psychiatry, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>University of Pennsylvania Perelman School Medicine, Philadelphia, PA, <sup>4</sup>Thomas Jefferson University, Philadelphia, PA, <sup>5</sup>Veterans Administration, Philadelphia, PA
- 2:50 *The effects of inhaled salvinorin A on resting state functional connectivity in humans*  
M. Doss<sup>1</sup>, R. Griffiths<sup>2</sup>, D. May<sup>3</sup>, M. Johnson<sup>2</sup>, J. Clifton<sup>1</sup>, F. Barrett<sup>2</sup>, <sup>1</sup>Johns Hopkins University, 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
- 2:55 *Sex differences in functional connectivity of large-scale neural networks and tobacco withdrawal-related states*  
A. Donis<sup>1</sup>, M. Perez Diaz<sup>2</sup>, D. Ghahremani<sup>2</sup>, P. Faulkner<sup>2</sup>, A. Dean<sup>2</sup>, G. Hellemann<sup>3</sup>, E. London<sup>2</sup>, <sup>1</sup>UCLA, Los Angeles, CA, <sup>2</sup>University of California Los Angeles, Los Angeles, CA, <sup>3</sup>Semel Institute, UCLA, Los Angeles, CA
- 3:00 *Evaluation of the abuse liability of very low nicotine content cigarettes with characterization of nicotine exposure profiles in adult smokers*  
N. Levy-Cooperman<sup>1</sup>, M. Shram<sup>1</sup>, D. Kelsh<sup>2</sup>, B. Vince<sup>2</sup>, E. Carmines<sup>3</sup>, <sup>1</sup>Altrees Research Partners Inc., Toronto, ON, Canada, <sup>2</sup>Vince and Associates, Malvern, PA, <sup>3</sup>Carmines Consulting, LLC, Scottsdale, AZ
- 3:05 *How and why adolescents and young adults are using different pod-type e-cigarettes*  
K. McKelvey, B. Halpern-Felsher, Stanford University School of Medicine, Palo Alto, CA
- 3:10 *Smoking is associated with inflammation and increased B-cell proportion in peripheral blood in older African American smokers*  
A. Andersen<sup>1</sup>, R. Philibert<sup>1</sup>, M. Lei<sup>2</sup>, S. Beach<sup>2</sup>, <sup>1</sup>University of Iowa, Iowa City, IA, <sup>2</sup>University of Georgia, Athens, GA

### ORAL COMMUNICATIONS 1 TEN GALLON HATS OFF TO THE VETS

**Grand Oaks M**  
**2:15 - 3:15 PM**

Chair: Ajay Manhapra

- 2:15 *Impact of bodily pain on substance use over time among Reserve and National Guard soldiers*  
B. Vest, R. Hoopsick, D. Homish, G. Homish, State University of New York at Buffalo, Buffalo, NY

- 2:30 *Opioid use disorder and risk of homelessness nationally in the Veterans Health Administration*  
A. Manhapra<sup>1</sup>, E. Stefanovics<sup>2</sup>, R. Rosenheck<sup>3</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Department of Psychiatry, Yale School of Medicine, West Haven, CT, <sup>3</sup>Yale University Department of Psychiatry, New Haven, CT
- 2:45 *Overdose events in homeless-experienced veterans: A common event in new survey data*  
S. Kertesz<sup>1</sup>, K. Riggs<sup>1</sup>, A. Gordon<sup>2</sup>, A. deRussy<sup>1</sup>, A. Montgomery<sup>1</sup>, S. Holmes<sup>1</sup>, A. Jones<sup>3</sup>, E. Austin<sup>4</sup>, L. Gelberg<sup>5</sup>, S. Gabrielian<sup>6</sup>, A. Hoge<sup>1</sup>, A. Varley<sup>4</sup>, D. Pollio<sup>4</sup>, J. Merlin<sup>7</sup>, J. Blossnich<sup>8</sup>, <sup>1</sup>Birmingham VA Medical Center, Birmingham, AL, <sup>2</sup>University of Utah, Salt Lake City, UT, <sup>3</sup>VA Salt Lake City Health Care System, Salt Lake City, UT, <sup>4</sup>University of Alabama, Birmingham, AL, <sup>5</sup>University of California, Department of Family Medicine, Los Angeles, CA, <sup>6</sup>VA Greater Los Angeles Healthcare System, Los Angeles, CA, <sup>7</sup>University of Pittsburgh School of Medicine, Pittsburgh, PA, <sup>8</sup>VA Pittsburgh Healthcare System, Pittsburgh, PA
- 3:00 *Psychosocial treatment reduces cost of crime among homeless veterans with substance use disorders*  
E. Santa Ana<sup>1</sup>, L. Dismuke<sup>1</sup>, K. Lamb<sup>2</sup>, K. Beavis<sup>1</sup>, M. Ardel<sup>1</sup>, N. Swinton-Jenkins<sup>1</sup>, <sup>1</sup>Ralph H. Johnson VA Medical Center, Charleston, SC, <sup>2</sup>Charleston VAMC, Charleston, SC

### **SYMPOSIUM I MINDFULNESS INTERVENTIONS IN THE TREATMENT OF MATERNAL SUBSTANCE USE**

**Grand Oaks E/F  
2:15 - 3:15 PM**

Chair: Karol Kaltenbach

- 2:15 *Overview of parenting quality and its relationship to comprehensive maternal substance use treatment*  
K. Kaltenbach, Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA
- 2:35 *Outcomes of mindfulness-based interventions in the treatment of maternal substance use*  
D. Abatemarco<sup>1</sup>, K. Kaltenbach<sup>2</sup>, M. Mackenzie<sup>3</sup>, V. Short<sup>1</sup>, M. Gannon<sup>1</sup>, <sup>1</sup>Thomas Jefferson University, Philadelphia, PA, <sup>2</sup>Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA, <sup>3</sup>University of Delaware, Newark,
- 2:55 *Predicting change in mindfulness-based outcomes: A multilevel modeling approach*  
M. Mackenzie, University of Delaware, Newark, DE

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**SYMPOSIUM II  
DEVELOPING AND INVESTIGATING  
RODENT MODELS OF COMPULSIVE DRUG USE**

**Grand Oaks H  
2:15 - 3:15 PM**

Chairs: Cody Siciliano and Erin Calipari

- 2:15 *A novel mouse model for tracking individual differences in compulsion vulnerability*  
C. Siciliano, Massachusetts Institute of Technology, Cambridge, MA
- 2:35 *Cues play a critical role in addiction vulnerability in females*  
E. Calipari, Vanderbilt University, Nashville, TN
- 2:55 *Withdrawal-induced escalated oxycodone self-administration is mediated by kappa opioid receptor function*  
M. Taffe, The Scripps Research Institute, La Jolla, CA

**SYMPOSIUM III  
PERIPHERAL MECHANISMS INVOLVED IN THE  
DEVELOPMENT OF OPIOID TOLERANCES**

**Grand Oaks G  
2:15 - 3:15 PM**

Chairs: William Dewey and Hamid Akbarali

- 2:15 *The guts of the opioid crisis*  
H. Akbarali, Virginia Commonwealth University, Richmond, VA
- 2:35 *The role of the microbiome in morphine tolerance*  
S. Roy, University of Miami, Miami, FL
- 2:55 *Morphine-mediated downregulation of miR-152 activates astrocytes via NLRP6 inflammasome signaling*  
P. Periyasamy, University of Nebraska Medical Center, Omaha, NE

**COFFEE BREAK**

**Cibolo Ballroom  
3:15 - 3:45 PM**

**ORAL COMMUNICATIONS 2  
LIFTING THE FOG ON CANNABINOIDS**

**Grand Oaks  
3:45 - 5:45 PM**

Chairs: Scott Lukas and Tory Spindle

- 3:45 *Pharmacological effects of AMB-FUBINACA (FUB-AMB) and related 'spice' compounds in mice lacking cannabinoid-1 receptor (CB1R) alleles*  
M. Baumann<sup>1</sup>, J. Partilla<sup>1</sup>, T. Prisinzano<sup>2</sup>, J. Fedorko<sup>1</sup>, N. Garibay<sup>1</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>University of Kansas, Lawrence, KS

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- 4:00 *Are acute effects more extreme with higher-potency cannabis? A within-person comparison of marijuana and butane hash oil*  
S. Okey, M. Meier, Arizona State University, Tempe, AZ
- 4:15 *Chronic cannabinoid treatment affects discrimination learning in adolescent nonhuman primates*  
S. Withey<sup>1</sup>, B. Kangas<sup>2</sup>, J. Bergman<sup>3</sup>, B. Madras<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>Harvard Medical School, Belmont, MA, <sup>3</sup>McLean Hospital, Belmont, MA
- 4:30 *Detection of cognitive impairment associated with cannabis intoxication via dynamic brain functional connectivity*  
Y. Zhu<sup>1</sup>, M. Sabuncu<sup>1</sup>, J. Gilman<sup>2</sup>, A. Evins<sup>2</sup>, <sup>1</sup>Cornell University, Ithaca, NY, <sup>2</sup>Massachusetts General Hospital-Psychiatry, Boston, MA
- 4:45 *Associations between delay discounting and measures of cannabis use frequency in a large sample of cannabis users*  
M. Sofis<sup>1</sup>, C. Stanger<sup>1</sup>, A. Knapp<sup>2</sup>, J. Borodovsky<sup>3</sup>, A. Budney<sup>2</sup>, <sup>1</sup>Dartmouth College, Hanover, NH, <sup>2</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>3</sup>Washington University School of Medicine, St. Louis, MO
- 5:00 *Residual impact of heavy recreational marijuana use without acute intoxication on driving performance*  
M. Dahlgren<sup>1</sup>, K. Sagar<sup>2</sup>, R. Smith<sup>2</sup>, A. Lambros<sup>2</sup>, M. Kuppe<sup>2</sup>, L. Patriarca<sup>2</sup>, S. Gruber<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA
- 5:15 *MRS metabolic profiling of marijuana users during the initial phase of abstinence*  
S. Lukas<sup>1</sup>, K. Davis<sup>2</sup>, M. Kuppe<sup>3</sup>, S. Gruber<sup>1</sup>, C. Zuo<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
- 5:30 *Assessment of impairment following oral and vaporized cannabis administration in infrequent cannabis users*  
T. Spindle<sup>1</sup>, M. Grabenauer<sup>2</sup>, E. Martin<sup>1</sup>, R. Vandrey<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>RTI International, Research Triangle Park, NC

### ORAL COMMUNICATIONS 3 THIS IS YOUR BODY ON DRUGS: HEALTH CONSEQUENCES

**Grand Oaks M**  
**3:45 - 5:45 PM**

Chairs: Luis Segura and William Stoops

- 3:45 *The effects of naloxone-precipitated opioid withdrawal on the parasympathetic nervous system*  
J. Wai<sup>1</sup>, C. Levin<sup>2</sup>, J. Jones<sup>3</sup>, J. Kaicher<sup>4</sup>, S. Comer<sup>5</sup>, <sup>1</sup>Columbia University Medical Center, New York, NY, <sup>2</sup>NYSPI, New York, NY, <sup>3</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>4</sup>Columbia University, New York, NY, <sup>5</sup>Columbia University and NYSPI, New York, NY

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## Sunday, June 16, 2019

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- 4:00 *Nonmedical prescription opioids use, heroin use, and cardiovascular disease*  
L. Segura<sup>1</sup>, N. Levy<sup>2</sup>, A. Perlmutter<sup>1</sup>, S. 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
- 4:15 *Neurochemical and cardiovascular effects of alpha-ethylphenethylamine analogs found in dietary supplements*  
C. Schindler<sup>1</sup>, E. Thorndike<sup>1</sup>, J. Partilla<sup>1</sup>, K. Rice<sup>2</sup>, M. 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, Baltimore, MD
- 4:30 *Relationship of cardiac health indicators to cocaine use variables*  
W. Stoops<sup>1</sup>, J. Strickland<sup>1</sup>, J. Havens<sup>2</sup>, T. Sexton<sup>1</sup>, J. Lile<sup>2</sup>, C. Rush<sup>1</sup>, S. Smyth<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 4:45 *Behavioral and health consequences of cannabis and tobacco co-use among cannabis-using young adults*  
C. Wong<sup>1</sup>, E. Iverson<sup>1</sup>, B. Conn<sup>1</sup>, S. Mendez<sup>2</sup>, E. Fedorova<sup>3</sup>, S. Lankenau<sup>4</sup>, <sup>1</sup>Children's Hospital Los Angeles, Los Angeles, CA, <sup>2</sup>USC University Center for Excellence in Developmental Disabilities, Los Angeles, CA, <sup>3</sup>Drexel University, Philadelphia, PA, <sup>4</sup>Drexel University Dornsife School of Public Health, Philadelphia, PA
- 5:00 *Regular cannabis use is associated with adverse cardiovascular outcomes: Electronic health record findings*  
T. Winhusen<sup>1</sup>, J. Theobald<sup>1</sup>, D. Kaelber<sup>2</sup>, D. Lewis<sup>1</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>MetroHealth, Shaker Heights, OH
- 5:15 *High prevalence of hypocapnia among healthy cigarette smokers*  
A. Umbricht<sup>1</sup>, D. Huggins<sup>1</sup>, N. Schlienz<sup>2</sup>, S. Reed<sup>1</sup>, M. Velez<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY
- 5:30 *Results of implementing objective measurement of smoking status at cardiac rehabilitation*  
D. Gaalema<sup>1</sup>, P. Savage<sup>2</sup>, J. Rengo<sup>2</sup>, P. Ades<sup>2</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Vermont Medical Center, Burlington, VT

### ORAL COMMUNICATIONS 4 SPURRING ON INNOVATION: EMERGING TX STRATEGIES

**Grand Oaks H  
3:45 - 5:45 PM**

Chairs: Margaret Haney and Caitlyn Hood

- 3:45 *Influence of oxytocin on neuroendocrine and subjective response to a social stress task in cocaine-dependent men and women*  
B. Sherman, N. Baker, K. Brady, J. Joseph, L. Nunn, A. McRae-Clark, Medical University of South Carolina, Charleston, SC

- 4:00 *Predictors of neuroendocrine reactivity to social stress among smokers: Examining the roles of sex, adverse childhood experiences, and intranasal oxytocin*  
C. Hood<sup>1</sup>, R. Tomko<sup>2</sup>, N. Baker<sup>2</sup>, B. Tuck<sup>2</sup>, J. Flanagan<sup>2</sup>, M. Carpenter<sup>2</sup>, K. Gray<sup>2</sup>, M. Saladin<sup>2</sup>, E. McClure<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>Medical University of South Carolina, Charleston, SC
- 4:15 *Serum BDNF levels are associated with increased gray matter (GM) volume in the striatum and reduced GM in the prefrontal cortex and hippocampus of crack-cocaine users*  
H. Oliveira<sup>1</sup>, F. Duran<sup>1</sup>, P. Dib Gonçalves<sup>1</sup>, M. Serpa<sup>1</sup>, L. de Menezes Sanchez<sup>2</sup>, D. Lima<sup>2</sup>, L. Valiengo<sup>1</sup>, R. Camarini<sup>1</sup>, I. Talib<sup>2</sup>, R. Souza<sup>1</sup>, M. Ometto<sup>3</sup>, B. Santos<sup>4</sup>, A. Malbergier<sup>4</sup>, R. Amaral<sup>3</sup>, W. Gattaz<sup>1</sup>, H. Giroud<sup>1</sup>, S. Nicastrì<sup>5</sup>, M. Zanetti<sup>1</sup>, T. Chaim-Avancini<sup>1</sup>, C. de Melo<sup>1</sup>, L. Kobuti<sup>1</sup>, M. Cavalett<sup>1</sup>, N. Costa<sup>1</sup>, A. Andrade<sup>6</sup>, G. Busatto Filho<sup>6</sup>, P. 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>University of São Paulo Medical School, São Paulo, <sup>5</sup>Hospital Israelita Albert Einstein, São Paulo, Brazil, <sup>6</sup>University of São Paulo Medical School, São Paulo, Brazil
- 4:30 *Evidence for GABA B agonists as smoking cessation aids: A placebo-controlled perfusion fMRI study*  
A. Ketcherside<sup>1</sup>, K. Jagannathan<sup>1</sup>, N. Spilka<sup>2</sup>, N. Hager<sup>1</sup>, F. Yang<sup>1</sup>, S. Darnley<sup>1</sup>, H. Rao<sup>1</sup>, T. Franklin<sup>1</sup>, R. Wetherill<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>The University of Pennsylvania, Philadelphia, PA
- 4:45 *In vitro and in silico illumination of an allosteric serotonin 5-HT<sub>2C</sub> receptor (5-HT<sub>2CR</sub>) binding site*  
E. Wold, C. Wild, J. Chen, K. Pazdrak, E. Garcia, N. Anastasio, H. Chen, K. Cunningham, J. Zhou, University of Texas Medical Branch, Galveston, TX
- 5:00 *High-dose lorcaserin: Interaction with intravenous cocaine and effects on drug self-administration*  
K. Grasing, J. Pirtle, K. Surineni, H. Thakur, V. Boinpelly, Kansas City VA Medical Center, Kansas City, MO
- 5:15 *Lorcaserin decreases cannabis self-administration in daily cannabis smokers following several days of abstinence*  
M. Haney<sup>1</sup>, C. Arout<sup>1</sup>, Z. Cooper<sup>2</sup>, S. Reed<sup>3</sup>, R. Foltin<sup>4</sup>, S. Comer<sup>5</sup>, F. Levin<sup>5</sup>, <sup>1</sup>Columbia University Medical Center, New York, NY, <sup>2</sup>UCLA Cannabis Research Initiative, Los Angeles, CA, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>Columbia University Irving Medical Center, New York, NY, <sup>5</sup>Columbia University and NYSPI, New York, NY
- 5:30 *Mirtazapine for methamphetamine use disorder among men and transwomen who have sex with men: A randomized placebo-controlled trial*  
P. Coffin<sup>1</sup>, G. Santos<sup>2</sup>, J. Hern<sup>1</sup>, E. Vittinghoff<sup>2</sup>, J. Walker<sup>1</sup>, T. Matheson<sup>1</sup>, D. Santos<sup>1</sup>, G. Colfax<sup>1</sup>, S. Batki<sup>3</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>San Francisco Veterans Affairs Health Care System, San Francisco, CA

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**Sunday, June 16, 2019**

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**SYMPOSIUM IV  
DEVELOPMENTAL FACTORS CONTRIBUTING  
TO OPIOID USE DISORDER**

**Grand Oaks I  
3:45 - 5:45 PM**

Chairs: Yasmin Hurd and Junstine Larson

- 3:45 *Long-term effects of child maltreatment on risk of substance abuse and dependence*  
L. Strathearn, University of Iowa, Stead Family Department of Pediatrics, Iowa City, IA
- 4:10 *Early life trauma and opioid dependence*  
S. Andersen, McLean Hospital, Harvard Medical School, Belmont, MA
- 4:35 *Epigenetics and cell biology of cannabinoids in opioid addiction*  
Y. Hurd, Icahn School of Medicine at Mount Sinai, New York, NY
- 5:00 *Genomic variation and epigenetic regulation in opioid use disorders*  
D. Nielsen, Baylor College of Medicine, Montgomery, TX
- 5:25 *Challenges in clinical and basic research of opioid misuse vulnerability in early life*  
J. Larson, Substance Abuse and Mental Health Services Administration, Rockville, MD

**SYMPOSIUM V  
IN MEMORY OF NANCY PETRY—APPLICATION OF  
BEHAVIOR ANALYSIS TO THE TREATMENT OF  
ADDICTION: REFLECTIONS ON A SHORT CAREER**

**Grand Oaks K/L  
3:45 - 5:45 PM**

Chairs: Maxine Stitzer and Kathleen Carroll

- 3:45 *Early contributions to delay discounting/behavioral economics utilizing human laboratory models*  
W. Bickel, Fralin Biomedical Research Institute at VTC, Roanoke, VA
- 4:10 *Refining CM for use in non-academic clinical settings*  
J. Roll, Washington State University, Spokane, WA
- 4:35 *Dissemination of CM into clinical practice*  
C. Rash, University of UConn School of Medicine, Farmington, CT
- 5:00 *Application of behavior analysis to understand and treat disordered gambling*  
D. Ledgerwood, Wayne State University, Detroit, MI
- 5:25 *Discussant*  
K. Carroll, Yale University School of Medicine, New Haven, CT

**CPDD/NIDA PRE/POST-DOCS  
NETWORKING EVENT**

**Cibolo 7-11  
5:45 -7:00 PM**

*All Trainees Invited*

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**Monday, June 17, 2019**

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**WORKSHOP V**  
**LEARNING TO TWEET YOURSELF RIGHT**

**Grand Oaks E/F**  
**6:30 - 7:00 PM**

Chairs: Erin Winstanley and Chris Wolf  
*The Perils of improperly tweeting your science*

**WORKSHOP I**  
**NAVIGATING A CAREER IN ADDICTION SCIENCE**

**Grand Oaks H**  
**7:00 - 9:00 PM**

Chairs: Denise Vidot and Cecilia Bergeria

*Navigating the pre- and post-doctoral stage*

C. Bergeria, Johns Hopkins University School of Medicine, Baltimore, MD

*To tenure or not to tenure: Navigating as a new investigator at a research institution*

D. Vidot, University of Miami, Miami, FL

*Drug abuse research at a primarily undergraduate institution: Balancing the classroom and laboratory*

R. Lacy, Franklin and Marshall College, Lancaster, PA

*Navigating substance use disorder careers outside of academia*

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

*Creating your space in and out of academia*

D. Fakunle, Morgan State University, Baltimore, MD

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

**Grand Oaks M**  
**7:00 - 9:00 PM**

Chairs: Howard Chilcoat and Maria Parker

*Using epidemiologic methods to inform development of medications to treat addiction*

H. Chilcoat, Indivior, Inc., Richmond, VA

*Use of electronic medical record and medical claims data to measure abuse, misuse, addiction, overdose and death related to long-term use opioids used to treat chronic pain*

A. DeVaugh-Geiss, Indivior, Inc., North Chesterfield, VA

*Validation of a measure of opioid use disorder among chronic pain patients treated with opioids*

D. Hasin, Columbia University, New York, NY

*Emerging practices in social data stewardship for pharmacovigilance*

M. Gilbert, Booz Allen Hamilton, Portland, OR

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## Sunday, June 16, 2019

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### WORKSHOP III 25TH ANNUAL CONTINGENCY MANAGEMENT WORKING GROUP

Grand Oaks K/L  
7:00 - 9:00 PM

Chairs: Diann Gaalema and August Holtyn

*25th Annual Contingency Management Working Group*

### WORKSHOP IV DEEP PHENOTYPING, DRUG DEVELOPMENT TOOLS AND -OMICS BIOSIGNATURES FOR SUBSTANCE USE DISORDERS

Grand Oaks I  
7:00 - 9:00 PM

Chairs: Tatiana Ramey and F. Gerard Moeller

*Deep phenotyping, drug development tools and -omics biosignatures for SUDs*

T. Ramey, National Institutes of Health, Bethesda, MD

*Multimodal neuroimaging probes of neurocircuit dysfunction profiles in SUD*

J. Bjork, Virginia Commonwealth University, Richmond, VA

*NIDA phenotyping battery*

F. Moeller, Virginia Commonwealth University, Richmond, VA

*The need for peripheral biomarkers defining substance use disorders*

K. Bough, National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD

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## Monday, June 17, 2019

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### POSTER SESSION II

### Breakfast

Cibolo Ballroom  
8:00 - 10:00 AM

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

Set-up time begins Sunday, 3:00 PM; Must be removed by Monday 2:30 PM

### CLUB DRUGS / NPS

- 1 *Drug-checking services at music festivals and events in British Columbia: A 2018 analysis of results*  
K. McCrae, J. Arredondo, S. Tobias, L. Ti, K. Tupper, E. Wood, British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 2 *Adulterants and altruism: A qualitative investigation of "drug checkers" in North America*  
P. Acosta<sup>1</sup>, M. Shedlin<sup>2</sup>, J. Palamar<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University Rory Meyers College of Nursing, New York, NY

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## Monday, June 17, 2019

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- 3     *A qualitative study of ketamine abuse in Thailand*  
U. Perngparn<sup>1</sup>, C. Areesantichai<sup>1</sup>, L. Cottler<sup>2</sup>, <sup>1</sup>Chulalongkorn University, Bangkok, Thailand, <sup>2</sup>University of Florida, Gainesville, FL
- 4     *Probability discounting of ecstasy use by perceived purity: Effects of adulterant-related information*  
S. Dolan, M. Johnson, Johns Hopkins University School of Medicine, Baltimore, MD
- 5     *Perceived negative effects and benefits of new psychoactive substances (NPS): Results of online survey among NPS users in Georgia (country)*  
D. Otiaashvili<sup>1</sup>, D. Subeliani<sup>2</sup>, L. Kutelia<sup>1</sup>, A. Beselia<sup>1</sup>, T. Mgebrishvili<sup>1</sup>, I. Kirtadze<sup>3</sup>, <sup>1</sup>Addiction Research Center, Tbilisi, Georgia, <sup>2</sup>Faculty of Arts and Science, Ilia State University, Tbilisi, Georgia, <sup>3</sup>Ilia State University, Tbilisi, Georgia
- 6     *“Instant coffee sachet” users — A new face of new psychoactive substances in Taiwan*  
L. Chen<sup>1</sup>, T. Weng<sup>2</sup>, P. Chen<sup>3</sup>, C. Kuo<sup>1</sup>, <sup>1</sup>Taipei City Hospital, Taipei, Taiwan, <sup>2</sup>Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan, Taipei, Taiwan, <sup>3</sup>Forensic and Clinical Toxicology Center, National Taiwan University, Taipei, Taiwan
- 7     *The effects of pre-encoding THC, psilocybin, and DXM on recollection and familiarity*  
M. Doss<sup>1</sup>, D. Gallo<sup>2</sup>, H. de Wit<sup>2</sup>, R. Griffiths<sup>3</sup>, F. Barrett<sup>3</sup>, <sup>1</sup>Johns Hopkins University, Baltimore, MD, <sup>2</sup>University of Chicago, Chicago, IL, <sup>3</sup>Johns Hopkins University School of Medicine, Baltimore, MD
- 8     *Estimating LSD- & MDMA-specific hallucinogen dependence risks*  
V. Gregoire, J. Anthony, Michigan State University, East Lansing, MI
- 9     *Entactogenic effect of three cathinones*  
M. Gatch, M. Forster, University of Texas Health Science Center, Fort Worth, TX
- 10    *Self-administration of  $\alpha$ -PVP or mephedrone produces selective patterns of neuroinflammation*  
J. Marusich<sup>1</sup>, E. Gay<sup>1</sup>, D. Stewart<sup>2</sup>, B. Blough<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC, <sup>2</sup>University of North Carolina, Chapel Hill, NC
- 11    *Behavioral and physiological profiles of intravenous MDPV, methylone, and caffeine in rats*  
R. Seaman Jr<sup>1</sup>, J. San Miguel<sup>1</sup>, A. Sulima<sup>2</sup>, K. Rice<sup>2</sup>, G. Collins<sup>3</sup>, <sup>1</sup>UT Health San Antonio, San Antonio, TX, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>3</sup>University of Texas Health Science Center, San Antonio, TX

## STIMULANTS - ANIMAL STUDIES

- 12    *Behavioral testing of nine novel cathinones*  
M. Forster<sup>1</sup>, S. Dolan<sup>2</sup>, M. Gatch<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Fort Worth, TX, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD

- 13     *Compulsion zone theory explains different duration of extinction responding with different cocaine analogues*  
D. Zinani<sup>1</sup>, H. Wetzel<sup>1</sup>, V. Tsibulsky<sup>1</sup>, A. Norman<sup>2</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University of Cincinnati, College of Medicine, Cincinnati, OH
- 14     *The effects of a recombinant humanized anti-cocaine monoclonal antibody and its Fab fragment on the urinary clearance of cocaine and metabolites in rats*  
J. Marckel<sup>1</sup>, H. Wetzel<sup>2</sup>, H. Amlal<sup>2</sup>, A. Norman<sup>1</sup>, <sup>1</sup>University of Cincinnati, College of Medicine, Cincinnati, OH, <sup>2</sup>University of Cincinnati, Cincinnati, OH
- 15     *The pharmacokinetics of a recombinant humanized anti-cocaine monoclonal antibody in both male and female rats*  
A. Norman<sup>1</sup>, J. Marckel<sup>1</sup>, H. Wetzel<sup>2</sup>, <sup>1</sup>University of Cincinnati, College of Medicine, Cincinnati, OH, <sup>2</sup>University of Cincinnati, Cincinnati, OH
- 16     *Effects of a methamphetamine vaccine, IXT-v100, on methamphetamine-related behaviors*  
C. Keller<sup>1</sup>, A. Spence<sup>2</sup>, M. Stevens<sup>3</sup>, S. Owens<sup>4</sup>, G. Guerin<sup>1</sup>, N. Goeders<sup>5</sup>, <sup>1</sup>LSU Health-Shreveport, Shreveport, LA, <sup>2</sup>Northwestern State University, Natchitoches, LA, <sup>3</sup>InterveXion Therapeutics, Little Rock, AR, <sup>4</sup>University of Arkansas for Medical Sciences, Little Rock, AR, <sup>5</sup>Louisiana State University, Shreveport, LA
- 17     *Role of NR2B function in extinction consolidation following adolescent- or adult-onset methamphetamine self-administration in male and female rats*  
S. Westbrook, J. Gulley, University of Illinois Urbana-Champaign, Champaign, IL
- 18     *Methamphetamine-induced vaginal lubrication*  
M. Mott<sup>1</sup>, N. Goeders<sup>2</sup>, <sup>1</sup>LSU Health-Shreveport, Shreveport, LA, <sup>2</sup>Louisiana State University, Shreveport, LA

### THC/CANNABINOIDS

- 19     *The sigma1 receptor antagonist CM304 enhances the antinociceptive effects of morphine and the cannabinoid receptor agonist CP55,940 in mice*  
S. Obeng<sup>1</sup>, S. Intagliata<sup>2</sup>, M. Mottinelli<sup>2</sup>, L. Restrepo<sup>3</sup>, A. Patel<sup>1</sup>, L. Wilson<sup>4</sup>, V. Taylor<sup>3</sup>, M. Reeves<sup>3</sup>, A. Pennington<sup>3</sup>, C. McCurdy<sup>1</sup>, L. McMahon<sup>1</sup>, T. Hiranita<sup>3</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Department of Medicinal Chemistry, Gainesville, FL, <sup>3</sup>University of Florida, College of Pharmacy, Gainesville, FL, <sup>4</sup>University of Florida, Department of Pharmacodynamics, Gainesville, FL
- 20     *Effects of co-exposure to alcohol and delta-9-tetrahydrocannabinol (THC) during adolescence on synaptic plasticity in the prelimbic cortex in rats*  
A. Banks<sup>1</sup>, S. Kang<sup>2</sup>, N. Nelson<sup>1</sup>, N. Liang<sup>1</sup>, J. Gulley<sup>1</sup>, <sup>1</sup>University of Illinois Urbana-Champaign, Champaign, IL, <sup>2</sup>University of Illinois, Champaign, IL
- 21     *Effects of cannabinoids on neuronal activity in mouse cerebellar cultures assessed using microelectrode array techniques*  
M. Funada<sup>1</sup>, T. Kenichi<sup>2</sup>, <sup>1</sup>National Institute of Mental Health, Kodaira, Japan, <sup>2</sup>National Center of Neurology and Psychiatry, Kodaira, Japan

- 22 *Influence of a low dose of pregabalin maintenance on cannabis effects and related behaviors in daily cannabis users*  
J. Lile<sup>1</sup>, J. Alcorn<sup>2</sup>, H. Lon<sup>2</sup>, T. Kelly<sup>1</sup>, C. Rush<sup>2</sup>, W. Stoops<sup>2</sup>, M. Wesley<sup>1</sup>, P. Westgate<sup>2</sup>,  
<sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY
- 23 *Marijuana use frequency at college entry predicts incident prescription analgesic and stimulant misuse, cocaine use, and cigarette use during college*  
B. Bugbee, A. Barrall, K. Vincent, A. Arria, University of Maryland, School of Public Health, College Park, MD
- 24 *Developmental trajectories of illicit drug use and prescription drug misuse among young adult medical cannabis patients and non-patient users in Los Angeles*  
E. Fedorova<sup>1</sup>, S. Schrager<sup>2</sup>, L. Robinson<sup>1</sup>, A. Roth<sup>1</sup>, C. Wong<sup>3</sup>, E. Iverson<sup>3</sup>, S. Lankenau<sup>4</sup>,  
<sup>1</sup>Drexel University, Philadelphia, PA, <sup>2</sup>California State University Northridge, Northridge, CA, <sup>3</sup>Children's Hospital Los Angeles, Los Angeles, CA, <sup>4</sup>Drexel University Dornsife School of Public Health, Philadelphia, PA
- 25 *Examining a quadripartite model of passion for marijuana use: Associations with consumption, consequences, craving, and satisfaction with life*  
A. Davis<sup>1</sup>, B. Arterberry<sup>2</sup>, <sup>1</sup>Johns Hopkins University, Baltimore, MD, <sup>2</sup>Iowa State University, Ames, IA
- 26 *Motives for cannabis use are differentially associated with severity of cannabis-use disorder and with current depression or anxiety*  
L. Moran<sup>1</sup>, S. Hertz<sup>2</sup>, D. Epstein<sup>2</sup>, K. Preston<sup>3</sup>, K. Phillips<sup>4</sup>, <sup>1</sup>NIDA - Center for Clinical Trials Network, Bethesda, MD, <sup>2</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>3</sup>National Institute of Drug Abuse Intramural Research Program, Baltimore, MD, <sup>4</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD
- 27 *An exploratory study of parents' experiences using medical cannabis for their children*  
J. Ryan, C. Boyd, S. McCabe, University of Michigan, Ann Arbor, MI
- 28 *An online survey of medicinal cannabinoid users: Qualitative analysis of users' experiences*  
A. Garcia-Romeu<sup>1</sup>, R. Mayhugh<sup>1</sup>, N. Schlien<sup>2</sup>, E. Martin<sup>1</sup>, M. Bonn-Miller<sup>3</sup>, H. Jackson<sup>4</sup>, R. Vandrey<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY, <sup>3</sup>University of Pennsylvania, Southmont, NC, <sup>4</sup>Realm of Caring Foundation, Colorado Springs, CO
- 29 *Medical cannabis: Avenue to alleviation or path to problematic use*  
K. Sagar<sup>1</sup>, M. Dahlgren<sup>2</sup>, R. Smith<sup>1</sup>, A. Lambros<sup>1</sup>, M. Kuppe<sup>1</sup>, L. Patriarca<sup>1</sup>, S. Gruber<sup>2</sup>,  
<sup>1</sup>McLean Hospital, Belmont, MA, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 30 *The earliest versus later syndromes of cannabis use disorders: Incidence versus prevalence*  
C. Thompson<sup>1</sup>, K. Alcover<sup>2</sup>, J. Anthony<sup>3</sup>, <sup>1</sup>Peds AI, Lansing, MI, <sup>2</sup>Washington State University, Spokane, WA, <sup>3</sup>Michigan State University, East Lansing, MI

- 31 *Racism and trauma: Examining unique effects on cannabis use among African American young adults*  
S. Khazvand, T. Zapolski, Indiana University Purdue University Indianapolis, Indianapolis, IN
- 32 *Relationship between  $\Delta$ 9-tetrahydrocannabinol concentration, anxiety, and depression among racially/ethnic diverse cannabis users*  
D. Vidot, W. Joseph, A. Carrico, S. Roy, D. Jayaweera, University of Miami, Miami, FL
- 33 *Patterns of current drug use among past-year medical marijuana users in the US*  
C. Lopez-Quintero<sup>1</sup>, K. Alcover<sup>2</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>Washington State University, Spokane, WA
- 34 *Clinical characteristics and health status of potential medical cannabis users in Arkansas*  
L. Russell, University of Arkansas for Medical Sciences, Little Rock, AR
- 35 *Transitions into and out of medical cannabis patient status among young adults*  
S. Lankenau<sup>1</sup>, A. Kioumarsis<sup>2</sup>, M. Reed<sup>2</sup>, E. Fedorova<sup>2</sup>, J. Ataiants<sup>1</sup>, C. Wong<sup>3</sup>, E. Iverson<sup>3</sup>, <sup>1</sup>Drexel University Dornsife School of Public Health, Philadelphia, PA, <sup>2</sup>Drexel University, Philadelphia, PA, <sup>3</sup>Children's Hospital Los Angeles, Los Angeles, CA
- 36 *Extracting clinical documentation of patient medical cannabis use from primary care encounter notes using natural language processing*  
D. Carrell, D. Cronkite, M. Shea, M. Oliver, C. Luce, K. Bradley, G. Lapham, Kaiser Permanente Washington Health Research Institute, Seattle, WA
- 37 *Medical marijuana use and trouble with the law: Does living in a state with a medical marijuana law modify the relationship?*  
A. Perlmutter, L. Segura, S. Martins, P. Mauro, Columbia University, New York, NY
- 38 *Legalization of recreational cannabis in Canada: Local media analysis*  
J. Sorensen, University of California San Francisco, San Francisco, CA
- 39 *Pharmacologic interventions for cannabis use disorder: A systematic review*  
S. Nugent, B. Morasco, M. O'Neil, C. Ayers, M. Freeman, R. Paynter, D. Kansagara, K. Kondo, VA Portland Health Care System, Portland, OR
- 40 *Preliminary findings from a brief contingency management intervention and its effects on cannabis abstinence and relapse*  
S. Wemm<sup>1</sup>, P. Himmelstein<sup>2</sup>, Z. Magin<sup>2</sup>, V. Milivojevic<sup>3</sup>, S. Monlezun<sup>4</sup>, P. Piazza<sup>4</sup>, R. Sinha<sup>3</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale Stress Center, Yale School of Medicine, New Haven, CT, <sup>3</sup>Yale University School of Medicine, New Haven, CT, <sup>4</sup>Aelis Farma, Neurocentre Magendie, Bordeaux, France
- 41 *A comparison between hypothetical and operant delay discounting procedures among adults enrolled in treatment for cannabis use disorder*  
D. Lee, M. Johnson, R. Vandrey, Johns Hopkins University School of Medicine, Baltimore, MD

- 42 *Impact of decision-making capacities on 3-month's treatment outcome among patients treated for cannabis use disorder*  
L. Jakubiec<sup>1</sup>, F. Serre<sup>2</sup>, S. Auriacombe<sup>1</sup>, C. Denis<sup>3</sup>, S. Moriceau<sup>2</sup>, M. Fatseas<sup>4</sup>, M. Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux, <sup>3</sup>University of Pennsylvania, Philadelphia, PA, <sup>4</sup>Centre Hospitalier Charles Perrens, Bordeaux, France
- 43 *Non-abstinent treatment outcomes in cannabis use disorder*  
F. Levin<sup>1</sup>, J. Mariani<sup>2</sup>, D. Brooks<sup>3</sup>, C. Choi<sup>4</sup>, C. Basaraba<sup>5</sup>, M. Pavlicova<sup>6</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University and New York Psychiatric Institute, New York, NY, <sup>3</sup>New York State Psychiatric Institute, New York, NY, <sup>4</sup>Columbia University, New York, NY, <sup>5</sup>NYSPI, New York, NY, <sup>6</sup>Columbia University Mailman School of Public Health, New York, NY

### POLYDRUG ABUSE

- 44 *The association of combined marijuana and alcohol on subjective memory complaints among persons living with HIV*  
V. Joseph, Y. Wang, R. Fieo, R. Cook, University of Florida, Gainesville, FL
- 45 *Cocaine and benzodiazepine polysubstance use among illicit opioid users in New York City*  
J. Manubay<sup>1</sup>, S. Martinez<sup>2</sup>, J. Jones<sup>3</sup>, S. Comer<sup>2</sup>, <sup>1</sup>Columbia University, 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
- 46 *National treatment admissions with opioids and benzodiazepines as drugs of abuse*  
C. Arfken, M. Greenwald, Wayne State University, Detroit, MI
- 47 *Benzodiazepine use does not decrease treatment retention in a low-threshold methadone program*  
K. Morford<sup>1</sup>, F. Li<sup>2</sup>, B. Zhou<sup>2</sup>, E. Edelman<sup>1</sup>, M. Stein<sup>3</sup>, J. Tetrault<sup>2</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT, <sup>3</sup>Boston University School of Public Health, Boston, MA
- 48 *The influence of tobacco and opioid use disorders on effort-based decisions*  
M. Addicott, M. Mancino, A. Oliveto, University of Arkansas for Medical Sciences, Little Rock, AR
- 49 *Smokers with opioid use disorder may have worse drug use outcomes after varenicline than nicotine replacement*  
D. Rohsenow, R. Martin, J. Tidey, Brown University, Providence, RI

- 50     *Electronic cigarette and tobacco use in individuals entering methadone or buprenorphine treatment*  
S. Baldassarri<sup>1</sup>, D. Fiellin<sup>2</sup>, M. Savage, L. Madden<sup>3</sup>, M. Beitel<sup>3</sup>, L. Dhingra<sup>4</sup>, L. Fucito<sup>1</sup>, D. Camenga<sup>2</sup>, P. Bollampally<sup>1</sup>, D. Barry<sup>2</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University, APT Foundation, New Haven, CT, <sup>4</sup>Albert Einstein College of Medicine, Philadelphia, PA
- 51     *Item response theory analyses of DSM-5 substance use disorder criteria in French outpatient addiction clinic participants*  
C. Kervran<sup>1</sup>, D. Shmulewitz<sup>2</sup>, F. Serre<sup>3</sup>, C. Denis<sup>4</sup>, M. Fatseas<sup>5</sup>, J. Daulouede<sup>6</sup>, D. Hasin<sup>2</sup>, M. Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Université de Bordeaux, Bordeaux, <sup>4</sup>University of Pennsylvania, Philadelphia, PA, <sup>5</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>6</sup>Bizia Addiction Clinic, Bayonne, France

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- 52     *Adverse childhood experiences, impulsivity, and e-cigarette use during the transition to adulthood*  
S. Shin, D. Conley, G. Ksinan Jiskrova, Virginia Commonwealth University, Richmond, VA
- 53     *E-cigarette product characteristics and frequency of smoking among young adults*  
Z. Yang, J. Barrington-Trimis, University of Southern California, Los Angeles, CA
- 54     *Circadian subjective and pharmacological effects of ad libitum electronic and combustible cigarette use among dual users*  
A. Harvanko, G. St.Helen, N. Benowitz, University of California San Francisco, San Francisco, CA
- 55     *Risk factors for current cigarette smoking among US college graduates*  
S. Coleman, D. Gaalema, T. Nighbor, A. Kurti, J. Priest, S. Higgins, University of Vermont, Burlington, VT
- 56     *The influence of ovarian hormones on cigarette smoking behavior in the natural environment*  
N. Baker<sup>1</sup>, K. Gray<sup>1</sup>, V. Ramakrishnan<sup>2</sup>, R. Tomko<sup>1</sup>, E. McClure<sup>1</sup>, M. Carpenter<sup>1</sup>, M. Saladin<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>Department of Public Health Sciences, Medical University of South Carolina, Charleston, SC

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- 57 *Smoking prevalence and trends among a US national sample of women of reproductive age in rural versus urban settings*  
T. Nighbor<sup>1</sup>, N. Doogan<sup>2</sup>, M. Roberts<sup>2</sup>, A. Cepeda-Benita<sup>1</sup>, A. Kurti<sup>1</sup>, J. Priest<sup>1</sup>, H. Johnson<sup>1</sup>, A. Lopez<sup>3</sup>, C. Stanton<sup>4</sup>, D. Gaalema<sup>1</sup>, R. Redner<sup>5</sup>, M. Parker<sup>1</sup>, D. Keith<sup>1</sup>, A. Quisenberry<sup>6</sup>, S. Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Ohio State University, Columbus, OH, <sup>3</sup>US Army Medical Research Directorate-West, Tacoma, WA, <sup>4</sup>Westat, Rockville, MD, <sup>5</sup>Southern Illinois University, Carbondale, IL, <sup>6</sup>Roswell Park Comprehensive Cancer Center, Buffalo, NY
- 58 *Tobacco use in a binational sample of Latino community health center (CHC) patients*  
L. Gelberg<sup>1</sup>, K. Koslov<sup>2</sup>, M. Rico<sup>1</sup>, <sup>1</sup>University of California, Department of Family Medicine, Los Angeles, CA, <sup>2</sup>University of California, Los Angeles, CA
- 59 *The relationship between nicotine dependence level and DSM-V nicotine use disorder diagnosis in a diverse sample of smokers seen in primary care*  
L. Harvey, L. Rodriguez, A. Wang, S. Essa, E. Absar, P. Srivastava, M. de Dios, University of Houston, Houston, TX
- 60 *Meta-analysis of the acute effects of nicotinic acetylcholine receptor stimulation on mismatch negativity*  
A. Hamidovic, University of Illinois, Chicago, IL
- 61 *Modeling the effects of an acute psychological stressor on vaping lapse behavior*  
I. Pericot-Valverde<sup>1</sup>, D. Gaalema<sup>2</sup>, <sup>1</sup>Clemson University, Greenville, SC, <sup>2</sup>University of Vermont, Burlington, VT
- 62 *Graphic warning labels affect hypothetical purchasing behavior among smokers living with HIV*  
M. Berry<sup>1</sup>, L. Pacek<sup>2</sup>, M. Johnson<sup>3</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>Duke University School of Medicine, Durham, <sup>3</sup>Johns Hopkins University School of Medicine, Baltimore, MD
- 63 *Caudate reactivity to smoking cues is associated with increased response bias to monetary rewards*  
E. Molokotos<sup>1</sup>, A. Peechatka<sup>2</sup>, D. Pizzagalli<sup>2</sup>, A. Janes<sup>2</sup>, <sup>1</sup>McLean Hospital, Belmont, MA, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 64 *Reduced-nicotine cigarettes: Behavioral economics of operant reinforcement*  
M. Johnson<sup>1</sup>, S. Dolan<sup>1</sup>, M. Berry<sup>2</sup>, D. Cox<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>University of Florida, Gainesville, FL
- 65 *Characterizing the malleability of cigarette product preference and consumption*  
D. Davis, M. DeSarno, S. Higgins, University of Vermont, Burlington, VT
- 66 *Digital access among clients in residential addiction treatment: Potential for increasing access to smoking cessation services*  
D. Yip<sup>1</sup>, A. Maglior<sup>2</sup>, N. Gubner<sup>1</sup>, T. Le<sup>1</sup>, J. Guydish<sup>1</sup>, <sup>1</sup>University of California San Francisco, San Francisco, CA, <sup>2</sup>Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco, CA

- 67 *Reinforcer pathology and response to contingency management for smoking cessation*  
A. González-Roz<sup>1</sup>, Á. García-Pérez<sup>1</sup>, G. Aonso-Diego<sup>1</sup>, V. Martínez-Loredo<sup>2</sup>, S. Fernandez-Artamendi<sup>3</sup>, R. Secades Villa<sup>2</sup>, D. Gaalema<sup>4</sup>, <sup>1</sup>University of Oviedo, Addictive Behaviors Group, Oviedo, Spain, <sup>2</sup>University of Oviedo, Oviedo, Spain, <sup>3</sup>Universidad Loyola Andalucía, Seville, Spain, <sup>4</sup>University of Vermont, Burlington, VT
- 68 *Electroretinogram (ERG) as a novel biomarker for dopamine release: Comparing healthy controls and cigarette smokers*  
T. Lin<sup>1</sup>, H. Lee<sup>2</sup>, C. Xu<sup>3</sup>, D. Martinez<sup>2</sup>, R. Girgis<sup>2</sup>, S. Tsang<sup>3</sup>, E. Nunes<sup>4</sup>, S. Luo<sup>5</sup>, <sup>1</sup>Teachers College Columbia University, New York, NY, <sup>2</sup>Department of Psychiatry, Columbia University, and New York State Psychiatric Institute, New York, NY, <sup>3</sup>Department of Ophthalmology, Columbia University Medical Center, New York, NY, <sup>4</sup>Columbia University and New York State Psychiatric Institute, New York, NY, <sup>5</sup>Columbia University, New York, NY
- 69 *Changes in specific miRNAs in substance use disorders following treatment*  
A. Ye<sup>1</sup>, M. Patriquin, T. Kosten<sup>2</sup>, D. Nielsen<sup>3</sup>, <sup>1</sup>Baylor College of Medicine, Houston, TX, <sup>2</sup>Baylor College of Medicine, Bellaire, TX, <sup>3</sup>Baylor College of Medicine, Montgomery, TX

## COCAINE

- 70 *Childhood trauma has sex-specific influences on the neural correlates of stress-induced cocaine craving*  
G. James<sup>1</sup>, Z. Alfaneke<sup>1</sup>, B. Martins<sup>1</sup>, A. Elton<sup>2</sup>, C. Kilts<sup>1</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AR, <sup>2</sup>University of North Carolina, Chapel Hill, NC
- 71 *Trait impulsivity and self-exposure to non-medical cannabis and alcohol as dimensional predictors of cocaine dependence diagnosis or time of cocaine escalation*  
R. Conybeare, K. Brown, C. Chen, E. Butelman, M. Kreek, The Rockefeller University, New York, NY
- 72 *A comprehensive examination of delay and probability discounting processes in cocaine use*  
D. Cox<sup>1</sup>, S. Dolan<sup>1</sup>, P. Johnson<sup>2</sup>, M. Johnson<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>California State University, Los Angeles, CA
- 73 *Exacerbating reinforcer pathology: Hurricane-associated loss increases delay discounting and demand for cocaine in cocaine users*  
S. Snider<sup>1</sup>, J. Turner<sup>2</sup>, W. Bickel<sup>1</sup>, <sup>1</sup>Fralin Biomedical Research Institute at VTC, Roanoke, VA, <sup>2</sup>Virginia Tech Carilion Research Institute, Roanoke, VA

- 74 *Boredom-induced temporal discounting in cocaine users*  
T. Chao<sup>1</sup>, Y. Shaltout<sup>2</sup>, M. Todman<sup>3</sup>, R. Foltin<sup>4</sup>, G. Bedi<sup>5</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>The New School for Social Research, New York City, NY, <sup>4</sup>Columbia University Irving Medical Center, New York, NY, <sup>5</sup>The University of Melbourne, Parkville, Australia
- 75 *The relative contribution of behavioral economic measures in predicting cocaine severity and treatment response*  
J. Yoon<sup>1</sup>, J. Schmitz<sup>1</sup>, S. Lane<sup>2</sup>, G. San Miguel<sup>2</sup>, S. Jensen<sup>1</sup>, J. Vincent<sup>1</sup>, A. Vujanovic<sup>3</sup>, A. Stotts<sup>1</sup>, M. Weaver<sup>1</sup>, A. Lin<sup>1</sup>, R. Suchting<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX, <sup>3</sup>University of Houston, Houston, TX
- 76 *The influence of long-term cocaine use on cognitive functioning*  
K. Akao<sup>1</sup>, M. Pena<sup>1</sup>, K. Moroney<sup>1</sup>, C. Clark<sup>1</sup>, K. Cropsey<sup>2</sup>, <sup>1</sup>Wichita State University, Wichita, KS, <sup>2</sup>University of Alabama, Birmingham, AL
- 77 *The late positive potential (LPP) as a marker of motivated attention in cocaine use disorder (CUD)*  
H. Soder<sup>1</sup>, J. Schmitz<sup>1</sup>, C. Green<sup>1</sup>, F. Versace<sup>2</sup>, S. Lane<sup>3</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>MD Anderson Cancer Center, Houston, TX, <sup>3</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX
- 78 *Elevated neutrophil to lymphocyte ratio (NLR) in cocaine use disorder as a marker of chronic inflammation*  
A. Berumen<sup>1</sup>, K. Gomez<sup>1</sup>, M. Wardle<sup>2</sup>, R. Suchting<sup>3</sup>, H. Soder<sup>3</sup>, J. Vincent<sup>3</sup>, J. Yoon<sup>3</sup>, A. Heads<sup>1</sup>, M. Weaver<sup>3</sup>, C. Green<sup>3</sup>, J. Schmitz<sup>3</sup>, S. Lane<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX, <sup>2</sup>University of Illinois, Chicago, IL, <sup>3</sup>University of Texas Health Science Center, Houston, TX
- 79 *Associations between beliefs about research and willingness to participate in a pharmacological randomized controlled trial for the treatment of cocaine or crack-cocaine dependence*  
V. Giang<sup>1</sup>, K. Jaffe<sup>2</sup>, K. Hayashi<sup>3</sup>, K. DeBeck<sup>1</sup>, M. Milloy<sup>2</sup>, L. Richardson<sup>2</sup>, <sup>1</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>University of British Columbia, Vancouver, BC, Canada, <sup>3</sup>Simon Fraser University, Vancouver, BC, Canada
- 80 *Patterns of cocaine use and posttreatment psychosocial functioning across seven randomized clinical trials*  
C. Roos<sup>1</sup>, C. Nich<sup>2</sup>, C. Mun<sup>3</sup>, J. Mendonca<sup>1</sup>, T. Babuscio<sup>1</sup>, K. Witkiewitz<sup>4</sup>, K. Carroll<sup>1</sup>, B. Kiluk<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT, <sup>3</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>4</sup>University of New Mexico, Albuquerque, NM
- 81 *Recovery capital and cocaine use in a diverse community sample*  
N. Smith, L. Paz, L. Cottler, University of Florida, Gainesville, FL

### OVERDOSE

- 82     *The provision of drug-checking services in the context of the fentanyl crisis: Preliminary findings on a pilot program in British Columbia, Canada*  
J. Arredondo<sup>1</sup>, K. McCrae<sup>1</sup>, L. Ti<sup>1</sup>, K. Tupper<sup>1</sup>, E. Nosova<sup>2</sup>, C. Grant<sup>2</sup>, S. Tobias<sup>1</sup>, E. Wood<sup>1</sup>,  
<sup>1</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada, <sup>2</sup>BC  
Centre on Substance Use, Vancouver, BC, Canada
- 83     *Characterizing age-based differences in fentanyl risk communication using qualitative methods*  
S. Bagley<sup>1</sup>, A. Walley<sup>1</sup>, M. Harris<sup>2</sup>, S. Sampath<sup>1</sup>, C. Gunn<sup>1</sup>, <sup>1</sup>Boston University School of  
Medicine, Boston, MA, <sup>2</sup>Boston University, Boston, MA
- 84     *Fentanyl use and perceptions of suicidality: You either wake up and keep going, or you die*  
C. Gunn<sup>1</sup>, S. Bagley<sup>1</sup>, S. Sampath<sup>1</sup>, M. Harris<sup>2</sup>, A. Walley<sup>1</sup>, <sup>1</sup>Boston University School of  
Medicine, Boston, MA, <sup>2</sup>Boston University, Boston, MA
- 85     *Known and unknown exposure to fentanyl and the associated risks among people who inject drugs in Vancouver, Canada*  
K. Hayashi<sup>1</sup>, N. Fairbairn<sup>2</sup>, H. Dong<sup>3</sup>, M. Milloy<sup>2</sup>, K. DeBeck<sup>3</sup>, E. Wood<sup>4</sup>, T. Kerr<sup>2</sup>, <sup>1</sup>Simon  
Fraser University, 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, <sup>4</sup>British  
Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 86     *The impact of social violence on women's utilization of housing-based overdose prevention sites: An ethnographic study during an overdose crisis in Vancouver, Canada*  
A. Collins<sup>1</sup>, J. Boyd<sup>2</sup>, S. Czechaczek<sup>3</sup>, R. McNeil<sup>4</sup>, <sup>1</sup>Simon Fraser University, Vancouver,  
BC, Canada, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>BC  
Centre on Substance Use, Vancouver, BC, Canada, <sup>4</sup>University of British Columbia,  
Vancouver, BC, Canada
- 87     *Overdose and suicidal motivation in adults with opioid use disorder*  
R. Weiss, McLean Hospital, Belmont, MA
- 88     *Mortality among people with opioid use disorder during an opioid overdose public health emergency in British Columbia, Canada*  
L. Pearce<sup>1</sup>, J. Min<sup>2</sup>, M. Piske<sup>1</sup>, C. Zhou<sup>1</sup>, F. Homyra<sup>1</sup>, B. Nosyk<sup>3</sup>, <sup>1</sup>BC Centre for  
Excellence in HIV/AIDS, Vancouver, BC, Canada, <sup>2</sup>BC Centre for Excellence in HIV/  
AIDS, Vancouver, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 89     *Circumstances of overdose among women who inject heroin: Drug, set, and setting*  
J. Ataiants, S. Lankenau, Drexel University Dornsife School of Public Health,  
Philadelphia, PA

- 90 *Misclassification of opioid overdose by ambulance dispatch systems: Implications for take-home naloxone programs*  
P. Dietze<sup>1</sup>, R. Crossin<sup>2</sup>, D. Scott<sup>3</sup>, K. Cantwell<sup>4</sup>, K. Smith<sup>5</sup>, D. Lubman<sup>3</sup>, <sup>1</sup>Burnet Institute, Melbourne, Australia, <sup>2</sup>Monash University, Melbourne, Australia, <sup>3</sup>Turning Point, Fitzroy, Australia, <sup>4</sup>Ambulance Victoria, Doncaster, Australia, <sup>5</sup>Ambulance Victoria, Doncaster, Australia
- 91 *Naloxone pharmacokinetics in humans: Novel nasal spray versus intravenous and intramuscular injection*  
A. Elkashef, Insys Development Company, Inc., Chandler, AZ
- 92 *Self-reported peer buprenorphine/naloxone (Suboxone®) administration for opioid overdose reversal: A potential avenue for peer-led overdose prevention efforts in medication-assisted treatment settings*  
M. Mittal<sup>1</sup>, P. Davidson<sup>1</sup>, E. Copulsky<sup>1</sup>, J. Bowles<sup>2</sup>, G. Hennessy<sup>1</sup>, S. Verdugo<sup>1</sup>, R. Harding<sup>3</sup>, T. Gaines<sup>1</sup>, K. Wagner<sup>4</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>Safehouse Philadelphia, Philadelphia, PA, <sup>3</sup>University of Nevada Reno, School of Community Health Sciences, Reno, NV, <sup>4</sup>University of Nevada, Reno, NV
- 93 *Evaluation of iPad-delivered opioid overdose education among individuals with opioid use disorder*  
T. Ochalek<sup>1</sup>, K. Peck<sup>1</sup>, K. Dunn<sup>2</sup>, A. Stoner<sup>3</sup>, S. Sigmon<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>University of Rochester School of Medicine & Dentistry, Rochester, NY
- 94 *Opioid prescribing prior to heroin overdose: A national cohort study*  
M. Larochelle<sup>1</sup>, P. Lagisetty<sup>2</sup>, L. Lin<sup>2</sup>, R. Haffajee<sup>2</sup>, R. Fowler<sup>2</sup>, J. Goldstick<sup>2</sup>, K. Zhang<sup>3</sup>, A. Bohnert<sup>2</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>University of Michigan, Ann Arbor, MI, <sup>3</sup>Centers for Disease Control and Prevention, Atlanta, GA
- 95 *Psychosocial correlates and treatment outcomes of methadone patients with a history of opioid overdose*  
J. Ellis, J. Lister, D. Ledgerwood, M. Fodor, C. Struble, Wayne State University, Detroit, MI
- 96 *Benzodiazepine misuse in patients with substance use disorders*  
R. McHugh<sup>1</sup>, M. Griffin<sup>2</sup>, N. Taghian<sup>1</sup>, R. Geyer<sup>1</sup>, R. Weiss<sup>1</sup>, <sup>1</sup>McLean Hospital, Belmont, MA, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA

## **RISK, HARM REDUCTION, PREVENTION**

- 97 *Drugs-violence nexus: Theory testing and health risk-factors among justice-involved Appalachian women*  
G. Victor, University of Kentucky, Lexington, KY

- 98 *Effect of publicly reported cardiac surgery outcomes on rate of valve replacement in injection drug-associated and non-injection drug-associated endocarditis*  
S. Kimmel<sup>1</sup>, A. Walley<sup>1</sup>, B. Linas<sup>1</sup>, B. Kalesan, L. White<sup>2</sup>, M. Laroche<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Boston University School of Public Health, Boston, MA
- 99 *Correlates of transactional sex among women who inject drugs: A mixed-methods study*  
S. Lamb<sup>1</sup>, S. Walters<sup>2</sup>, L. Wenger<sup>3</sup>, A. Kral<sup>3</sup>, R. Bluthenthal<sup>1</sup>, <sup>1</sup>Keck School of Medicine, Los Angeles, CA, <sup>2</sup>New York University, New York, NY, <sup>3</sup>RTI International, San Francisco, CA
- 100 *Substance use, discrimination, and HIV risk among men who have sex with men in Massachusetts*  
A. Batchelder<sup>1</sup>, M. Klevens<sup>2</sup>, C. Fitch<sup>1</sup>, S. Marquez McKetchnie<sup>3</sup>, K. Mayer<sup>4</sup>, C. O'Cleirigh<sup>1</sup>, <sup>1</sup>Massachusetts General Hospital, Harvard Medical School, Boston, MA, <sup>2</sup>Bureau of Infectious Disease and Laboratory Sciences, Massachusetts Department of Public Health, Jamaica Plain, MA, <sup>3</sup>Massachusetts General Hospital, Boston, MA, <sup>4</sup>Harvard Medical School, Belmont, MA
- 101 *Syringe exchange uptake and HIV risk behaviors among rural people who inject drugs*  
H. Surratt<sup>1</sup>, M. Staton<sup>2</sup>, A. Cowley<sup>1</sup>, J. Otachi<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 102 *Risk factors associated with early injection drug use initiation among a cohort of PWID*  
J. Goldshear<sup>1</sup>, C. Page<sup>2</sup>, K. Dominguez Gonzalez<sup>2</sup>, A. Kral<sup>3</sup>, L. Wenger<sup>3</sup>, R. Bluthenthal<sup>1</sup>, <sup>1</sup>Keck School of Medicine, Los Angeles, CA, <sup>2</sup>University of Southern California, Los Angeles, CA, <sup>3</sup>RTI International, San Francisco, CA
- 103 *Preliminary analyses of benefits and costs of family planning interventions for women enrolled in medication treatment for opioid use disorder*  
H. Melbostad<sup>1</sup>, D. Shepard<sup>2</sup>, C. Rey<sup>1</sup>, A. Matusiewicz<sup>1</sup>, S. Sigmon<sup>1</sup>, L. Macafee<sup>1</sup>, S. Higgins<sup>1</sup>, S. Heil<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Brandeis University, Waltham, MA
- 104 *Adapting a family resilience intervention for families experiencing homelessness, trauma, and parental substance use disorders*  
R. Ijadi-Maghsoodi<sup>1</sup>, J. Horton<sup>2</sup>, G. Ryan<sup>3</sup>, S. Kataoka<sup>4</sup>, P. Lester<sup>5</sup>, L. Gelberg<sup>6</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>UCLA, Los Angeles, CA, <sup>3</sup>RAND Corporation, Santa Monica, CA, <sup>4</sup>Semel Institute, UCLA, Los Angeles, CA, <sup>5</sup>UCLA Semel Institute for Neuroscience and Human Behavior, Los Angeles, CA, <sup>6</sup>University of California, Department of Family Medicine, Los Angeles, CA
- 105 *Military spouses and longitudinal substance use: The role of marital satisfaction*  
J. Kulak<sup>1</sup>, D. Homish<sup>2</sup>, G. Homish<sup>2</sup>, <sup>1</sup>Buffalo State College, Buffalo, NY, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY

- 106 *Efforts can reduce selection bias by strengthening parental consent for child participation in a school-based drug prevention program*  
T. Lee<sup>1</sup>, S. Chang<sup>2</sup>, C. Hsieh<sup>3</sup>, Y. Yang<sup>3</sup>, J. Feng<sup>3</sup>, <sup>1</sup>National Taiwan Normal University, Taipei, Taiwan, <sup>2</sup>National Taiwan University Children and Family Research Center, Taipei, <sup>3</sup>National Taiwan University Children and Family Research Center, Taipei, Taiwan
- 107 *A qualitative study on protective factors for drug use prevention among Black and Hispanic girls*  
I. Opara<sup>1</sup>, D. Lardier Jr.<sup>2</sup>, R. Reid<sup>1</sup>, P. Garcia-Reid<sup>1</sup>, <sup>1</sup>Montclair State University, Montclair, NJ, <sup>2</sup>University of New Mexico, Albuquerque, NM
- 108 *Evaluation of a drug analysis service as a harm reduction strategy in a large-scale music event in Portugal*  
H. Valente<sup>1</sup>, D. Martins<sup>1</sup>, M. Barratt<sup>2</sup>, M. Pinto<sup>3</sup>, <sup>1</sup>Kosmicare Association/Faculty of Sciences of Porto University, Porto, Portugal, <sup>2</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>3</sup>Faculty of Psychology and Educational Science of the Porto University, Porto, Portugal
- 109 *Persuading police to support public health in Mexico: Interactive training improves police endorsement of syringe legality*  
L. Beletsky<sup>1</sup>, J. Arredondo<sup>2</sup>, P. Baker<sup>3</sup>, D. Abramovitz<sup>3</sup>, I. Artamonova<sup>3</sup>, E. Clairgue<sup>3</sup>, M. Morales<sup>3</sup>, M. Mittal<sup>3</sup>, T. Rocha<sup>3</sup>, T. Kerr<sup>4</sup>, A. Banuelo<sup>5</sup>, S. Strathdee<sup>3</sup>, J. Cepeda<sup>3</sup>, <sup>1</sup>Northeastern University, Boston, MA, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada, <sup>3</sup>University of California San Diego, La Jolla, CA, <sup>4</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>5</sup>Secretaría de Seguridad Pública Municipal, Tijuana, Tijuana, Mexico
- 110 *Police characteristics associated with preferences for referral of people who inject drugs to harm reduction services in Tijuana, Mexico*  
P. Baker<sup>1</sup>, E. Clairgue<sup>1</sup>, A. Borquez<sup>1</sup>, J. Arredondo<sup>2</sup>, S. Strathdee<sup>1</sup>, A. Vera<sup>1</sup>, J. Cepeda<sup>1</sup>, <sup>1</sup>University of California San Diego, La Jolla, CA, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 111 *The moral foundations of needle exchange attitudes*  
N. Christie<sup>1</sup>, E. Hsu<sup>1</sup>, C. Iskiwitch<sup>1</sup>, R. Iyer<sup>1</sup>, J. Graham<sup>2</sup>, B. Schwartz<sup>3</sup>, J. Monterosso<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>University of Utah, Salt Lake City, UT, <sup>3</sup>Swarthmore College, Swarthmore, PA
- 112 *Police interactions and carrying naloxone among people who inject drugs*  
M. Reed<sup>1</sup>, K. Wagner<sup>2</sup>, N. Tran<sup>1</sup>, K. Brady<sup>3</sup>, J. Shinefeld<sup>3</sup>, A. Roth<sup>1</sup>, <sup>1</sup>Drexel University, Philadelphia, PA, <sup>2</sup>University of Nevada, Reno, NV, <sup>3</sup>Philadelphia Department of Public Health, Philadelphia, PA
- 113 *Prevalence of substance misuse in a sample of primary care patients*  
D. Pomm, A. Parlier-Ahmad, K. Polak, D. Svikis, Virginia Commonwealth University, Richmond, VA

- 114 *Implementing an updated “Break the Cycle” intervention to reduce initiating persons into injecting drug use in an Eastern European and a US “opioid epidemic” setting*  
A. Uuskula<sup>1</sup>, D. Des Jarlais<sup>2</sup>, A. Talu<sup>1</sup>, D. Barnes<sup>3</sup>, M. Raag<sup>1</sup>, K. Arasteh<sup>3</sup>, G. Org<sup>1</sup>, J. Feelemyer<sup>4</sup>, H. Berg<sup>4</sup>, S. Tross<sup>5</sup>, <sup>1</sup>University of Tartu, Tartu, Estonia, <sup>2</sup>New York University College of Global Public Health, New York, NY, <sup>3</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>4</sup>New York University, New York, NY, <sup>5</sup>Columbia University, New York, NY
- 115 *The role of residential evictions in shaping harm amidst twin epidemics of illicit opioid and methamphetamine use: A qualitative study in Vancouver, Canada*  
R. McNeil<sup>1</sup>, T. Fleming<sup>2</sup>, A. Collins<sup>3</sup>, S. Mayer<sup>2</sup>, J. Boyd<sup>4</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>Simon Fraser University, Vancouver, BC, Canada, <sup>4</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 116 *Contrasting trajectories of injection methamphetamine and cocaine use in a Canadian setting between 2008-2017*  
P. Bach<sup>1</sup>, L. Ti<sup>2</sup>, E. Nosova<sup>1</sup>, T. Kerr<sup>1</sup>, K. Hayashi<sup>3</sup>, M. Milloy<sup>1</sup>, E. Wood<sup>2</sup>, N. Fairbairn<sup>1</sup>, <sup>1</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada, <sup>3</sup>Simon Fraser University, Vancouver, BC, Canada
- 117 *Substance use disorder diagnosis and craving: Comparison of substance users accessing treatment and substance users in harm reduction programs*  
M. Auriacombe<sup>1</sup>, C. Kervran<sup>1</sup>, F. Serre<sup>2</sup>, C. Denis<sup>3</sup>, P. Roux<sup>4</sup>, M. Jauffret-Roustide<sup>4</sup>, L. Lalanne<sup>5</sup>, J. Daulouede<sup>6</sup>, M. Fatseas<sup>7</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux, <sup>3</sup>University of Pennsylvania, Philadelphia, PA, <sup>4</sup>Institut National de la Santé et de la Recherche Médicale, Marseille, <sup>5</sup>University Hospital of Strasbourg, Strasbourg, France, <sup>6</sup>Bizia Addiction Clinic, Bayonne, France, <sup>7</sup>Centre Hospitalier Charles Perrens, Bordeaux, France
- 118 *Longitudinal study of treatment need perception among people with substance use disorders in the US: Low perceived need is both common and stable over time*  
S. Moeller<sup>1</sup>, J. Platt<sup>2</sup>, R. Goodwin<sup>3</sup>, <sup>1</sup>Stony Brook University School of Medicine, Stony Brook, NY, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>The City University of New York, New York, NY

**ORAL COMMUNICATIONS 5  
READY AND RARIN' TO GO:  
PRECLINICAL STIMULANT RESEARCH****Grand Oaks G  
10:00 - 12:00 PM**

Chairs: Cameron Davidson and Michelle Doyle

- 10:00 *Influence of drug histories on the development of high levels of MDPV self-administration*  
M. Doyle<sup>1</sup>, R. DeSantis<sup>2</sup>, A. Sulima<sup>3</sup>, K. Rice<sup>3</sup>, G. Collins<sup>2</sup>, <sup>1</sup>University of Texas Health Science Center at San Antonio, San Antonio, TX, <sup>2</sup>University of Texas Health Science Center, San Antonio, TX, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD
- 10:15 *Effects of methamphetamine isomers on d-methamphetamine self-administration and food-maintained responding in male rats*  
L. Dwoskin<sup>1</sup>, M. Bardo<sup>1</sup>, E. Denehy<sup>1</sup>, L. Hammerslag<sup>1</sup>, B. Blough<sup>2</sup>, J. Bergman<sup>3</sup>, S. Kohut<sup>4</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>McLean Hospital, Belmont, MA, <sup>4</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 10:30 *The role of mitochondrial complexes in methamphetamine-induced vulnerability to develop Parkinson's disease*  
I. Calma, A. Persons, T. Napier, Rush University Medical Center, Chicago, IL
- 10:45 *Characterization of novel allosteric modulatory effects of SRI-32743 on HIV-1 Tat protein-induced inhibition of human dopamine transporter and potentiation of cocaine reward in HIV-1 Tat transgenic mice*  
J. Zhu<sup>1</sup>, J. McLaughlin<sup>2</sup>, Y. Wang<sup>3</sup>, P. Quizon<sup>4</sup>, S. Ananthan<sup>5</sup>, S. Eans<sup>2</sup>, H. Stacy<sup>2</sup>, M. Strauss<sup>4</sup>, <sup>1</sup>University of South Carolina, Columbia, SC, <sup>2</sup>University of Florida, Gainesville, FL, <sup>3</sup>College of Pharmaceutical Sciences, Zhejiang University, Hangzhou, China, <sup>4</sup>Drug Discovery and Biomedical Sciences, University of South Carolina, Columbia, SC, <sup>5</sup>Southern Research Institute, Birmingham, AL
- 11:00 *Periadolescence toluene exposure alters behavioral responsiveness to later ethanol or cocaine challenges in Swiss-Webster mice*  
C. Davidson, M. Naddaf, D. Holcomb, J. Hannigan, S. Bowen, Wayne State University, Detroit, MI
- 11:15 *Assessing effect of nalmefene on daily 4-hr cocaine self-administration in male mice*  
M. Morochnik, K. Windisch, B. Reed, M. Kreek, The Rockefeller University, New York, NY
- 11:30 *Comparing social and nonsocial influences on cocaine seeking in male rats*  
L. Hammerslag, J. Beckmann, M. Bardo, University of Kentucky, Lexington, KY

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## Monday, June 17, 2019

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- 11:45 *Shifts in the neurobiological mechanisms motivating cocaine use with the development of an addicted phenotype*  
T. Nesil, A. Bakhti-Suroosh, C. Davis, W. Lynch, University of Virginia, Charlottesville, VA

### ORAL COMMUNICATIONS 6 SEXUAL MINORITY HEALTH AND SUBSTANCE USE DISORDERS

**Grand Oaks M**  
**10:00 - 12:00 PM**

Chairs: Morgan Philbin and Johannes Thrul

- 10:00 *Sensation seeking, sexual orientation, and emerging adult drug abuse*  
T. Regan<sup>1</sup>, S. Wager<sup>2</sup>, H. Hahn<sup>3</sup>, B. Harris<sup>1</sup>, S. Engler<sup>1</sup>, J. Schueler<sup>1</sup>, S. Fields<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Brown University, Providence, RI, <sup>3</sup>Ohio State University, College Station, TX
- 10:15 *Social provision, substance use and sexual orientation from a nationally representative sample of adults from NESARC-III*  
E. Kahle, P. Veliz, S. McCabe, C. Boyd, University of Michigan, Ann Arbor, MI
- 10:30 *Alcohol use, dependence and abuse in sexual minority adults by sex: Evidence from a national survey, 2015-2017*  
R. Peralta<sup>1</sup>, C. Thompson<sup>2</sup>, <sup>1</sup>University of Akron, Akron, OH, <sup>2</sup>Peds AI, Lansing, MI
- 10:45 *Cigarette, alcohol, and cannabis use and co-use among sexual minority and non-minority young adult smokers: A daily diary study*  
J. Thrul<sup>1</sup>, N. Nguyen<sup>2</sup>, L. Holmes<sup>3</sup>, P. Ling<sup>4</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>UCSF, San Francisco, CA, <sup>3</sup>State University of New York at Binghamton, Vestal, NY, <sup>4</sup>University of California San Francisco, San Francisco, CA
- 11:00 *Associations of sexual orientation discrimination and substance use disorders: Differences by age and gender*  
R. Evans-Polce<sup>1</sup>, P. Veliz<sup>1</sup>, C. Boyd<sup>1</sup>, T. Hughes<sup>2</sup>, S. McCabe<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Columbia University, New York, NY
- 11:15 *State-level medical marijuana laws and marijuana use outcomes among a nationally representative lesbian, gay and bisexual individuals from 2015-2016: Gender matters*  
M. Philbin<sup>1</sup>, P. Mauro<sup>2</sup>, E. Greene<sup>2</sup>, S. 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
- 11:30 *Disparities in past-year blunt use and daily cigarette smoking among sexual minority adults*  
E. Greene<sup>1</sup>, P. Mauro<sup>1</sup>, M. Philbin<sup>2</sup>, N. Levy<sup>2</sup>, S. 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

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## Monday, June 17, 2019

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- 11:45 *Correlates of transactional sex among male people who inject drugs (PWID) in Los Angeles and San Francisco, CA*  
S. Walters<sup>1</sup>, S. Lamb<sup>2</sup>, L. Wenger<sup>3</sup>, A. Kral<sup>3</sup>, R. Bluthenthal<sup>2</sup>, <sup>1</sup>New York University, New York, NY, <sup>2</sup>Keck School of Medicine, Los Angeles, CA, <sup>3</sup>RTI International, San Francisco, CA

### ORAL COMMUNICATIONS 7 MOMMY AND ME: PERINATAL

**Grand Oaks I**  
**10:00 - 12:00 PM**

Chairs: Loretta Finnegan and Dennis Hand

- 10:00 *Developing a model of care for substance use in pregnancy and parenting services in Sydney, Australia*  
H. Coupland<sup>1</sup>, M. Moensted<sup>2</sup>, R. Sharon<sup>3</sup>, B. White<sup>1</sup>, S. Khanlari<sup>4</sup>, J. Eastwood<sup>4</sup>, P. Haber<sup>4</sup>, C. Day<sup>3</sup>, <sup>1</sup>Drug Health Services, Sydney Local Health District, Camperdown, Australia, <sup>2</sup>Discipline of Addiction Medicine, Faculty of Medicine and Health, University of Sydney, Sydney, Australia, <sup>3</sup>University of Sydney, Sydney, Australia, <sup>4</sup>Sydney Local Health District, Sydney, Australia
- 10:15 *Gabapentin exposure and neonatal abstinence syndrome among methadone-exposed neonates*  
D. Hand, S. Jones, E. Mann, V. Short, E. Rosenthal, C. Barber, W. Kraft, S. Adeniyi-Jones, D. Abatemarco, Thomas Jefferson University, Philadelphia, PA
- 10:30 *Alexithymia, emotional regulation strategies, and the role of traumatic experiences in prenatally cocaine-exposed young adults.*  
K. Morie<sup>1</sup>, M. Potenza<sup>2</sup>, L. Mayes<sup>1</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT
- 10:45 *Eat-sleep-console as a treatment for infants with neonatal abstinence syndrome*  
A. Allen<sup>1</sup>, L. Grisham<sup>2</sup>, M. Bader<sup>1</sup>, <sup>1</sup>University of Arizona, Tucson, AZ, <sup>2</sup>Banner Health, Tucson, AZ
- 11:00 *Prevalence of marijuana use in pregnant women with concurrent opioid use disorder or alcohol use in pregnancy: Results from the ENRICH cohort*  
L. Bakhireva, University of New Mexico, Albuquerque, NM
- 11:15 *Cigarette and cannabis use among new mothers*  
O. Alshaarawy, Michigan State University, East Lansing, MI
- 11:30 *Evaluating the impact of the Affordable Care Act (ACA) on medication for addiction treatment utilization for pregnant women with opioid use disorder*  
S. Choi<sup>1</sup>, T. Johnson<sup>2</sup>, C. Herrera<sup>3</sup>, M. Stein<sup>1</sup>, <sup>1</sup>Boston University School of Public Health, Boston, MA, <sup>2</sup>Boston University, Oakland, CA, <sup>3</sup>Boston University, Boston, MA
- 11:45 *Social support and opioid use among pregnant and parenting women*  
L. Paz, N. Smith, L. Cottler, University of Florida, Gainesville, FL

### **SYMPOSIUM VI EXPLORING NON-OPIOID MECHANISMS FOR THE TREATMENT OF PAIN**

**Grand Oaks K/L  
10:00 - 12:00 PM**

Chairs: David Shurtleff and Emmeline Edwards

- 10:00    *Brain imaging to assess neuroplasticity following acupuncture therapy for neuropathic pain*  
V. Napadow, Harvard University, Charlestown, MA
- 10:25    *Enhancement of opioid analgesia using chemokine receptor antagonists*  
S. Inan, Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- 10:50    *Shedding new light on pain management*  
M. Ibrahim, University of Arizona, Tucson, AZ
- 11:15    *The role of mindfulness-based stress reduction in migraine management*  
S. Burrowes, Boston University School of Public Health, Boston, MA
- 11:40    *Discussant*  
D. Shurtleff, National Institutes of Health, Bethesda, MD

### **SYMPOSIUM VII PREDICTIVE MODELING IN ADDICTION: RECENT FINDING AND IMPLICATIONS**

**Grand Oaks H  
10:00 - 12:00 PM**

Chairs: Sarah Yip and Susan Whitfield-Gabrielli

- 10:00    *Classifying and characterizing nicotine use disorder using support vector machine-based classification*  
R. Wetherill, University of Pennsylvania, Philadelphia, PA
- 10:25    *Multi-modal, machine-learning methods for predicting substance use initiation*  
H. Garavan, University of Vermont, Burlington, VT
- 10:50    *Connectome-based predictive modelling of polysubstance use in methadone-maintained individuals*  
S. Lichenstein, Yale University School of Medicine, New Haven, CT
- 11:15    *Bayesian computational adjustment of inhibitory control predicts relapse in methamphetamine dependence*  
J. Stewart, Laureate Institute for Brain Research, Tulsa, OK
- 11:40    *Addiction prediction: Implications for precision medicine*  
S. Whitfield-Gabrielli, Massachusetts Institute of Technology, Cambridge, MA

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**Monday, June 17, 2019**

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**ANIMAL FORUM  
HOW MANY R'S DOES IT TAKE TO DO RESEARCH?****Grand Oaks I  
12:15 - 1:15 PM**

Chairs: Mark Smith and Ziva Cooper

S. Hacker, The University of Texas Health Science Center at San Antonio, San Antonio, TX

**HUMAN RESEARCH FORUM  
ETHICAL CHALLENGES RECRUITING AND  
RETAINING PARTICIPANTS IN ADDICTION RESEARCH****Grand Oaks H  
12:15 - 1:15 PM**

Chairs: Victoria Votaw and Catherine Woodstock Striley

*Recruiting and retaining human participants for laboratory-based studies: Challenges and strategies*

S. Walsh, University of Kentucky, Lexington, KY

*Recruitment and retention of substance use disordered participants in clinical trials: Ethical and pragmatic considerations*

A. Oliveto, University of Arkansas for Medical Sciences, Little Rock, AR

*Recruiting and retaining adolescent and emerging adults in substance use disorder treatment trials*

E. McClure, Medical University of South Carolina, Charleston, SC

*Indicas, IRBs, and the Internet: Ethical considerations and recruitment strategies for social media-based cannabis use surveys*

J. Borodovsky, Washington University School of Medicine, St. Louis, MO

**CPDD EARLY CAREER INVESTIGATOR  
TRAVEL AWARDS LUNCHEON****Sunday House  
12:30 - 2:00 PM**

*By Invitation Only*

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**Monday, June 17, 2019**

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**TOWN HALL FORUM**

**MEDICAL DEVICES AND SUBSTANCE USE DISORDERS:  
LINKING EFFORTS FROM ACADEMIA, INDUSTRY  
AND GOVERNMENT**

**Grand Oaks G**

**1:00 - 2:00 PM**

Chairs: Marco Pravetoni and Sean Luo

*Transcranial magnetic stimulation and substance use disorders*

A. Tendler, Brainsway, Jerusalem, Israel

*Neuromodulation with peripheral vagal nerve*

A. Miranda, Medical College of Wisconsin, Milwaukee, WI

*Status of medical device development from academic efforts*

J. Wai, Columbia University Medical Center, New York, NY

*Overview of Food and Drug Administration regulations regarding devices for substance use disorders*

P. Bom, Institute of Health Informatics, Saint Paul, MN, University of Minnesota

*Discussant*

S. Luo, Columbia University, New York, NY

**MARIAN W. FISCHMAN AWARD LECTURE**

**Grand Oaks K/L**

**2:00 - 3:00 PM**

*Presentation of the Marian W. Fischman Award to Hendree Jones*

Introduction by Michelle Lofwall

Lecture: *Following the Wisdom of Women*

Hendree Jones, UNC at Chapel Hill, Chapel Hill, NC

**COFFEE BREAK**

**Cibolo Ballroom**

**3:00 - 3:30 PM**

**M.I.T. TOWN HALL**

**Bluebonnet**

**3:00 - 4:00 PM**

Chair: Cecilia Bergeria

### ORAL COMMUNICATIONS 9 EVERYTHING IS BIGGER IN TEXAS: COMORBIDITY ISSUES

Grand Oaks H  
3:30 - 4:30 PM

Chair: Brian Fairman

- 3:30 *Depression features associated with current marijuana use among youth*  
B. Fairman, National Institute of Child Health and Human Development, Bethesda, MD
- 3:45 *Differences in the tryptophan system between primary and substance-induced depression*  
F. Fonseca<sup>1</sup>, J. Mestre-Pintó<sup>2</sup>, A. Gomez-Gomez<sup>3</sup>, E. Papasseit<sup>4</sup>, C. Pérez-Mañá<sup>4</sup>, K. Langohr<sup>5</sup>, O. Valverde<sup>6</sup>, O. Pozo<sup>3</sup>, R. de la Torre<sup>7</sup>, M. Farre<sup>4</sup>, M. Torrens<sup>8</sup>, <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Institut Hospital del Mar d'Investigacions Mèdiques, Barcelona, Spain, <sup>2</sup>Hospital del Mar Medical Research Institute-IMIM, Barcelona, Spain, <sup>3</sup>Integrative Pharmacology and Systems Neuroscience Research Group, Neuroscience Research Program, Hospital del Mar Medical Research Institute (IMIM), Barcelona, Spain, <sup>4</sup>Hospital Universitari Germans Trias i Pujol, Badalona, Spain, <sup>5</sup>Department of Statistics and Operations Research, Universitat Politècnica de Barcelona/Barcelonatech, Barcelona, Spain, <sup>6</sup>Department of Experimental and Health Sciences, Universitat Pompeu Fabra, & Neurobiology of Behaviour Research Group, Neuroscience Research Programme. IMIM-Hospital Del Mar Research Institute, Barcelona, Spain, <sup>7</sup>D'Investigacio Medica, Barcelona, Spain, <sup>8</sup>Institut de Neuropsiquiatria i Addiccions, Barcelona, Spain
- 4:00 *Psychiatric comorbidity and order of condition onset among patients seeking treatment for chronic pain and opioid use disorder*  
D. Barry<sup>1</sup>, M. Beitel<sup>2</sup>, C. Cutter<sup>3</sup>, D. Fiellin<sup>1</sup>, L. Madden<sup>2</sup>, N. Lipkind<sup>4</sup>, P. Bollampally<sup>3</sup>, R. Schottenfeld<sup>5</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>APT Foundation, Inc., New Haven, CT, <sup>5</sup>Howard University College of Medicine, Washington, DC
- 4:15 *Psychiatric burden of prisoners suffering from opioid use disorder and ADHD*  
M. Silbernagl<sup>1</sup>, R. Slamanig<sup>1</sup>, M. Stegemann<sup>1</sup>, M. Sterzer<sup>1</sup>, L. Mayer<sup>1</sup>, G. Fischer<sup>2</sup>, <sup>1</sup>Medical University of Vienna, Vienna, Austria, <sup>2</sup>Medizinische Universitat, Wien, Australia

## ORAL COMMUNICATIONS 11 NOT YOUR TYPICAL TEXAS BARBECUE: STIMULI AND CRAVING

Grand Oaks I  
3:30 - 5:15 PM

Chairs: Maylen Perez Diaz and Zhenhao Shi

- 3:30     *Withdrawal symptom severity is associated with heightened mesocorticolimbic response to drug-related stimuli in opioid use disorder*  
Z. Shi<sup>1</sup>, V. Fairchild<sup>2</sup>, A. Wang<sup>2</sup>, C. O'Brien<sup>3</sup>, A. Childress<sup>4</sup>, D. Langleben<sup>5</sup>, <sup>1</sup>Department of Psychiatry, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>University of Pennsylvania, VA Medical Center, Philadelphia, PA, <sup>4</sup>University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, <sup>5</sup>Veterans Administration, Philadelphia, PA
- 3:45     *Stress, craving and mood as predictors of early dropout from opioid agonist therapy: Clues from Ecological Momentary Assessment*  
K. Preston<sup>1</sup>, L. Panlilio<sup>2</sup>, S. Stull<sup>2</sup>, B. Kowalczyk<sup>3</sup>, K. Phillips<sup>4</sup>, J. Schroeder<sup>5</sup>, D. Epstein<sup>2</sup>, <sup>1</sup>National Institute of Drug Abuse Intramural Research Program, Baltimore, MD, <sup>2</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>3</sup>Hartwick College, Oneonta, NY, <sup>4</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>5</sup>Schroeder Statistical Consulting, LLC, Ellicott City, MD
- 4:00     *Craving for opioids affects retention in treatment and adherence to antiretroviral therapy in HIV positive patients with OUD stabilized on naltrexone*  
E. Krupitsky<sup>1</sup>, E. Blokhina<sup>2</sup>, E. Verbitskaya<sup>2</sup>, T. Yaroslavtseva<sup>2</sup>, N. Bushara<sup>3</sup>, V. Palatkin<sup>3</sup>, M. Vetrova<sup>3</sup>, D. Lioznov<sup>2</sup>, S. Poole<sup>4</sup>, R. Gross<sup>4</sup>, G. Woody<sup>4</sup>, <sup>1</sup>V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russian Federation, <sup>2</sup>First Pavlov State Medical University, St. Petersburg, Russian Federation, <sup>3</sup>First Pavlov State Medical University, St. Petersburg, <sup>4</sup>University of Pennsylvania, Philadelphia, PA
- 4:15     *Conditioned neural responses to methamphetamine-paired contexts*  
E. Childs<sup>1</sup>, J. Weafer<sup>2</sup>, <sup>1</sup>University of Illinois, Chicago, IL, <sup>2</sup>University of Chicago, Chicago, IL
- 4:30     *Temporal response in subgenual anterior cingulate cortex (sgACC) to drug salient cues: An fMRI study among meth users*  
H. Ekhtiari<sup>1</sup>, R. Kuplicki<sup>1</sup>, M. Paulus<sup>2</sup>, <sup>1</sup>Laureate Institute for Brain Research, Tulsa, OK, <sup>2</sup>Tulsa 1000 Investigators, Tulsa, OK
- 4:45     *Male-female differences in the neural substrates of cigarette craving, withdrawal and relief*  
M. Perez Diaz<sup>1</sup>, D. Ghahremani<sup>1</sup>, P. Faulkner<sup>1</sup>, J. O'Neill<sup>2</sup>, J. Alger<sup>3</sup>, E. London<sup>1</sup>, <sup>1</sup>University of California Los Angeles, Los Angeles, CA, <sup>2</sup>Semel Institute, UCLA, Los Angeles, CA, <sup>3</sup>University of California, Los Angeles, Los Angeles, CA

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## Monday, June 17, 2019

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- 5:00 *Influence of cannabis-related cues on concurrent monetary choice in humans*  
J. Strickland<sup>1</sup>, J. Lile<sup>2</sup>, W. Stoops<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

### ORAL COMMUNICATIONS 8 SYSTEMS/HEALTH SERVICES

**Grand Oaks M  
3:30 - 5:30 PM**

Chairs: Trina Johnson and Maria Parker

- 3:30 *The effect of Pharmacare Plan G coverage change in British Columbia, Canada on OAT initiation and adherence*  
N. Hongdilokkul<sup>1</sup>, E. Krebs<sup>2</sup>, X. Zang<sup>1</sup>, C. Zhou<sup>1</sup>, F. Homayra<sup>1</sup>, J. Min<sup>2</sup>, B. Nosyk<sup>3</sup>, <sup>1</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada, <sup>2</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 3:45 *Applying the 'cascade of care' conceptualization to the current US opioid public health crisis*  
M. Parker<sup>1</sup>, A. Villanti<sup>2</sup>, S. Sigmon<sup>1</sup>, R. Rawson<sup>3</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, <sup>3</sup>UCLA Integrated Substance Abuse Programs, Los Angeles, CA
- 4:00 *Impact of Affordable Care Act implementation on psychiatric treatment in outpatient substance use disorder treatment settings*  
C. Shover<sup>1</sup>, A. Abraham<sup>2</sup>, T. D'Aunno<sup>3</sup>, P. Friedmann<sup>4</sup>, K. Humphreys<sup>1</sup>, <sup>1</sup>Stanford University, Palo Alto, CA, <sup>2</sup>University of Georgia, Athens, GA, <sup>3</sup>Robert F. Wagner Graduate School of Public Service, New York University, New York, NY, <sup>4</sup>Baystate Health, Springfield, MA
- 4:15 *Perceived impacts of the Affordable Care Act on buprenorphine treatment*  
H. Knudsen, University of Kentucky, Lexington, KY
- 4:30 *Disparities in post-ACA utilization of MAT at publicly subsidized substance use treatment facilities*  
T. Johnson, J. Raifman, Boston University, Oakland, CA
- 4:45 *The impact of the Affordable Care Act's young adult dependent coverage expansion on opioid overdoses in the emergency department*  
E. Coupet<sup>1</sup>, D. Polsky<sup>2</sup>, R. Werner<sup>2</sup>, M. Delgado<sup>2</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>University of Pennsylvania, Philadelphia, PA
- 5:00 *Impact of opioid use disorder on hospital disposition and readmissions*  
J. Zavodnick<sup>1</sup>, M. Morley<sup>2</sup>, R. Sterling<sup>2</sup>, <sup>1</sup>Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA, <sup>2</sup>Thomas Jefferson University, Philadelphia, PA

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**Monday, June 17, 2019**

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- 5:15 *The Cornerstone Clinic at Helping Up Mission: Increasing treatment retention for homeless persons with substance use disorders*  
D. Antoine<sup>1</sup>, L. Hanks<sup>2</sup>, T. Speed<sup>3</sup>, D. Huggins<sup>1</sup>, E. Strain<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins University, Baltimore, MD, <sup>3</sup>Johns Hopkins Hospital, Baltimore, MD

**SYMPOSIUM IX**

**Grand Oaks G**

**ENLARGING THE TOOLBOX: USING  
PRECLINICAL DATA TO IDENTIFY NON-OPIOID  
RECEPTOR TARGETS FOR MEDICATION-ASSISTED  
TREATMENT OF OPIOID USE DISORDER**

**3:30 - 5:30 PM**

Chairs: Kurt Rasmussen and Jane Acri

- 3:30 *Serotonin receptor targets for opioid use disorder pharmacotherapy*  
K. Cunningham, University of Texas Medical Branch, Galveston, TX
- 3:55 *Identifying medication targets for opioid use disorder: Redirecting the dopamine D3 receptor hypothesis*  
A. Newman, NIDA Intramural Research Program, Baltimore, MD
- 4:20 *The study of gut-brain neuroendocrine pathways for the development of novel treatments for opioid (and other) use disorders: The ghrelin system*  
L. Leggio, NIDA Intramural Research Program, Baltimore, MD
- 4:45 *Optimization of muscarinic M5 negative allosteric modulators for the prevention and treatment of opioid use disorder*  
C. Jones, Vanderbilt University, Nashville, TN
- 5:10 *Discussant: NIDA as a catalyst for the development of new treatments for OUD*  
K. Rasmussen, National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD

**SYMPOSIUM VIII**

**Grand Oaks K/L**

**WHAT PREDICTS EARLY ALCOHOL SIPPING,  
CAFFEINE USE AND SCREEN MEDIA ACTIVITY IN  
YOUTH? 2-YEAR FINDINGS FROM THE ADOLESCENT  
BRAIN COGNITIVE DEVELOPMENT STUDY**

**3:30 - 5:30 PM**

Chairs: Susan Weiss and Krista Lisdahl

- 3:30 *Neurocognitive predictors of alcohol sipping and caffeine use in pre-teens: Year-two findings from the ABCD Study*  
K. Lisdahl, University of Wisconsin-Milwaukee, Milwaukee, WI

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## Monday, June 17, 2019

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- 3:55 *Externalizing correlates of early sipping*  
A. Watts, University of Missouri, Columbia, MO
- 4:20 *Culture and environmental predictors of early sipping in pre-teen youth*  
R. Gonzalez, Florida International University, Miami, FL
- 4:45 *Screen media activity in youth: Association with physical activity, family conflict, and sleep*  
F. Breslin, Laureate Institute for Brain Research, Tulsa, OK
- 5:10 *Discussant: Overview, implications, and discussion of year-2 findings from the ABCD Study*  
S. Weiss, National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD

### ORAL COMMUNICATIONS 10 RACIAL AND ETHNIC HEALTH DISPARITIES

**Grand Oaks H  
4:45 - 5:45 PM**

Chairs: Devin Banks and Angela Haeny

- 4:45 *The effect of varenicline on smoking and drinking outcomes by ethnic group*  
A. Haeny<sup>1</sup>, R. Gueorguieva<sup>2</sup>, A. Zweben<sup>3</sup>, S. O'Malley<sup>2</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Columbia School of Social Work, New York, NY
- 5:00 *Differences in typologies of current substance use among African American and White high-school adolescents: A latent class analysis*  
D. Banks<sup>1</sup>, M. Bello<sup>2</sup>, Q. Crichlow<sup>1</sup>, A. Leventhal<sup>2</sup>, T. Zapolski<sup>1</sup>, <sup>1</sup>Indiana University Purdue University Indianapolis, Indianapolis, IN, <sup>2</sup>University of Southern California, Los Angeles, CA
- 5:15 *Racial differences in opioid overdose training, naloxone possession, and naloxone administration among people who inject drugs (PWID)*  
A. Jones<sup>1</sup>, J. Park<sup>2</sup>, S. Allen<sup>2</sup>, K. Schneider<sup>1</sup>, B. Weir<sup>3</sup>, S. Sherman<sup>3</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins University, Baltimore, MD, <sup>3</sup>Johns Hopkins Hospital, Baltimore, MD
- 5:30 *Racial/ethnic and gender differences in risk for past 30-day opioid misuse: A statewide sample of the Florida juvenile justice system*  
H. Pierre<sup>1</sup>, M. Johnson<sup>2</sup>, <sup>1</sup>University of Florida: STOMP Lab, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL

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## Monday, June 17, 2019

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**FILM: HEROIN(E)**

**Grand Oaks E/F  
5:45 - 6:30 PM**

**PRIMM-SINGLETON RECEPTION**

*By Invitation Only*

**Wisteria  
5:30 - 7:00 PM**

**NIDA INTERNATIONAL RESEARCH  
POSTER SESSION**

**Grand Oaks E/F  
7:00 - 9:00 PM**

Chair: Steven Gust

CPDD International Committee: Best research poster by a scientist  
from a low, lower middle, or upper middle-income country  
C. McCoy, Comprehensive Drug Research Center, Miami, FL

## 2019 NIDA International Forum Abstracts

**June 17, 2018–7:00 to 9:00 p.m.**

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

### Informational

*100 Africa and Middle East Congress on Addiction: Outreach and capacity building activities in 2018*

M. al'Absi<sup>1</sup>, S. Mhamdi<sup>2</sup>, M. Nakajima<sup>1</sup>, S. Seedat<sup>3</sup>. <sup>1</sup>University of Minnesota, United States;  
<sup>2</sup>University of Monastir, Tunisia; <sup>3</sup>Stellenbosch University, South Africa

*101 Society for Research on Nicotine and Tobacco University: Training and resources for the nicotine and tobacco research community*

Mona Johnson, Society for Research on Nicotine and Tobacco, United States

*102 Translating evidence into practice through drug demand reduction education programs in universities: The Kenyatta University, Kenya Experience*

B. Kathungu, M. Karega. Kenyatta University, Kenya

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

J.R. Koch, R.L. Balster, W.L. Klierer, H. Ashton. Virginia Commonwealth University, United States

*104 The Virginia Commonwealth University Hubert H. Humphrey Fellowship Program in Substance Abuse Prevention, Treatment, and Policy: One-year follow-up assessment*

O. Leonchuk<sup>1</sup>, J.R. Koch<sup>2</sup>, R.L. Balster<sup>2</sup>, W. Klierer<sup>2</sup>. <sup>1</sup>North Carolina State University, United States; <sup>2</sup>Virginia Commonwealth University, United States

*105 Five years of cannabis legalization in Uruguay: Finding new indicators to evaluate the effects*

M. Martoy. Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; National Drug Board of Uruguay, Uruguay

*106 The adaptation of the universal treatment curriculum walkthrough workshops: Philippine experience*

M.I. Melgar. Ateneo de Manila University, Philippines

107 *A cross-country comparison of tobacco control policies between the United States and China*  
D. Yuan<sup>1,2</sup>, X. Chen<sup>1</sup>, S. Lin<sup>1</sup>, A. Barnes<sup>1</sup>, J.R. Koch<sup>1</sup>, H. Xue<sup>1</sup>. <sup>1</sup>Virginia Commonwealth University, United States; <sup>2</sup>*Southern Weekly Newspaper*, China

### Basic Science

200 *Genotype-phenotype feasibility studies on khat abuse, traumatic experiences, and psychosis in Ethiopia*

K. Adorjan<sup>1,2,3</sup>, Z. Mekonnen<sup>4</sup>, F. Tessema<sup>5</sup>, M. Ayana<sup>4</sup>, F. Degenhardt<sup>6</sup>, P. Hofmann<sup>6,7</sup>, N. Fricker<sup>6</sup>, M. Widmann<sup>8,9</sup>, H. Riedke<sup>8,9</sup>, S. Toennes<sup>10</sup>, M. Soboka<sup>11</sup>, S. Suleman<sup>12</sup>, M. Tesfaye<sup>13</sup>, M. Rietschel<sup>14</sup>, E. Susser<sup>15,16</sup>, M. Odenwald<sup>8,9</sup>, T.G. Schulze<sup>1</sup>, M. Mattheisen<sup>17,18</sup>. <sup>1</sup>Institute of Psychiatric Phenomics and Genomics, Medical Center of the University of Munich, Germany; <sup>2</sup>Department of Psychiatry and Psychotherapy, Medical Center of the University of Munich, Germany; <sup>3</sup>Center for International Health, University of Munich, Germany; <sup>4</sup>Department of Medical Laboratory Sciences and Pathology, Jimma University, Ethiopia; <sup>5</sup>Department of Epidemiology, Jimma University, Ethiopia; <sup>6</sup>Institute of Human Genetics, University of Bonn, Germany; <sup>7</sup>Department of Genomics, Life and Brain Center, University of Bonn, Germany; <sup>8</sup>Department of Psychology, University of Konstanz, Germany; <sup>9</sup>Vivo international e.V., Germany; <sup>10</sup>Department of Forensic Toxicology, Goethe University, Germany; <sup>11</sup>Department of Psychiatry, Jimma University, Ethiopia; <sup>12</sup>School of Pharmacy, Faculty of Health Sciences, Jimma University Institute of Health, Ethiopia; <sup>13</sup>Department of Psychiatry, St. Paul's Hospital Millennium Medical College, Ethiopia; <sup>14</sup>Department of Genetic Epidemiology in Psychiatry, Central Institute of Mental Health, Medical Faculty Mannheim, University of Heidelberg, Germany; <sup>15</sup>Mailman School of Public Health, Columbia University, United States; <sup>16</sup>New York State Psychiatric Institute, United States; <sup>17</sup>Department of Psychiatry, Psychosomatics, and Psychotherapy, University of Wuerzburg, Germany; <sup>18</sup>Department of Clinical Neuroscience, Karolinska Institutet, Sweden

201 *More extensive gray matter volume reduction in fronto-temporal areas and decision-making impairments among individuals with cocaine + alcohol use disorder than cocaine only: A voxel-based morphometric study*

P.D. Goncalves, C.V.I. de Melo, F.L.S. Duran, D.R. Lima, H.P. de Oliveira Junior, M.H. Serpa, L.M. Sanchez, P. Rosa, M. Zanetti, T. Chaim-Avancini, L.K. Ferreira, M. Cavalett, N.A. da Costa, M. Foigel, M. Ometto, A. Malbergier, R. Amaral, S. Nicastri, A.G. de Andrade, G.F. Busatto, P.J. Cunha. Department and Institute of Psychiatry, School of Medicine, University of São Paulo, Brazil

202 *Acute effects of cannabinoids on addiction endophenotypes are moderated by genes encoding the cannabinoid receptor 1 and fatty acid amide hydrolase enzyme*

C. Hindocha<sup>1,2,3,6</sup>, T.P. Freeman<sup>1,2,4,5</sup>, G. Schafer<sup>1</sup>, C. Gardner<sup>1</sup>, M.A.P. Bloomfield<sup>1,2,3,6,7,8,9,10</sup>, E. Bramon<sup>8,9,11</sup>, C.J.A. Morgan<sup>1,12</sup>, H.V. Curran<sup>1,3</sup>. <sup>1</sup>Clinical Psychopharmacology Unit, Research Department of Clinical, Educational, and Health Psychology, University College London, United Kingdom; <sup>2</sup>Translational Psychiatry Research Group, Research Department of Mental Health Neuroscience, Division of Psychiatry, Faculty of Brain Sciences, University College London, United Kingdom; <sup>3</sup>National Institute for Health Research Biomedical Research Centre at University College London Hospitals

and University College Hospital, United Kingdom; <sup>4</sup>Department of Psychology, University of Bath, United Kingdom; <sup>5</sup>National Addiction Centre, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, United Kingdom; <sup>6</sup>Psychiatric Imaging Group, Medical Research Council London Institute of Medical Sciences, Hammersmith Hospital, United Kingdom; <sup>7</sup>Institute of Clinical Sciences, Faculty of Medicine, Imperial College London, United Kingdom; <sup>8</sup>Division of Psychiatry, University College London, United Kingdom; <sup>9</sup>Institute of Psychiatry, Psychology, and Neuroscience at King's College London, United Kingdom; <sup>10</sup>Maudsley National Health Service Foundation Trust, United Kingdom; <sup>11</sup>Institute of Cognitive Neuroscience, University College London, United Kingdom; <sup>12</sup>Psychopharmacology and Addiction Research Centre, University of Exeter, United Kingdom

*203 The role of nerve growth factor gene, personality, and impulsivity in women with opioid use disorder*

S-Y. Huang. Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center, Taiwan

*204 Cerebral volumetric bases of attention and working memory impairment in chronic ketamine users*

C-C. Hung<sup>1,2</sup>, Y-H. Liu<sup>1</sup>, C-C. Huang<sup>3</sup>, C-S.R. Li<sup>4,5</sup>, N.G. Muggleton<sup>6</sup>, T. Szu-Hsien Lee<sup>7</sup>, C.-P. Lin<sup>1,8</sup>. <sup>1</sup>Institute of Neuroscience, National Yang Ming University, Taiwan; <sup>2</sup>Bali Psychiatric Center, Ministry of Health and Welfare, Taiwan; <sup>3</sup>Aging and Health Research Center, National Yang-Ming University, Taiwan; <sup>4</sup>Department of Psychiatry, Yale University, United States; <sup>5</sup>Department of Neuroscience, Yale University, United States; <sup>6</sup>Institute of Cognitive Neuroscience, National Central University, Taiwan; <sup>7</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan; <sup>8</sup>Brain Research Center, National Yang-Ming University, Taiwan

*205 Gas chromatography coupled to mass spectrometry (GC-MS) analysis and cytotoxicity investigations of shammah (smokeless tobacco) samples of Jazan region of Saudi Arabia reveals carcinogenic and addictive components*

A. Khalid, H. Alhazmi. Smokeless Tobacco Research Group, Substance Abuse Research Centre, Jazan University, Saudi Arabia

*206 Evaluation of extraction methods for the determination of cannabinoids in breast milk*

R.S. Ramnarine<sup>1,2</sup>, J.L. Poklis<sup>3</sup>, C.E. Wolf<sup>4</sup>. <sup>1</sup>Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>Trinidad and Tobago Forensic Science Centre, Trinidad and Tobago; <sup>3</sup>Department of Pharmacology and Toxicology, Virginia Commonwealth University, United States; <sup>4</sup>Department of Pathology, Virginia Commonwealth University, United States

*207 Sex differences in implicit brain connectivity of cocaine users: Opposite patterns of connectivity for males and females in resting-state functional magnetic resonance imaging*

B. Sanvicente-Vieira<sup>1</sup>, P.E. Ferreira<sup>2</sup>, N. Bianchini<sup>2</sup>, L. Rothmann<sup>2</sup>, A. Buchweitz<sup>2</sup>, A.R. Franco<sup>3</sup>, R. Grassi-Oliveira<sup>2</sup>. <sup>1</sup>Pontificia Universidade Católica do Rio Grande do Sul (PUCRS), School of Health Sciences, Developmental Cognitive Neuroscience Lab, Brazil; <sup>2</sup>PUCRS, Brain Institute of Rio Grande do Sul (BraIns), Brazil; <sup>3</sup>The Nathan S. Kline Institute for Psychiatric Research, Brazil

208 *Patterns of cognitive impairment in heroin users and methamphetamine users*

W. Shen<sup>1</sup>, J. Zhang<sup>1</sup>, W.Cui<sup>2</sup>, L. Li<sup>1</sup>, Y. Liu<sup>1</sup>, H. Liu<sup>1</sup>, W. Zhou<sup>1,2</sup>. <sup>1</sup>Ningbo Addiction Research and Treatment Center, China; <sup>2</sup>Ningbo University School of Medicine, China

209 *Epigenetic biomarkers of drug addiction and withdrawal*

D. Soares Bispo Santos Silva, R. Spurbeck, S. Reed, A. Zmarowski. Battelle Memorial Institute, United States

210 *Repeated toluene, but not cyclohexane inhalation, induces endocrine alterations in adolescent male rats*

P. Soberanes-Chavez<sup>1</sup>, P. de Gortari-Gallardo<sup>1</sup>, S.L. Cruz<sup>2</sup>. <sup>1</sup>Laboratory of Molecular Neurophysiology, National Institute of Psychiatry, Mexico; <sup>2</sup>Department of Pharmacology, Cinvestav, Mexico

211 *Activation of trace amine-associated receptor 1 attenuates schedule-induced polydipsia in rats*

I. Sukhanov<sup>1</sup>, A. Dorotenko<sup>1</sup>, A. Dolgorukova<sup>1</sup>, R.R.Gainetdinov<sup>2</sup>, E.E. Zvartau<sup>1</sup>, A.Y. Beshpalov<sup>1</sup>. <sup>1</sup>First Saint Petersburg State Medical University, Russia; <sup>2</sup>Saint Petersburg State University, Institute of Translational Biomedicine, Russia

212 *Kratom and pain tolerance*

K. Vicknasingam<sup>1</sup>, W-T. Chooi<sup>2</sup>, A.A. Rahim<sup>1</sup>, D. Ramachandran<sup>1</sup>, S. Ramanathan<sup>1</sup>, D. Singh<sup>1</sup>, H. Zainal<sup>3</sup>, M.C. Chawarski<sup>4</sup>. <sup>1</sup>Centre for Drug Research, Universiti Sains Malaysia, Malaysia; <sup>2</sup>School of Social Sciences, Universiti Sains Malaysia, Malaysia; <sup>3</sup>School of Pharmaceutical Sciences, Universiti Sains Malaysia, Malaysia; <sup>4</sup>Yale School of Medicine, United States

213 *Effects of repeated toluene, ketamine, or MK-801 treatment on sexual behavior in adolescent male rats*

V. Violante-Soria, G. Rodríguez-Manzo, S.L.Cruz. Pharmacobiology Department, Cinvestav-Coapa, Mexico

214 *Resting state default-mode network functional connectivity correlates with glutamate+glutamine/creatine ratio of the medial prefrontal cortex in methamphetamine males: An fMRS study*

Q. Wu<sup>1,2,3,4,5</sup>, C. Qi<sup>1,2,3,4,5</sup>, A. Xie<sup>6</sup>, Y. Liao<sup>1,2,3,4,5</sup>, X.Wang<sup>1,2,3,4,5</sup>, J. Tang<sup>1,2,3,4,5</sup>, J. Liu<sup>6</sup>, W. Hao<sup>1,2,3,4,5</sup>, T. Liu<sup>1,2,3,4,5</sup>. <sup>1</sup>Department of Psychiatry, The Second Xiangya Hospital, Central South University, China; <sup>2</sup>Mental Health Institute, The Second Xiangya Hospital, Central South University, China; <sup>3</sup>National Clinical Research Center on Mental Disorders, China; <sup>4</sup>National Technology Institute on Mental Disorders, China; <sup>5</sup>Hunan Key Laboratory of Psychiatry and Mental Health, China; <sup>6</sup>Department of Radiology, The People's Hospital of Hunan Province, China

215 *Role of ventral medial prefrontal cortex (vmPFC) to nucleus accumbens (NAc) shell glutamatergic projection in the heroin reward and motivation*

H. Zhu<sup>1</sup>, M.Lai<sup>1</sup>, X. Zhang<sup>2</sup>, H. Liu<sup>1</sup>, H. Shen<sup>2</sup>, W. Zhou<sup>1</sup>. <sup>1</sup>Laboratory of Behavioral Neuroscience, Ningbo Addiction Research and Treatment Center, Ningbo University School of Medicine, China; <sup>2</sup>Zhejiang Provincial Key Laboratory of Pathophysiology, Ningbo University School of Medicine, China

### Epidemiology

300 *Gender differences in stimulants use among patients in methadone maintenance treatment in Bucharest, Romania*

A.O. Abagiu<sup>1,2</sup>, I.C. Fierbinteanu<sup>2</sup>, A. Koulosousas<sup>2</sup>, E.A. Bolocan<sup>1,2</sup>, F.M. Duna<sup>1</sup>. <sup>1</sup>National Institute for Infectious Diseases Prof. Dr. Matei Bals, Romania; <sup>2</sup>Romanian Association Against AIDS, Romania

301 *Addressing prevalence and correlates among a sample of Egyptian university students who suffer from substance use disorders*

M. Abdelghani, G.S. El-Deen, M. Said, H.M. El-Gohary, U.M. Youssef, M.M. Bassiony. Psychiatry Department, College of Medicine, Zagazig University, Egypt

302 *Factors influencing indulgence in drug abuse among adolescents in selected secondary schools Akure, Ondo State*

M.O. Abiona<sup>1</sup>, J.T. Olusegun<sup>2</sup>. <sup>1</sup>Department of Nursing, University of Ibadan, Nigeria; <sup>2</sup>Ondo State School of Nursing Akure, Nigeria

303 *Psychopathy and khat abuse among prisoners in the correctional institution in Jimma, Ethiopia*

Y.Y. Abyu<sup>1</sup>, M. Soboka<sup>1</sup>, E. Tesfaye<sup>1</sup>, M. Abera<sup>1</sup>, A. Mamaru<sup>1</sup>, K. Adorjan<sup>2,3,4</sup>. <sup>1</sup>Department of Psychiatry, Faculty of Medical Sciences, Jimma University, Ethiopia; <sup>2</sup>Center for International Health, Ludwig-Maximilians-Universität, Germany; <sup>3</sup>Departments of Psychiatry and Psychotherapy, Medical Center of the University of Munich, Germany; <sup>4</sup>Institute of Psychiatric Phenomics and Genomics, Medical Center of the University of Munich, Germany

304 *The hidden harm: Child academic performance is negatively impacted by heroin using parents in Pakistan*

Q.U. Ain<sup>1</sup>, M.A. Dahar<sup>1</sup>, T. Szu-Hsien Lee<sup>2</sup>. <sup>1</sup>Department of Education, Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan; <sup>2</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan

305 *Access to treatment services among female drug users in Nigeria*

G.A. Akpabio, I.S. Obot. Centre for Research and Information on Substance Abuse, University of Uyo, Nigeria

306 *Involvement with the child welfare system independently associated with early injection initiation among street-involved youth who inject drugs in Vancouver, Canada*

B. Barker<sup>1,2</sup>, J. Shoveller<sup>2,3</sup>, H. Dong<sup>2,3</sup>, T. Kerr<sup>2,4</sup>, K. DeBeck<sup>2,5</sup>. <sup>1</sup>Interdisciplinary Studies Graduate Program, University of British Columbia (UBC), Canada; <sup>2</sup>British Columbia Centre on Substance Use, Canada; <sup>3</sup>School of Population and Public Health, UBC, Canada; <sup>4</sup>Division of AIDS, Department of Medicine, UBC, Canada; <sup>5</sup>School of Public Policy, Simon Fraser University, Canada

307 *Psychiatric comorbidity among Egyptian patients with opioid use disorders attributed to tramadol*

M.M. Bassiony, U.M. Youssef, M.S. Hassan, G.S. El-Deen, M. Abdelghani, H. El-Gohari. Psychiatry Department, Faculty of Medicine, Zagazig University, Egypt

*308 Feasibility and effectiveness of an HIV education and harm reduction projection mapping intervention among crack users in Mexico City*

A. Cepeda<sup>1</sup>, J. Frankeberger<sup>2</sup>, K. Nowotny<sup>3</sup>, G. Natera-Rey<sup>4</sup>, A. Valdez<sup>1</sup>. <sup>1</sup>University of Southern California, United States; <sup>2</sup>University of Pittsburgh, United States; <sup>3</sup>University of Miami, United States; <sup>4</sup>National Institute of Psychiatry Ramón de la Fuente Muñiz, Mexico

*309 Exposure to environmental neurotoxins, epigenetic changes, and vulnerability to psychiatric disorders: The Consortium on Vulnerability to Externalizing Disorders and Addictions Study: Methodological issues*

A. Chakrabarti<sup>1</sup>, V. Benegal<sup>2</sup>, G. Schumann<sup>3</sup>, D. Basu<sup>4</sup>, S.S. Kurpad<sup>5</sup>, M. Krishna<sup>6</sup>, R.K.L. Singh<sup>7</sup>, R.D. Bharat<sup>2</sup>, G. Barker<sup>3</sup>, M. Purushottam<sup>2</sup>, S. Desrivieres<sup>3</sup>, P. Maurya<sup>1</sup>, S. Roy<sup>1</sup>, A. Yadav<sup>1</sup>, S. Das<sup>1</sup>, E. Sharma<sup>2</sup>, B. Holla<sup>2</sup>, N. Vaidya<sup>2</sup>, Y. Zhang<sup>3</sup>. <sup>1</sup>Regional Occupational Health Centre–Eastern, National Institute of Occupational Health, Indian Council of Medical Research, India; <sup>2</sup>National Institute of Mental Health and Neurosciences, India; <sup>3</sup>Institute of Psychiatry, King's College London, United Kingdom; <sup>4</sup>Postgraduate Institute of Medical Education and Research, India; <sup>5</sup>St. John's Medical College, India; <sup>6</sup>Holdsworth Memorial Hospital, India; <sup>7</sup>Regional Institute of Medical Sciences, India

*310 Pattern of substance use and its correlates among street children in India*

B. Chatterjee, A. Dhawan, A. Ambekar, R. Bhargawa, A. Agrawal, A. Mishra, A. Chopra. National Drug Dependence Treatment Centre and Department of Psychiatry, All India Institute of Medical Sciences, India

*311 The aging journey railway, drug (De)rails and care ways in Brazil and Portugal*

M.R. dos Reis Lourenço, T.C. Bueno, J. Da Silva. Federal University of Brazil, Brazil

*312 An exploratory study on the prevalence of opiate use, abuse, and treatment in Tirana University Hospital Center*

D. Doko<sup>1</sup>, Z. Sulaj<sup>2</sup>, C. Tamasdan<sup>3</sup>. <sup>1</sup>Frank H. Netter M.D. School of Medicine at Quinnipiac University, University of North Haven, United States; <sup>2</sup>Clinical Toxicology Service of Tirana University Hospital Center 'Mother Teresa', Albania; <sup>3</sup>Pain Management Department, St. Vincent's Medical Center, United States

*313 Association of experimentation with tobacco and nicotine-containing products and current tobacco use status among youth in the United States: Findings from a 2017 national online survey*

O. El-Shahawy<sup>1,2,3</sup>, K.L. Walker<sup>3,4</sup>, A.M. Groom<sup>3</sup>, J.L. Hart<sup>3,4</sup>. <sup>1</sup>New York University School of Medicine, United States; <sup>2</sup>Ain Shams University School of Medicine, Egypt; <sup>3</sup>American Heart Association–Dallas, Texas, United States; <sup>4</sup>University of Louisville, United States

*314 Gender differences in substance use, victimization, and mental health among adolescents in specialized residential care*

S. Fernandez-Artamendi<sup>1</sup>, A. Águila<sup>2</sup>, J. Fernández del Valle<sup>2</sup>, A. Bravo<sup>2</sup>. <sup>1</sup>Department of Psychology, Universidad Loyola Andalucía, Spain; <sup>2</sup>Family and Childhood Research Group, University of Oviedo, Spain

- 315 *Heroin use in the Mexican northern border: A qualitative and epidemiological study in field and treatment centers*  
C. Fleiz<sup>1</sup>, E. Medina-Mora<sup>1</sup>, J. Villatoro<sup>1</sup>, S. Cruz<sup>2</sup>, M. Domínguez<sup>1</sup>, A. Chavez<sup>3</sup>, J. Arredondo<sup>4</sup>, L. Pacheco<sup>3</sup>. <sup>1</sup>National Institute of Psychiatry Ramón de la Fuente, Mexico; <sup>2</sup>Center for Research and Advanced Studies, Mexico; <sup>3</sup>Prevensa-Tijuana, Mexico; <sup>4</sup>School of Medicine, University of California San Diego, United States
- 316 *Emergency department admissions in Kumasi, Ghana: Prevalence of alcohol and other drug use and associated trauma*  
P.K. Forson<sup>1,2</sup>, G. Oduro<sup>1,2</sup>, J. Bonney<sup>1,2</sup>, S. Cobbold<sup>2</sup>, J.S. 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 Center, University of Michigan, United States
- 317 *Impact of cocaine and/or cannabis use on markers of inflammation, monocyte activation, and intestinal permeability in patients with alcohol use disorder admitted for detoxification*  
D. Fuster<sup>1</sup>, X. García-Calvo<sup>1</sup>, F. Bolao<sup>2</sup>, P. Zuluaga<sup>1</sup>, A. Sanvisens<sup>1</sup>, J. Tor<sup>1</sup>, R. Muga<sup>1</sup>. <sup>1</sup>Internal Medicine Service, Hospital Universitari Germans Trias i Pujol, Spain; <sup>2</sup>Internal Medicine Service, Hospital Universitari Bellvitge, Spain
- 318 *Understanding the role of adverse childhood experiences and life time prevalence of substance use in predicting current substance use among university students*  
R. Hanif, R. Riaz. Department of Psychology, University of Karachi, Pakistan
- 319 *Predictors of baseline and recent non-fatal opioid overdose among a cohort of people who inject drugs in Melbourne, Australia*  
P. Hill<sup>1,2</sup>, P. Dietze<sup>1,2</sup>, M. Stoove<sup>1,2</sup>. <sup>1</sup>Behaviours and Health Risks Program, Burnet Institute, Australia; <sup>2</sup>School of Public Health and Preventive Medicine, Monash University, Australia
- 320 *Drug and substance abuse among antenatal women in Nigeria*  
N. Ibe, I.C. Chidiebere. African Youths Initiative on Crime Prevention, Nigeria
- 321 *Stigma and violence among HIV-positive people who use drugs in Ukraine*  
B. Idrisov<sup>1,2</sup>, J.O. Lee<sup>3</sup>, Y. Yoon<sup>3</sup>, O. Makarenko<sup>4</sup>, T. Kiriazova<sup>4</sup>, P.S. Nurius<sup>5</sup>, T. Flanagan<sup>6</sup>, J.H. Samet<sup>2</sup>, K. Lunze<sup>2</sup>. <sup>1</sup>Bashkir State Medical University, Russia; <sup>2</sup>Boston University, United States; <sup>3</sup>University of Southern California, United States; <sup>4</sup>Ukrainian Institute for Public Health Policy, Ukraine; <sup>5</sup>University of Washington, United States; <sup>6</sup>Brown University, United States
- 322 *Epidemic of incident hepatitis C virus infection among injecting drug users in Rajshahi City of Bangladesh: Time is running out for massive interventions*  
M.A. Kalam. Siam Health Care, Bangladesh
- 323 *Stigma associated with substance use in the Palestinian community*  
H. Kharabsha. Humphrey Fellowship Program, Virginia Commonwealth University, United States; Palestinian Ministry of Health, Palestinian Territories
- 324 *The pattern of use of cannabis and a pilot run for genetic polymorphism: A prospective, exploratory cross-sectional tertiary care hospital-based study*  
C. Kulkarni, A. Bavle, S. Hebbar, A. Kolandaswamy, H. Sahajanand, M.R. Prabhu. Rajarajeswari Medical College and Hospital, India

325 *Suicide risk of community ketamine users in Taiwan*

Y-C. Kuo<sup>1</sup>, H-I. Chen<sup>2</sup>, S-C. Wang<sup>2,3</sup>. <sup>1</sup>Linsen Chinese Medicine and Kunming Branch, Taipei City Hospital, Taiwan; <sup>2</sup>Center for Neuropsychiatric Research, National Health Research Institutes, Taiwan; <sup>3</sup>Department of Psychiatry, Cardinal Tien Hospital, Taiwan

326 *Prevalence of HIV, hepatitis B, hepatitis C, and syphilis among crystal methamphetamine users in Indonesia*

T.P. Kusumoputri, L. Nevendorff, I. Praptoraharjo. HIV and AIDS Research Center, Atma Jaya Catholic University of Indonesia, Indonesia

327 *Factors associated with increasing cannabis use among adolescents in Chile from 2003 to 2015*

N. Libuy, A. Mundt, C. Ibáñez. Universidad de Chile, Chile

328 *Genetic characterization of HIV-1 from people who inject drugs and sexual transmission in people in Southwestern China*

Y. Ding<sup>1</sup>, Y. Wang<sup>1</sup>, Y. Feng<sup>1</sup>, W. Xu<sup>1</sup>, D. Metzger<sup>2</sup>, Y. Shao<sup>1</sup>, L. Ma<sup>1</sup>. <sup>1</sup>State Key Laboratory for Infectious Disease Prevention and Control, National Center for AIDS/STD Control and Prevention, China; <sup>2</sup>University of Pennsylvania, United States

329 *Evolution of tobacco and marijuana consumption in pregnant women's populations in Uruguay*

R. Magri<sup>1</sup>, M. Fleming<sup>2</sup>, E. Ostrender<sup>2</sup>, A. Baldwin<sup>3</sup>, N. Hayes<sup>2</sup>, M. Martinez<sup>1</sup>, P. Cabral<sup>4</sup>. <sup>1</sup>Universidad de la Republica de Uruguay, Uruguay; <sup>2</sup>Northwestern University, United States; <sup>3</sup>United States Drug Testing Laboratories, United States; <sup>4</sup>Hospital General de las Fuerzas Armadas de Uruguay, Uruguay

330 *How to quit heroin and injection drug use: A cross-sectional study across 14 countries*

L.J. Maier<sup>1</sup>, M.J. Barratt<sup>2</sup>, J.A. Ferris<sup>3</sup>, A.R. Winstock<sup>4</sup>. <sup>1</sup>University of California San Francisco, United States; <sup>2</sup>University of New South Wales, Australia; <sup>3</sup>University of Queensland, Australia; <sup>4</sup>University College London, United Kingdom

331 *Predictors of high levels of satisfaction with opioid antagonist treatment in people who inject drugs in Ukraine: European Quality Audit of Opioid Treatment survey*

A. Meteliuk<sup>1</sup>, L. Madden<sup>2</sup>, S. Farnum<sup>2</sup>, T. Fomenko<sup>1</sup>, K. LaMonaca<sup>3</sup>, R. Marcus<sup>3</sup>, I. Pykalo<sup>4</sup>, Z. Islam<sup>1</sup>, F.L. Altice<sup>3</sup>. <sup>1</sup>Alliance for Public Health, Ukraine; <sup>2</sup>APT Foundation, United States; <sup>3</sup>Yale School of Medicine, United States; <sup>4</sup>Ukrainian Institute for Public Health Policy, Ukraine

332 *Diphenhydramine injection in Kyrgyz prisons: A qualitative study of a high-risk behavior with implications for harm reduction*

J.P. Meyer<sup>1</sup>, G. Culbert<sup>2</sup>, L. Azbel<sup>3</sup>, C. Bachiredy<sup>4</sup>, A. Kumanalieva<sup>5</sup>, F.L. Altice<sup>6</sup>. <sup>1</sup>AIDS Program, Yale University School of Medicine, United States; <sup>2</sup>University of Illinois at Chicago, United States; <sup>3</sup>London School of Tropical Hygiene and Tropical Medicine, United Kingdom; <sup>4</sup>Robert Wood Johnson Clinician Scholars Program, University of Pennsylvania, United States; <sup>5</sup>AIDS Foundation East-West, Kyrgyzstan; <sup>6</sup>Yale AIDS Program, University of Malaya, Malaysia

333 *Irregular migration and drug use: Assessing the prevalence among identified migrant returnees in Nigeria*

I.D. Molobe<sup>1</sup>, O. Oluwakemi<sup>2</sup>. <sup>1</sup>Unified Initiative for a Drug Free Nigeria, Nigeria; <sup>2</sup>Department of Community Health and Primary Care, College of Medicine, University of Lagos, Nigeria

334 *Assessing progress on HIV treatment and prevention goals in Burma (Myanmar)*

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

335 *Heroin and amphetamine dependent individuals manifest different patterns of DSM-5 dependence symptoms*

D. Nedelchev<sup>1</sup>, E. Psederska<sup>1,2</sup>, K. Bozgunov<sup>1</sup>, G. Vasilev<sup>1</sup>, J. Vassileva<sup>3</sup>. <sup>1</sup>Bulgarian Addictions Institute, Bulgaria; <sup>2</sup>New Bulgarian University, Bulgaria; <sup>3</sup>Virginia Commonwealth University, United States

336 *Substance use and risky sexual behaviour among young male adults in Uyo, Nigeria*

E-U.E. Nelson, N.F. Essien. Centre for Research and Information on Substance Abuse, Nigeria

337 *The global opioid epidemic: Pattern and dynamics*

K. Niaz. United Nations Office on Drugs and Crime, Austria

338 *Smoking and quality of life among HIV-positive females at an out-patient clinic in Lagos*

A.M. Ojo, O.A. Adegbohun, O.E. Ajayi. Federal Neuro-Psychiatric Hospital, Nigeria

339 *Influence of substance use on quality of life among adolescents in Lagos*

C.C. Okonkwo, O.J. Ibiyokun, I.A. Sadiku, O.F. Ajiroto. Federal Neuro-Psychiatric Hospital, Nigeria

340 *Risk perception towards exposure to secondhand smoke from tobacco among antenatal clinic attendees in primary health care facility in Calabar, Nigeria*

U. Onukogu<sup>1</sup>, A. Anya<sup>2</sup>, O Udofia<sup>3</sup>, B.Edet<sup>1</sup>, E. Ekpe<sup>1</sup>. <sup>1</sup>Federal Neuro-Psychiatric Hospital, Nigeria; <sup>2</sup>Federal University Gusau Zamfara, Nigeria; <sup>3</sup>Department of Psychiatry, University of Calabar, Nigeria

341 *A comparative study of substance and non-substance abusers among Nigeria prison inmates on recidivism, psychopathy, and aggression*

F.C. Onyedibe<sup>1</sup>, M.C.C. Onyedibe<sup>2</sup>, E.E Nnadozie<sup>2</sup>, M.C. Ifeagwazi<sup>2</sup>. <sup>1</sup>Ministry of Economic Development–Uyo, Nigeria; <sup>2</sup>Department of Psychology, University of Nigeria

342 *Substance abuse and psychotic symptoms among psychiatric patients: The moderating role of resilience*

M-C.C. Onyedibe, C.J. Aliche, M.I. Chuka. Department of Psychology, University of Nigeria–Nsukka, Nigeria

343 *Perceived negative effects and benefits of new psychoactive substances (NPS): Results of online survey among NPS users in Georgia*

D. Otiaashvili<sup>1</sup>, D. Subeliani<sup>2</sup>, L. Kutelia<sup>1</sup>, A. Beselia<sup>1</sup>, T. Mgebrishvili<sup>1</sup>, I. Kirtadze<sup>1</sup>. <sup>1</sup>Addiction Research Centre–Alternative Georgia, Georgia; <sup>2</sup>Faculty of Arts and Science, Ilia State University, Georgia

- 344 *Relationships between psychopathy and alexithymia in heroin, amphetamine, and polysubstance users*  
E. Psederska<sup>1</sup>, K. Bozgunov<sup>1</sup>, D. Nedelchev<sup>1</sup>, G. Vasilev<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
- 345 *The oral cancer awareness among a sample of recovering drug addicts in Drug Rehabilitation Center, National Narcotics Board, Republic of Indonesia*  
A.T.D. Putri<sup>1</sup>, Y.S. Wimardhani<sup>2</sup>. <sup>1</sup>Drug Rehabilitation Center, National Narcotics Board, Indonesia; <sup>2</sup>Department of Oral Medicine, Faculty of Dentistry, Universitas Indonesia, Indonesia
- 346 *Incidence of substance use and suicidal ideation among patients reporting to psychiatric clinic of a district hospital in Sikkim, India*  
T. 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>Singtam District Hospital, India
- 347 *Reasons, consequences, and pattern of consumption of alcohol and cannabis in university students of the City Of Quito*  
V.B. Rojeab-Bravo, J.A.J. Costa. Technical Secretary of Drug Use Prevention, Ecuador
- 348 *Other drug use is common in medical hospital patients willing to start alcohol use disorder medication treatment*  
E. Romero-Rodriguez, S. Kim, C.A. Chen, S. Meli, D.M. Cheng, H. Lee, T. Palfai, J. Samet, R. Saitz. School of Public Health, Boston University, United States; School of Medicine, Boston University, United States; Boston Medical Center, United States
- 349 *Knowledge about opioid overdose among people who inject drugs in India and association with experience of opioid overdose: A community-based study*  
R. Saini, R. Rao, A. Parmar, A.K. Mishra, A. Ambekar, A. Agrawal. National Drug Dependence Treatment Centre, All India Institute of Medical Sciences, India
- 350 *Factors of hepatitis C virus seroconversion among clients of harm reduction programs in Ukraine*  
I. Sazonova<sup>1</sup>, T. Mykhalchuk<sup>2</sup>, O. Cheshun<sup>1</sup>, Y. Novak<sup>3</sup>, T. Saluik<sup>1</sup>, P. Smyrnov<sup>1</sup>. <sup>1</sup>ICF "Alliance for Public Health," Ukraine; <sup>2</sup>Deloitte Ukraine, Ukraine; <sup>3</sup>United Nations Population Fund, Ukraine
- 351 *Influence of social network on drug use among clients of methadone maintenance treatment centers in Kunming, China*  
L. Shen<sup>1</sup>, S. Assanangkornchai<sup>2</sup>, W. Liu<sup>1</sup>, L. Cai<sup>1</sup>, F. Li<sup>3</sup>, S. Tang<sup>1</sup>, J. Shen<sup>4</sup>, E.B. McNeil<sup>2</sup>, V. Chongsuvivatwong<sup>2</sup>. <sup>1</sup>School of Public Health, Kunming Medical University, China; <sup>2</sup>Epidemiology Unit, Faculty of Medicine, Prince of Songkla University, Thailand; <sup>3</sup>School of Basic Medical Science, Kunming Medical University, China; <sup>4</sup>Yunnan Institute for Drug Abuse, Xi Shan District, China
- 352 *Psychiatric burden of prisoners suffering from opioid use disorder and attention deficit/hyperactivity disorder*  
M. Silbernag, R. Slamanig, M. Stegemann, M. Sterzer, L. Mayer, G. Fischer. Medical University of Vienna, Austria

*353 Effectiveness of methadone treatment and client characteristics in five regions of Burma (Myanmar)*

N.M.A. Wan<sup>1</sup>, C.S. Hlaing<sup>1,2</sup>, P.W. Htun<sup>2</sup>, P. Bollen<sup>2</sup>, I. Tavitian-Exley<sup>2,3</sup>. <sup>1</sup>Drug Dependency and Treatment Research Unit, Ministry of Health and Sports, Burma (Myanmar); <sup>2</sup>World Health Organization Burma (Myanmar), Burma (Myanmar); <sup>3</sup>Department of Infectious Disease Epidemiology, Imperial College London, United Kingdom

*354 Comparison of nutritional status and food insecurity among people who inject illicit drugs, non drug users and those on methadone treatment in selected areas of Nairobi, Kenya*

V. Wanjihia<sup>1</sup>, E. Muniu<sup>1</sup>, M. Mwangi<sup>1</sup>, C. Mwangi<sup>2</sup>, R. Mutisya<sup>1</sup>, P. Ndemwa<sup>1</sup>, F. Kiplamai<sup>3</sup>. <sup>1</sup>Kenya Medical Research Institute, Centre for Public Health Research, Kenya; <sup>2</sup>Support for Addiction Prevention and Treatment in Africa, Kenya; <sup>3</sup>Department of Recreation Management and Exercise Science Department, Kenyatta University, Kenya

*355 Surveillance of the illicit drug cryptomarkets on the darknet*

Y. Wu<sup>1</sup>, M.H. Swahn<sup>2</sup>, S.M. Strasser<sup>2</sup>, E.L. Sevigny<sup>3</sup>. <sup>1</sup>Department of Computer Science, Georgia State University, United States; <sup>2</sup>School of Public Health, Georgia State University, United States; <sup>3</sup>Department of Criminal Justice and Criminology, Georgia State University, United States

*356 People who inject drugs (PWID) networks of medically assisted treatment patients in Ukraine*

O. Zeziulin<sup>1</sup>, S. Dvoriak<sup>1</sup>, K. Dumchev<sup>1</sup>, O. Makarenko<sup>1</sup>, T. Kiriazova<sup>1</sup>, N. Saichuk<sup>1</sup>, C. Latkin<sup>2</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Johns Hopkins University Bloomberg School of Public Health, United States

## **Prevention**

*400 Effectiveness of provider initiative approach for smoking cessation among pregnant women in OsunState, Nigeria*

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*401 Comparing effect of daily mobile short messages and social media messages in reducing smoking among AlAzhar University students in Gaza, Palestine*

M.F. AlAfifi<sup>1</sup>, M. Sakka<sup>2</sup>, M. Shehada<sup>1</sup>. <sup>1</sup>Substance Abuse Research Centre, Palestinian Territories; <sup>2</sup>AlAzhar University, Palestinian Territories

*402 Risk and protection factors associated with the consumption of alcohol, tobacco, and marijuana consumption in seventh through ninth grade students in five schools in the City of San Salvador*

F. Bautista-Pérez. Universidad Tecnologica de El Salvador, El Salvador

*403 Direct relationship between family functioning and methamphetamine use among opioid injection drug users in Hanoi, Vietnam*

T.D. Dao<sup>1</sup>, G.M. Le<sup>1</sup>, T.T. Nguyen<sup>1</sup>, T.M. Nguyen<sup>2</sup>, L. Metsch<sup>3</sup>, D. Feaster<sup>4</sup>. <sup>1</sup>Hanoi Medical University, Vietnam; <sup>2</sup>Vietnam Ministry of Health, Vietnam; <sup>3</sup>Columbia University, United States; <sup>4</sup>University of Miami Miller School of Medicine, United States

404 *Integration 3D virtual reality to develop simulation-based training system for counselors who work with adolescents abusing drugs*

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405 *The impact of supervised injection facility use on all-cause mortality among a cohort of people who inject drugs in Vancouver, Canada*

M.C. Kennedy<sup>1</sup>, K. Hayashi<sup>2</sup>, M-J Milloy<sup>3</sup>, E. Wood<sup>3</sup>, E. Nosova<sup>3</sup>, T. Kerr<sup>3</sup>. <sup>1</sup>British Columbia Centre on Substance Use, School of Population and Public Health, University of British Columbia, Canada; <sup>2</sup>British Columbia Centre on Substance Use, Faculty of Health Sciences, Simon Fraser University, Canada; <sup>3</sup>British Columbia Centre on Substance Use; Department of Medicine, University of British Columbia, Canada

406 *People who inject drugs and provider perspectives on factors influencing medication-assisted treatment uptake among people who inject drugs in Ukraine: Highlights from HPTN 074 study*

T. Kiriazova<sup>1</sup>, O. Makarenko<sup>1</sup>, I. Zaviriukha<sup>1</sup>, R.B. Hershow<sup>2</sup>, E.L. Hamilton<sup>3</sup>, K. Lancaster<sup>4</sup>, K. Dumchev<sup>1</sup>, V. Go<sup>2</sup>, C. Latkin<sup>5</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina–Chapel Hill, United States; <sup>3</sup>Science Facilitation Department, FHI 360, United States; <sup>4</sup>Division of Infectious Diseases, School of Medicine, University of North Carolina–Chapel Hill, United States; <sup>5</sup>Department of Health, Behavior, and Society, Johns Hopkins Bloomberg School of Public Health, United States

407 *Validation of the substance use risk profile scale with Georgian substance dependent adults*

T. Kordzadze<sup>1,2</sup>, J. Vassileva<sup>3</sup>. <sup>1</sup>Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>Addiction Research and Counseling Center, Georgia; <sup>3</sup>Departments of Psychiatry and Psychology, Institute for Drug and Alcohol Studies, Virginia Commonwealth University, United States

408 *The persisting influence of traditional gender roles on substance use by Spanish adolescents*

S.S. Kulis<sup>1</sup>, F.F. Marsiglia<sup>1</sup>, C. Villalba<sup>2</sup>, D. Alarcon<sup>2</sup>, I. MacFadden<sup>2</sup>. <sup>1</sup>Global Center for Applied Health Research, Arizona State University, United States; <sup>2</sup>Universidad Pablo de Olavide, Spain

409 *A comparison of the number of inappropriately discarded syringes before and after the implementation of a syringe exchange program in Miami, Florida*

H. Levine, T. Bartholomew, V. Rea-Wilson, D.J. Arriola, G. Cardenas, D. Forrest, H. Tookes. Department of Public Health Sciences, University of Miami Miller School of Medicine, United States

410 *The Migrants' Approached Self-Learning Intervention in HIV/AIDS for Tajiks (MASLIHAT) HIV intervention for Tajik temporary migrant workers in Moscow who inject drugs*

J. Levy<sup>1</sup>, M.E. Mackesy<sup>1</sup>, M. Bakhromov<sup>2</sup>, C. Latkin<sup>3</sup>, J. Jonbekov<sup>2</sup>. <sup>1</sup>School of Public Health, University of Illinois at Chicago, United States; <sup>2</sup>PRISMA Research Center, Tajikistan; <sup>3</sup>Johns Hopkins University Bloomberg School of Public Health, United States

- 411 *Establishing screening, brief intervention, and referral to treatment (SBIRT) in China: A focus group study for the comprehensiveness, suitability, applicability, and feasibility of SBIRT*  
L. Zhang<sup>1</sup>, Z. Zhao<sup>2</sup>, Y. Liu<sup>1</sup>, W. Hao<sup>1</sup>, N. Zhong<sup>3</sup>, M. Zhao<sup>3</sup>, V. Poznyak<sup>4</sup>, Y. Liao<sup>1</sup>. <sup>1</sup>Mental Health Institute, the Second Xiangya Hospital of Central South University, China; <sup>2</sup>Xinjiang Mental Health Center and Urumqi Fourth People's Hospital, China; <sup>3</sup>Shanghai Mental Health Center, Shanghai Jiaotong University School of Medicine, China; <sup>4</sup>Department of Mental Health and Substance Abuse, World Health Organization, Switzerland
- 412 *Evaluation of dynamic risk assessment system for drug users in community-based drug rehabilitation program in Yuxi, China*  
W. Liu<sup>1</sup>, Y. Ma<sup>2</sup>, T. Wei<sup>1</sup>, S-H. Yang<sup>2</sup>, D-L. Yang<sup>3</sup>, X. Wang<sup>4</sup>, Xu-bin 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>AIDS Care China, China; <sup>4</sup>Yunnan Aidun Science and Technology Company, China
- 413 *Adaptation of a risk and protective factor survey for use in South Africa*  
L. Makunyan. African Youth Development Fund, South Africa; Humphrey Fellowship Program, Virginia Commonwealth University, United States
- 414 *A pilot study of Mantente REAL in Nogales, Mexico: Testing risk moderation effects*  
F.F. Marsiglia<sup>1</sup>, S. Kulis<sup>1</sup>, H.G. Pérez<sup>2</sup>, S. Ayers<sup>1</sup>. <sup>1</sup>Global Center for Applied Health Research, Arizona State University, United States; <sup>2</sup>Colegio de la Frontera, Nogales, Mexico
- 415 *Tobacco and marijuana co-use in adolescents: Differences in impulsivity and gambling behavior*  
V. Martínez-Loredo, A. Grande-Gosende, A. González-Roz, S. Fernández-Artamendi, S. Weidberg, J.R. Fernández-Hermida. Department of Psychology, University of Oviedo, Spain
- 416 *Highlighting female-specific HIV and drug risk environment factors among persons who inject drugs in Nairobi, Kenya*  
L.W. Mbogo<sup>1</sup>, N.T. Ludwig-Barron<sup>1,2</sup>, B. Guthrie<sup>1,2,3</sup>, J. Simoni<sup>2,4,5</sup>, A. Monroe-Wise<sup>6</sup>, D. Bukusi<sup>7</sup>, W. Sinkele<sup>8</sup>, J. Herbeck<sup>2</sup>, C. Farquhar<sup>1,2,6</sup>. <sup>1</sup>Department of Epidemiology, School of Public Health, University of Washington, United States; <sup>2</sup>Department of Global Health, School of Public Health, University of Washington, United States; <sup>3</sup>University of Washington Global Assistance Program—Kenya, Kenya; <sup>4</sup>Department of Psychology, University of Washington, United States; <sup>5</sup>Department of Gender, Women, and Sexuality Studies, University of Washington, United States; <sup>6</sup>Department of Medicine, Division of Allergy and Infectious Diseases, University of Washington, United States; <sup>7</sup>VCT and HIV Care, Kenyatta National Hospital, Kenya; <sup>8</sup>Support for Addictions Prevention and Treatment in Africa, Kenya
- 417 *Women who use drugs left without shelter*  
T. Mgebrishvili<sup>1</sup>, A. Beselia<sup>1</sup>, I. Kirtadze<sup>1,2</sup>. <sup>1</sup>Addiction Research Center, Alternative Georgia, Georgia; <sup>2</sup>Iliia State University, Georgia

418 *Assessment of mental health and perceived access to care among people who inject drugs in Athens, Greece*

G.K. Nikolopoulos<sup>1</sup>, D. Pampaka<sup>2</sup>, G. Giallourous<sup>1</sup>, D. Evripidou<sup>1</sup>, E. Pavlitina<sup>3</sup>, L.D. Williams<sup>4</sup>, D. Paraskevis<sup>5</sup>, M. Psychogiou<sup>6</sup>, V. Sympsa<sup>5</sup>, J. Schneider<sup>7</sup>, P. Smyrnov<sup>8</sup>, S.R. Friedman<sup>4</sup>, A. Hatzakis<sup>5</sup>, K. Pantavou<sup>1</sup>. <sup>1</sup>Medical School, University of Cyprus, Cyprus; <sup>2</sup>Cyprus International Institute for Environmental and Public Health, Cyprus University of Technology, Cyprus; <sup>3</sup>Transmission Reduction Intervention Project–Athens site, Greece; <sup>4</sup>Internal Medicine, Laiko General Hospital, Medical School, National and Kapodistrian University of Athens, Greece; <sup>5</sup>Departments of Medicine and Public Health Sciences, The Chicago Center for HIV Elimination, University of Chicago, United States; <sup>6</sup>Alliance for Public Health, Ukraine

419 *Adulterants of drugs and their effects on the health of drug users: A critical review*

A. Pascale<sup>1,2</sup>, A. da Matta Chasin<sup>3</sup>, N. Giancotti<sup>4</sup>, F. Pose<sup>2</sup>, M. Hynes<sup>5</sup>. <sup>1</sup>REDLA Network (Red Latinoamericana de Investigadores en Drogas), Uruguay; <sup>2</sup>Department of Toxicology, School of Medicine, University of the Republic, Uruguay; <sup>3</sup>Oswaldo Cruz School–São Paulo, Brazil; <sup>4</sup>School of Pharmaceutical Sciences, University of São Paulo, Brazil; <sup>5</sup>Inter-American Observatory on Drugs, Inter-American Drug Abuse Control Commission (CICAD), United States

420 *Factors predicting engagement with an HIV and substance abuse prevention intervention for young men living in resource-constrained communities in South Africa*

M.J. Rotheram<sup>1</sup>, S. Rabie<sup>2</sup>, J. Bantjes<sup>2</sup>, S. Gordon<sup>2</sup>, E. Almirol<sup>1</sup>, J. Stewart<sup>2</sup>, M. Tomlinson<sup>2</sup>. <sup>1</sup>Department of Psychiatry and Biobehavioral Sciences, Semel Institute, University of California–Los Angeles, United States; <sup>2</sup>Department of Psychology, Stellenbosch University, South Africa

421 *HIV testing practices and reasons for never-testing among men who have sex with men in Malaysia*

R. Shrestha<sup>1</sup>, Z. Ni<sup>2</sup>, M.M. Copenhaver<sup>3</sup>, F.L. Altice<sup>1</sup>, S.H. Lim<sup>4</sup>. <sup>1</sup>Yale University, United States; <sup>2</sup>Duke University, United States; <sup>3</sup>University of Connecticut, United States; <sup>4</sup>University of Malaya, Malaysia

422 *The impact of kratom (Mitragnyna Speciosa [Korth.]) use on frequency of illicit drug use and risky HIV behaviours among poly-drug users in Malaysia*

D. Singh<sup>1</sup>, A. Saref<sup>1</sup>, S. Suraya<sup>2</sup>, O. Grundmann<sup>3</sup>, S. Narayanan<sup>2</sup>, M.T. Swogger<sup>4</sup>, W.C. Prozialeck<sup>5</sup>, E. Boyer<sup>6</sup>, V. Balasingam<sup>1</sup>. <sup>1</sup>Centre for Drug Research, Universiti Sains Malaysia, Malaysia; <sup>2</sup>School of Social Sciences, Universiti Sains Malaysia, Malaysia; <sup>3</sup>Department of Medicinal Chemistry, College of Pharmacy, University of Florida, United States; <sup>4</sup>Department of Psychiatry, University of Rochester Medical Center, United States; <sup>5</sup>Department of Pharmacology, College of Graduate Studies, Midwestern University, United States; <sup>6</sup>Department of Emergency Medicine, Brigham and Women's Hospital, Harvard Medical School, United States

423 *Healthy lifestyle screen: A positive approach for self-empowerment and resilience through health promotion among Filipino high school students*

J.M. Tamana<sup>1</sup>, C.H. Kim<sup>2</sup>. Department of Addiction Science, Sahmyook University Graduate School, South Korea

*424 Association between mental health and risk of initiating others into drug injecting in Vancouver, Canada*

J. Tirado-Muñoz<sup>1</sup>, S. Jain<sup>2</sup>, X. Sun<sup>2</sup>, K. Hayashi<sup>3</sup>, M.L. Mitta<sup>1</sup>, D. Werb<sup>1,4</sup>, C. Rafful on behalf of the PRIMER study team<sup>1,4</sup>. <sup>1</sup>Division of Infectious Diseases and Global Public Health, Department of Medicine, University of California San Diego, United States; <sup>2</sup>Department of Family Medicine and Public Health, Biostatistics Research Center, University of California San Diego, United States; <sup>3</sup>Department of Epidemiology and Population Health, British Columbia Centre for Excellence in HIV/AIDS, St. Paul's Hospital, Canada; <sup>4</sup>Centre on Drug Policy Evaluation, St. Michael's Hospital Toronto, Canada

*425 Pattern and factors associated with intention to quit tobacco abuse in a rural community of south-eastern Nigeria*

U. Ofonakara<sup>1</sup>, O.O. Odukoya<sup>2</sup>, N. Orofuke<sup>3</sup>. <sup>1</sup>Federal Teaching Hospital Abakaliki, Nigeria; <sup>2</sup>Lagos University Teaching Hospital, Nigeria; <sup>3</sup>Delta State Primary Health Care Development Agency, Nigeria

## Treatment

*500 An alternative to incarceration of drug users: A comparative study of Ghana and the United States*

D. Amankwaah. Economic Community of West African States, Nigeria

*501 Barriers to screening and treatment for HIV and hepatitis C virus among injection drug users in Colombia*

J.P. Borda<sup>1</sup>, P.M. Herrera<sup>2</sup>, G. Castaño<sup>3</sup>, S. Lopez-Guzman<sup>4</sup>, H. Friedman<sup>5</sup>, B. Tofghi<sup>5</sup>. <sup>1</sup>Facultad de Medicina Universidad von Humboldt, Colombia; <sup>2</sup>Universidad Tecnológica de Pereira Facultad de Ciencias de la Salud, Colombia; <sup>3</sup>Universidad CES, Colombia; <sup>4</sup>Universidad del Rosario, Colombia; <sup>5</sup>New York University School of Medicine, United States

*502 Dose-dependent naloxone-induced morphine withdrawal symptoms in opioid-dependent males: A double-blinded, randomized study*

L. Brandt<sup>1</sup>, S. Weisshaar<sup>2</sup>, B. Litschauer<sup>2</sup>, S. Sheik-Rezai<sup>2</sup>, L. Moser<sup>2</sup>, E. Kühberger<sup>3</sup>, U. Bauer<sup>3</sup>, C. Firbas<sup>2</sup>, G. Gouya<sup>2</sup>, M. Wolzt<sup>2</sup>, G. Fischer<sup>4</sup>. <sup>1</sup>Faculty of Psychology, University of Vienna, Austria; <sup>2</sup>Department of Clinical Pharmacology, Medical University of Vienna, Austria; <sup>3</sup>G.L. Pharma GmbH, Austria; <sup>4</sup>Center for Public Health, Medical University of Vienna, Austria

*503 Treatment and care for people with drug use disorders in contact with the criminal justice system: Alternatives to conviction or punishment*

A. Busse<sup>1</sup>, S. Pfeiffer<sup>2</sup>, G. Gerra<sup>3</sup>, G. Campello<sup>1</sup>, E. Sáenz<sup>1</sup>, V. Lebaux<sup>2</sup>, J.A. Lee<sup>2</sup>. <sup>1</sup>Prevention, Treatment, and Rehabilitation Section, Drug Prevention and Health Branch (DHB), Division of Operations (DO), United Nations Office on Drugs and Crime (UNODC), Austria; <sup>2</sup>Justice Section, DO, UNODC, Austria; <sup>3</sup>DHB, DO, UNODC, Austria

*504 Variations and determinants of novel psychoactive substance use: Implications for policy and practice*

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*505 Adherence among HIV-positive injection drug users undergoing methadone assisted treatment*

E. Chao<sup>1</sup>, Q. Ul Ain<sup>2</sup>, T. Szu-Hsien Lee<sup>1</sup>. <sup>1</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan; <sup>2</sup>Department of Education, Pir Mehr Ali Shah Arid Agriculture University, Pakistan

*506 Increasing antiretroviral therapy adherence after prison release: Early findings from a randomized controlled trial of an evidence-based medication adherence intervention for HIV-infected prisoners transitioning to the community in Indonesia*

G.J. Culbert<sup>1,2</sup>, A. Waluyo<sup>2</sup>, Z.O. Syarif<sup>3</sup>, A.B. Williams<sup>4,5</sup>, J.A. Levy<sup>6</sup>, S.A. Freels<sup>7</sup>, F.A. Altice<sup>8,9,10</sup>. <sup>1</sup>Department of Health Systems Science, College of Nursing, University of Illinois at Chicago, United States; <sup>2</sup>Center for HIV/AIDS Nursing Research, Faculty of Nursing, University of Indonesia, Indonesia; <sup>3</sup>Tarakan General Hospital, Indonesia; <sup>4</sup>Meyers College of Nursing, New York University, United States; <sup>5</sup>Yale School of Nursing, United States; <sup>6</sup>Health Policy and Administration, School of Public Health, University of Illinois at Chicago, United States; <sup>7</sup>Epidemiology and Biostatistics, School of Public Health, University of Illinois at Chicago, United States; <sup>8</sup>Department of Medicine, Section of Infectious Diseases–AIDS Program, Yale University School of Medicine, United States; <sup>9</sup>Department of Epidemiology of Microbial Diseases, Yale University School of Public Health, United States; <sup>10</sup>Centre of Excellence for Research in AIDS, University of Malaya, Malaysia

*507 Understanding New South Wales Long-Acting Opioids in Custody-Treatment: The UNLOC-T Study*

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*508 Opioid addiction beliefs and attitudes of primary health care clinicians in Ukraine*

M. Filippovych<sup>1</sup>, K. La Monaca<sup>2</sup>, I. Pykalo<sup>1</sup>, L.M. Madden<sup>2,3</sup>, R. Marcus<sup>2</sup>, S. Farnum<sup>3</sup>, D. Barry<sup>3</sup>, S. Dvoriak<sup>1</sup>, F.L. Altice<sup>2</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Yale School of Medicine, United States; <sup>3</sup>APT Foundation, Inc., United States

*509 Using the evidence-based model for opioid agonist treatment scale-up in Ukraine*

T. Fomenko<sup>1</sup>, A. Meteliuk<sup>1</sup>, L. Madden<sup>2,3</sup>, S. Farnum<sup>2</sup>, R. Marcus<sup>3</sup>, K. LaMonaca<sup>3</sup>, I. Pykalo<sup>4</sup>, M. Filippovych<sup>4</sup>, I.Z. Islam<sup>1</sup>, F.L. Altice<sup>3,5</sup>. <sup>1</sup>ICF “Alliance for Public Health,” Ukraine; <sup>2</sup>APT Foundation, Inc., United States; <sup>3</sup>Department of Medicine, Section of Infectious Diseases–AIDS Program, Yale University School of Medicine, United States; <sup>4</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>5</sup>Department of Epidemiology of Microbial Diseases, Yale University School of Public Health, United States

*510 Differences in the tryptophan system between primary and substance induced depression*

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*511 Bayesian and classical meta-analysis of the effectiveness of the implementation science evidence for improving treatment outcome for adolescent patients accessing antiretroviral therapy in sub-Saharan Africa*

I. Fwemba<sup>1,4</sup>, P. Govule<sup>2</sup>, S. Iddi<sup>3</sup>, C. Guure<sup>1</sup>, C. Michelo<sup>4</sup>, P. Musonda<sup>4</sup>, T. Lehane<sup>5</sup>, A. Yawson<sup>1</sup>, E. Lesaffre<sup>6</sup>, S. Bosomprah<sup>1</sup>. <sup>1</sup>Department of Biostatistics, University of Ghana, Ghana; <sup>2</sup>Department of Epidemiology, University of Ghana, Ghana; <sup>3</sup>Department of Statistic, University of Ghana, Ghana; <sup>4</sup>Department of Epidemiology and Biostatistics, University of Zambia, Zambia; <sup>5</sup>Department of Health Research Methods, Evidence, and Impact, Mc Master University, Canada; <sup>6</sup>Leuven Biostatistics and Statistical Bioinformatics Centre, KU Leuven University, Belgium

*512 Reinforcer pathology and response to contingency management for smoking cessation*

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

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*514 Effects of extended abstinence on cognitive functions in tramadol dependent patients: A prospective cohort study*

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*515 Low dose flumazenil in the management of benzodiazepine withdrawal*

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*516 Gender-sensitive training for substance use disorder treatment: Results and implications of a pilot health professionals needs assessment*

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*517 Effects of cytidine-5'-diphosphate choline on brain structure and craving in methamphetamine-dependent patients*

J. Kim<sup>1</sup>, H. Jeong<sup>2</sup>, S. Yoon<sup>1</sup>, D. Yurgelun-Todd<sup>3</sup>, Y-A. Chung<sup>2</sup>, J. Kim<sup>4</sup>, I-K.Lyoo<sup>1</sup>, P.F. Renshaw<sup>3</sup>. <sup>1</sup>Ewha Brain Institute and Department of Brain and Cognitive Sciences, Ewha W. University, South Korea; <sup>2</sup>Department of Radiology, Incheon St. Mary's Hospital, College of Medicine, The Catholic University of Korea, South Korea; <sup>3</sup>The Brain Institute and the Department of Psychiatry, The University of Utah, United States; <sup>4</sup>Ewha Brain Institute, Ewha W. University, South Korea

*518 Slow release oral morphine versus methadone for the treatment of opioid use disorder: A systematic review and meta-analysis*

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*519 Opportunities to improve care of Vietnamese patients with opioid use disorder by enhancing professional development of methadone treatment staff*

M. Komaromy<sup>1,2</sup>, N.K. Ngan<sup>3</sup>, L.M.Giang<sup>4</sup>. <sup>1</sup>Division of General Internal Medicine, Department of Medicine, University of New Mexico Health Sciences Center, United States; <sup>2</sup>Hanoi Medical University, Vietnam; <sup>3</sup>Center for Research and Training on Substance Abuse/HIV, Hanoi Medical University, Vietnam; <sup>4</sup>Department of Global Health, Hanoi Medical University, Vietnam

*520 Adapting the addiction technology transfer center model to address HIV and injection drug use in Eastern Europe, Southeast Asia, and South Africa*

L. Krom<sup>1</sup>, G. Bart<sup>2</sup>, S. Becker<sup>3</sup>, D.J. Grelotti<sup>4</sup>, I. Koutsenok<sup>4</sup>, C. Kuo<sup>3</sup>, S. Larkins<sup>5</sup>, C. O'Connell<sup>6</sup>. <sup>1</sup>University of Missouri–Kansas City, United States; <sup>2</sup>University of Minnesota, United States; <sup>3</sup>Brown University, United States; <sup>4</sup>University of California San Diego, United States; <sup>5</sup>University of California Los Angeles, United States; <sup>6</sup>Substance Abuse and Mental Health Services Administration, United States

*521 Craving for opioids affects retention in treatment and adherence to antiretroviral therapy in HIV positive patients with opioid use disorder treated with naltrexone*

E. Krupitsky<sup>1,2,3</sup>, E. Blokhina<sup>1</sup>, E. Zvartau<sup>1</sup>, E. Verbitskaya<sup>1</sup>, T. Yaroslavl'tseva<sup>1</sup>, N. Bushara<sup>1</sup>, V. Palatkin<sup>1</sup>, M. Vetrova<sup>1</sup>, D. Lioznov<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, Russia; <sup>2</sup>Bekhterev National Medical Research Center for Psychiatry and Neurology, Russia; <sup>3</sup>Perelman School of Medicine, University of Pennsylvania, United States

522 *Medication and counseling effects in opioid-dependent people who inject drugs from HPTN058*

Y-C. Ku<sup>1,2</sup>, T.S-H. Lee<sup>3</sup>, L. Ma<sup>4</sup>, L. Fu<sup>5</sup>, J. Ma<sup>5</sup>, B. Rui<sup>5</sup>, L. Wei<sup>6</sup>, J. Huang<sup>7</sup>, Y. Ruan<sup>4</sup>, Y. Shao<sup>4</sup>, D.S. Metzger<sup>1</sup>. <sup>1</sup>HIV Prevention Research Division, Perelman School of Medicine, University of Pennsylvania, United States; <sup>2</sup>Crime Prevention Research Center, Ministry of Justice, Taiwan; <sup>3</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan; <sup>4</sup>National Center for AIDS Prevention and Control, China; <sup>5</sup>Xinjiang Centers for Disease Control and Prevention, China; <sup>6</sup>Guangxi Centers for Disease Control and Prevention, China; <sup>7</sup>Heng County Centers for Disease Control and Prevention, China

523 *Group antenatal care: A prospective type I hybrid effectiveness-implementation study in rural Nepal*

L.B. Kunwar<sup>1,2</sup>, P. Thapa<sup>3</sup>, S. Maru<sup>4</sup>. <sup>1</sup>Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>Possible Health, Kathmandu, Nepal; <sup>3</sup>School of Public Health and Community Medicine, University of New South Wales, Australia; <sup>4</sup>Arnhold Institute for Global Health, Icahn School of Medicine at Mount Sinai, United States

524 *Feasibility and outcomes of evidence-based interventions to reduce methamphetamine use among patients on methadone maintenance therapy in Hanoi, Vietnam*

A. Nguyen<sup>1</sup>, H. Tran<sup>1</sup>, T. Nguyen<sup>1</sup>, S. Shoptaw<sup>2</sup>, G. Le<sup>1</sup>. <sup>1</sup>Hanoi Medical University, Vietnam; <sup>2</sup>University of California Los Angeles, United States

525 *Severity of methamphetamine use among methadone patients in Vietnam: Prevalence and correlates*

G. Le<sup>1</sup>, T. Dao<sup>1</sup>, T. Nguyen<sup>1</sup>, C. Okafor<sup>2</sup>, M. Li<sup>2</sup>, S. Shoptaw<sup>2</sup>. <sup>1</sup>Hanoi Medical University, Vietnam; <sup>2</sup>University of California Los Angeles, United States

526 *The effectiveness of a smartphone application for illegal drug use prevention among at-risk adolescents*

J-Y. Liao<sup>1</sup>, C-M. Huang<sup>2</sup>, J-L. Guo<sup>1</sup>. <sup>1</sup>Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan; <sup>2</sup>Institute of Clinical Nursing, National Yang-Ming University, Taiwan

527 *Prevalence of substance abuse in prisons in Nigeria . A case study of seven prisons across the southern region of Nigeria*

N.B.C Maduka, I. Esther. Bensther Development Foundation, Nigeria

528 *Randomized controlled trial of the intervention program for adolescents who initiate the consumption of alcohol and other drugs and a family-adolescent communication component*

K.I.M. Martínez<sup>1</sup>, M.E.Contreras-Pérez<sup>1</sup>, E.F. Wagner<sup>2</sup>. <sup>1</sup>Universidad Autónoma de Aguascalientes, Mexico; <sup>2</sup>Florida International University, United States

529 *A smart electronic cigarette for smoking cessation: Using machine learning to improve treatment*

T. Modak<sup>1</sup>, I. Saha<sup>2</sup>, R. Baidya<sup>3</sup>, A. Paul<sup>3</sup>. <sup>1</sup>National Drug Dependence Treatment Centre, All India Institute of Medical Sciences, India; <sup>2</sup>Department of Computer Science, Indian Institute of Technology, India; <sup>3</sup>Department of Information Technology, Jadavpur University, India

530 *Develop and systematically evaluate a child addiction severity index (Child-ASI): The CHILD Intervention for Living Drug-Free Comprehensive Assessment of Risk, Resilience, and Experience (CHILD CARRE) tool*

A.S. Momand<sup>1</sup>, B. Morales<sup>2</sup>, T. Browne<sup>3</sup>, K. O'Grady<sup>4</sup>, H.E. Jones<sup>1</sup>. <sup>1</sup>UNC Horizons, Department of Obstetrics and Gynecology, University of North Carolina at Chapel Hill, United States; <sup>2</sup>Bureau of International Narcotics and Law Enforcement Affairs, U.S. Department of State, United States; <sup>3</sup>Rubicon Global Enterprises and Colombo Plan Secretariat, Sri Lanka; <sup>4</sup>Department of Psychology, University of Maryland College Park, United States

531 *Motivational enhancement group therapy for cannabis use disorder co-morbidity with borderline personality disorder*

S. Momtazi. Iranian Canadian Mental Health, Canada

532 *Outcomes of patients with cocaine use disorders after admissions to treatment*

R. Muga<sup>1</sup>, S. Galan<sup>1</sup>, D. Fuster<sup>1</sup>, M. Farré<sup>1</sup>, P. Zuluaga<sup>1</sup>, E. Papaseit<sup>1</sup>, I. Rivas<sup>2</sup>, A. Sanvisens<sup>1</sup>. <sup>1</sup>Hospital Universitari Germans Trias i Pujol, Universitat Autònoma de Barcelona, Spain; <sup>2</sup>Municipal Center for Substance Abuse Treatment, Badalona Serveis Assistencials, Spain

533 *Validation of the routine opioid outcome monitoring screening tool in patients prescribed opioids for chronic pain*

S. Nielsen<sup>1,2</sup>, L. Picco<sup>1</sup>, M. Middleton<sup>1</sup>, M. Kowalski<sup>2</sup>, R. Bruno<sup>2,3</sup>. <sup>1</sup>Monash University, <sup>1</sup>Monash University, Australia; <sup>2</sup>University of New South Wales, Australia; <sup>3</sup>University of Tasmania, Australia

534 *Addiction, anxiety, depression, and neurosteroid or opioid dysfunction*

G. O'Neil. Fresh Start Recovery Programme, University of Western Australia, Australia

535 *Uptake of new hepatitis C treatments among patients in opioid substitution therapy*

I. Rivas Puy<sup>1</sup>, A. Sanvisens<sup>2</sup>, E. Faure<sup>1</sup>, N. Espinach<sup>1</sup>, T. Muñoz<sup>1</sup>, M. Rubio<sup>1</sup>, N. Salgado<sup>1</sup>, R. Muga<sup>2</sup>. <sup>1</sup>Mental Health and Addiction Service, Badalona Serveis Assistencials, Spain; <sup>2</sup>Internal Medicine Service, Hospital Universitari Germans Trias i Pujol, Spain

536 *Assessing continuation of treatment post release for Amritsar jail inmates receiving medically assisted treatment for opioid use disorders*

K. Sharma. Punjab Police, India; Humphrey Fellowship Program, Virginia Commonwealth University, United States

537 *Prescription psychostimulants for treatment of cocaine and methamphetamine use disorders: A review and meta-analysis*

V. Soares Tardelli<sup>1,2</sup>, A. Bisaga<sup>3</sup>, F.B. Arcadepani<sup>1</sup>, T.M. Fidalgo<sup>1</sup>. <sup>1</sup>Department of Psychiatry, Universidade Federal de São Paulo, Brazil; <sup>2</sup>Mailman School of Public Health, Columbia University, United States; <sup>3</sup>Division of Substance Abuse, New York State Psychiatric Institute, United States

538 *Antiretroviral therapy services for people who inject drugs in Myanmar*

Z.N. Soe. John Snow, Inc. Research and Training Institute, Myanmar

*539 Physician perceptions of primary care management of opioid use, HIV, and hepatitis C in Colombia: A qualitative study of clinical practices and barriers*

B. Tofighi<sup>1</sup>, P.M.H. Gomez<sup>2</sup>, J.C. Cataño<sup>3</sup>, H. Friedman<sup>1</sup>, J.P.B. Bohigas<sup>4</sup>. <sup>1</sup>New York University School of Medicine, United States; <sup>2</sup>Universidad Tecnológica de Pereira Facultad de Ciencias de la Salud, Colombia; <sup>3</sup>University of Antioquia Medical School, Colombia; <sup>4</sup>Facultad de Medicina, Universidad von Humboldt, Colombia

*540 Characterizing the barriers to access and utilization of HIV/AIDS and sexual health services among men who have sex with men in Nigeria*

A. Williams<sup>1</sup>, S. Iwuagwu<sup>2</sup>. <sup>1</sup>Rutgers University, United States; <sup>2</sup>Center for the Right to Health, Nigeria

*541 Epitope finding on DRD2 and DRD2 antibody for further nicotine addiction vaccine development*

V. Wiwanitkit. Chulalongkorn University, Thailand; Dr DY Patil University, India; Joseph Ayo Babalola University, Nigeria

*542 The impact of the incarceration experience on the drug consumption among drug users in a Brazilian prison: Barriers and support of access to care*

N. Worcman. Psychiatrist on the Sistema Único de Saúde, Brazil; Humphrey Fellowship Program, Virginia Commonwealth University, United States

*543 Outcome of drug and alcohol dependent users after in-patient treatment and effect of follow-up outpatient counseling*

M. Yang<sup>1</sup>, H. Ru<sup>1</sup>, Y. Liao<sup>2</sup>, T. Liu<sup>3</sup>, S. Xiao<sup>4</sup>. <sup>1</sup>Department of Drug Dependence, Shenzhen Kangning Hospital, Shenzhen Mental Health Center, Medical Department of Shenzhen University, China; <sup>2</sup>Mental Health Institute, Second Xiangya Hospital, Central South University, China; <sup>3</sup>Administration Department, Shenzhen Kangning Hospital, Shenzhen Mental Health Center, Medical Department of Shenzhen University, China; <sup>4</sup>Department of Social Medicine, School of Public Health, Central South University, China

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**Monday, June 17, 2019**

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**WORKSHOP IX**

**USING IMPLEMENTATION SCIENCE PRINCIPLES AND  
INTERVENTIONS TO IMPROVE SUBSTANCE USE  
SERVICES LINKAGE FOR JUSTICE-INVOLVED  
ADOLESCENTS: FINDINGS FROM THE  
NIDA JJ-TRIALS COOPERATIVE AGREEMENT**

**Grand Oaks K/L  
7:00 - 9:00 PM**

*Followed by Society for Adolescent Substance Abuse Treatment Effectiveness Business Meeting*

Chairs: Steven Belenko and Danica Knight

*JJ-TRIALS youth: Baseline characteristics and correlates of behavioral health cascade events*  
G. Wasserman, Columbia University, New York, NY

*Effectiveness of an implementation intervention to improve identification of substance use  
treatment need and referral to treatment among justice-involved youth*  
S. Belenko, Temple University, Philadelphia, PA

*Beyond fidelity: The case for measuring and monitoring site engagement*  
J. Becan, Texas Christian University, Fort Worth, TX

*The influence of individual and organizational characteristics on interagency service  
coordination between juvenile justice and behavioral health agencies*  
W. Welsh, Temple University, Philadelphia, PA

*Discussant*

T. Wiley, National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD

**WORKSHOP VI**

**COMMUNICATING YOUR SCIENCE**

**Grand Oaks M  
7:00 - 9:00 PM**

Chairs: Margaret Chisolm and Erin Winstanley

*Communicating your science*

M. Chisolm<sup>1</sup>, P. Vieira<sup>2</sup>, J. Palamar<sup>3</sup>, E. Winstanley<sup>4</sup>, <sup>1</sup>Johns Hopkins University School of  
Medicine, Baltimore, MD, <sup>2</sup>CSU Dominguez Hills, Carson, CA, <sup>3</sup>New York University School of  
Medicine, New York, NY, <sup>4</sup>West Virginia University, Morgantown, WV

*Communicating science with slides is an art*

B. Madras, McLean Hospital, Harvard Medical School, Belmont, MA

*Secrets to great TED talks*

P. Vieira, CSU Dominguez Hills, Carson, CA

*Sharing your research findings to the public using press releases*

J. Palamar, New York University School of Medicine, New York, NY

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**Monday, June 17, 2019**

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*Science for non-scientists: Using social media to increase reach*

E. Winstanley, West Virginia University, Morgantown, WV

**WORKSHOP VII**  
**INTRODUCTION TO MACHINE LEARNING**  
**AND APPLICATIONS TO ADDICTION RESEARCH**

**Grand Oaks H**  
**7:00 - 9:00 PM**

Chairs: Sarah Yip and Dustin Scheinost

*What is machine learning? An overview of common approaches*

N. Allgaier, University of Vermont, Burlington, VT

*What do I need to know? Ten simple rules for machine learning*

D. Scheinost, Yale University, New Haven, CT

*How do I do this? Practical application of machine learning in addiction*

S. Yip, Yale University, New Haven, CT

*What if I need help? Resources for incorporation of machine learning into research*

J. Hardee, University of Michigan, Ann Arbor, MI

*What can and cannot be learned from machine learning?*

S. Grant, National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD

**WORKSHOP VIII**  
**REACHING UNDERSERVED SMOKERS:**  
**NEW STRATEGIES AND HOW TO**  
**IMPLEMENT THEM**

**Grand Oaks I**  
**7:00 - 9:00 PM**

Chairs: Joy Schmitz

*Using mobile dental clinics to deliver tobacco cessation treatment to rural smokers*

L. Yammine, University of Texas Health Science Center, Houston, TX

*Reducing tobacco smoke exposure in NICU infants' homes*

A. Stotts, University of Texas Health Science Center, Houston, TX

*Adherence to smoking pharmacotherapy in low income patients*

K. Cropsey, University of Alabama, Birmingham, AL

*Facilitating engagement in tobacco cessation treatment among smokers with low health literacy*

J. Vidrine, University of Oklahoma Health Sciences Center, Oklahoma City, OK

*Novel approaches to reach disadvantaged smokers with serious mental illnesses in community settings*

M. Brunette, Geisel School of Medicine at Dartmouth, Lebanon, NH

*Discussant*

S. Higgins, University of Vermont, Burlington, VT

**WORKSHOP X**  
**OPIOID USE DISORDER IMPACTS**  
**DIVERSE COMMUNITIES, TOO!**

**Grand Oaks G**  
**7:00 - 9:00 PM**

Chairs: A. Kathleen Burlew and Aimee Campbell

*OUD and mental health outcomes among substance users in Puerto Rico following Hurricane Maria*

V. Horigian, University of Miami, Miami, FL

*The effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention among African Americans*

A. Haeny, Yale University, New Haven, CT

*The use of the citizen's model delivered by peer facilitators in the Black/African American church to address the opioid epidemic in Black/African American communities*

A. Jordan, Yale University, New Haven, CT

*Diverse perspectives on medications for opioid use disorders (MOUD): Generalizable to mainstream populations*

K. Venner, University of New Mexico, Albuquerque, NM

*Discussant*

A. Campbell, Columbia University and New York Psychiatric Institute, New York, NY

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**Tuesday, June 18, 2019**

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**2019 CPDD OUTREACH EVENT**

**7:30 - 11:30 AM**

St. Jude's Ranch for Children (SJRC). Meet in the Lobby at 7:30AM  
Preregistration is strongly encouraged. Contact Jessica Weafer,  
Email: [jweafer@uchicago.edu](mailto:jweafer@uchicago.edu) / Phone: 859-533-9878

### **MEDIA FORUM 2019** **WHAT'S HOT?**

**Grand Oaks M**  
**8:00 - 9:00 AM**

Chairs: Margaret Chisolm and Erin Winstanley

- 8:00 *Welcome and overview of Media Forum and introduction of each speaker*  
Margaret S. Chisolm, Johns Hopkins University, Baltimore, MD

#### **CANNABINOIDS**

- 8:10 *Acute oral and vaporized cannabidiol in healthy adults*  
Ryan Vandrey, Johns Hopkins University, Baltimore, MD, USA
- 8:15 *Residual impact of heavy recreational marijuana use without acute intoxication on driving performance*  
Mary (Kate) Dahlgren, Harvard University, Boston, MA, USA
- 8:20 *Regular cannabis use is associated with adverse cardiovascular outcomes*  
Theresa Winhusen, University of Cincinnati, Cincinnati, OH, USA

#### **OPIOIDS**

- 8:25 *Adolescent onset marijuana use and risk for opioid misuse in an urban cohort*  
Beth Reboussin, Wake Forest University, Wake Forest, NC, USA
- 8:30 *A longitudinal study of prescription opioid use and misuse during adolescence*  
Sean McCabe, University of Michigan, Ann Arbor, MI, USA
- 8:35 *The geographic distribution of fentanyl-involved overdose deaths*  
Elizabeth Nesoff, Columbia University, NY, NY, USA

#### **METHAMPHETAMINE**

- 8:40 *Mirtazapine for methamphetamine use disorder among men and transwomen who have sex with men: A randomized placebo- controlled trial*  
Phillip Coffin, San Francisco Department of Public Health, San Francisco, CA, USA
- 8:45 *Summary of session, Q&A*  
Erin L. Winstanley

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**Tuesday, June 18, 2019**

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**POLICY FORUM:  
ADDRESSING THE OPIOID EPIDEMIC  
IN HIGHLY IMPACTED COMMUNITIES**

**Grand Oaks K/L  
9:00 - 10:30 AM**

Chairs: Sandra Comer and William Dewey

**Part I HEALing Communities**

Titles and speakers to be confirmed

**Part II Public Policy Updates**

*CPDD's public policy activities and a report from 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, Midlothian, VA

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

E. Long, Van Scoyoc Associates, Washington, DC

**ORAL COMMUNICATIONS 12  
BULLSEYE! PRECLINICAL OPIOID  
USE DISORDER TARGETS**

**Grand Oaks G  
10:00 - 12:00 PM**

Chairs: Christina Merritt and Dennis Sholler

10:00 *The development of novel G-protein-biased mu opioid receptor agonists as safer analgesics*

A. Alder<sup>1</sup>, N. Shivaperumal<sup>1</sup>, R. Crowley<sup>2</sup>, S. Williamson<sup>2</sup>, T. Prisinzano<sup>2</sup>, B. Kivell<sup>1</sup>,

<sup>1</sup>Victoria University of Wellington, Wellington, New Zealand, <sup>2</sup>University of Kansas, Lawrence, KS

- 10:15 *A stable heroin hapten (6-AmHap) vaccine formulation slated for a phase 1 clinical trial induces long duration antibody titers that block the antinociceptive effects of heroin and other opioids*  
G. Matyas<sup>1</sup>, O. Torres<sup>2</sup>, A. Sulima<sup>3</sup>, C. Whalen<sup>1</sup>, Z. Beck<sup>2</sup>, A. Jacobson<sup>4</sup>, K. Rice<sup>3</sup>, <sup>1</sup>Walter Reed Army Institute of Research, Silver Spring, MD, <sup>2</sup>Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>4</sup>National Institutes of Health, Bethesda, MD
- 10:30 *Revisiting the primary reinforcing effects of the delta-opioid receptor agonist SNC80*  
E. Jutkiewicz<sup>1</sup>, A. Matthews<sup>1</sup>, K. 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, Baltimore, MD
- 10:45 *Effects of the synthetic short-acting kappa-opioid antagonist LY2795050 in locomotor and self-grooming behaviors in male and female mice*  
B. McElroy<sup>1</sup>, E. Butelman<sup>1</sup>, T. Prisinzano<sup>2</sup>, M. Kreek<sup>1</sup>, <sup>1</sup>The Rockefeller University, New York, NY, <sup>2</sup>University of Kansas, Lawrence, KS
- 11:00 *Oxycodone self-administration is blunted during repeated administration of the 5-HT<sub>2C</sub>R agonist lorcaserin*  
C. Merritt<sup>1</sup>, R. Fox<sup>1</sup>, S. Stutz<sup>1</sup>, F. Moeller<sup>2</sup>, N. Anastasio<sup>1</sup>, K. Cunningham<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX, <sup>2</sup>Virginia Commonwealth University, Richmond, VA
- 11:15 *Nalfurafine blocks oxycodone's conditioned rewarding effects and acquisition of oxycodone self-administration in male rats*  
C. Zamarripa<sup>1</sup>, T. Patel<sup>1</sup>, B. Williams<sup>1</sup>, T. Prisinzano<sup>2</sup>, K. Sufka<sup>3</sup>, K. 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 Mississippi, Mississippi, MS
- 11:30 *The 5-HT<sub>2A</sub> receptor (5-HT<sub>2AR</sub>) antagonist/inverse agonist pimavanserin decreases oxycodone-evoked impulsive action in male Sprague-Dawley rats*  
D. Sholler, N. Anastasio, K. Cunningham, University of Texas Medical Branch, Galveston, TX
- 11:45 *Short-acting M5 negative allosteric modulator VU6008667 attenuates response to oxycodone in rats*  
L. Teal, R. Gould, M. Bubser, E. Duncan, R. Matthews, D. Winder, C. Lindsley, C. Jones, Vanderbilt University, Nashville, TN

### ORAL COMMUNICATIONS 13 KNEE-HIGH TO A GRASSHOPPER: ADOLESCENT EPIDEMIOLOGY

Grand Oaks M  
10:00 - 12:00 PM

Chairs: Micah Johnson and Kathryn Polak

- 10:00 *Trends in adolescent heroin and injection drug use vary across New York City boroughs - differences by sex and race, 2003-2017*  
S. Brighthaupt, K. Schneider, R. Johnson, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 10:15 *Analyzing optimism and past 30-day opioid misuse among Florida justice-involved children*  
M. Johnson, L. Cottler, University of Florida, Gainesville, FL
- 10:30 *Adolescent onset marijuana use and risk for opioid misuse in an urban cohort*  
B. Reboussin<sup>1</sup>, K. Green<sup>2</sup>, D. Furr-Holden<sup>3</sup>, A. Milam<sup>4</sup>, J. Rabinowitz<sup>5</sup>, P. Matson<sup>6</sup>, B. Maher<sup>7</sup>, N. Ialongo<sup>7</sup>, <sup>1</sup>Wake Forest University School of Medicine, Winston-Salem, NC, <sup>2</sup>University of Maryland, College Park, MD, <sup>3</sup>Michigan State University, East Lansing, MI, <sup>4</sup>Johns Hopkins University, LA, CA, <sup>5</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>6</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>7</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 10:45 *A longitudinal study of prescription opioid use and misuse during adolescence and adult substance use disorder symptoms*  
S. McCabe<sup>1</sup>, P. Veliz<sup>1</sup>, C. Boyd<sup>1</sup>, T. Voepel-Lewis<sup>1</sup>, T. Schepis<sup>2</sup>, J. Ford<sup>3</sup>, V. McCabe<sup>4</sup>, J. Schulenberg<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Texas State University, San Marcos, TX, <sup>3</sup>University of Central Florida, Orlando, FL, <sup>4</sup>St. Joseph Mercy Hospital, Ann Arbor, MI
- 11:00 *Incidence of extra-medical oxycontin use after reformulation among youth, 2004-2017*  
K. Sanchez<sup>1</sup>, C. Thompson<sup>2</sup>, J. Gryczynski<sup>3</sup>, <sup>1</sup>Baylor Scott and White Research Institute, Dallas, TX, <sup>2</sup>Peds AI, Lansing, MI, <sup>3</sup>Friends Research Institute, Baltimore, MD
- 11:15 *Opioid use and related socioeconomic and health outcomes among marginalized Mexican-American women*  
T. Perdue, A. Cepeda, A. Valdez, University of Southern California, Los Angeles, CA
- 11:30 *Gender differences in adolescent risk and protective factors associated with opioid misuse from 2012 to 2016*  
K. Polak, P. Dillon, J. Koch, W. Miller, E. Ngjelina, S. Kelpin, D. Pomm, J. Sadicario, A. Parlier-Ahmad, D. Svikis, Virginia Commonwealth University, Richmond, VA

- 11:45 *Adolescent sexual violence trajectories: Substance use and mental health correlates*  
Q. Ngo<sup>1</sup>, P. Veliz<sup>2</sup>, Y. Kusunoki<sup>3</sup>, C. Boyd<sup>2</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

### **SYMPOSIUM X TO SMOKE OR NOT TO SMOKE: THAT IS THE CUE-ESTION**

**Grand Oaks I  
10:00 - 12:00 PM**

Chairs: Yasmin Zakiniaieiz and Eric Woodcock

- 10:00 *Cue-reactivity among cigarette smokers and the importance of the insula from initiation to relapse*  
A. Janes, McLean Hospital, Harvard Medical School, Belmont, MA
- 10:25 *Acute stress alters cue-evoked neural response and potentiates nicotine-seeking among cigarette smokers*  
E. Woodcock, Yale University School of Medicine, New Haven, CT
- 10:50 *Further exploration into the influence of sex and hormones on cigarette smoking cue-reactivity*  
T. Franklin, University of Pennsylvania, Philadelphia, PA
- 11:15 *The central role of smoking cues in reconsolidation-based interventions for cigarette smokers*  
M. Saladin, Medical University of South Carolina, Charleston, SC
- 11:40 *Stress and cue-reactivity: Challenges and potential opportunities*  
R. Sinha, Yale University School of Medicine, New Haven, CT

### **SYMPOSIUM XI STUDIES OF MEDICATIONS FOR ADDICTION TREATMENT IN CORRECTIONAL SETTINGS COOPERATIVE (SOMATICS): ADDRESSING THE OPIOID CRISIS IN VULNERABLE POPULATIONS**

**Grand Oaks H  
10:00 - 12:00 PM**

Chairs: David Farabee and Redonna Chandler

- 10:00 *SOMATICS research cooperative: The intersection between the justice system and the opioid epidemic*  
R. Chandler, National Institutes of Health, Bethesda, MD
- 10:25 *Methadone treatment and patient navigation initiated in jail: A randomized trial*  
R. Schwartz, Friends Research Institute, Baltimore, MD

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## Tuesday, June 18, 2019

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10:50 *XOR: A randomized controlled trial of XR-naltrexone opioid treatment at jail-to-community re-entry*

J. Lee, New York University School of Medicine, New York, NY

11:15 *An experimental comparison of extended-release naltrexone alone and combined with patient navigation in a jail setting*

D. Farabee, New York University, New York, NY

11:40 *Economic analyses of pharmacotherapy for opioid treatment in criminal justice settings: Results from the SOMATICS collaborative*

G. Zarkin, RTI International, Durham, NC

### POSTER SESSION III

### Lunch

### Cibolo Ballroom

12:00 - 2:00 PM

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

**Set-up time begins Monday, 3:00 PM; Must be removed by Tuesday 2:30 PM**

### ALCOHOL

1 *Enhancement of a cue-exposure therapeutic approach with an alpha5GABA-A inverse agonist in rhesus monkeys*

T. Pareek<sup>1</sup>, J. Overton<sup>1</sup>, J. Rowlett<sup>1</sup>, M. Rahman<sup>2</sup>, J. Cook<sup>2</sup>, D. Platt<sup>3</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>University of Wisconsin-Milwaukee, Milwaukee, WI, <sup>3</sup>Division of Neurobiology and Behavior Research, Jackson, MS

2 *Varenicline reduces concurrent alcohol and nicotine self-administration in baboons*

E. Weerts, A. Holtyn, Johns Hopkins University School of Medicine, Baltimore, MD

3 *Paternal alcohol exposure reduces reinstatement of alcohol seeking in rat offspring*

S. Nieto<sup>1</sup>, R. Meisch<sup>2</sup>, T. Kosten<sup>3</sup>, <sup>1</sup>University of Houston, Los Angeles, CA, <sup>2</sup>University of Texas Health Science Center, Houston, TX, <sup>3</sup>University of Houston, Houston, TX

4 *Markers of inflammation, monocyte activation and intestinal permeability in patients with alcohol use disorder admitted for detoxification*

D. Fuster<sup>1</sup>, X. Garcia-Calvo<sup>2</sup>, F. Bolao<sup>2</sup>, P. Zuluaga<sup>2</sup>, A. Sanvisens<sup>2</sup>, J. Tor<sup>2</sup>, R. Muga<sup>3</sup>, <sup>1</sup>Hospital Universitari Germans Trias, Badalona, Spain, <sup>2</sup>Internal Medicine Service, Hospital Universitari Germans Trias i Pujol, Badalona, Spain, <sup>3</sup>Hospital Universitari Germans Trias i Pujol, Badalona, Spain

5 *From network medicine: Construction and analysis of protein-protein interaction network of alcohol use disorder*

S. Chen, Mackay Medical College, Taitung Taiwan, NP, Taiwan

6 *Extended-release vs. oral naltrexone for alcohol dependence treatment in primary care*

M. Malone<sup>1</sup>, A. Vittitow<sup>1</sup>, R. McDonald<sup>1</sup>, B. Tofighi<sup>1</sup>, A. Garment<sup>1</sup>, D. Schatz<sup>2</sup>, E. Laska<sup>1</sup>, K. Goldfeld<sup>1</sup>, J. Rotrosen<sup>1</sup>, J. 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

- 7     *Assessment of the safety and pharmacodynamic (PD) interaction of ANS-6637 and ethanol (EtOH) in male moderate drinkers*  
M. Shram<sup>1</sup>, N. Levy-Cooperman<sup>1</sup>, B. Vince<sup>2</sup>, S. O'Malley<sup>3</sup>, <sup>1</sup>Altreos Research Partners Inc., Toronto, ON, Canada, <sup>2</sup>Vince and Associates, Malvern, PA, <sup>3</sup>Yale University School of Medicine, New Haven, CT
  
- 8     *Improvements in working memory in problem alcohol drinkers during adaptive psychological treatment*  
N. Vadhan<sup>1</sup>, M. Wu<sup>2</sup>, T. Lalwani<sup>2</sup>, R. Vitale<sup>2</sup>, K. Craft<sup>2</sup>, G. Nitzburg<sup>2</sup>, J. Morgenstern<sup>2</sup>, <sup>1</sup>Zucker School of Medicine, Great Neck, NY, <sup>2</sup>Feinstein Institute for Medical Research, Northwell Health, Great Neck, NY
  
- 9     *The associations between alcohol-related cognitions and substance use among young adult drinkers*  
D. Litt, M. Lewis, A. Lowery, C. LoParco, M. Leon, A. Galvin, University of North Texas Health Science Center, Fort Worth, TX
  
- 10    *Can inhibitory control training produce reductions in drinking? Influence of the control condition*  
L. Mewton<sup>1</sup>, J. Smith<sup>2</sup>, Q. Liu<sup>2</sup>, L. Hu<sup>2</sup>, <sup>1</sup>University of New South Wales, Woollahra, Australia, <sup>2</sup>University of New South Wales, Sydney, Australia
  
- 11    *Poor inhibitory control predicts positive, stimulant-like subjective response to alcohol*  
J. Weafer, H. de Wit, University of Chicago, Chicago, IL
  
- 12    *Externalizing symptom and trait trajectories of youth who become regular alcohol users*  
K. Bagot<sup>1</sup>, M. Infante<sup>2</sup>, K. Cummins<sup>3</sup>, D. Clark<sup>4</sup>, S. Eberson<sup>2</sup>, S. Brown<sup>3</sup>, S. Tapert<sup>3</sup>, <sup>1</sup>University of California, La Jolla, CA, <sup>2</sup>University of California, Department of Psychiatry, La Jolla, CA, <sup>3</sup>University of California San Diego, La Jolla, CA, <sup>4</sup>University of Pittsburgh, Pittsburgh, PA
  
- 13    *Applying multiple indicator, multiple cause models to understand changes in youth externalizing behaviors*  
J. Borodovsky<sup>1</sup>, R. Krueger<sup>2</sup>, R. Grucza<sup>1</sup>, <sup>1</sup>Washington University School of Medicine, St. Louis, MO, <sup>2</sup>University of Minnesota, Minneapolis, MN
  
- 14    *Alexithymia, alcohol expectancies, drinking refusal self-efficacy expectancies and negative affect in alcohol-dependent treatment seekers*  
F. Thorberg<sup>1</sup>, R. Tyssen<sup>2</sup>, A. Landheim<sup>1</sup>, R. Young<sup>3</sup>, M. Lyvers<sup>4</sup>, P. Hasking<sup>5</sup>, J. Connor<sup>3</sup>, E. London<sup>6</sup>, Y. Huang<sup>7</sup>, G. Feeney<sup>8</sup>, <sup>1</sup>Innlandet Hospital Trust, Brumunddal, Norway, <sup>2</sup>University of Oslo, Oslo, Norway, <sup>3</sup>University of Queensland, Brisbane, <sup>4</sup>Bond University, Robina, Australia, <sup>5</sup>Curtin University, Perth, Australia, <sup>6</sup>University of California Los Angeles, Los Angeles, CA, <sup>7</sup>Department of Emergency Medicine & Department of Respiratory Medicine, Gold Coast Health, Southport, Australia, <sup>8</sup>Princess Alexandra Hospital, Queensland, Australia

- 15 *Reduction in non-abstinent WHO drinking risk levels and psychiatric and drug use disorders: 3-year follow-up results in the US general population*  
J. Knox, D. Hasin, Columbia University, New York, NY
- 16 *Alcohol use and alcohol use motives in women firefighters: The role of conformity to masculine norms*  
L. Smith<sup>1</sup>, M. Zegel<sup>1</sup>, J. Tran<sup>2</sup>, A. Vujanovic<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>Firefighter Support Network, Houston Fire Department, Houston, TX
- 17 *Occupational stress, alcohol use, and alcohol use coping motives among firefighters: The moderating role of distress tolerance*  
B. Bartlett<sup>1</sup>, A. Lebeaut<sup>1</sup>, M. Zegel<sup>1</sup>, L. Smith<sup>1</sup>, J. Tran<sup>2</sup>, A. Vujanovic<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>Firefighter Support Network, Houston Fire Department, Houston, TX
- 18 *Marijuana and alcohol use among National Guard soldiers across the urban-rural continuum*  
L. Coughlin<sup>1</sup>, R. McCormick<sup>2</sup>, K. Haenchen<sup>1</sup>, A. Bohnert<sup>1</sup>, M. Ilgen<sup>1</sup>, M. Valenstein<sup>1</sup>, M. Walton<sup>3</sup>, F. Blow<sup>3</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Case Western Reserve University, Cleveland, OH, <sup>3</sup>University of Michigan, Addiction Center, Ann Arbor, MI

### DRUGS AND PREGNANCY

- 19 *Attitudes among pregnant and postpartum women in substance disorder treatment toward using technology-assisted treatment*  
A. Hammond, E. Strain, R. Brooner, D. Antoine, Johns Hopkins University School of Medicine, Baltimore, MD
- 20 *Punitive approaches to pregnant women with opioid use disorder: Impact on health care utilization, outcomes and ethical implications*  
T. Clemons<sup>1</sup>, D. Muthulingam<sup>2</sup>, R. Marcus<sup>2</sup>, K. Yonkers<sup>3</sup>, J. Meyer<sup>2</sup>, <sup>1</sup>Quinnipiac University, Westland, MI, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University Department of Psychiatry, New Haven, CT
- 21 *Treatment for substance use disorder in pregnant women: Motivators and barriers*  
Z. Frazer<sup>1</sup>, L. Jansson<sup>2</sup>, K. McConnell<sup>3</sup>, <sup>1</sup>Johns Hopkins University, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD
- 22 *Predictors of success in pregnant women receiving medication treatment for opioid use disorder*  
C. Struble<sup>1</sup>, J. Ellis<sup>1</sup>, M. Carr<sup>2</sup>, M. Fodor<sup>1</sup>, D. Ledgerwood<sup>1</sup>, L. Lundahl<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>Eastern Michigan University, Detroit, MI
- 23 *Family planning among female syringe exchange clients*  
G. Zollman, A. O'Meara, S. Heil, University of Vermont, Burlington, VT

- 24     *The detection of fentanyl in human umbilical cord tissue: Method validation and prevalence in a high-risk population*  
J. Jones, L. Abbas, United States Drug Testing Laboratories, Des Plaines, IL
- 25     *Individual-level and neighborhood-level sociodemographic predictors of cigarette smoking during pregnancy using birth record and census data*  
A. Houston-Ludlam<sup>1</sup>, K. Bucholz<sup>2</sup>, M. Waldron<sup>3</sup>, P. Madden<sup>1</sup>, A. Heath<sup>1</sup>, <sup>1</sup>Washington University in St. Louis, St. Louis, MO, <sup>2</sup>Washington University School of Medicine, St. Louis, MO, <sup>3</sup>Indiana University School of Education, Bloomington, IN
- 26     *Anticipated vs. actual postpartum contraception use among pregnant cigarette smokers*  
R. Harfmann<sup>1</sup>, S. Heil<sup>1</sup>, I. Zvorsky<sup>2</sup>, T. Nighbor<sup>1</sup>, I. Bernstein<sup>1</sup>, S. Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT
- 27     *Place matters: The role of population size and urbanicity in prenatal tobacco and cannabis use in the US*  
Q. Brown<sup>1</sup>, N. Peterson<sup>1</sup>, S. Crystal<sup>2</sup>, J. Goodwin<sup>1</sup>, R. Raghavan<sup>1</sup>, E. Bosk<sup>1</sup>, D. Furr-Holden<sup>3</sup>, <sup>1</sup>School of Social Work, Rutgers, The State University of New Jersey, New Brunswick, NJ, <sup>2</sup>Rutgers University, New Brunswick, NJ, <sup>3</sup>Michigan State University, East Lansing, MI

### PAIN

- 28     *Pain as an emerging risk factor for non-medical cannabis use and cannabis use disorders in US adults: 2001-2002 and 2012-2013*  
D. Hasin, D. Shmulewitz, Columbia University, New York, NY
- 29     *Longitudinal associations between cannabis use motives and cannabis use, mental health functioning, and physical health functioning among a cohort of medical cannabis patients with chronic pain*  
K. Bohnert<sup>1</sup>, M. Ilgen<sup>2</sup>, M. Jannausch<sup>2</sup>, <sup>1</sup>University of Michigan and Department of Veterans Affairs, Ann Arbor, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI
- 30     *A single centre retrospective study comparing post-operative opioid prescribing practices between caesarean sections and open general surgery procedures*  
M. Harris<sup>1</sup>, T. Girard<sup>2</sup>, N. Dayan<sup>3</sup>, A. El-Messidi<sup>4</sup>, S. Gosselin<sup>5</sup>, D. Fleiszer<sup>6</sup>, T. Lee<sup>3</sup>, E. McDonald<sup>7</sup>, E. Villeneuve<sup>8</sup>, A. Bonnici<sup>8</sup>, <sup>1</sup>Boston University, Boston, MA, <sup>2</sup>Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, <sup>3</sup>Clinical Practice Assessment Unit, McGill University Health Centre, Montreal, QC, Canada, <sup>4</sup>Department of Obstetrics and Gynecology, McGill University Health Centre, Montreal, QC, Canada, <sup>5</sup>Hôpital Charles-Lemoyne, Greenfield Park, Greenfield Park, QC, Canada, <sup>6</sup>Department of Surgery, McGill University Health Centre, Montreal, QC, Canada, <sup>7</sup>McGill University Health Centre, Montreal, QC, Canada, <sup>8</sup>Department of Pharmacy, McGill University Health Centre, Montreal, QC, Canada

- 31 *Predicting opioid utilization following cesarean section*  
K. Bartels<sup>1</sup>, J. Carrico<sup>1</sup>, K. Mahoney<sup>1</sup>, K. Raymond<sup>1</sup>, S. McWilliams<sup>2</sup>, L. Mayes<sup>1</sup>, S. Mikulich-Gilbertson<sup>2</sup>, <sup>1</sup>University of Colorado, Aurora, CO, <sup>2</sup>University of Colorado School of Medicine, Aurora, CO
- 32 *Continued opioid use and risk for misuse in a sample of post-injury surgical patients*  
A. Heads<sup>1</sup>, S. Kapoor<sup>2</sup>, J. Schmitz<sup>2</sup>, C. Green<sup>2</sup>, A. Stotts<sup>2</sup>, S. Lane<sup>1</sup>, J. Yoon<sup>2</sup>, J. Harvin<sup>2</sup>, <sup>1</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX, <sup>2</sup>University of Texas Health Science Center, Houston, TX
- 33 *Opioid misuse risk assessment in patients undergoing surgery following traumatic injury*  
S. Kapoor<sup>1</sup>, J. Schmitz<sup>1</sup>, A. Heads<sup>2</sup>, C. Green<sup>1</sup>, A. Stotts<sup>1</sup>, S. Lane<sup>2</sup>, J. Harvin<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX
- 34 *Differences between non-opioid and long-term opioid therapy in pain and health-related outcomes*  
A. Coloma-Carmona<sup>1</sup>, J. Carballo<sup>1</sup>, J. Rodríguez-Marín<sup>1</sup>, A. Pérez-Carbonell<sup>2</sup>, C. Van-der Hofstadt Román<sup>1</sup>, R. Secades Villa<sup>3</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
- 35 *Identifying predictors of pain intensity following discontinuation of long-term opioid therapy among patients with and without substance use disorders*  
T. Lovejoy<sup>1</sup>, C. Smith<sup>2</sup>, B. Morasco<sup>1</sup>, S. Dobscha<sup>1</sup>, S. McPherson<sup>3</sup>, <sup>1</sup>VA Portland Health Care System, Portland, OR, <sup>2</sup>Washington State University, Spokane, WA, <sup>3</sup>Washington State University, Elson S. Floyd College of Medicine, Spokane, WA
- 36 *Effects of ascending buprenorphine doses on measures of experimental pain: A pilot study*  
S. Nielsen<sup>1</sup>, C. Rivas<sup>2</sup>, A. Demirkol<sup>2</sup>, N. Lintzeris<sup>2</sup>, <sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>South Eastern Sydney Local Health District, Surry Hills, Australia

## PRESCRIPTION DRUG ABUSE

- 37 *Abuse of pregabalin and gabapentin in the US*  
K. Asomaning<sup>1</sup>, G. Bau<sup>2</sup>, S. Severtson<sup>3</sup>, K. Rockhill<sup>3</sup>, D. Martire<sup>1</sup>, R. Dart<sup>3</sup>, <sup>1</sup>Pfizer, Inc., New York, NY, <sup>2</sup>RADARS® System and Rocky Mountain Poison and Drug Center, Denver, CO, <sup>3</sup>Rocky Mountain Poison & Drug Center, Denver, CO
- 38 *Pregabalin misuse: Identifying acute harms and misuse trends in Victoria, Australia through analysis of ambulance attendance data*  
R. Crossin<sup>1</sup>, D. Scott<sup>2</sup>, S. Arunogiri<sup>1</sup>, K. Smith<sup>3</sup>, P. Dietze<sup>4</sup>, D. Lubman<sup>2</sup>, <sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>Turning Point, Fitzroy, Australia, <sup>3</sup>Ambulance Victoria, Doncaster, Australia, <sup>4</sup>Burnet Institute, Melbourne, Australia

- 39 *An ethnographic decision model of initiation of gabapentin misuse among opioid misusers*  
M. Buttram, S. Kurtz, Nova Southeastern University, Miami, FL
- 40 *A brief point-of-prescription intervention to improve appropriate use of opioids*  
E. Winstanley<sup>1</sup>, A. Castracane<sup>2</sup>, B. Manibusan<sup>3</sup>, E. Thacker<sup>2</sup>, M. Bridwell<sup>4</sup>, B. Riley<sup>4</sup>,  
<sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>West Virginia University School of Pharmacy, Morgantown, WV, <sup>3</sup>West Virginia University School of Public Health, Morgantown, WV, <sup>4</sup>Marshall University, School of Pharmacy, Huntington, WV
- 41 *Prescription opioid misuse among US Hispanics*  
M. Cano, Boston College, Chestnut Hill, MA
- 42 *Patterns of non-prescribed buprenorphine and other opioid use among individuals with current opioid use disorder: A latent class analysis*  
R. Daniulaityte<sup>1</sup>, R. Nahhas<sup>1</sup>, S. Silverstein<sup>2</sup>, S. Martins<sup>3</sup>, R. Carlson<sup>1</sup>, <sup>1</sup>Wright State University, Dayton, OH, <sup>2</sup>Boonshoft School of Medicine Wright State University, Kettering, OH, <sup>3</sup>Columbia University, New York, NY
- 43 *Patterns of prescription opioid use prior to self-reported heroin initiation*  
D. Hartung<sup>1</sup>, J. Geddes<sup>1</sup>, G. Leichtling<sup>2</sup>, K. Johnston<sup>3</sup>, S. Hallvik<sup>2</sup>, C. Hildebran<sup>2</sup>, P. Korthuis<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>HealthInsight, Portland, OR, <sup>3</sup>Oregon State University, Corvallis, OR
- 44 *Examining prescription opioid diversion cases and cases involving illicitly manufactured opioids in Canada*  
M. Levi-Minzi<sup>1</sup>, Z. Margolin<sup>2</sup>, K. Wogenstahl<sup>2</sup>, G. Martin<sup>1</sup>, M. Buttram<sup>1</sup>, S. Kurtz<sup>1</sup>, <sup>1</sup>Nova Southeastern University, Miami, FL, <sup>2</sup>Rocky Mountain Poison & Drug Center, Denver, CO
- 45 *Misclassification may contribute to overestimates of use of specific opioid products*  
S. Severtson<sup>1</sup>, J. Iwanicki<sup>1</sup>, S. Kurtz<sup>2</sup>, R. Dart<sup>1</sup>, <sup>1</sup>Rocky Mountain Poison & Drug Center, Denver, CO, <sup>2</sup>Nova Southeastern University, Miami, FL
- 46 *Non-medical use of codeine products in Canada*  
B. Sproule<sup>1</sup>, J. Black<sup>2</sup>, R. Dart<sup>2</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>Rocky Mountain Poison & Drug Center, Denver, CO
- 47 *Does medical and non-medical use of benzodiazepines and prescription opioids vary by insurance status?*  
V. Tardelli<sup>1</sup>, T. Fidalgo<sup>2</sup>, J. Santaella-Tenorio<sup>3</sup>, S. Martins<sup>3</sup>, <sup>1</sup>Universidade Federal de São Paulo, São Paulo, Brazil, <sup>2</sup>Universidade Federal de São Paulo, São Paulo, <sup>3</sup>Columbia University, New York, NY

- 48 *A recent six-city study of prescription stimulant use and misuse among 10- to 17- year-olds*  
L. Cottler, M. Johnson, Y. Liu, N. Smith, K. Vaddiparti, C. Woodstock Striley, University of Florida, Gainesville, FL
- 49 *An exploratory study of decision factors for seeking medication-assisted treatment for prescription opioid use disorder*  
P. Wright, A. Oliveto, M. Mancino, J. Jimmerson, J. Gernat, University of Arkansas for Medical Sciences, Little Rock, AR
- 50 *Sources of prescription opioids for misuse and dropping out of high school*  
J. Ford<sup>1</sup>, S. McCabe<sup>2</sup>, T. Schepis<sup>3</sup>, <sup>1</sup>University of Central Florida, Orlando, FL, <sup>2</sup>University of Michigan, Ann Arbor, MI, <sup>3</sup>Texas State University, San Marcos, TX
- 51 *Providing an FDA-approved prescription opioid disposal method does not improve parental disposal intentions: The strong effect of past misuse and risk perception*  
T. Voepel-Lewis, B. Zikmund-Fisher, A. Tait, S. McCabe, C. Boyd, E. Loescher, University of Michigan, Ann Arbor, MI

### ADOLESCENT DRUG ABUSE

- 52 *A culturally adapted parenting intervention for Latino/a immigrant families: Testing implementation feasibility and initial efficacy*  
R. Parra-Cardona<sup>1</sup>, H. Yeh<sup>2</sup>, J. 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, East Lansing, MI
- 53 *Family substance use, relationship problems and race/ethnicity among juvenile offenders*  
C. Leukefeld<sup>1</sup>, M. Dickson<sup>1</sup>, C. Oser<sup>1</sup>, M. Webster<sup>1</sup>, H. Knudsen<sup>1</sup>, J. Havens<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY
- 54 *History of depression and past 30- day opioid misuse among justice-involved children*  
G. Diaz, T. Hayes, M. Johnson, University of Florida, Gainesville, FL
- 55 *Netflix and pill: Antisocial romantic partners linked to past 30-day opioid misuse*  
S. Lawrence, M. Johnson, University of Florida, Gainesville, FL
- 56 *School dropout predicts past 30-day opioid misuse among juveniles*  
S. Bristol, M. Johnson, University of Florida, Gainesville, FL
- 57 *Associations between exposure to gangs and positive urine drug screens in Cape Town, South Africa among a sample of female adolescents who have dropped out of school*  
F. Browne<sup>1</sup>, T. Carney<sup>2</sup>, J. Ndirangu<sup>3</sup>, B. Myers<sup>2</sup>, W. Wechsberg<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC, <sup>2</sup>South African Medical Research Council, Tygerberg, South Africa, <sup>3</sup>RTI International, Washington, DC

- 58 *Criminal behavior and arrest among opioid-dependent youth following residential rehabilitation*  
L. Monico<sup>1</sup>, S. Mitchell<sup>1</sup>, J. Gryczynski<sup>1</sup>, R. Schwartz<sup>1</sup>, K. O'Grady<sup>2</sup>, M. Fishman<sup>3</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, College Park, MD, <sup>3</sup>Maryland Treatment Center, Baltimore, MD
- 59 *Data-driven subgroups of help-seeking youth based on patterns of substance use*  
S. Malignaggi<sup>1</sup>, N. Van Dam<sup>1</sup>, J. Turnbull<sup>2</sup>, R. Purcell<sup>3</sup>, P. McGorry<sup>3</sup>, I. Hickie<sup>4</sup>, A. Yung<sup>5</sup>, C. Pantelis<sup>6</sup>, P. Amminger<sup>7</sup>, G. Bedi<sup>1</sup>, <sup>1</sup>The University of Melbourne, Parkville, Australia, <sup>2</sup>Orygen, The National Centre of Excellence in Youth Mental Health, Parkville, <sup>3</sup>The University of Melbourne, Victoria, Australia, <sup>4</sup>The University of Sydney, Sydney, Australia, <sup>5</sup>The University of Melbourne, Victoria, Australia, <sup>6</sup>The University of Melbourne, Parkville, <sup>7</sup>Orygen, The National Centre of Excellence in Youth Mental Health
- 60 *Gender differences in substance use, victimization and mental health among adolescents in therapeutic residential care*  
S. Fernandez-Artamendi<sup>1</sup>, A. Águila<sup>2</sup>, J. Fernandez del Valle<sup>3</sup>, A. Bravo<sup>2</sup>, <sup>1</sup>Universidad Loyola Andalucía, Seville, Spain, <sup>2</sup>Universidad de Oviedo, Oviedo, Spain, <sup>3</sup>Family and Childhood Research Group. Universidad de Oviedo, Oviedo, Spain
- 61 *Sex-specific bidirectional association between bullying perpetration and substance use among youth in the US: Findings from the PATH Study*  
M. Azevedo Da Silva<sup>1</sup>, S. 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
- 62 *Assessing cohort differences in the grade of onset and initiation sequence of e-cigarette, cigarette, and smokeless tobacco use among US adolescents*  
V. McCabe<sup>1</sup>, P. Veliz<sup>2</sup>, R. Evans-Polce<sup>2</sup>, C. Boyd<sup>2</sup>, S. McCabe<sup>2</sup>, <sup>1</sup>St. Joseph Mercy Hospital, Ann Arbor, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI
- 63 *Identifying patterns of poly-tobacco use to predict longitudinal changes in tobacco and substance use disorder symptoms among US adolescents*  
P. Veliz<sup>1</sup>, R. Evans-Polce<sup>1</sup>, S. McCabe<sup>1</sup>, V. McCabe<sup>2</sup>, C. Boyd<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>St. Joseph Mercy Hospital, Ann Arbor, MI
- 64 *Longitudinal associations between cannabis use and self-reported motivation among adolescents*  
I. Pacheco-Colon, S. Coxe, S. Hawes, R. Gonzalez, Florida International University, Miami, FL
- 65 *The association of gender discrimination and cannabis use among adolescents and young adults*  
M. Ahuja<sup>1</sup>, K. Bucholz<sup>2</sup>, <sup>1</sup>Washington University in St. Louis, St. Louis, MO, <sup>2</sup>Washington University School of Medicine, St. Louis, MO
- 66 *Perceived discrimination and substance use among adolescents: Examining the moderating effect of distress tolerance and negative urgency*  
A. Rowe, T. Zapolski, D. Banks, M. Faidley, Indiana University Purdue University Indianapolis, Indianapolis, IN

- 67 *Social influence and adolescent marijuana use: A latent space adjusted approach*  
A. Burgess-Hull<sup>1</sup>, J. Moody<sup>2</sup>, <sup>1</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>2</sup>Duke University, Durham, NC
- 68 *Marijuana-related beliefs in adolescents: Moving beyond perceived riskiness of marijuana use*  
N. Chadi, S. Levy, E. Weitzman, Boston Children's Hospital, Boston, MA
- 69 *Does legalization of recreational cannabis use increase substance use treatment admissions for youth?*  
J. Stahler, J. Mennis, Temple University, Philadelphia, PA
- 70 *Health care providers asking adolescents about their marijuana or illegal drug use: Differences by state medical marijuana status, 2015-2017*  
P. Mauro<sup>1</sup>, M. Philbin<sup>2</sup>, M. Askari<sup>1</sup>, S. 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

## **HIV/HCV**

- 71 *HIV testing practices and reasons for never-testing among men who have sex with men (MSM) in Malaysia*  
R. Shrestha<sup>1</sup>, Z. Ni<sup>2</sup>, M. Copenhaver<sup>3</sup>, F. Altice<sup>4</sup>, S. Lim<sup>5</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Duke University, Durham, NC, <sup>3</sup>University of Connecticut, New Haven, CT, <sup>4</sup>Yale University School of Medicine, New Haven, CT, <sup>5</sup>University of Malaya, Kuala Lumpur, Malaysia
- 72 *Emotion regulation moderates the relationships between substance use and risky sexual behaviors*  
A. Gilmore-Thomas<sup>1</sup>, A. Heads<sup>2</sup>, M. Hill<sup>1</sup>, J. Hamilton<sup>3</sup>, J. Schmitz<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX, <sup>3</sup>University of Texas Health Science Center Houston, Houston, TX
- 73 *A brief intervention with mobile boosters for drug use and sexual risk behaviors among emerging adults in an urban emergency department*  
E. Bonar<sup>1</sup>, F. Blow<sup>2</sup>, R. Cunningham<sup>1</sup>, L. Drislane<sup>1</sup>, M. Walton<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan, Addiction Center, Ann Arbor, MI
- 74 *PrEP awareness and interest among people who inject drugs in rural West Virginia*  
K. Schneider<sup>1</sup>, R. White<sup>1</sup>, A. O'Rourke<sup>2</sup>, M. Kilkenny<sup>3</sup>, S. Sherman<sup>4</sup>, S. Allen<sup>5</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>George Washington University, Washington, DC, <sup>3</sup>Cabell-Huntington Health Department, Huntington, WV, <sup>4</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>5</sup>Johns Hopkins University, Baltimore, MD

- 75 *HIV pre-exposure prophylaxis (PrEP) prevention awareness, willingness and barriers among people who inject drugs (PWID) in Los Angeles and San Francisco, CA, 2016-2018*  
R. Bluthenthal<sup>1</sup>, S. Walters<sup>2</sup>, L. Wenger<sup>3</sup>, K. Simpson<sup>1</sup>, A. Kral<sup>3</sup>, <sup>1</sup>Keck School of Medicine, Los Angeles, CA, <sup>2</sup>New York University, New York, NY, <sup>3</sup>RTI International, San Francisco, CA
- 76 *Trajectories of self-reported illicit opioid use among people living with HIV*  
E. Edelman<sup>1</sup>, Y. Li<sup>2</sup>, D. Barry<sup>1</sup>, W. Becker<sup>3</sup>, J. Braden<sup>4</sup>, J. Chang<sup>5</sup>, S. Crystal<sup>6</sup>, J. Gaither<sup>7</sup>, K. Gordon<sup>8</sup>, R. Kerns<sup>1</sup>, A. Manhapra<sup>1</sup>, B. Moore<sup>1</sup>, B. Oldfield<sup>1</sup>, L. Park<sup>9</sup>, C. Rentsch<sup>8</sup>, M. Skanderson<sup>8</sup>, J. Tate<sup>3</sup>, A. Justice<sup>3</sup>, D. Fiellin<sup>1</sup>, B. Marshall<sup>2</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Brown University School of Public Health, Providence, RI, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>Behavioral Health Integration Program, Renton, WA, <sup>5</sup>University of Pittsburgh School of Medicine, Pittsburgh, PA, <sup>6</sup>Rutgers University, New Brunswick, NJ, <sup>7</sup>Yale Center for Medical Informatics, New Haven, CT, <sup>8</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>9</sup>Stanford University, Palo Alto, CA
- 77 *Barriers and facilitators to recruiting patients with HIV for opioid use disorder research: Staff perspectives from the clinical trials network CHOICES study*  
K. Hoffman, R. Baker, L. Kunkel, D. McCarty, P. Korthuis, Oregon Health & Science University, Portland, OR
- 78 *Exploring the role of family relationships on the decision to enter opioid agonist treatment among people who inject drugs in Ukraine*  
R. Marcus<sup>1</sup>, L. Madden<sup>2</sup>, S. Farnum<sup>3</sup>, A. Meteliuk<sup>4</sup>, T. Fomenko<sup>4</sup>, I. Pykalo<sup>5</sup>, K. LaMonaca<sup>1</sup>, F. Altice<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>ICF Alliance for Public Health, Kyiv, Ukraine, <sup>5</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine
- 79 *The impact of expanding opioid agonist therapies on HIV epidemic and mortality in Ukraine: A modeling study*  
J. Tan<sup>1</sup>, F. Altice<sup>2</sup>, L. Madden<sup>3</sup>, A. Zelenev<sup>2</sup>, <sup>1</sup>Yale University AIDS Program, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University, APT Foundation, New Haven, CT
- 80 *Interacting risks: High-risk network locations and risk behaviors during an HIV outbreak in Athens, Greece*  
S. Friedman, L. Williams, T. Research Group, National Development and Research Institute, Inc., New York, NY

- 81 *Substance use and HIV care outcome trends among substance users in Puerto Rico*  
Y. Pan<sup>1</sup>, L. Metsch<sup>2</sup>, J. Santana, P. Castellon<sup>2</sup>, S. Miranda de Leon<sup>3</sup>, A. Rodriguez<sup>4</sup>, G. Dávila Torres<sup>5</sup>, Y. Iveth G<sup>2</sup>, M. Maisonet-Alejandro<sup>6</sup>, L. Gooden<sup>2</sup>, D. 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>Departamento de Salud de Puerto Rico, San Juan, PR, <sup>4</sup>University of Miami, Miami, FL, <sup>5</sup>Departamento de Prevención y Educación Iniciativa Comunitaria, Inc., San Juan, PR, <sup>6</sup>University of Puerto Rico, San Juan, PR
- 82 *Durable viral suppression among people with HIV and problem substance use in the era of universal antiretroviral treatment*  
M. Paschen-Wolff<sup>1</sup>, A. Campbell<sup>2</sup>, S. Tross<sup>3</sup>, T. Choo<sup>4</sup>, M. Pavlicova<sup>4</sup>, D. Des Jarlais<sup>5</sup>, <sup>1</sup>New York State Psychiatric Institute at Columbia University Irving Medical Center, New York, NY, <sup>2</sup>Columbia University and New York Psychiatric Institute, New York, NY, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>5</sup>New York University College of Global Public Health, New York, NY
- 83 *A novel mathematical simulation to study the effect of naltrexone on CD4 cells, CD8 cells, and HIV viral load*  
N. Thakor<sup>1</sup>, S. Springer<sup>2</sup>, G. Miller<sup>1</sup>, <sup>1</sup>Northeastern University, Boston, MA, <sup>2</sup>Yale University School of Medicine, New Haven, CT
- 84 *Evaluating the effect of extended-release naltrexone on HIV risk in patients presenting for opioid-use disorder treatment*  
J. Fleuriscar<sup>1</sup>, A. Bisaga<sup>2</sup>, A. Campbell<sup>3</sup>, <sup>1</sup>City University of New York School of Medicine, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>3</sup>Columbia University and New York Psychiatric Institute, New York, NY
- 85 *Uptake of new hepatitis C treatments among patients in opioid substitution therapy*  
I. Rivas Puy<sup>1</sup>, A. Sanvisens<sup>2</sup>, E. Faure<sup>3</sup>, N. Espinach<sup>3</sup>, T. Muñoz<sup>3</sup>, M. Rubio<sup>3</sup>, N. Salgado<sup>3</sup>, R. Muga<sup>4</sup>, <sup>1</sup>Badalona Serveis Assistencials Plaza Pau Casals, Badalona, Spain, <sup>2</sup>Internal Medicine Service. Hospital Universitari Germans Trias i Pujol, Badalona, Spain, <sup>3</sup>Salut Mental i Addiccions. Badalona Serveis Assistencials (BSA), Badalona, Spain, <sup>4</sup>Hospital Universitari Germans Trias i Pujol, Badalona, Spain
- 86 *Correlates of health care by HCV status among rural women at community re-entry from jail*  
M. Staton<sup>1</sup>, M. Dickson<sup>2</sup>, C. Oser<sup>2</sup>, M. Webster<sup>2</sup>, C. Leukefeld<sup>2</sup>, <sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY
- 87 *Stakeholder perspectives on enhancing hepatitis C (HCV) screening, access, and linkage to care in the homeless population*  
J. Fokuo<sup>1</sup>, C. Masson<sup>1</sup>, A. Andersen<sup>1</sup>, B. Zevin<sup>2</sup>, J. Powell<sup>3</sup>, M. Khalili<sup>1</sup>, <sup>1</sup>University of California San Francisco, San Francisco, CA, <sup>2</sup>San Francisco Department of Public Health, San Francisco, CA, <sup>3</sup>Hennepin Healthcare, Minneapolis, MN

### PROGRAM DESCRIPTION

- 88 *An environmental scan of service delivery models for injectable opioid agonist treatment in Canada*  
C. Johnson<sup>1</sup>, E. Eydt<sup>1</sup>, C. Sutherland<sup>1</sup>, K. Meador<sup>2</sup>, M. Trew<sup>2</sup>, M. Perreault<sup>3</sup>, M. Goyer<sup>4</sup>, B. Le Foll<sup>5</sup>, J. Turnbull<sup>6</sup>, N. Fairbairn<sup>7</sup>, <sup>1</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>Alberta Health Services, Red Deer, AB, Canada, <sup>3</sup>McGill University, Montreal, QC, Canada, <sup>4</sup>University of Montreal, Montreal, QC, Canada, <sup>5</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>6</sup>Ottawa Inner City Health Inc., Ottawa, ON, Canada, <sup>7</sup>BC Centre on Substance Use, Vancouver, BC, Canada
- 89 *Rapid initiation of buprenorphine/naloxone to optimize MAT utilization in Philadelphia*  
D. Metzger<sup>1</sup>, C. Denis<sup>2</sup>, K. Kampman<sup>2</sup>, J. Becher<sup>2</sup>, K. Lynch<sup>2</sup>, J. Benitez<sup>3</sup>, D. Barclay<sup>3</sup>, K. Dugosh<sup>4</sup>, D. Festinger<sup>2</sup>, K. Viner<sup>5</sup>, <sup>1</sup>University of Pennsylvania, Department of Psychiatry, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>Prevention Point Philadelphia, Philadelphia, PA, <sup>4</sup>Treatment Research Institute, Philadelphia, PA, <sup>5</sup>Philadelphia Department of Public Health, Philadelphia, PA
- 90 *Implementation of emergency-department-initiated buprenorphine induction for opioid use disorder*  
C. Bogdon<sup>1</sup>, L. Jennings<sup>1</sup>, K. Barth<sup>1</sup>, S. Goldsby<sup>2</sup>, M. Oros<sup>3</sup>, L. Haynes<sup>1</sup>, S. Lane<sup>1</sup>, K. Brady<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>South Carolina Department of Alcohol and Other Drug Abuse Services, Columbia, SC, <sup>3</sup>Mosaic Group, Towson, MD
- 91 *Get waived Texas: Expanding buprenorphine treatment capacity for medication-assisted treatment for opioid use disorder*  
S. Schneegans<sup>1</sup>, E. Finley<sup>2</sup>, V. King<sup>3</sup>, A. Callen<sup>4</sup>, S. Schmidt<sup>4</sup>, J. 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>University of Texas Health, San Antonio, San Antonio, TX, <sup>4</sup>UT Health San Antonio, San Antonio, TX
- 92 *Design of the buprenorphine physician-pharmacist collaborative care of patients with opioid use disorder*  
L. Wu<sup>1</sup>, U. Ghitza<sup>2</sup>, M. Lewis<sup>3</sup>, A. Matthews<sup>3</sup>, P. Mannelli<sup>1</sup>, <sup>1</sup>Duke University School of Medicine, Durham, NC, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>3</sup>The Emmes Corporation, Rockville, MD

- 93 *Understanding NSW long-acting opioids in custody-treatment (the UNLOC-T study)*  
A. Dunlop<sup>1</sup>, B. White<sup>2</sup>, J. Roberts<sup>3</sup>, P. Haber<sup>4</sup>, J. Attia<sup>5</sup>, C. Oldmeadow<sup>5</sup>, A. Searles<sup>5</sup>, M. Cretikos<sup>6</sup>, J. Mackson<sup>7</sup>, D. Attalla<sup>3</sup>, T. Murrell<sup>8</sup>, M. Doyle<sup>9</sup>, E. McEntyre<sup>10</sup>, L. Brown<sup>11</sup>, H. Hellal<sup>3</sup>, M. Howard<sup>12</sup>, M. Sequeira<sup>1</sup>, N. Lintzeris<sup>13</sup>, <sup>1</sup>Hunter New England Local Health District, Newcastle, Australia, <sup>2</sup>Drug Health Services, Sydney Local Health District, Camperdown, Australia, <sup>3</sup>Justice Health & Forensic Mental Health Network, Matraville, Australia, <sup>4</sup>Sydney Local Health District, Sydney, Australia, <sup>5</sup>Hunter Medical Research Institute, New Lambton Heights, Australia, <sup>6</sup>Centre for Population Health, NSW Ministry of Health, North Sydney, Australia, <sup>7</sup>Legal & Regulatory Services, NSW Ministry of Health, North Sydney, Australia, <sup>8</sup>Corrective Services, NSW, Sydney, Australia, <sup>9</sup>University of Sydney, Camperdown, Australia, <sup>10</sup>Durri Aboriginal Corporation Medical Centre, Kempsey, Australia, <sup>11</sup>Aboriginal Health Unit, Nepean Blue Mountains Local Health District, Penrith, Australia, <sup>12</sup>Corrections Research Evaluation and Statistics, Corrections Research Evaluation and Statistics, Sydney, Australia, <sup>13</sup>South Eastern Sydney Local Health District, Surry Hills, Australia
- 94 *Treatment and care for people with drug use disorders in contact with the criminal justice system: Alternatives to conviction or punishment*  
A. Busse, S. Pfeiffer, G. Gerra, G. Campello, E. Sáenz, V. Lebaux, J. Lee, United National Office on Drugs and Crime, Vienna, Austria
- 95 *Reducing risk of overdose after release from incarceration (ROAR): Protecting women released from prison in Oregon*  
E. Waddell<sup>1</sup>, C. Hildebran<sup>2</sup>, G. Leichtling<sup>2</sup>, R. Baker<sup>1</sup>, D. Hartung<sup>1</sup>, L. Kunkel<sup>1</sup>, E. Stack<sup>2</sup>, P. Korhuis<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>HealthInsight, Portland, OR
- 96 *Peer supports at the intersection of opioid use disorder and disability*  
J. Nicholson<sup>1</sup>, S. Reif<sup>2</sup>, M. Lee<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>Institute for Behavioral Health, Brandeis University, Waltham, MA
- 97 *Increasing identification and providing evidence-based treatment of opioid use disorder in VA primary care: The supporting primary care providers in opioid risk reduction and treatment (SUPPORT) center*  
E. Williams<sup>1</sup>, M. Frost<sup>1</sup>, C. Achtmeyer<sup>2</sup>, C. Malte<sup>2</sup>, A. Saxon<sup>3</sup>, C. Hood<sup>4</sup>, A. Danner<sup>2</sup>, A. Lott<sup>2</sup>, E. Hawkins<sup>2</sup>, <sup>1</sup>Veterans Affairs Puget Sound Health Services Research & Development, Seattle, WA, <sup>2</sup>Center of Excellence in Substance Abuse Treatment and Education, Veterans Affairs Puget Sound Health Care System, Seattle, WA, <sup>3</sup>Veterans Affairs Puget Sound Healthcare System, Seattle, WA, <sup>4</sup>Veterans Affairs Puget Sound Health Care System, Seattle, WA
- 98 *Leveraging the emergency department visit to debunk myths on HIV risks among substance-using African American women*  
S. Coker, M. Hill, A. Stotts, University of Texas Health Science Center, Houston, TX

- 99     *Testing an integrated bio-behavioral approach to improve adherence to pre-exposure prophylaxis and HIV risk reduction among methadone-maintained patients: The CHRP-BB study*  
R. Shrestha<sup>1</sup>, F. Altice<sup>2</sup>, J. Ssenyonjo<sup>3</sup>, B. Sibilio<sup>3</sup>, M. Copenhaver<sup>3</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>University of Connecticut, New Haven, CT
- 100    *Implementing opioid agonist therapy scale-up for opioid use disorder in Ukraine*  
L. Madden<sup>1</sup>, D. Muthulingam<sup>2</sup>, S. Farnum<sup>3</sup>, R. Marcus<sup>2</sup>, K. LaMonaca<sup>2</sup>, A. Meteliuk<sup>4</sup>, T. Fomenko<sup>4</sup>, I. Pykalo<sup>5</sup>, S. Dvoriak<sup>5</sup>, F. Altice<sup>2</sup>, <sup>1</sup>Yale University, APT Foundation, New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>APT Foundation, Inc., New Haven, CT, <sup>4</sup>ICF Alliance for Public Health, Kyiv, Ukraine, <sup>5</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine
- 101    *Using nominal group technique to inform strategic planning for integration of specialty and primary care among high-level administrators in Ukraine*  
I. Pykalo<sup>1</sup>, L. Madden<sup>2</sup>, K. LaMonaca<sup>3</sup>, S. Farnum<sup>4</sup>, M. Filippovych<sup>1</sup>, D. Barry<sup>3</sup>, S. Dvoriak<sup>1</sup>, F. Altice<sup>3</sup>, <sup>1</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>2</sup>Yale University, APT Foundation, New Haven, CT, <sup>3</sup>Yale University School of Medicine, New Haven, CT, <sup>4</sup>APT Foundation, Inc., New Haven, CT
- 102    *Innovative solutions to opioid overdose mortality crisis: Safe consumption sites*  
A. Kral<sup>1</sup>, L. Wenger<sup>1</sup>, B. Lambdin<sup>1</sup>, R. Bluthenthal<sup>2</sup>, P. Davidson<sup>3</sup>, <sup>1</sup>RTI International, San Francisco, CA, <sup>2</sup>Keck School of Medicine, Los Angeles, CA, <sup>3</sup>University of California San Diego, La Jolla, CA
- 103    *A cohort study investigating and addressing morbidity, mortality and health care costs among substance use disorder patients in an acute care setting in Vancouver, Canada.*  
S. Nolan<sup>1</sup>, J. Morgan<sup>2</sup>, J. Shoveller<sup>2</sup>, E. Wood<sup>3</sup>, L. Ti<sup>3</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 104    *Building an addiction care continuum model in North America: Lessons from an emerging integrated drug checking and supervised consumption system in Toronto, Canada*  
N. Maghsoudi<sup>1</sup>, D. Beriault<sup>2</sup>, T. Watson<sup>3</sup>, L. Beletsky<sup>4</sup>, D. Werb<sup>5</sup>, <sup>1</sup>University of Toronto, Toronto, ON, Canada, <sup>2</sup>St. Michael's Hospital, Toronto, ON, Canada, <sup>3</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>4</sup>Northeastern University, Boston, MA, <sup>5</sup>University of California San Diego, La Jolla, CA

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## Tuesday, June 18, 2019

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- 105 *Workforce development as a tool for strengthening OUID (opioid use disorder) treatment outcomes*  
A. Skinstad<sup>1</sup>, M. Dreyer Rossi<sup>2</sup>, J. Ledolter<sup>3</sup>, C. McCoy<sup>4</sup>, <sup>1</sup>University of Iowa, Iowa City, IA, <sup>2</sup>University of Iowa, Iowa City, <sup>3</sup>National American Indian and Alaska Native Addiction Technology Transfer Center, Iowa City, IA, <sup>4</sup>Comprehensive Drug Research Center, Miami, FL
- 106 *Direct dispensing laws: Status, trends and evidence*  
C. Davie, A. Frazer, Legal Science, LLC, Philadelphia, PA
- 107 *Student-led initiatives to incorporate addiction medicine training into undergraduate medical education in Detroit, MI*  
I. Lien<sup>1</sup>, T. Moses<sup>2</sup>, J. Chou<sup>1</sup>, K. Shango<sup>1</sup>, A. Szpytman<sup>2</sup>, S. Dass<sup>2</sup>, M. Greenwald<sup>2</sup>, <sup>1</sup>Wayne State University School of Medicine, Detroit, MI, <sup>2</sup>Wayne State University, Detroit, MI

### LATE BREAKING II

**Grand Oaks K/L**  
**2:00 - 3:00 PM**

Chair: Kelly Dunn

- 2:00 *Cocaine use is increasing. Are we prepared to confront the epidemic?*  
J. Maxwell, Steve Hicks School of Social Work, Salisbury, NC
- 2:05 *How abusable is a slow-onset, longer duration dopamine reuptake inhibitor?*  
M. Froimowitz<sup>1</sup>, A. Moore<sup>2</sup>, T. Buck<sup>2</sup>, Z. You<sup>2</sup>, E. Gardner<sup>3</sup>, <sup>1</sup>Consultant, Newton, MA, <sup>2</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>3</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD
- 2:10 *An innovative approach for studying decision-making deficits in cocaine use disorder*  
M. Wesley<sup>1</sup>, J. Beckmann<sup>2</sup>, J. Alcorn<sup>2</sup>, B. Bolin<sup>2</sup>, M. Ponder<sup>2</sup>, C. Rush<sup>2</sup>, A. Smith<sup>2</sup>, W. Stoops<sup>2</sup>, J. Strickland<sup>2</sup>, J. Lile<sup>1</sup>, <sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY
- 2:15 *Neural correlates of stimulant use, gender, and risky sexual practices in sexual and monetary delay discounting*  
M. Koffarnus<sup>1</sup>, J. Lisinski<sup>2</sup>, S. LaConte<sup>2</sup>, T. Willson<sup>2</sup>, W. Bickel<sup>3</sup>, M. Johnson<sup>4</sup>, <sup>1</sup>Virginia Tech, Roanoke, VA, <sup>2</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>3</sup>Fralin Biomedical Research Institute at VTC, Roanoke, VA, <sup>4</sup>Johns Hopkins University School of Medicine, Baltimore, MD
- 2:20 *Relevance of methamphetamine and injection drug use in an ongoing outbreak of Hepatitis A in Kentucky*  
J. Strickland, O. Vselvolozhskaya, A. Grigorian, University of Kentucky, Lexington, KY

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## Tuesday, June 18, 2019

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- 2:25 *Pilot study of tolerability and safety of opioid receptor antagonists as novel therapies for pain among HIV-positive Russians with chronic pain and prior heavy drinking*  
J. Tsui<sup>1</sup>, S. Bendiks<sup>2</sup>, D. Cheng<sup>3</sup>, E. Blokhina<sup>4</sup>, M. Vetrova<sup>4</sup>, E. Verbitskaya<sup>4</sup>, N. Gnatienco<sup>3</sup>, K. Bryant<sup>5</sup>, E. Krupitsky<sup>6</sup>, J. Samet<sup>3</sup>, <sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>Boston Medical Center, Boston, MA, <sup>3</sup>Boston University School of Medicine, Boston, MA, <sup>4</sup>First Pavlov State Medical University, St. Petersburg, Russian Federation, <sup>5</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>6</sup>V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, St. Petersburg, Russian Federation
- 2:30 *Syringe disposal practices among injection drug users before and after implementation of a syringe exchange program in Miami, FL*  
H. Levine, T. Bartholomew, V. Rea-Wilson, D. Arriola, G. Cardenas, D. Feaster, D. Forrest, H. Tookes, University of Miami Miller School of Medicine, Miami, FL
- 2:35 *The relationship between pregnant women's interaction with the justice system and their admission of and continuation of use of cannabis*  
K. Mark<sup>1</sup>, E. Pierce<sup>1</sup>, M. Terplan<sup>2</sup>, <sup>1</sup>University of Maryland School of Medicine, Baltimore, MD, <sup>2</sup>Virginia Commonwealth University, Richmond, VA
- 2:40 *Prenatal tobacco and marijuana co-use: Impact on infant stress response*  
C. Vergara-Lopez<sup>1</sup>, J. Metrik<sup>2</sup>, G. Papandonatos<sup>1</sup>, L. Stroud<sup>3</sup>, <sup>1</sup>Brown University, Providence, RI, <sup>2</sup>Brown University School of Public Health, Providence, RI, <sup>3</sup>Brown Medical School and The Miriam Hospital, Providence, RI
- 2:45 *High anxiety? Preliminary data from the first clinical trial of a novel high cannabidiol product for anxiety*  
S. Gruber<sup>1</sup>, A. Lambros<sup>2</sup>, R. Smith<sup>2</sup>, M. Dahlgren<sup>1</sup>, K. Sagar<sup>2</sup>, D. Olson<sup>2</sup>, S. Lukas<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA
- 2:50 *Does cannabis improve self-reported pain, sleep problems, and health-related quality of life among Individuals Living with chronic pain?*  
N. Payakachat, W. Fantegrossi, University of Arkansas for Medical Sciences, Little Rock, AR
- 2:55 *A single, web-based episodic future thinking session may improve delay discounting, sunk cost propensity and readiness to change in cannabis users*  
S. Lemley<sup>1</sup>, M. Sofis<sup>2</sup>, A. Budney<sup>1</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>2</sup>Dartmouth College, Hanover, NH

### ORAL COMMUNICATIONS 14 SLEEP IN THE HEART OF TEXAS

**Grand Oaks M**  
**2:00 - 3:00 PM**

Chair: Lais Berro

- 2:00 *Acute effects of stimulant drugs on actigraphy-based sleep parameters in rhesus monkeys*  
L. Berro, J. Rowlett, University of Mississippi Medical Center, Jackson, MS

- 2:15 *Prevalence and impact of PTSD symptoms on sleep and cannabis abstinence in an urban cannabis treatment trial*  
R. Mayhugh<sup>1</sup>, T. Spindle<sup>1</sup>, M. Bonn-Miller<sup>2</sup>, R. Vandrey<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>University of Pennsylvania, Southmont, NC
- 2:30 *Are people with severe insomnia able to discontinue chronic hypnotic use?*  
T. Roehrs, Henry Ford Health System, Detroit, MI
- 2:45 *The relationship between sleep apnea and substance abuse: Findings from the National Survey on Drug Use and Health*  
S. Nayak<sup>1</sup>, E. Strain<sup>2</sup>, <sup>1</sup>Johns Hopkins Hospital, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD

**SYMPOSIUM VII  
ETIOLOGY AND TREATMENT OF CO-OCCURRING  
SUBSTANCE USE DISORDERS AND ATTENTION-DEFICIT  
HYPERACTIVITY DISORDER: FROM PRECLINICAL  
STUDIES TO BIG DATA ANALYTICS**

**Grand Oaks H  
2:00 - 3:00 PM**

Chairs: Emily Hankosky and Linda Dwoskin

- 2:00 *Effects of ADHD medications on the developing brain: Impact on adult cocaine abuse risk in an animal model of ADHD*  
K. Kantak, Boston University, Boston, MA
- 2:20 *Big data approaches exploring ADHD and substance use disorder*  
J. Talbert, University of Kentucky, Lexington, KY
- 2:40 *Treating ADHD and substance use disorders: What does the current literature tell us?*  
F. Levin, Columbia University and NYSPI, New York, NY

**SYMPOSIUM XIII  
SELF-SUSTAINING STRATEGIES: VOLUNTARY  
NONDRUG CHOICES TO REDUCE LONG-TERM  
DRUG CRAVING AND RELAPSE: SEX DIFFERENCES**

**Grand Oaks G  
2:00 - 3:00 PM**

Chairs: Marilyn Carroll and Wendy Lynch

- 2:00 *Voluntary aerobic exercise reduces incubation of cocaine and nicotine craving and multi-triggered relapse in rats: Sex differences*  
M. Carroll, University of Minnesota, Minneapolis, MN
- 2:20 *Operant social interaction inhibits drug self-administration and incubation of drug craving in rat addiction models*  
M. Venniro, NIDA Intramural Research Program, Baltimore, MD

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2:40 *Employment-based incentives to address interrelated problems of poverty and drug addiction*

K. Silverman, Johns Hopkins University, Baltimore, MD

**SYMPOSIUM XIV**

**THE USE OF TECHNOLOGY TO IMPROVE DETECTION  
AND TREATMENT OF PERINATAL SUBSTANCE  
USE DISORDERS**

**Grand Oaks I  
2:00 - 3:00 PM**

Chair: Constance Guille

2:00 *Electronic and clinician delivered screening, brief intervention and referral to treatment for women in reproductive healthcare centers: A randomized controlled trial*

K. Yonkers, Yale University Department of Psychiatry, New Haven, CT

2:20 *The use of telemedicine for the treatment of perinatal opioid use disorder*

C. Guille, Medical University of South Carolina, Charleston, SC

2:40 *Smartphone-delivered attentional bias modification for postpartum smoking relapse*

A. Forray, Yale University School of Medicine, New Haven, CT

**BUSINESS MEETING**

**Grand Oaks E/F  
3:00 - 4:00 PM**

*Members Only, MITs Welcome*

**COFFEE BREAK**

**Cibolo Ballroom  
3:00 - 4:00 PM**

**ORAL COMMUNICATIONS 17**  
**MINI DRIVER****Grand Oaks H**  
**4:00 - 5:00 PM**

Chair: Shanna Babalonis

- 4:00 *Effects of therapeutic cannabis consumption on simulated driving and road safety*  
P. Di Ciano<sup>1</sup>, H. Hamilton<sup>1</sup>, A. Matamoros<sup>1</sup>, J. Matheson<sup>1</sup>, A. Fares<sup>1</sup>, C. Wickens<sup>1</sup>, R. Mann<sup>1</sup>, T. Watson<sup>1</sup>, B. Le Foll<sup>1</sup>, B. Brands<sup>2</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>Health Canada, Toronto, ON, Canada
- 4:15 *Impaired driving: Effects of opioids, alcohol and their combination on simulated driving performance*  
S. Babalonis<sup>1</sup>, M. Coe<sup>2</sup>, P. Nuzzo<sup>3</sup>, M. Lofwall<sup>1</sup>, P. Sloan<sup>3</sup>, L. Fanucchi<sup>1</sup>, S. Walsh<sup>3</sup>, <sup>1</sup>University of Kentucky, College of Medicine, Lexington, KY, <sup>2</sup>Pinney Associates, Inc., Bethesda, MD, <sup>3</sup>University of Kentucky, Lexington, KY
- 4:30 *Impaired cognitive flexibility in young adult heavy marijuana users compared with healthy controls: Relationships with recent and lifetime marijuana use*  
A. Cservenka, S. Lahanas, Oregon State University, Corvallis, OR
- 4:45 *Factors associated with impaired driving and other risk behaviors at re-entry from jail*  
M. Webster<sup>1</sup>, M. Dickson<sup>1</sup>, M. Staton<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

### ORAL COMMUNICATIONS 18 TRUE GRIT: FIGHTING STRESS

Grand Oaks M  
4:00 - 5:00 PM

Chair: Mark Greenwald

- 4:00 *Sex differences in life stress, morning cortisol levels, pain and risk of opioid use in a community sample*  
N. Fogelman<sup>1</sup>, R. Hart<sup>2</sup>, R. Sinha<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT
- 4:15 *Modulation of stress-induced opioid seeking by hedonic sensitivity*  
M. Greenwald, Wayne State University, Detroit, MI
- 4:30 *Wearable sensor-based detection of stress and craving in patients during treatment for substance use disorder*  
K. Chintha<sup>1</sup>, P. Indic<sup>1</sup>, B. Chapman<sup>2</sup>, S. Carreiro<sup>2</sup>, <sup>1</sup>Department of Electrical Engineering, The University of Texas at Tyler, Tyler, TX, <sup>2</sup>University of Massachusetts Medical School, Worcester, MA
- 4:45 *Stress, craving, and psychological flow during work in a therapeutic workplace*  
J. Bertz<sup>1</sup>, S. Stull<sup>1</sup>, D. Epstein<sup>1</sup>, A. Holtyn<sup>2</sup>, K. Silverman<sup>3</sup>, K. Preston<sup>4</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Johns Hopkins University, Baltimore, MD, <sup>4</sup>National Institute of Drug Abuse Intramural Research Program, Baltimore, MD

### ORAL COMMUNICATIONS 15 ANIMAL HOUSE: OPIOIDS AND BEHAVIOR

Grand Oaks G  
4:00 - 6:00 PM

Chairs: Francesco Leri and Chela Wallin

- 4:00 *Intermittent abstinence potentiates oxycodone self-administration and alters brain reward sensitivity*  
J. Nguyen, Y. Grant, M. Taffé, The Scripps Research Institute, La Jolla, CA
- 4:15 *The effects of food restriction on the acquisition and persistence of responding for an opioid-associated stimulus*  
S. Robertson, E. Jutkiewicz, University of Michigan, Ann Arbor, MI
- 4:30 *Sex differences in opioid reinforcement under a fentanyl vs. food choice procedure in rats*  
D. Townsend<sup>1</sup>, S. Negus<sup>1</sup>, B. Caine<sup>2</sup>, M. Thomsen<sup>3</sup>, M. Banks<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>McGill University, Belmont, MA, <sup>3</sup>University Hospital of Copenhagen, Copenhagen, Denmark
- 4:45 *Preconceptional, gestation, and postpartum buprenorphine exposure in rats: Litter outcomes, development, and adolescent behavior*  
C. Wallin, C. Wiacek, K. Tilson, M. Saffar, L. Richardson, C. Roberge, S. Brummelte, S. Bowen, Wayne State University, Detroit, MI

- 5:00 *Quantification of observable behaviors induced by kappa agonists in rhesus monkeys: Effects of signaling bias*  
S. Huskinson<sup>1</sup>, D. Platt<sup>2</sup>, M. Brasfield<sup>1</sup>, M. Follett<sup>1</sup>, T. Prisinzano<sup>3</sup>, B. Blough<sup>4</sup>, K. 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
- 5:15 *The memories that linger: The effect of opiate withdrawal and conditioned opiate withdrawal on memory consolidation*  
F. Leri, N. Baidoo, M. Wolter, B. Winters, University of Guelph, Guelph, ON, Canada
- 5:30 *Comparison of mu-opioid and alpha2-adrenergic agonists: Scheduled-control responding, rectal temperature and hot-plate latency in rats*  
T. Hiranita<sup>1</sup>, J. Leon Oyola<sup>1</sup>, L. Restrepo<sup>1</sup>, S. Obeng<sup>2</sup>, M. Reeves<sup>1</sup>, A. Pennington<sup>1</sup>, V. Taylor<sup>1</sup>, A. Patel<sup>2</sup>, C. McCurdy<sup>2</sup>, L. McMahon<sup>2</sup>, <sup>1</sup>University of Florida, College of Pharmacy, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL
- 5:45 *Opioid, GABAB, and 5-HT1A receptor agonist combinations in a mouse model of neuropathic pain*  
J. Wilkerson<sup>1</sup>, J. Felix<sup>1</sup>, M. Ansari<sup>2</sup>, A. Coop<sup>2</sup>, L. McMahon<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Maryland, School of Pharmacy, Baltimore, MD

### ORAL COMMUNICATIONS 16 SHINING SOME FRIDAY NIGHT LIGHTS ON THE BRAIN: IMAGING

**Grand Oaks I**  
**4:00 - 6:00 PM**

Chairs: Stephen Kohut and Breno Sanvicente-Vieira

- 4:00 *Resting-state fMRI connectivity in awake nonhuman primates: Modulation by cocaine self-administration*  
F. de Moura<sup>1</sup>, M. Rohan<sup>2</sup>, S. Kohut<sup>2</sup>, <sup>1</sup>Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 4:15 *Altered resting-state functional MRI connectivity following chronic cocaine self-administration in nonhuman primates*  
S. Kohut<sup>1</sup>, D. Mintzopoulos<sup>2</sup>, B. Kangas<sup>3</sup>, R. Doyle<sup>4</sup>, T. Gillis<sup>5</sup>, J. Bergman<sup>6</sup>, M. Kaufman<sup>2</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Brain Imaging Center, Belmont, MA, <sup>3</sup>Harvard Medical School, Belmont, MA, <sup>4</sup>McGill University, Belmont, MA, <sup>5</sup>ADARC - McLean Hospital, Belmont, MA, <sup>6</sup>McLean Hospital, Belmont, MA

- 4:30 *Sex differences in implicit brain connectivity of cocaine users: Opposite patterns of connectivity for males and females in resting-state functional magnetic resonance imaging*  
B. Sanvicente-Vieira<sup>1</sup>, P. Ferreira<sup>1</sup>, N. Bianchini<sup>1</sup>, L. Rothmann<sup>1</sup>, A. Buchweitz<sup>1</sup>, A. Franco<sup>2</sup>, R. Grassi-Oliveira<sup>1</sup>, <sup>1</sup>Pontifica Universidade Catolica do Rio Grande do Sul, Porto Alegre, Brazil, <sup>2</sup>The Nathan S. Kline Institute for Psychiatric Research, New York, NY
- 4:45 *Gray-matter structure in long-term abstinent methamphetamine users*  
L. Nie<sup>1</sup>, D. Ghahremani<sup>2</sup>, J. Li<sup>3</sup>, E. London<sup>2</sup>, <sup>1</sup>West China Medical School of Sichuan University; UCLA, Los Angeles, CA, <sup>2</sup>University of California Los Angeles, Los Angeles, CA, <sup>3</sup>West China Medical School of Sichuan University, Chengdu, China
- 5:00 *The performance of working memory and brain structural changes in chronic ketamine users*  
Y. Liu<sup>1</sup>, C. Hung<sup>2</sup>, C. Huang<sup>1</sup>, C. Li<sup>3</sup>, N. Muggleton<sup>4</sup>, T. Lee<sup>5</sup>, C. Lin<sup>1</sup>, <sup>1</sup>National Yang Ming University, Taipei, Taiwan, <sup>2</sup>Bali Psychiatric Center, New Taipei City, Taiwan, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>National Central University, Jhongli City, Taiwan, <sup>5</sup>National Taiwan Normal University, Taipei, Taiwan
- 5:00 *Frontoparietal connectivity as a potential EEG biomarker for substance use disorder: Interaction of stimulants and opioids*  
R. Kuplicki<sup>1</sup>, H. Ekhtiari<sup>1</sup>, O. Al Zoubi<sup>1</sup>, J. Bodurka<sup>1</sup>, T. Investigators<sup>1</sup>, M. Paulus<sup>2</sup>, <sup>1</sup>Laureate Institute for Brain Research, Tulsa, OK, <sup>2</sup>Tulsa 1000 Investigators, Tulsa, OK
- 5:15 *Neural correlates of decreased persistence behavior in treatment-seeking prescription opioid-dependent individuals*  
S. Ray, J. Bhanji, M. Delgado, Rutgers University, Newark, NJ
- 5:30 *Imaging the dopamine system with [<sup>11</sup>C]PHNO PET in recently abstinent tobacco smokers compared to nonsmokers*  
K. Calakos, A. Hillmer, J. Anderson, D. Matuskey, Y. Huang, K. Cosgrove, Yale University, New Haven, CT

**SYMPOSIUM XV**  
**THE IMPLEMENTATION CHASM FOR**  
**HARM REDUCTION SERVICES IN RURAL AREAS**

**Grand Oaks K/L**  
**4:00 - 6:00 PM**

Chairs: Hannah Cooper and Richard Jenkins

- 4:00 *Implications of burgeoning methamphetamine co-use for the health of people who inject opioids and for harm reduction systems in rural Oregon*  
G. Leichtling, HealthInsight, Portland, OR
- 4:25 *The role of anti-MAT stigma in shaping access to and utilization of MAT among people who misuse opioids in the Ohio Valley*  
E. Richard, University of North Carolina, Bronx, NY

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- 4:50 *Opportunities for pharmacies to serve as harm reduction sites in Appalachian Kentucky*  
H. Cooper, Emory University, Atlanta, GA
- 5:15 *Experiences with overdose and Narcan among people who use opioids in 3 rural areas, and implications for harm reduction policy and practice*  
D. Seal, Tulane University SPHTM, New Orleans, LA
- 5:40 *The effect of siloed harm reduction organizations on the health of people who misuse opioids in the Ohio Valley*  
C. Schalkoff, University of North Carolina, Chapel Hill, NC

### **WORKSHOP XI MANUSCRIPT REVIEW: TIPS AND TRAPS FOR EMERGING INVESTIGATORS IN DRUG DEPENDENCE**

**Grand Oaks M  
5:15 - 7:15 PM**

Chairs: James Sorensen and Joseph Guydish

*Manuscript review: Tips and traps for emerging investigators in drug dependence research*

J. Sorensen<sup>1</sup>, L. Porrino<sup>2</sup>, T. Lovejoy<sup>3</sup>, L. Montgomery<sup>4</sup>, A. Freda<sup>5</sup>, E. Strain<sup>6</sup>, <sup>1</sup>University of California San Francisco, San Francisco, CA, <sup>2</sup>Wake Forest University School of Medicine, Winston-Salem, NC, <sup>3</sup>VA Portland Health Care System, Portland, OR, <sup>4</sup>University of Cincinnati, College of Medicine, Cincinnati, OH, <sup>5</sup>Elsevier Health and Medical Sciences, Amsterdam, <sup>6</sup>Johns Hopkins University School of Medicine, Baltimore, MD

*Importance, benefits, & requirements for peer reviewing for young investigators*  
L. Porrino, Wake Forest University School of Medicine, Winston-Salem, NC

*Pragmatic guidelines for reviewing: Aid to both authors and editors*  
T. Lovejoy, VA Portland Health Care System, Portland, OR

*Ways to become and develop as a peer reviewer*  
L. Montgomery, University of Cincinnati, College of Medicine, Cincinnati, OH

*Publisher resources for becoming a more skilled reviewer*  
A. Freda, Elsevier Health and Medical Sciences, Amsterdam, Netherlands

*Discussant and moderator of participant issues*  
E. Strain, Johns Hopkins University School of Medicine, Baltimore, MD

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**WORKSHOP XII  
EXPANDING THE IMPACT OF SUBSTANCE  
USE DISORDER RESEARCH: ECONOMIC ANALYSIS  
FOR PROGRAM AND POLICY EVALUATION**

**Grand Oaks H  
5:15 - 7:15 PM**

Chairs: Sean Murphy and Kathryn McCollister

*Expanding the impact of substance use disorder research: Economic analysis for  
program and policy evaluation*

S. Murphy<sup>1</sup>, K. McCollister<sup>2</sup>, <sup>1</sup>Weill Cornell Medical College, New York, NY, <sup>2</sup>University  
of Miami Miller School of Medicine, Miami, FL

*Economic evaluation in substance use disorder research: Defining approach, relevant  
data, and interpretation of results for stakeholders*

K. McCollister, University of Miami Miller School of Medicine, Miami, FL

*Is it cost-effective: Interpreting economic outcomes*

S. Murphy, Weill Cornell Medical College, New York, NY

**DESSERT/RECEPTION**

**Grand Oaks Ballroom  
8:00 - 10:00 PM**

**DJ & DANCING**

**Cibolo Ballroom  
8:00 - 10:00 PM**

**JAZZ**

**Grand Oaks G  
8:00 - 10:00 PM**

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**Wednesday, June 19, 2019**

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**POSTER SESSION IV**

**Breakfast**

**Cibolo Ballroom  
8:00 - 10:00 AM**

**Odd-numbered posters manned first hour; Even-numbered, second hour  
Set-up time begins Tuesday, 3:00 PM; Must be removed by Wednesday 2:30 PM**

**HEALTH DISPARITIES**

- 1     *Gender and racial/ethnic differences in heavy episodic drinking and non-medical use of  
prescription opioids by sexual identity in a nationally representative sample of US adults*  
J. Diaz<sup>1</sup>, E. Greene<sup>1</sup>, M. Philbin<sup>2</sup>, S. Martins<sup>1</sup>, P. Mauro<sup>1</sup>, <sup>1</sup>Columbia University, New  
York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY

- 2     *Racial identity and substance use: The promotive and protective role of racial identity profiles*  
R. Clifton, T. Zapolski, Indiana University Purdue University Indianapolis, Indianapolis, IN
- 3     *Culturally adapted motivational interviewing and community reinforcement for substance use disorders among treatment-seeking American Indian adults: Predictors of abstinence*  
J. Herron<sup>1</sup>, K. Hirschak<sup>2</sup>, K. Venner<sup>1</sup>, <sup>1</sup>University of New Mexico, Albuquerque, NM, <sup>2</sup>Center on Alcoholism, Substance Abuse and Addictions, Albuquerque, NM
- 4     *Urban Native American adults participating in AA: Drinking outcomes by attendance at culturally adapted versus mainstream aa meetings*  
K. Hirschak<sup>1</sup>, K. Venner<sup>2</sup>, J. Tonigan<sup>3</sup>, J. Herron<sup>2</sup>, <sup>1</sup>Center on Alcoholism, Substance Abuse and Addictions, Albuquerque, NM, <sup>2</sup>University of New Mexico, Albuquerque, NM, <sup>3</sup>University of New Mexico, Albuquerque
- 5     *Cumulative trauma and drug use outcomes among a sample of Mexican-American women living in a marginalized community*  
A. Cepeda<sup>1</sup>, E. Ramirez<sup>1</sup>, K. Nowotny<sup>2</sup>, A. Valdez<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>University of Miami, Miami
- 6     *Racial differences in the SUD services cascade among justice-involved youth*  
A. Elliott, M. Johnson, L. Cottler, University of Florida, Gainesville, FL
- 7     *Trends in smoking during pregnancy over time and by race/ethnicity in the Florida, 2012 to 2016 birth cohorts*  
M. Maldonado-Molina, University of Florida, Gainesville, FL

## LITERATURE REVIEW

- 8     *Substance use interventions for refugees in low- and middle-income countries: A review of the literature*  
M. Greene<sup>1</sup>, P. Ventevogel<sup>2</sup>, J. Kane<sup>3</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>United Nations High Commissioner for Refugees, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 9     *An examination of binge eating disorder assessments for use in primary care settings: A systematic review*  
J. Schueler, S. Engler, B. Harris, T. Regan, S. Fields, Texas A&M University, College Station, TX
- 10    *Physical health and gambling and gaming disorders: A critical and systematic review of the literature*  
L. Benchebra<sup>1</sup>, J. Alexandre<sup>2</sup>, J. Dubernet<sup>2</sup>, M. Fatseas<sup>3</sup>, M. Auriacombe<sup>4</sup>, <sup>1</sup>Addiction Psychiatry, University of Bordeaux, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux, <sup>3</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>4</sup>Université de Bordeaux, Bordeaux, France

- 11 *Risky decision making and delay discounting in concurrent cannabis and stimulant users: A literature review*  
K. Cadet<sup>1</sup>, L. 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
- 12 *Pharmacotherapies for methamphetamine/amphetamine use disorder: A systematic review*  
B. Chan<sup>1</sup>, K. Kondo<sup>2</sup>, M. Freeman<sup>2</sup>, C. Ayers<sup>2</sup>, J. Montgomery<sup>3</sup>, R. Paynter<sup>2</sup>, D. Kansagara<sup>2</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>VA Portland Health Care System, Portland, OR, <sup>3</sup>VAPORCHS, Portland, OR
- 13 *Pharmacotherapies for cocaine use disorder: A systematic review*  
B. Chan<sup>1</sup>, K. Kondo<sup>2</sup>, M. Freeman<sup>2</sup>, C. Ayers<sup>2</sup>, J. Montgomery<sup>3</sup>, R. Paynter<sup>2</sup>, D. Kansagara<sup>2</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>VA Portland Health Care System, Portland, OR, <sup>3</sup>VAPORCHS, Portland, OR
- 14 *Will this adult patient develop a prescription opioid addiction? Strategies for rational clinical examination*  
J. Klimas<sup>1</sup>, L. Gorfinkel<sup>2</sup>, D. Simel<sup>3</sup>, E. Wood<sup>4</sup>, <sup>1</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Duke University, Durham, NC, <sup>4</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 15 *Integrating care of hepatitis C virus infection and opioid use disorder: A systematic review of interventions in diverse clinical settings*  
B. Oldfield<sup>1</sup>, N. Munoz<sup>1</sup>, M. McGovern<sup>2</sup>, M. Funaro<sup>1</sup>, M. Villanueva<sup>1</sup>, E. Edelman<sup>1</sup>, J. Tetrault<sup>3</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Stanford University School of Medicine, Palo Alto, CA, <sup>3</sup>Yale University, New Haven, CT
- 16 *Review of sex-based differences in clinical trials and treatment outcome studies for individuals with opioid use disorder*  
A. Huhn<sup>1</sup>, M. Berry<sup>2</sup>, K. Dunn<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>University of Florida, Gainesville, FL
- 17 *Nonpharmacological adjunct treatment for postpartum women with opioid use disorder: A review of the literature beyond pharmacology treatment*  
A. Martinez<sup>1</sup>, A. Allen<sup>2</sup>, <sup>1</sup>University of Arizona College of Medicine Tucson, Tucson, AZ, <sup>2</sup>University of Arizona, Tucson, AZ
- 18 *Characteristics, feasibility, and efficacy of technology-based interventions for opioid use disorder and aberrant opioid behavior: A systematic review*  
K. Rosen<sup>1</sup>, M. Curtis<sup>2</sup>, B. Dempsey<sup>3</sup>, M. Acuff<sup>1</sup>, T. Vo<sup>4</sup>, S. Kaghyan<sup>4</sup>, S. Morissette<sup>4</sup>, D. Akopian<sup>4</sup>, J. Sharpe Potter<sup>2</sup>, <sup>1</sup>UT Health San Antonio, San Antonio, TX, <sup>2</sup>University of Texas Health Science Center, San Antonio, TX, <sup>3</sup>OPAL; UT Health, San Antonio, TX, <sup>4</sup>The University of Texas, San Antonio, TX
- 19 *Intersecting research on opioid misuse, addiction, and disability: A critical review*  
S. Reif<sup>1</sup>, R. Adams<sup>1</sup>, C. Thomas<sup>2</sup>, M. Mitra<sup>2</sup>, J. Nicholson<sup>2</sup>, <sup>1</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>2</sup>Brandeis University, Waltham, MA

- 20 *Buprenorphine in the US: Motives for abuse, misuse, and diversion*  
H. Chilcoat<sup>1</sup>, H. Amick<sup>2</sup>, E. Wood<sup>3</sup>, K. Dunn<sup>4</sup>, <sup>1</sup>Indivior, Inc., Richmond, VA, <sup>2</sup>Venebio Group, LLC, North Chesterfield, VA, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada, <sup>4</sup>Johns Hopkins University School of Medicine, Baltimore, MD

### OPIOIDS - HUMAN STUDIES II

- 21 *Buprenorphine use and misuse among those with opioid use disorders with and without recent treatment*  
A. DeVaugh-Geiss<sup>1</sup>, H. Chilcoat<sup>2</sup>, <sup>1</sup>Indivior, Inc., North Chesterfield, VA, <sup>2</sup>Indivior, Inc., Richmond, VA
- 22 *Examining the impact of chronic non-cancer pain on buprenorphine treatment response for individuals with opioid use disorder*  
K. Peck, T. Ochalek, C. Watson, S. Sigmon, University of Vermont, Burlington, VT
- 23 *Variations in healthcare expenditures associated with buprenorphine treatment retention among privately insured adults with opioid use disorder*  
A. Manhapra<sup>1</sup>, E. Agbese<sup>2</sup>, D. Leslie<sup>2</sup>, R. Rosenheck<sup>3</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Penn State College of Medicine, Department of Public Health Sciences, Hershey, PA, <sup>3</sup>Yale University Department of Psychiatry, New Haven, CT
- 24 *Risk-adjusted abstinence rates are higher with greater buprenorphine plasma exposure among patients who inject opioids*  
N. Fox<sup>1</sup>, C. Laffont<sup>2</sup>, S. Zhao<sup>2</sup>, F. Gray<sup>3</sup>, A. Andorn<sup>1</sup>, S. Learned<sup>2</sup>, C. Heidbreder<sup>2</sup>, <sup>1</sup>Indivior, Inc., North Chesterfield, VA, <sup>2</sup>Indivior, Inc., Richmond, VA, <sup>3</sup>Indivior, Inc., Slough, United Kingdom
- 25 *Attenuated response to hydromorphone during buprenorphine stabilization associated with injection opioid use and quicker opioid lapse during buprenorphine dose tapering*  
T. Moses, M. Greenwald, Wayne State University, Detroit, MI
- 26 *Patterns of opioid withdrawal in patients transitioning from opioid use or buprenorphine treatment to extended-release injectable naltrexone*  
A. Douaihy<sup>1</sup>, A. Zavod<sup>2</sup>, S. Akerman<sup>2</sup>, A. Legedza<sup>2</sup>, M. Sullivan<sup>2</sup>, <sup>1</sup>UPMC-Western Psychiatric Hospital, Pittsburgh, PA, <sup>2</sup>Alkermes, Inc., Waltham, MA
- 27 *Retention on extended-release naltrexone for patients with opioid use disorder: Predictive value of an inter-dose evaluation after initial injection*  
P. Mannelli<sup>1</sup>, J. Fratanio<sup>2</sup>, A. Zavod<sup>2</sup>, S. Akerman<sup>2</sup>, A. Legedza<sup>2</sup>, M. Sullivan<sup>2</sup>, <sup>1</sup>Duke University School of Medicine, Durham, NC, <sup>2</sup>Alkermes, Inc., Waltham, MA

- 28 *Preferences and perceptions of long-acting injectable and implantable medications for opioid use disorder*  
E. Saunders<sup>1</sup>, S. Moore<sup>2</sup>, O. Walsh<sup>3</sup>, S. Metcalf<sup>4</sup>, L. Marsch<sup>4</sup>, <sup>1</sup>The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, NH, <sup>2</sup>Dartmouth College, Lebanon, NY, <sup>3</sup>Dartmouth College, Hanover, NH, <sup>4</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH
- 29 *Initial treatment responses in opioid use disorder: A universal predictor of outcome*  
S. Luo<sup>1</sup>, J. Jin<sup>1</sup>, Y. Hser<sup>2</sup>, A. Saxon<sup>3</sup>, E. Nunes<sup>4</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>UCLA Integrated Substance Abuse Programs, Los Angeles, CA, <sup>3</sup>Veterans Affairs Puget Sound Healthcare System, Seattle, WA, <sup>4</sup>Columbia University and New York State Psychiatric Institute, New York, NY
- 30 *Association between methadone use during detoxification and long-acting injectable naltrexone induction failure*  
M. Shulman<sup>1</sup>, M. Pavlicova<sup>2</sup>, T. Choo<sup>2</sup>, A. Campbell<sup>3</sup>, J. Scodes<sup>1</sup>, J. Rotrosen<sup>4</sup>, E. Nunes<sup>5</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 and New York Psychiatric Institute, New York, NY, <sup>4</sup>New York University School of Medicine, New York, NY, <sup>5</sup>Columbia University and New York State Psychiatric Institute, New York, NY
- 31 *Survey of medication-assisted treatment side effects among methadone-and buprenorphine-treated patients*  
M. Mancino, M. Addicott, J. Thostenson, A. Oliveto, University of Arkansas for Medical Sciences, Little Rock, AR
- 32 *Relationships between psychosocial characteristics and co-occurring emotional problems among methadone patients*  
J. Lister, J. Ellis, M. Greenwald, D. Ledgerwood, Wayne State University, Detroit, MI
- 33 *Using nominal group technique to identify barriers, facilitators and preferences among patients seeking treatment for opioid use disorder: A needs assessment for decision making support*  
S. Farnum<sup>1</sup>, D. Muthulingam<sup>2</sup>, J. Bia<sup>3</sup>, L. Madden<sup>4</sup>, D. Barry<sup>2</sup>, F. Altice<sup>2</sup>, <sup>1</sup>APT Foundation, Inc., New Haven, CT, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Frank H. Netter MD School of Medicine, North Haven, CT, <sup>4</sup>Yale University, APT Foundation, New Haven, CT
- 34 *Influence of a low-barrier buprenorphine treatment program on illicit drug use and quality of life metrics among predominantly homeless, needle exchange clients in Seattle*  
H. Whitney<sup>1</sup>, C. Banta-Green<sup>2</sup>, J. Duchin<sup>1</sup>, J. Libbing<sup>1</sup>, M. Hamblin<sup>1</sup>, M. Shim<sup>1</sup>, J. Hood<sup>1</sup>, <sup>1</sup>Public Health- Seattle & King County, Seattle, WA, <sup>2</sup>University of Washington, Seattle, WA

- 35     *Long-term opioid use trajectories in relation to opioid agonist therapy outcomes among people who use drugs in a Canadian setting: An application of latent class growth analysis*  
H. Dong<sup>1</sup>, N. Fairbairn<sup>2</sup>, K. Hayashi<sup>3</sup>, M. Milloy<sup>2</sup>, K. DeBeck<sup>1</sup>, E. Wood<sup>4</sup>, T. Kerr<sup>2</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>Simon Fraser University, Vancouver, BC, Canada, <sup>4</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 36     *Heterogeneity in the cascade of OUD care: A retrospective study in British Columbia, Canada*  
M. Piske<sup>1</sup>, C. Zhou<sup>1</sup>, F. Homayra<sup>1</sup>, J. Min<sup>2</sup>, M. Socias<sup>3</sup>, B. Nosyk<sup>4</sup>, <sup>1</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada, <sup>2</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>University of British Columbia, Vancouver, BC, Canada, <sup>4</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 37     *Selection into alternative forms of opioid agonist treatment in British Columbia, Canada*  
F. Homayra<sup>1</sup>, N. Hongdilokkul<sup>1</sup>, C. Zhou<sup>1</sup>, J. Min<sup>2</sup>, B. Nosyk<sup>3</sup>, <sup>1</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada, <sup>2</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 38     *Towards a comprehensive performance measurement system for opioid use disorders in British Columbia, Canada*  
B. Nosyk<sup>1</sup>, J. Min<sup>2</sup>, L. Pearce<sup>3</sup>, C. Zhou<sup>3</sup>, F. Homayra<sup>3</sup>, L. Wang<sup>3</sup>, M. Piske<sup>3</sup>, <sup>1</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, <sup>3</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada
- 39     *Motivations for the initiation of injectable opioid agonist treatment: An ethnographic study of patient experiences in Vancouver, Canada*  
S. Mayer<sup>1</sup>, A. Fowler<sup>2</sup>, J. Boyd<sup>2</sup>, R. 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, Vancouver, BC, Canada
- 40     *Patient characteristics associated with the provision of opioid agonist therapy during hospitalization in a cohort of people who use opioids in Vancouver, Canada*  
K. Colizza<sup>1</sup>, N. Fairbairn<sup>2</sup>, E. Nosova<sup>2</sup>, E. Wood<sup>3</sup>, K. Hayashi<sup>4</sup>, M. Milloy<sup>2</sup>, <sup>1</sup>University of Calgary, Calgary, AB, Canada, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada, <sup>4</sup>Simon Fraser University, Vancouver, BC, Canada
- 41     *Opioid addiction beliefs and attitudes of primary health care clinicians in Ukraine*  
M. Filippovych<sup>1</sup>, K. LaMonaca<sup>2</sup>, I. Pykalo<sup>1</sup>, L. Madden<sup>3</sup>, R. Marcus<sup>2</sup>, S. Farnum<sup>4</sup>, D. Barry<sup>2</sup>, K. Dumchev<sup>1</sup>, S. Dvoriak<sup>1</sup>, F. Altice<sup>2</sup>, <sup>1</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>2</sup>Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University, APT Foundation, New Haven, CT, <sup>4</sup>APT Foundation, Inc., New Haven, CT

- 42 *PWID and provider perspectives on factors influencing MAT uptake among PWID in Ukraine: Highlights from HPTN 074 study*  
T. Kiriazova<sup>1</sup>, O. Makarenko<sup>1</sup>, I. Zaviriukha<sup>1</sup>, R. Hershow<sup>2</sup>, E. Hamilton, K. Lancaster<sup>3</sup>, K. Dumchev<sup>1</sup>, V. Go<sup>4</sup>, C. Latkin<sup>5</sup>, <sup>1</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>2</sup>Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina-Chapel Hill, Chapel Hill, NC, <sup>3</sup>The Ohio State University, Columbus, OH, <sup>4</sup>University of North Carolina, Chapel hill, NC, <sup>5</sup>Johns Hopkins School of Public Health, Baltimore, MD

### SUBSTANCE ABUSE TREATMENT

- 43 *Departure against medical advice (AMA) among hospitalized medical patients with substance use disorder (SUD)*  
J. Gryczynski<sup>1</sup>, C. Nordeck<sup>1</sup>, R. Schwartz<sup>1</sup>, S. Mitchell<sup>1</sup>, C. Welsh<sup>2</sup>, K. O'Grady<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>University of Maryland, College Park, MD
- 44 *Primary care provider attitudes toward substance use: Results of the substance abuse attitudes survey (SAAS) among urban public hospital primary care physicians*  
A. Warner<sup>1</sup>, A. Polyn<sup>2</sup>, S. Floyd<sup>3</sup>, C. Cleland<sup>1</sup>, D. Shelley<sup>2</sup>, J. McNeely<sup>2</sup>, <sup>1</sup>NYU Rory Meyers College of Nursing, New York, NY, <sup>2</sup>New York University School of Medicine, New York, NY, <sup>3</sup>NYU School of Medicine, New York, NY
- 45 *Stigma, discrimination, treatment effectiveness, and policy support: Comparing behavior analysts' views on substance use disorders and mental illness*  
C. Rey<sup>1</sup>, A. Kurti<sup>1</sup>, G. Badger<sup>1</sup>, A. Cohen<sup>2</sup>, S. Heil<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Vermont, Burlington
- 46 *Creating a digital platform to support an integrated system of care for youth substance use treatment and recovery supports*  
K. Claborn<sup>1</sup>, T. Cunningham<sup>2</sup>, J. McElrath<sup>3</sup>, L. Sherman<sup>3</sup>, L. Holleran Steiker<sup>4</sup>, <sup>1</sup>University of Texas Dell Medical School, Austin, TX, <sup>2</sup>The University of Texas at Austin, Austin, TX, <sup>3</sup>Youth Recovery Network, Austin, TX, <sup>4</sup>University of Texas at Austin, Austin, TX
- 47 *Utilization of web-based evidence-based program registers by state behavioral health departments*  
S. Magura<sup>1</sup>, M. Maranda<sup>1</sup>, R. Gugerty<sup>2</sup>, J. Landsverk<sup>3</sup>, J. Rolls-Reutz<sup>4</sup>, B. Green<sup>5</sup>, <sup>1</sup>Western Michigan University, Kalamazoo, MI, <sup>2</sup>Ryan Gugerty, Santa Cruz, CA, <sup>3</sup>Oregon Social Learning Center, Eugene, OR, <sup>4</sup>Chadwick Center for Children and Families, San Diego, CA, <sup>5</sup>DSG Inc, Bethesda, MD
- 48 *Urine drug screen trajectory as a universal outcome predictor: Overcoming limitations of logistic regression as a canonical technique for binary outcome modeling*  
J. Jin<sup>1</sup>, S. Luo<sup>1</sup>, E. Nunes<sup>2</sup>, A. Ciarleglio, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University and New York State Psychiatric Institute, New York, NY

### SOCIAL NETWORKS

- 49     *Substance use in urban areas: Results from Chula HealthStreet surveys*  
C. Areesantichai<sup>1</sup>, U. Perngparn<sup>1</sup>, L. Cottler<sup>2</sup>, <sup>1</sup>Chulalongkorn University, Bangkok, Thailand, <sup>2</sup>University of Florida, Gainesville, FL
- 50     *Risk and protective effects of social network characteristics on substance misuse among Army Reserve and National Guard soldiers*  
E. Anderson Goodell<sup>1</sup>, D. Homish<sup>2</sup>, G. 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
- 51     *Engagement in opioid agonist therapy and drug use among network members*  
K. Tormohlen<sup>1</sup>, L. Dayton<sup>1</sup>, K. Tobin<sup>1</sup>, C. Latkin<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins School of Public Health, Baltimore, MD
- 52     *Peer information and substance use decision making in street-involved youth*  
E. Macdonald, A. Howard, Carleton University, Ottawa, ON, Canada
- 53     *Age as a moderator of the association between perceived vulnerability and the posting and deleting of alcohol-related content on social media*  
C. LoParco, A. Lowery, A. Galvin, M. Leon, M. Lewis, D. Litt, University of North Texas Health Science Center, Fort Worth, TX
- 54     *Posting, texting, and related social risk behavior while high*  
J. Palamar<sup>1</sup>, A. Le<sup>2</sup>, P. Acosta<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University College of Dentistry, New York, NY
- 55     *Nighttime social networking site use by platform and the associations with adolescent and young adult sleep quality, substance use, and anxiety*  
A. Lowery, D. Litt, M. Leon, C. LoParco, A. Galvin, M. Lewis, University of North Texas Health Science Center, Fort Worth, TX

### TECH

- 56     *Machine learning identifies common and specific markers of alcohol, cannabis, and nicotine dependence*  
J. Vassileva<sup>1</sup>, R. Shahidi<sup>1</sup>, E. Long<sup>2</sup>, Q. Wang<sup>3</sup>, B. Taylor<sup>1</sup>, F. Moeller<sup>1</sup>, G. Vasilev<sup>4</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Pennsylvania State University, University Park, PA, <sup>3</sup>The University of Alabama, Tuscaloosa, AL, <sup>4</sup>Bulgarian Addictions Institute, Sofia
- 57     *Feasibility and acceptability of a m-health APP to assess daily substance use and firearm behaviors among an urban emergency department sample*  
P. Carter<sup>1</sup>, M. Walton<sup>2</sup>, K. Resnicow<sup>3</sup>, J. Cranford<sup>1</sup>, M. Zimmerman<sup>1</sup>, R. 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

- 58 *mHealth for opioid use disorder, HIV, and hepatitis C treatment support in primary care: A pilot randomized controlled trial*  
B. Tofighi<sup>1</sup>, C. Marini<sup>1</sup>, M. Acosta<sup>2</sup>, J. 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
- 59 *eDarkTrends: Analyzing illicit fentanyl and other novel synthetic opioid trends on cryptomarkets*  
F. Lamy<sup>1</sup>, R. Daniulaityte<sup>2</sup>, U. Lokala<sup>2</sup>, U. Kursuncu<sup>2</sup>, A. Sheth<sup>2</sup>, M. Barratt<sup>3</sup>, R. Nahhas<sup>2</sup>, R. Carlson<sup>2</sup>, <sup>1</sup>Mahidol University, Salaya, Thailand, <sup>2</sup>Wright State University, Dayton, OH, <sup>3</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 60 *Dillies, gas, butyr, piff: Finding opioid and marijuana drug terms on social media*  
N. Adams<sup>1</sup>, E. Artigiani<sup>1</sup>, E. Wish<sup>2</sup>, <sup>1</sup>University of Maryland, College Park, MD, <sup>2</sup>University of Maryland, College Park
- 61 *Relations between smartphone use, smartphone addiction and delay discounting*  
B. Harris, J. Schueler, T. Regan, S. Engler, S. Fields, Texas A&M University, College Station, TX

## EDUCATION AND TRAINING

- 62 *Who gains the most from online training in addiction medicine? Development and evaluation of a free, open-access online certificate in addiction medicine*  
L. Gorfinkel<sup>1</sup>, J. Klimas<sup>2</sup>, N. Fairbairn<sup>2</sup>, A. Giesler<sup>3</sup>, H. Dong<sup>3</sup>, E. Wood<sup>4</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, New York, NY, <sup>2</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>3</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada, <sup>4</sup>British Columbia Centre on Substance Use, Vancouver, British Columbia, Canada
- 63 *Does online substance use education improve nurses' knowledge in addiction medicine? An educational evaluation in a Canadian setting*  
K. Lorenz<sup>1</sup>, S. Robinson<sup>1</sup>, C. Johnson<sup>2</sup>, J. Klimas<sup>1</sup>, <sup>1</sup>BC Centre on Substance Use, Vancouver, BC, Canada, <sup>2</sup>British Columbia Centre on Substance Use, Vancouver, BC, Canada
- 64 *Training health sciences students to conduct screening, brief intervention and referral for treatment (SBIRT) for substance use problems*  
M. Reynolds<sup>1</sup>, A. Douaihy<sup>2</sup>, A. Falk<sup>1</sup>, N. Korach<sup>1</sup>, J. Pringle<sup>1</sup>, <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>UPMC-Western Psychiatric Hospital, Pittsburgh, PA
- 65 *Current workforce development priorities for training and technical assistance concerning health services for persons with opioid use disorders*  
B. Hartzler, D. Vandersloot, University of Washington, Seattle, WA

### ABUSE POTENTIAL

- 66 *Analysis of the discriminant validity and psychometric performance of the misuse, abuse and diversion drug event reporting system (MADDERS) in phase II and III clinical trials of drugs with suspected abuse potential*  
H. Elder, R. Lanier, N. Erpelding, N. Katz, Analgesic Solutions, Natick, MA
- 67 *Prospective assessment of potentially abuse-related events in two Phase 3 studies of NKTR-181, a novel opioid analgesic, using the misuse, abuse, and diversion drug event reporting system (MADDERS)*  
R. Lanier<sup>1</sup>, J. Gudin<sup>2</sup>, R. Rauck<sup>3</sup>, H. Elder<sup>1</sup>, N. Erpelding<sup>1</sup>, J. Gimbel<sup>4</sup>, S. Doberstein<sup>5</sup>, M. Tagliaferri<sup>5</sup>, L. Lu<sup>5</sup>, S. Siddhanti<sup>5</sup>, S. Schnoll<sup>6</sup>, J. Henningfield<sup>6</sup>, N. Katz<sup>1</sup>, <sup>1</sup>Analgesic Solutions, Natick, MA, <sup>2</sup>Englewood Hospital and Medical Center, Englewood, NJ, <sup>3</sup>Carolinas Pain Institute and The Center for Clinical Research, Winston-Salem, NC, <sup>4</sup>Arizona Research Center, Phoenix, AZ, <sup>5</sup>Nektar Therapeutics, San Francisco, CA, <sup>6</sup>Pinney Associates, Inc., Bethesda, MD
- 68 *Human abuse potential study of laquinimod in recreational polydrug users*  
K. Schoedel<sup>1</sup>, A. Elgart<sup>2</sup>, L. Erisson<sup>2</sup>, A. Zur<sup>3</sup>, M. Gillespie<sup>4</sup>, S. Searle<sup>5</sup>, D. Kelsh<sup>6</sup>, R. Turncliff<sup>5</sup>, O. Spiegelstein<sup>2</sup>, <sup>1</sup>Altreos Research Partners Inc., Toronto, ON, Canada, <sup>2</sup>Teva Pharmaceuticals, Petah Tiqva, Israel, <sup>3</sup>BioLineRx Ltd., Modi'in, Israel, <sup>4</sup>Teva Pharmaceuticals, Inc., Malvern, PA, <sup>5</sup>PRA Health Sciences, Salt Lake City, UT, <sup>6</sup>Vince and Associates, Malvern, PA
- 69 *An investigation of the reinforcing potential of Blue-181 in rats trained to self-administer heroin*  
S. Smith<sup>1</sup>, M. Hallam<sup>1</sup>, Z. Turnbull<sup>1</sup>, D. Roberson<sup>2</sup>, M. Painter<sup>2</sup>, A. Yekkirala<sup>2</sup>, D. Heal<sup>1</sup>, <sup>1</sup>RenaSci Ltd, Nottingham, United Kingdom, <sup>2</sup>Blue Therapeutics, Cambridge, MA
- 70 Withdrawn
- 71 *CBI Agonist (CP-55940) decreases sign-tracking behavior in male rats*  
A. Gheidi, University of Michigan Medical School, Ann Arbor, MI

### FOOD REWARD

- 72 *The growth hormone secretagogue receptor 1a (GHS1aR) antagonist JMV2959 differentially impacts high fat food vs. drug reinforcement in male Sprague-Dawley rats*  
E. Garcia, V. Brehm, R. Fox, N. Anastasio, K. Cunningham, University of Texas Medical Branch, Galveston, TX

- 73     *Cannabidiol decreases drug choice in rhesus monkeys responding under a food versus remifentanyl choice procedure*  
D. Maguire, C. France, University of Texas Health Science Center, San Antonio, TX
- 74     *Blockade of orexin receptors in the paraventricular nucleus of the thalamus prevents stress-induced food-seeking behavior in rats with a history of alcohol dependence*  
R. Martin-Fardon, A. Matzeu, The Scripps Research Institute, La Jolla, CA
- 75     *Phenotype of recovery: Valuation of delayed rewards mediates the relationship of substance use and hedonic value of food*  
D. Pope<sup>1</sup>, W. DeHart<sup>1</sup>, A. Mellis<sup>1</sup>, B. Kaplan<sup>1</sup>, L. Athamneh<sup>1</sup>, W. Bickel<sup>2</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>2</sup>Fralin Biomedical Research Institute at VTC, Roanoke, VA
- 76     *Neural correlates of inhibitory control in adolescents with symptoms of food addiction*  
C. Phaneuf, L. Cope, A. Gearhardt, M. Heitzeg, J. Hardee, University of Michigan, Ann Arbor, MI

### IMAGING

- 77     *A positron emission tomography study of relationships between striatal dopamine function and individual differences in big five personality traits*  
L. Oswald<sup>1</sup>, G. Wand<sup>2</sup>, H. Kuwabara<sup>2</sup>, D. Wong<sup>3</sup>, J. Brasic<sup>2</sup>, <sup>1</sup>University of Maryland School of Nursing, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Johns Hopkins Hospital, Baltimore, MD
- 78     *Striatal dopamine release in response to morphine: A [<sup>11</sup>C]-raclopride positron emission tomography study in healthy men*  
P. Spagnolo<sup>1</sup>, A. Kimes<sup>2</sup>, M. Scwhandt<sup>2</sup>, E. Shokri Kojori<sup>2</sup>, S. Thada<sup>1</sup>, K. Phillips<sup>2</sup>, N. Diazgranados<sup>2</sup>, K. Preston<sup>3</sup>, P. Herscovitch<sup>4</sup>, D. Tomasi<sup>2</sup>, V. Ramchandani<sup>2</sup>, M. Heilig<sup>5</sup>, <sup>1</sup>National Institutes of Health, Bethesda, MD, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, Baltimore, MD, <sup>3</sup>National Institute of Drug Abuse Intramural Research Program, Baltimore, MD, <sup>4</sup>NIH, PET, CC, Bethesda, MD, <sup>5</sup>Linköping University, Linköping, Sweden
- 79     *Cingulo-hippocampal effective connectivity and drug cue related attentional bias in opioid use disorder*  
L. Ma<sup>1</sup>, J. Steinberg<sup>1</sup>, J. Bjork<sup>1</sup>, B. Taylor<sup>1</sup>, A. Arias<sup>1</sup>, M. Terplan<sup>1</sup>, E. Zuniga<sup>1</sup>, M. Lennon<sup>1</sup>, N. Anastasio<sup>2</sup>, K. Cunningham<sup>2</sup>, F. Moeller<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>University of Texas Medical Branch, Galveston, TX

- 80 *More extensive gray matter volume reduction in fronto-temporal areas among individuals with cocaine + alcohol use disorder than cocaine only: A voxel-based morphometric study*  
P. Dib Gonçalves<sup>1</sup>, C. de Melo<sup>1</sup>, F. Duran<sup>1</sup>, D. Lima<sup>2</sup>, H. Oliveira<sup>1</sup>, M. Serpa<sup>1</sup>, L. de Menezes Sanchez<sup>2</sup>, P. Rosa<sup>1</sup>, T. Chaim-Avancini<sup>1</sup>, L. Kobuti<sup>1</sup>, M. Cavalett<sup>1</sup>, N. Costa<sup>1</sup>, M. Foigel<sup>2</sup>, M. Ometto<sup>3</sup>, A. Malbergier<sup>4</sup>, R. Amaral<sup>3</sup>, S. Nicastri<sup>5</sup>, A. Andrade<sup>6</sup>, G. Busatto Filho<sup>6</sup>, P. Jannuzzi Cunha<sup>2</sup>, <sup>1</sup>University of São Paulo, São Paulo, Brazil, <sup>2</sup>University of Sao Paulo Medical School, São Paulo, Brazil, <sup>3</sup>University of São Paulo Medical School, São Paulo, <sup>4</sup>University of Sao Paulo Medical School, São Paulo, <sup>5</sup>Hospital Israelita Albert Einstein, São Paulo, Brazil, <sup>6</sup>University of São Paulo Medical School, São Paulo, Brazil
- 81 *Gray matter concentration of hippocampal and cerebellar regions associated with cocaine use severity and relapse: A follow-up voxel-based morphometric study*  
C. de Melo<sup>1</sup>, P. Goncalves<sup>1</sup>, F. Duran<sup>1</sup>, H. Oliveira<sup>1</sup>, D. Lima<sup>2</sup>, M. Serpa<sup>1</sup>, M. Ometto<sup>3</sup>, R. Amaral<sup>3</sup>, M. Zanetti<sup>1</sup>, T. Chaim-Avancini<sup>1</sup>, L. Kobuti<sup>1</sup>, M. Cavalett<sup>1</sup>, A. Malbergier<sup>4</sup>, N. Costa<sup>1</sup>, S. Nicastri<sup>5</sup>, A. Andrade<sup>6</sup>, G. Busatto Filho<sup>6</sup>, P. Jannuzzi Cunha<sup>2</sup>, <sup>1</sup>University of São Paulo, São Paulo, Brazil, <sup>2</sup>University of Sao Paulo Medical School, São Paulo, Brazil, <sup>3</sup>University of São Paulo Medical School, São Paulo, <sup>4</sup>University of Sao Paulo Medical School, São Paulo, <sup>5</sup>Hospital Israelita Albert Einstein, São Paulo, Brazil, <sup>6</sup>University of São Paulo Medical School, São Paulo, Brazil
- 82 *In vivo evidence of lower synaptic density in cocaine users vs. healthy controls using IIC-UCB-J PET, independent of gray matter volume changes*  
G. Angarita<sup>1</sup>, P. Worhunsky<sup>1</sup>, M. Naganawa<sup>2</sup>, T. Toyonaga<sup>2</sup>, N. Nabulsi<sup>3</sup>, Y. Huang<sup>3</sup>, C. Li<sup>3</sup>, I. Esterlis<sup>3</sup>, P. Skosnik<sup>4</sup>, R. Radhakrishnan<sup>4</sup>, S. Finnema<sup>2</sup>, R. Carson<sup>3</sup>, R. Malison<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Department of Radiology and Biomedical Imaging, Yale University School of Medicine, New Haven, CT, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>Department of Psychiatry, Yale School of Medicine, West Haven, CT
- 83 *Resource allocation index as a potential fMRI-based biomarker for substance use disorder: Negative findings in T1000 Cohort*  
M. Moradi<sup>1</sup>, H. Ekhtiari<sup>1</sup>, R. Kuplicki<sup>1</sup>, B. McKinney<sup>2</sup>, J. Stewart<sup>1</sup>, R. Aupperle<sup>1</sup>, J. Bodurka<sup>1</sup>, Y. Cha<sup>3</sup>, J. Feinstein<sup>3</sup>, S. Khalsa<sup>3</sup>, J. Savitz<sup>3</sup>, T. Victor<sup>3</sup>, M. Paulus<sup>3</sup>, <sup>1</sup>Laureate Institute for Brain Research, Tulsa, OK, <sup>2</sup>University of Tulsa, Tulsa, Ok, <sup>3</sup>Tulsa 1000 Investigators, Tulsa, OK
- 84 *Caudate volumes and cognition in primarily ketamine and poly-drug ketamine users*  
H. Liang<sup>1</sup>, W. Tang<sup>2</sup>, T. Ernst<sup>3</sup>, R. Chen<sup>4</sup>, L. Chang<sup>5</sup>, <sup>1</sup>University of Maryland, Baltimore, MD, <sup>2</sup>Department of Psychiatry, Chinese University of Hong Kong, Hong Kong, Hong Kong SAR, <sup>3</sup>Department of Medicine, John A. Burns School of Medicine, University of Hawaii and Queen's Medical Center, Baltimore, MD, <sup>4</sup>Department of Diagnostic Radiology and Nuclear Medicine, University of Maryland School of Medicine, Baltimore, MD, <sup>5</sup>University of Maryland School of Medicine, Baltimore, MD
- 85 *Gender differences in the impact of aerobic fitness and cannabis use on brain structure in adolescents and young adults*  
R. Sullivan, A. Wallace, K. Lisdahl, University of Wisconsin-Milwaukee, Milwaukee, WI

### CRIMINAL JUSTICE

- 86 *Are juvenile offenders with ADHD more likely to misuse opioids?*  
K. Wilson, M. Cushion, M. Johnson, University of Florida, Gainesville, FL
- 87 *Family structure and past 30- day opioid misuse among justice involved children*  
D. Shaw, T. Warren, M. Johnson, University of Florida, Gainesville, FL
- 88 *Factors associated with completion of substance use disorder treatment among adolescents in the justice system*  
D. Tran<sup>1</sup>, M. Johnson<sup>2</sup>, <sup>1</sup>Stomp Lan, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL
- 89 *Somatic complaints and past-30 day opioid misuse among justice-involved children*  
S. Clerjute, M. Johnson, University of Florida, Gainesville, FL
- 90 *Juvenile detention placements linked to past 30- day opioid misuse*  
W. Dixon, M. Johnson, University of Florida, Gainesville, FL
- 91 *Felony recidivism and past 30- day opioid misuse among adolescents*  
D. Peitit-Bois, M. Johnson, University of Florida, Gainesville, FL
- 92 *Medication for opioid use disorder before and after short-term incarceration in Massachusetts*  
A. Walley<sup>1</sup>, Y. Li<sup>2</sup>, S. Lodi<sup>3</sup>, D. Bernson<sup>4</sup>, B. Linas<sup>1</sup>, M. Laroche<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Boston Medical Center, Boston, MA, <sup>3</sup>Boston University School of Public Health, Boston, MA, <sup>4</sup>Massachusetts Department of Public Health, Boston, MA
- 93 *Opioid overdose death following justice involvement and hospitalization: Using multiple data sources to detect individuals at highest risk*  
N. Krawczyk<sup>1</sup>, K. Schneider<sup>1</sup>, M. Eisenberg<sup>1</sup>, T. Richards<sup>1</sup>, L. Ferris<sup>1</sup>, C. Lyons<sup>2</sup>, K. Jackson<sup>2</sup>, J. Weiner<sup>1</sup>, B. Saloner<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Maryland Department of Health, Catonsville, MD
- 94 *Evaluating evidence-based treatment for OUD in a US correctional system: Program participant impressions*  
R. Martin<sup>1</sup>, S. Gresko<sup>1</sup>, L. Hurley<sup>2</sup>, L. Barber<sup>2</sup>, J. Clarke<sup>3</sup>, <sup>1</sup>Brown University, Providence, RI, <sup>2</sup>CODAC Behavioral Healthcare, Cranston, RI, <sup>3</sup>Rhode Island Department of Corrections, Cranston, RI
- 95 *Correlates of perceived need for treatment of drug-using incarcerated African American men*  
J. Dogan, D. Stevens-Watkins, S. Thrasher, D. Lewis, P. Wheeler, University of Kentucky, Lexington, KY
- 96 *Effectiveness of medication-assisted treatment for opioid use in prison and jail settings: A meta-analysis and systematic review*  
K. Moore<sup>1</sup>, S. McKee<sup>2</sup>, <sup>1</sup>East Tennessee State University, Johnson City, TN, <sup>2</sup>Yale University School of Medicine, New Haven, CT

- 97 *Criminal justice history for individuals with opioid use disorder (OUD) presenting to a community substance use treatment center and intention for medication-assisted therapy (MAT)*  
D. Muthulingam<sup>1</sup>, L. Madden<sup>2</sup>, D. Barry<sup>1</sup>, F. Altice<sup>1</sup>, <sup>1</sup>Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University, APT Foundation, New Haven, CT
- 98 *Criminal justice outcomes over 5 years after randomization to buprenorphine-naloxone or methadone treatment for opioid use disorder*  
E. Evans, University of Massachusetts Amherst School of Public Health and Health Sciences, Amherst, MA
- 99 *Feasibility and acceptability of take-home naloxone for people released from prisons in New South Wales, Australia*  
S. Larney<sup>1</sup>, B. Moradmand Badie<sup>1</sup>, J. Roberts<sup>2</sup>, S. Ward<sup>2</sup>, S. Nielsen<sup>3</sup>, J. Bowman<sup>2</sup>, M. Farrell<sup>1</sup>, L. Degenhardt<sup>1</sup>, <sup>1</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>2</sup>Justice Health & Forensic Mental Health Network, Matraville, Australia, <sup>3</sup>Monash University, Melbourne, Australia
- 100 *Changes in associations of prescription opioid use disorder and illegal behaviors over time*  
C. Mintz, Washington University School of Medicine, St. Louis, MO
- 101 *Community methadone treatment entry among detainees initiating interim methadone treatment in jail: Impact of patient navigation*  
S. Kelly<sup>1</sup>, R. Schwartz<sup>1</sup>, S. Mitchell<sup>1</sup>, K. O'Grady<sup>2</sup>, J. Jaffe<sup>1</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, College Park, MD
- 102 *HIV risk behavior during a randomized trial of methadone treatment initiated in jail*  
M. Mitchell<sup>1</sup>, J. Gryczynski<sup>1</sup>, S. Mitchell<sup>1</sup>, S. Kelly<sup>1</sup>, J. Jaffe<sup>1</sup>, K. O'Grady<sup>2</sup>, R. Schwartz<sup>1</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland, College Park, MD
- 103 *Improving knowledge of, attitudes toward, and referrals to medication-assisted treatment in Ohio courts*  
H. Matusow<sup>1</sup>, A. Rosenblum<sup>2</sup>, <sup>1</sup>National Development and Research Institute, Inc., New York, NY, <sup>2</sup>National Disease Research Institutes, New York, NY
- 104 *New Haven Law Enforcement Assisted Diversion (LEAD): Formative assessment of program implementation and adaptation*  
P. Joudrey, C. Nelson, K. Morford, E. Wang, C. Crusto, Yale University School of Medicine, New Haven, CT
- 105 *The impact of drug of choice in community corrections*  
R. Ewy<sup>1</sup>, K. Akao<sup>1</sup>, J. Armstrong<sup>1</sup>, C. Clark<sup>1</sup>, K. Cropsey<sup>2</sup>, <sup>1</sup>Wichita State University, Wichita, KS, <sup>2</sup>University of Alabama, Birmingham, AL
- 106 *Characteristics associated with different sexual orientations in a community corrections population*  
K. Moroney<sup>1</sup>, J. Armstrong<sup>1</sup>, R. Ewy<sup>1</sup>, C. Clark<sup>1</sup>, K. Cropsey<sup>2</sup>, <sup>1</sup>Wichita State University, Wichita, KS, <sup>2</sup>University of Alabama, Birmingham, AL

- 107 *Exploring the characteristics associated with psychotic disorders in a community corrections setting*  
M. Pena<sup>1</sup>, K. Akao<sup>1</sup>, R. Ewy<sup>1</sup>, C. Clark<sup>1</sup>, K. Cropsey<sup>2</sup>, <sup>1</sup>Wichita State University, Wichita, KS, <sup>2</sup>University of Alabama, Birmingham, AL
- 108 *Race-related stress, types of Illicit drug use, and years of lifetime drug use for incarcerated African American men nearing re-entry*  
S. Thrasher, D. Stevens-Watkins, J. Dogan, D. Lewis, P. Wheeler, M. Moody, University of Kentucky, Lexington, KY
- 109 *Relationship between overdose experiences prior to incarceration and substance use treatment utilization following release in rural women*  
E. Pike<sup>1</sup>, M. Staton<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, College of Medicine, Lexington, KY

### ORAL COMMUNICATIONS 19 REMEMBER THE ALLELE! GENETICS

**Grand Oaks G**  
**10:00 - 12:00 PM**

Chairs: Victoria Brehm and Philipp Mews

- 10:00 *Revealing dynamic epigenetic changes in the nucleus accumbens induced by methamphetamine overdose*  
A. Moszczynska<sup>1</sup>, S. Liu<sup>2</sup>, X. Xing<sup>2</sup>, A. Sharma<sup>1</sup>, V. Bazylianska<sup>3</sup>, B. Zhang<sup>4</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>Washington University School of Medicine, St. Louis, MO, <sup>3</sup>Wayne State University, College of Pharmacy and Health Sciences, Detroit, MI, <sup>4</sup>Washington University, School of Medicine, St. Louis, MO
- 10:15 *When agony fuels ecstasy: Cocaine patients carrying a genetic variant linked to over-response of the stress (cortisol) system demonstrate heightened limbic brain response to appetitive drug cues*  
A. Childress<sup>1</sup>, R. Crist<sup>2</sup>, K. Jagannathan<sup>2</sup>, P. Regier<sup>2</sup>, J. Suh<sup>2</sup>, S. Darnley<sup>2</sup>, M. Taylor<sup>3</sup>, Z. Monge<sup>2</sup>, T. Franklin<sup>2</sup>, D. Langleben<sup>4</sup>, K. Young<sup>2</sup>, M. Gawrysiak<sup>5</sup>, R. Szucs-Reed<sup>2</sup>, K. Kampman<sup>2</sup>, C. O'Brien<sup>6</sup>, <sup>1</sup>University of Pennsylvania Perelman School Medicine, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>University of Pennsylvania Perelman School Medicine, Philadelphia, PA, <sup>4</sup>Veterans Administration, Philadelphia, PA, <sup>5</sup>West Chester University of Pennsylvania, West Grove, PA, <sup>6</sup>University of Pennsylvania, VA Medical Center, Philadelphia, PA
- 10:30 *Epigenetic priming maintains transcriptional disruption caused by cocaine*  
P. Mews<sup>1</sup>, H. Kronman<sup>1</sup>, A. Ramakrishnan<sup>1</sup>, S. Sidoli<sup>2</sup>, B. Garcia<sup>2</sup>, E. Nestler<sup>3</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>Mount Sinai School of Medicine, New York, NY

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## Wednesday, June 19, 2019

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- 10:45 *Epigenetics of cocaine use disorder: A collaborative case-control initiative in blood and brain*  
C. Walss-Bass<sup>1</sup>, G. Fries<sup>1</sup>, T. Wendt Viola<sup>2</sup>, B. Sanvicente-Vieira<sup>3</sup>, J. Schmitz<sup>1</sup>, T. Meyer<sup>1</sup>, D. Rovaris<sup>3</sup>, C. Bau<sup>4</sup>, R. Grassi-Oliveira<sup>3</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Rio Grande do Sul, Porto Alegre, Brazil, <sup>3</sup>Pontificia Universidade Catolica do Rio Grande do Sul, Porto Alegre, Brazil, <sup>4</sup>Universidade Federal de Sao Paulo, São Paulo, Brazil
- 11:00 *Bromodomain-containing protein 4 (BRD4) as an emerging therapeutic target in opioid use disorder*  
V. Brehm, C. Merritt, Z. Liu, S. Stafford, R. Fox, H. Chen, N. Anastasio, J. Zhou, K. Cunningham, University of Texas Medical Branch, Galveston, TX
- 11:15 *Effects of genetic polymorphism on ligand-biased signaling: Mu-opioid receptor*  
X. Zhang, R. Gilmore, S. Hutchins, E. Vallender, University of Mississippi Medical Center, Jackson, MS
- 11:30 *Paternal morphine exposure causes maladaptive behavior in male progeny*  
A. Toussaint<sup>1</sup>, A. Ellis<sup>2</sup>, A. Bongiovanni<sup>1</sup>, S. Bhakta<sup>1</sup>, M. Knouse<sup>1</sup>, A. Thomas<sup>3</sup>, K. Peer<sup>1</sup>, H. Mayberry<sup>1</sup>, M. Wimmer<sup>1</sup>, <sup>1</sup>Temple University, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>Pennsylvania University, Philadelphia, PA

### ORAL COMMUNICATIONS 20 TRAUMA AND INTERPERSONAL VIOLENCE

**Grand Oaks M**  
**10:00 - 12:00 PM**

Chairs: Jeremy Kane and Angela Moreland

- 10:00 *Prior adversity is associated with a heightened limbic response to aversive cues in patients with opioid, cannabis, and cocaine use disorders*  
P. Regier<sup>1</sup>, Z. Shi<sup>2</sup>, K. Jagannathan<sup>1</sup>, R. Wetherill<sup>1</sup>, D. Langleben<sup>3</sup>, T. Franklin<sup>1</sup>, A. Childress<sup>4</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Department of Psychiatry, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, <sup>3</sup>Veterans Administration, Philadelphia, PA, <sup>4</sup>University of Pennsylvania Perelman School of Medicine, Philadelphia, PA
- 10:15 *Sexual trauma history is associated with reduced orbitofrontal network strength in stimulant-dependent women*  
T. Poppa<sup>1</sup>, V. Droutman<sup>1</sup>, I. Arnaudova<sup>1</sup>, H. Amaro<sup>2</sup>, D. Black<sup>1</sup>, J. Monterosso<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>Florida International University, Miami, FL
- 10:30 *Comorbid PTSD among women with opioid use disorder: Prevalence of symptoms and utilization in trauma-focused treatment*  
A. Moreland, K. Crum, A. Melkonian, C. Newman, Medical University of South Carolina, Charleston, SC

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## Wednesday, June 19, 2019

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- 10:45 *Marijuana use modifies the association between post-traumatic stress disorder and non-fatal overdose: Results from the IMPACT study*  
S. Fisher<sup>1</sup>, A. Bennett<sup>2</sup>, E. Goldmann<sup>1</sup>, D. Ompad<sup>1</sup>, <sup>1</sup>New York University College of Global Public Health, New York, NY, <sup>2</sup>National Development and Research Institute, Inc., New York, NY
- 11:00 *Trauma onset and cumulative trauma exposure moderate integrated treatment for posttraumatic stress disorder and substance use disorders*  
T. Saraiya<sup>1</sup>, S. Fitzpatrick<sup>2</sup>, T. Lopez-Castro<sup>3</sup>, L. Ruglass<sup>3</sup>, D. Hien<sup>4</sup>, <sup>1</sup>Adelphi University, Garden City, NY, <sup>2</sup>Rutgers University, Piscataway, NJ, <sup>3</sup>The City University of New York, New York, NY, <sup>4</sup>Center of Alcohol Studies, Rutgers University-New Brunswick, Piscataway, NJ
- 11:15 *Intimate partner violence and couple conflict behaviors: The moderating effect of drug use problem severity*  
A. Jarnecke, S. Back, K. Brady, J. Flanagan, Medical University of South Carolina, Charleston, SC
- 11:30 *Effectiveness of an evidence-based transdiagnostic treatment for substance misuse and intimate partner violence in Zambia: Results from a community randomized controlled trial*  
J. Kane<sup>1</sup>, P. Bolton<sup>1</sup>, N. Glass<sup>2</sup>, S. Skavenski van Wyk<sup>1</sup>, F. Melendez<sup>1</sup>, S. Murray<sup>1</sup>, C. Danielson<sup>3</sup>, R. Paul<sup>4</sup>, L. Murray<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins School of Nursing, Baltimore, MD, <sup>3</sup>Medical University of South Carolina, Charleston, SC, <sup>4</sup>University of Zambia Teaching Hospital, Lusaka, Zambia
- 11:45 *Intimate partner violence and current drug use in US Army Reserve/National Guard soldiers and their partners*  
D. Homish, R. Hoopsick, B. Vest, G. Homish, State University of New York at Buffalo, Buffalo, NY

### ORAL COMMUNICATIONS 21 CANNABINOIDS - TREATMENT

**Grand Oaks H**  
**10:00 - 12:00 PM**

Chairs: Carol Paronis and Alexander Wallace

- 10:00 *Changes in sleep pattern in mice during and after daily cannabinoid treatment*  
C. Paronis<sup>1</sup>, G. Missig<sup>1</sup>, S. Nikas<sup>2</sup>, A. Makriyannis<sup>3</sup>, W. Carlezon<sup>1</sup>, J. Bergman<sup>4</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>CDD/Northeastern University, Boston, MA, <sup>3</sup>Northeastern University, Boston, MA, <sup>4</sup>McLean Hospital, Belmont, MA
- 10:15 *Selective neuromorphometric changes and recovery in response to cannabinoid treatment in adolescent female rhesus macaques*  
A. Maksimovskiy<sup>1</sup>, B. Kangas<sup>2</sup>, J. Bergman<sup>1</sup>, S. Nikas<sup>3</sup>, A. Makriyannis<sup>4</sup>, S. Lukas<sup>5</sup>, B. Frederick<sup>5</sup>, S. Kohut<sup>5</sup>, <sup>1</sup>McLean Hospital, Belmont, MA, <sup>2</sup>Harvard Medical School, Belmont, MA, <sup>3</sup>CDD/Northeastern University, Boston, MA, <sup>4</sup>Northeastern University, Boston, MA, <sup>5</sup>McLean Hospital, Harvard Medical School, Belmont, MA

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- 10:30 *Does gender moderate BOLD responses to inhibition in cannabis using adolescents and emerging adults?*  
A. Wallace, K. Maple, K. Lisdahl, University of Wisconsin-Milwaukee, Milwaukee, WI
- 10:45 *Inhibitors of sterol carrier protein-2, a binding protein for endocannabinoids*  
C. Cunningham<sup>1</sup>, G. Martin<sup>2</sup>, C. Vogt<sup>1</sup>, B. Rodriguez<sup>1</sup>, H. Huang<sup>2</sup>, T. Neumann<sup>1</sup>, D. Sem<sup>1</sup>, F. Schroeder<sup>2</sup>, C. Hillard<sup>3</sup>, <sup>1</sup>Concordia University Wisconsin, Mequon, WI, <sup>2</sup>Texas A&M University, College Station, TX, <sup>3</sup>Medical College of Wisconsin, Milwaukee, WI
- 11:00 *Tinkering with THC-to-CBD ratios in marijuana: Modulation of dopamine signaling*  
B. Madras<sup>1</sup>, J. Bergman<sup>2</sup>, S. Kohut<sup>1</sup>, S. George<sup>3</sup>, Z. Lin<sup>2</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA, <sup>3</sup>University of Toronto, Toronto, ON, Canada
- 11:15 *Acute oral and vaporized cannabidiol in healthy adults*  
R. Vandrey<sup>1</sup>, T. Spindle<sup>1</sup>, E. Cone<sup>2</sup>, J. Mitchell<sup>3</sup>, G. Bigelow<sup>1</sup>, R. Flegel<sup>4</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Pinney Associates, Inc., Bethesda, MD, <sup>3</sup>RTI International, Research Triangle Park, NC, <sup>4</sup>Substance Abuse and Mental Health Services Administration, Rockville, MD
- 11:30 *Can high-frequency deep rTMS to the dorsomedial prefrontal cortex/anterior cingulate cortex reduce cannabis self-administration in cannabis smokers?*  
T. Kearney-Ramos<sup>1</sup>, N. Urban<sup>2</sup>, M. Haney<sup>1</sup>, D. Martinez<sup>3</sup>, <sup>1</sup>Columbia University Medical Center, New York, NY, <sup>2</sup>New York University Langone Medical Center, New York, NY, <sup>3</sup>Department of Psychiatry, Columbia University, and New York State Psychiatric Institute, New York, NY
- 11:45 *Quetiapine treatment of cannabis dependence: A randomized placebo-controlled clinical trial*  
J. Mariani<sup>1</sup>, M. Pavlicova<sup>2</sup>, C. Choi<sup>3</sup>, E. Nunes<sup>4</sup>, K. Carpenter<sup>3</sup>, D. Brooks<sup>5</sup>, A. Mahony<sup>5</sup>, C. Brezing<sup>6</sup>, N. Naqvi<sup>3</sup>, F. Levin<sup>6</sup>, <sup>1</sup>Columbia University and New York Psychiatric Institute, 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>Columbia University and New York State Psychiatric Institute, New York, NY, <sup>5</sup>New York State Psychiatric Institute, New York, NY, <sup>6</sup>Columbia University and NYSPI, New York, NY

### ORAL COMMUNICATIONS 22

#### RECOVERY IS NO BED OF YELLOW ROSES: RELAPSE/REINSTATEMENT

### Grand Oaks I

10:00 - 12:00 PM

Chairs: Kathleen Kantak and Lynn Kirby

- 10:00 *Exploring sex differences in the prevention of ethanol drinking by naltrexone in dependent rats during early and protracted abstinence*  
A. Matzeu<sup>1</sup>, L. Terenius<sup>2</sup>, R. Martin-Fardon<sup>1</sup>, <sup>1</sup>The Scripps Research Institute, La Jolla, CA, <sup>2</sup>Karolinska Institute, Stockholm, Sweden

- 10:15 *Outcome of drug- and alcohol-dependent users after in-patient treatment and effect of follow-up outpatient counseling*  
M. Yang<sup>1</sup>, H. Run<sup>1</sup>, Y. Liao<sup>2</sup>, T. Liu<sup>1</sup>, S. Xiao<sup>3</sup>, W. Hao<sup>4</sup>, <sup>1</sup>Shenzhen Kangning Hospital, Shenzhen, China, <sup>2</sup>Mental Health Institute, Second Xiangya Hospital, Central South University, Changsha, Changsha, China, <sup>3</sup>School of Public Health, Central South University, Changsha, China, <sup>4</sup>Central South University, Changsha, China
- 10:30 *Preliminary effectiveness of mindfulness-based relapse prevention among those in recovery from opioid use disorder receiving outpatient medication-assisted treatment*  
K. Zullig<sup>1</sup>, L. Lander<sup>2</sup>, M. Tuscano<sup>1</sup>, G. Hobbs<sup>1</sup>, L. Faulkenberry<sup>3</sup>, <sup>1</sup>West Virginia University School of Public Health, Morgantown, WV, <sup>2</sup>West Virginia University, Morgantown, WV, <sup>3</sup>West Virginia University School of Medicine, Morgantown, WV
- 10:45 *Phase II efficacy of a mindfulness-based intervention on clinical progress and relapse among women in residential SUD treatment: A randomized controlled trial*  
H. Amaro<sup>1</sup>, D. Black<sup>2</sup>, <sup>1</sup>Florida International University, Miami, FL, <sup>2</sup>University of Southern California, Los Angeles, CA
- 11:00 *Molecular changes associated with extinction training for cocaine relapse prevention in rats: Role of environmental enrichment and extinction context*  
M. Hastings<sup>1</sup>, J. Gauthier<sup>2</sup>, H. Man<sup>1</sup>, K. Kantak<sup>1</sup>, <sup>1</sup>Boston University, Boston, MA, <sup>2</sup>Boston University School of Medicine, Boston, MA
- 11:15 *CRF-5-HT interactions and motivation for stress-induced opioid relapse*  
L. Kirby, C. Li, Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- 11:30 *Escalation and reinstatement of fentanyl self-administration in rats*  
S. Malone, L. Hammerslag, M. Bardo, University of Kentucky, Lexington, KY
- 11:45 *The orexin system in the attenuation of relapse-related mechanisms in cocaine use disorder*  
R. Suchting<sup>1</sup>, J. Yoon<sup>1</sup>, G. San Miguel<sup>2</sup>, J. Vincent<sup>1</sup>, M. Wardle<sup>3</sup>, A. Heads<sup>2</sup>, M. Weaver<sup>1</sup>, C. Green<sup>1</sup>, J. Schmitz<sup>1</sup>, S. Lane<sup>2</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX, <sup>3</sup>University of Illinois, Chicago, IL

### **SYMPOSIUM XVI NOVEL AND MEANINGFUL CLINICAL TRIAL ENDPOINTS IN SUBSTANCE USE DISORDER TREATMENT**

**Grand Oaks K/L  
10:00 - 12:00 PM**

Chairs: Brian Kiluk and Katie Witkiewitz

10:00 *Beyond abstinence: Reductions in drinking as an endpoint for alcohol clinical trials*  
K. Witkiewitz, University of New Mexico, Albuquerque, NM

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## Wednesday, June 19, 2019

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- 10:25 *Identifying meaningful alternatives to abstinence for cocaine use*  
B. Kiluk, Yale University School of Medicine, New Haven, CT
- 10:50 *Cutting down on cannabis, can that be enough?*  
A. Budney, Geisel School of Medicine at Dartmouth, Lebanon, NH
- 11:15 *Reanalyzing opioid trials for non-abstinence-based endpoints*  
K. Dunn, Johns Hopkins University School of Medicine, Baltimore, MD
- 11:40 *The point at the end: Where are we in the evolution of clinical trial endpoints, and where might we go?*  
E. Strain, Johns Hopkins University School of Medicine, Baltimore, MD

### BRUNCH WITH CHAMPIONS

*Advance Registration Required*

**Begonia**

**12:00 - 1:30 PM**

### ORAL COMMUNICATIONS 23

#### INFECTIOUS DISEASE INNOVATIONS

**Grand Oaks I**

**1:30 - 3:30 PM**

Chairs: Cecile Denis and William Zule

- 1:30 *Substance use as a predictor of HIV testing among emergency department patients who initially decline testing offered by hospital staff*  
I. Aronson<sup>1</sup>, S. Rajan<sup>2</sup>, C. Cleland<sup>3</sup>, L. Marsch<sup>4</sup>, T. Bania<sup>5</sup>, <sup>1</sup>Digital Health Empowerment, Brooklyn, NY, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>NYU Rory Meyers College of Nursing, New York, NY, <sup>4</sup>Geisel School of Medicine at Dartmouth, Lebanon, NH, <sup>5</sup>Mount Sinai School of Medicine, New York, NY
- 1:45 *The effects of needle gauge and syringe barrel capacity on syringe cleaning and possible HIV/HCV transmission*  
W. Zule, S. Rhea, D. Schley, G. Mitchell, G. Bobashev, RTI International, Research Triangle Park, NC
- 2:00 *Substance use and quality of life in an urban cohort of people living with HIV and substance dependence*  
S. Rawlins-Pilgrim<sup>1</sup>, M. Winter<sup>2</sup>, T. Heeren<sup>2</sup>, A. Walley<sup>3</sup>, T. Kim<sup>1</sup>, S. Kim<sup>4</sup>, R. Saitz<sup>2</sup>, <sup>1</sup>Boston Medical Center, Boston, MA, <sup>2</sup>Boston University School of Public Health, Boston, MA, <sup>3</sup>Boston University School of Medicine, Boston, MA, <sup>4</sup>Boston University, Boston, MA
- 2:15 *Polysubstance use patterns and HIV disease severity among those with substance use disorder: Latent class analysis*  
N. Bertholet<sup>1</sup>, M. Winter<sup>2</sup>, T. Heeren<sup>2</sup>, A. Walley<sup>3</sup>, R. Saitz<sup>2</sup>, <sup>1</sup>Lausanne University Hospital, Lausanne, Switzerland, <sup>2</sup>Boston University School of Public Health, Boston, MA, <sup>3</sup>Boston University School of Medicine, Boston, MA

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## Wednesday, June 19, 2019

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- 2:30 *Combined substance use and HIV risk reduction intervention reduces depressive symptoms in rural African American female adolescents*  
S. Engler<sup>1</sup>, C. Lopez<sup>2</sup>, T. Regan<sup>1</sup>, J. Schueler<sup>1</sup>, B. Harris<sup>1</sup>, S. Fields<sup>1</sup>, <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>The Medical University of South Carolina, Charleston, SC
- 2:45 *Sex differences in physical and mental health among people living with HIV/AIDS who smoke tobacco*  
M. Fodor, C. Struble, J. Ellis, L. Lundahl, D. Ledgerwood, Wayne State University, Detroit, MI
- 3:00 *Double dissociation of HIV and SUD effects on tasks dependent on striatal integrity*  
E. Martin<sup>1</sup>, R. Gonzalez<sup>2</sup>, J. Fogel<sup>3</sup>, J. Vassileva<sup>4</sup>, A. Bechara<sup>5</sup>, <sup>1</sup>Rush University Medical Center, Chicago, IL, <sup>2</sup>Florida International University, Miami, FL, <sup>3</sup>The University of Illinois at Chicago, Chicago, IL, <sup>4</sup>Virginia Commonwealth University, Richmond, VA, <sup>5</sup>University of Southern California, Los Angeles, CA
- 3:15 *Association between diagnoses of chronic pain, substance use disorder and HIV-related outcomes in HIV-positive individuals*  
C. Denis<sup>1</sup>, D. Metzger<sup>2</sup>, Q. Wu<sup>1</sup>, J. Pena<sup>1</sup>, K. Morales<sup>1</sup>, M. Cheatl<sup>3</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>University of Pennsylvania, Department of Psychiatry, Philadelphia, PA, <sup>3</sup>Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

### ORAL COMMUNICATIONS 24

#### THE GOOD, THE BAD AND THE UGLY: POLYDRUG ABUSE

**Grand Oaks M**  
**1:30 - 3:30 PM**

Chairs: Víctor Martínez-Loredo and Erin McClure

- 1:30 *The DISSECTIV method uncovers hidden actions of complex psychoactive mixtures: Emergent polypharmacology in fenethylamine*  
C. Wenthur<sup>1</sup>, B. Zhou<sup>2</sup>, K. Janda<sup>2</sup>, <sup>1</sup>University of Wisconsin-Madison, Madison, WI, <sup>2</sup>The Scripps Research Institute, La Jolla, CA
- 2:00 *Modeling ethanol and nicotine co-use in Sprague Dawley rats*  
C. Chandler, S. Maggio, K. Nixon, M. Bardo, University of Kentucky, Lexington, KY
- 2:15 *Sedative effects of triazolam and pregnanolone combinations in female rhesus macaques*  
J. Cook<sup>1</sup>, D. Platt<sup>2</sup>, D. Rüedi-Bettschen<sup>1</sup>, B. Gunter<sup>3</sup>, J. 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, Nashville, TN
- 2:30 *Tobacco and marijuana co-use in adolescents: Differences in impulsivity and gambling behavior*  
V. Martínez-Loredo<sup>1</sup>, A. Grande-Gosende<sup>1</sup>, A. González-Roz<sup>2</sup>, S. Fernandez-Artamendi<sup>3</sup>, S. Weidberg<sup>1</sup>, J. Fernández-Hermida<sup>1</sup>, D. Gaalema<sup>4</sup>, <sup>1</sup>University of Oviedo, Oviedo, Spain, <sup>2</sup>University of Oviedo, Addictive Behaviors Group, Oviedo, Spain, <sup>3</sup>Universidad Loyola Andalucía, Seville, Spain, <sup>4</sup>University of Vermont, Burlington, VT

- 2:45 *Cannabis and alcohol co-use in a pharmacotherapy tobacco treatment trial for adolescent and emerging adult smokers*  
E. McClure<sup>1</sup>, N. Baker<sup>1</sup>, C. Hood<sup>2</sup>, R. Tomko<sup>1</sup>, L. Squeglia<sup>1</sup>, K. Gray<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC, <sup>2</sup>University of Kentucky, Lexington, KY
- 3:00 *Patterns of polysubstance use and anxiety sensitivity among adults with sedative misuse*  
V. Votaw<sup>1</sup>, R. McHugh<sup>2</sup>, K. Vowles<sup>1</sup>, R. Weiss<sup>2</sup>, M. Griffin<sup>3</sup>, K. Witkiewitz<sup>1</sup>, <sup>1</sup>University of New Mexico, Albuquerque, NM, <sup>2</sup>McLean Hospital, Belmont, MA, <sup>3</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 3:15 *Culturally relevant correlates of polysubstance use among frequent marijuana users: An examination of African American incarcerated men*  
P. Wheeler, D. Stevens-Watkins, S. Thrasher, J. Dogan, D. Lewis, University of Kentucky, Lexington, KY

### ORAL COMMUNICATIONS 25 THE CONTINUING CRISIS: OPIOIDS AND OVERDOSE

**Grand Oaks H**  
**1:30 - 3:30 PM**

Chairs: Robert Carlson and Ju Nyeong Park

- 1:30 *Unintentional drug overdose: Is more frequent use of non-prescribed buprenorphine associated with lower risk of overdose?*  
R. Carlson<sup>1</sup>, R. Daniulaityte<sup>1</sup>, S. Silverstein<sup>2</sup>, R. Nahhas<sup>1</sup>, <sup>1</sup>Wright State University, Dayton, OH, <sup>2</sup>Boonshoft School of Medicine Wright State University, Kettering, OH
- 1:45 *The geographic distribution of fentanyl-involved overdose deaths*  
E. Nesoff, C. Branas, S. Martins, Columbia University, New York, NY
- 2:00 *Novel strategies for the treatment of opioid use disorder: Anti-fentanyl vaccine*  
C. Haile<sup>1</sup>, G. Cuny<sup>1</sup>, A. Duddupudi<sup>1</sup>, H. Walters<sup>1</sup>, F. Orson<sup>2</sup>, Y. Kogan<sup>3</sup>, T. Kosten<sup>1</sup>, T. Kosten<sup>4</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>Baylor College of Medicine, Houston, TX, <sup>3</sup>Kadvax Technologies Inc, Houston, TX, <sup>4</sup>Baylor College of Medicine, Bellaire, TX
- 2:15 *Short-term effectiveness of a brief fentanyl test strip intervention in reducing overdose risk among women who use street drugs*  
J. Park<sup>1</sup>, C. Tomko<sup>1</sup>, B. Silberzahn<sup>2</sup>, B. Marshall<sup>3</sup>, K. Haney<sup>2</sup>, S. Sherman<sup>4</sup>, <sup>1</sup>Johns Hopkins University, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>3</sup>Brown University School of Public Health, Providence, RI, <sup>4</sup>Johns Hopkins Hospital, Baltimore, MD
- 2:30 *Predictors of baseline and recent non-fatal opioid overdose among a cohort of people who inject drugs in Melbourne, Australia*  
P. Hill, P. Dietze, M. Stooze, Burnet Institute, Melbourne, Australia

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## Wednesday, June 19, 2019

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- 2:45 *Recent incarceration and opioid-related risk in rural areas: Opportunities for harm reduction in the criminal justice system*  
E. Waddell<sup>1</sup>, G. Leichtling<sup>2</sup>, C. Hildebran<sup>2</sup>, P. Korthuis<sup>1</sup>, <sup>1</sup>Oregon Health & Science University, Portland, OR, <sup>2</sup>HealthInsight, Portland, OR
- 3:00 *Safety and liability concerns and naloxone deployment in response to an opioid overdose among patrol officers*  
M. Podolsky<sup>1</sup>, S. Mital<sup>2</sup>, P. Martinez<sup>1</sup>, T. Green<sup>3</sup>, J. Wolff<sup>1</sup>, R. Noonan<sup>1</sup>, J. Carroll<sup>4</sup>, <sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, <sup>2</sup>Emory University, Atlanta, GA, <sup>3</sup>Boston University School of Medicine, Boston, MA, <sup>4</sup>Elon University, Elon, NC
- 3:15 *Opioid overdose in patients treated with extended-release naltrexone: Postmarketing data from 2006 to 2018*  
G. Bloomgren, P. Jain, R. Marino, K. Marcopoul, M. Wenten, P. Vunnavu, M. Liles-Burden, A. Desai, S. Akerman, M. Sullivan, J. Fratanio, Alkermes, Inc., Waltham, MA

### **SYMPOSIUM XVII MECHANISMS FOR SEX AND GENDER DIFFERENCES IN ADDICTION: IMPLICATIONS FOR PREVENTION AND TREATMENT**

**Grand Oaks G  
1:30 - 3:30 PM**

Chairs: Mark Smith and Mariangela Martini

- 1:30 *Role of sex chromosome complement in vulnerability to cocaine use*  
M. Martini, North Carolina State University, Raleigh, NC
- 1:55 *Hormonal influences on the development of a cocaine-addicted phenotype in females*  
A. Bakhti-Suroosh, University of Virginia, Charlottesville, VA
- 2:20 *Gonadal hormones and vulnerability to opioid use*  
M. Smith, Davidson College, Davidson, NC
- 2:45 *Sex and gender differences in substance use disorder: Evidence from human studies*  
K. Brady, Medical University of South Carolina, Charleston, SC
- 3:10 *Sex/gender-specific prevention and treatment strategies for addiction*  
W. Lynch, University of Virginia, Charlottesville, VA

### ORAL COMMUNICATIONS 26 SADDLED WITH PAIN

Grand Oaks H  
3:45 - 4:45 PM

Chair: Caroline Arout

- 3:45 *Half of the pregabalin misuse among methadone maintenance patients is for pain relief*  
E. Peles<sup>1</sup>, A. Sason<sup>2</sup>, S. Schreiber<sup>3</sup>, M. Adelson<sup>2</sup>, <sup>1</sup>Tel Aviv Sourasky Medical Center & Sackler Faculty of Medicine, Tel Aviv University, Reut, Israel, <sup>2</sup>Adelson Clinic, Tel Aviv Medical Center, Tel Aviv, <sup>3</sup>Tel Aviv Medical Center, Tel Aviv, Israel
- 4:00 *Pain decreases after transition from chronic opioid therapy for pain to buprenorphine*  
K. Barth, J. Borckardt, K. Brady, Medical University of South Carolina, Charleston, SC
- 4:15 *Minocycline does not affect experimental pain or addiction-related outcomes in opioid-maintained patients*  
C. Arout<sup>1</sup>, A. Waters<sup>2</sup>, R. MacLean<sup>3</sup>, P. Compton<sup>4</sup>, M. Sofuoglu<sup>5</sup>, <sup>1</sup>Columbia University Medical Center, New York, NY, <sup>2</sup>Full Professor & Director of Graduate Studies, Bethesda, MD, <sup>3</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>4</sup>University of Pennsylvania, School of Nursing, Philadelphia, PA, <sup>5</sup>Yale University, New Haven, CT
- 4:30 *A behavioral economic analysis of cannabis and opioid co-use for pain*  
C. Bergeria, S. Dolan, M. Johnson, C. Campbell, K. Dunn, Johns Hopkins University School of Medicine, Baltimore, MD

### SYMPOSIUM XIX METHOCINNAMOX: A NOVEL ANTAGONIST FOR TREATING OPIOID OVERDOSE AND ABUSE

Grand Oaks G  
3:45 - 4:45 PM

Chairs: Charles France and James Woods

- 3:45 *MCAM: Not your run-of-the-mill irreversible opioid antagonist*  
J. Woods, University of Texas Health Science Center, San Antonio, TX
- 4:05 *Pharmacological properties of MCAM at mu, kappa and delta opioid receptors in vitro*  
W. Clarke, University of Texas Health Science Center, San Antonio, TX
- 4:25 *MCAM reverses and provides long-lasting protection against the effects of opioids in vivo*  
L. Gerak, University of Texas Health Science Center, San Antonio, TX

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**Wednesday, June 19, 2019**

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**SYMPOSIUM XVIII  
LEVERAGING TECHNOLOGY TO DEPLOY  
INNOVATIVE SUBSTANCE ABUSE TREATMENTS**

**Grand Oaks I  
3:45 - 4:45 PM**

Chairs: Allison Kurti and Stephen Higgins

- 3:45 *Smartphone-based financial incentives to promote smoking cessation among pregnant women*  
A. Kurti, University of Vermont, Burlington, VT
- 4:05 *Using transdermal alcohol monitoring in a contingency management procedure to promote healthier drinking patterns*  
D. Dougherty, University of Texas Health Science Center, San Antonio, TX
- 4:25 *Acceptability and willingness to pay for contingency management interventions among caregivers affected by an opioid use disorder*  
S. Ryan-Pettes, Baylor University, Waco, TX

**CPDD SWEEPSTAKES DRAWING**

**Grand Oaks M  
5:00 PM**

*You must be seated in one of the afternoon sessions in order to have your badge collected.*

***Have a safe trip home!  
See you next year at the Diplomat Beach Resort  
Hollywood, Florida, June 20th-24th, 2020***

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## SYMPOSIA

Sunday, June 16

I.

### ***Outcomes of Mindfulness-Based Interventions in the Treatment of Maternal Substance Use***

Chairs: Diane Abatemarco and Karol Kaltenbach

Maternal substance use and treatment is a complex public health concern. Women with substance use disorders report high levels of depression, anxiety, parenting stress, and adverse childhood exposures/trauma. Trauma as a leading cause for addiction behavior has not been systematically addressed. The use of mindfulness practices to ameliorate the effects of early life trauma and prevent intergenerational trauma among new mothers and their children has shown promise. Mindfulness practice supports mothers to be present with their children when interacting, while simultaneously highlighting non-judgment, self-compassion, self-regulation, and emotional awareness. This symposium will present data from two studies with women in treatment for opioid use disorder who participated in mindfulness-based interventions; one intervention during pregnancy and the other postnatally. The symposium will provide a comprehensive overview of the trauma-informed intervention programs and how each was designed to reduce stress, improve pregnancy outcomes and parenting responsiveness. A comprehensive presentation of the results will include both quantitative and qualitative findings. The quantitative data demonstrate improvement in general stress, parenting stress, mindfulness, parenting, and anxiety. The qualitative results focus on systematic program evaluation using focus groups and Re-AIM methods. Presentations will also include a comprehensive discussion of what the current research findings suggest for future mindfulness research in this population and the role of parenting to comprehensive treatment and relapse-prevention. Implications, plans for sustainability, and lessons learned, including barriers and assets for including mindfulness in treatment programs for pregnant and parenting women with substance use disorders, will also be discussed.

II.

### ***Developing and Utilizing Preclinical Models for Investigating Circuit-Based Mechanisms Controlling Behavioral Dysregulation in Addiction***

Chairs: Cody Siciliano and Erin Calipari

Drug abuse results in over 600,000 deaths and costs over 500 billion dollars in the United States annually. Despite efforts to elucidate the precise mechanisms by which drug-induced cellular dysregulation can lead to addiction, there has been limited success in translating findings from preclinical models into efficacious treatments for human substance abusers. Recent technological advances allow for unprecedented insight into neural circuitry controlling behavior; however, the impact of these technologies on our understanding of human addiction is inherently limited by the validity of the animal models that they are used to investigate them. Being able to dissociate discrete aspects of behavior and understand how each is dysregulated to drive addiction is critical to our understanding of the disorder. All participating investigators are at the forefront of developing and investigating innovative rodent models of addictive behaviors, and examining synaptic and circuit dysregulation with cutting-edge techniques. First, Dr. Calipari will present her work developing rodent models to examine the effects of cues on motivated behaviors. Using these models, she has identified the critical role that cues play in enhancing female self-administration and defined the associated neurocircuitry involved in this process. Dr. Taffe will discuss the development of compulsive behaviors and their manifestation following oxycodone self-administration. Finally, Dr. Siciliano will present a novel model of compulsion vulnerability, and discuss how the activity of single neurons in the prefrontal cortex during animals' first drug experience can predict the development of compulsive behaviors. Together, this session will highlight the importance of developing translational addiction models and will showcase the most recent advances in applying novel technologies to advance our understanding of the mechanisms controlling these behaviors.

### III.

#### ***Peripheral Mechanisms of Opioid Tolerances***

Chairs: William Dewey and Hamid Akbarali

Tolerance develops to the many different effects of opioids in the same individual to various degrees and at very different rates. The fact that tolerance develops to the euphoric effects of opioids faster than to the respiratory depressant effects may well be the cause of many lethalties to these widely abused and important therapeutic agents. For years, the studies related to the mechanisms involved in the tolerances that develops to these drugs have concentrated on effects in the brain and at the cellular and receptor levels. It is now clear from the work of the speakers of the symposium that the chronic effects of opioids on the microbiota, the resultant increase in epithelial membrane permeability in the gastrointestinal tract and marked systemic inflammation contribute to the mechanism of antinociceptive tolerance. Inflammation caused by other mechanisms including HIV infections and others also affect tolerance to morphine and other opioids. The speakers in this symposium will present evidence that peripheral changes induced by chronic morphine as well as by other external elements alter the activity of opioids at both peripheral and central neuronal sites. These studies, for the first time suggest the hypothesis that an “endocrine-like phenomenon” from the periphery, especially the gastrointestinal tract, might well be involved in the tolerance that develops to these drugs in the brain. Speculation as to the possible involvement of these peripheral sites in the development of physical dependence to opioids will also be discussed

### IV.

#### ***Developmental Factors Contributing to Opioid Use Disorder Vulnerability***

Chairs: Yasmin Hurd and Junstine Larson

Evidence suggests that both genes and early environmental factors contribute to the future propensity to develop opioid use disorders (OUD). These factors may include early life (embryonic, fetal or after birth) exposure to opioids and other drugs, genomic predisposition for substance dependence, childhood trauma and maltreatment, and psychosocial adversities. Exactly how these environmental insults interact with the genome to alter the developmental trajectory of brain and behavior, and promote the propensity to develop OUD will be discussed at this symposium. Dr. Strathearn will present his studies on long term effects of child maltreatment on risk of substance abuse and dependence. Dr. Andersen will present data on how early life trauma and opiates interact to produce susceptibility to opioid dependence. Dr. Hurd will talk about her research on the effect of embryonic exposure to cannabinoids that heightens adult opioid sensitization and craving. Finally, Dr. Nielsen will discuss how genomic variations and epigenetic regulation that impact brain development and exacerbate vulnerability for OUD.

V.

***Application of Behavior Analysis to the Treatment of Addiction:  
Reflections on a Short Career***

Chairs: Kathleen Carroll and Maxine Stitzer

Nancy Petry was a creative and highly productive investigator who made many important contributions during a career cut short by her recent untimely death. This symposium is in her honor to acknowledge and celebrate those many contributions. The title reflects the behavior analysis perspective that underpinned her work while the presentations highlight the major aspects of her contribution. In the first presentation, Warren Bickel will describe how Nancy began her career with work on behavioral economics and delay discounting, how that perspective informed her subsequent treatment development work and where the field has taken the early discounting work. John Roll will discuss Nancy's creative contribution to the development and advance of contingency management as a treatment for substance use disorders and the large body of research she generated with her colleagues that has helped to cement this approach as an evidence-based treatment intervention. Carla Rash will follow with a discussion of Nancy's substantial body of contingency management dissemination work, a valuable asset to clinicians. This work includes development of counselor training methods, research on efficacy of training interventions and dissemination of CM throughout the network of Veteran's Administration substance use disorder programs. The fourth presentation by David Ledgerwood highlights another independent line of research on gambling disorders in which Nancy stimulated advances through her assessment and intervention research. The symposium will conclude with remarks by the session chairs. Overall, the symposium will provide a valuable review of Petry's creative and productive career contributions while acknowledging her substantial impact.

**Monday, June 17**

VI.

***Exploring Non-Opioid Approaches for the Treatment of Pain***

Chairs: David Shurtleff and Emmeline Edwards

Over 25 million Americans suffer from chronic pain, a highly debilitating medical condition that is complex and difficult to manage. In recent decades, there has been an overreliance on prescription opioids for chronic pain, contributing to an epidemic of opioid overdose deaths, misuse, addiction, and other harms, such as fractures and myocardial infarction. Evidence further indicates there is an associated dose-dependent risk for these harms. At the same time, there is insufficient evidence to determine the effectiveness of long-term opioid therapy for improving chronic pain and function. Given the risk-benefit profile of opioids for the management of pain, there is an increased interest in, and need for exploring, developing and utilizing non-opioid (including non-pharmacologic) approaches to manage pain. This symposium will explore some of these emerging interventions, and their underlying mechanisms as alternatives for the treatment of pain. Symposium topics will focus on the neuromodulatory effects of acupuncture and its role in pain management; the neuroimmune system's role in modulating pain and analgesia, offering a novel target for medication development; the antinociceptive effects of green light therapy on chronic pain, highlighting possible mechanisms, and preliminary results from fibromyalgia and migraine clinical trials; and brain circuitry and neurochemistry associated with mindfulness-based meditation for the management of pain. Discussion will summarize key findings, and future directions including the NIH HEAL (Helping End Addiction Long-term) initiative goals in the discovery and pre-clinical development of pain treatments and advancing pain treatments through the clinical research pipeline.

VII.

***Predictive Modeling in Addiction:  
Recent Findings and Implications for Precision Medicine***

Chairs: Sarah Yip and Susan Whitfield-Gabrielli

Recent advances in predictive modeling and machine-learning methods enable data-driven prediction of complex behaviors, including substance use. By focusing on individual differences and generalization to novel subjects (i.e., cross-validation) these approaches overcome limitations of traditional approaches, increasing the likelihood of replication and potential translation to clinical settings. However, these methods are still relatively new to clinical research and have yet to be fully leveraged within the context of addictions. This symposium brings together junior and senior addiction researchers to demonstrate the potential of machine-learning methods to inform clinical and neurobiological understanding of substance-use disorders and their treatment. Research will be presented to demonstrate the ability of these approaches to (i) accurately classify substance-using versus non-substance-using individuals using resting state fMRI data; (ii) predict substance-use initiation in developmental cohorts; (iii) identify brain networks predictive of opioid and cocaine abstinence during treatment; and (iv) predict future relapse to methamphetamine. Presentations will cover findings from a range of machine-learning approaches, including support vector regression, elastic net, and connectome-based predictive modeling approaches. The discussant, a world-recognized expert in machine learning, will synthesize research findings and discuss implications for precision medicine. While the goal of this symposium is to showcase clinically relevant addiction findings derived from machine-learning methods, our paired Workshop ('Introduction to Machine Learning and Applications to Addiction Research') will provide a practical introduction to machine-learning methods to encourage future adoption of these methods in addiction research.

VIII.

***What Predicts Early Alcohol Sipping, Caffeine Use, and Screen Media Activity in Youth?  
Two-year Findings from the Adolescent Brain Cognitive Development (ABCD) Study***

Chairs: Susan Weiss and Krista Lisdahl

The Adolescent Brain Cognitive Development (ABCD) Study is a landmark multi-site 10-year longitudinal study that has now successfully enrolled over 11,800 youth. One aim of the ABCD Study is to examine the risk and protective factors influencing onset and trajectories of substance use (SU) outcomes. The symposium will begin by presenting updated SU patterns observed in the ABCD youth at baseline and year-1 follow up (estimated n=11,800). For example, current baseline data (n=11,199) demonstrated approximately 23% of youth aged 9-10 reported sipping alcohol in their lifetime. By year 1, 12.6% of the 4508 participants to date reported a new onset of sipping alcohol. The speakers will then present a series of studies examining risk and resilience factors associated with early alcohol sipping, caffeine and screen media usage behaviors. Thus far, findings suggest that personality (e.g., impulsivity, sensation seeking, planning, perseverance, prosocial behavior), cognitive (problem solving), culture and environment (school involvement, parental religiosity, familism, family conflict), and demographics (gender, ethnicity) were linked with alcohol sipping. Youth with more general screen media usage demonstrated higher family conflict and more sleep disturbance. The symposium will include late-breaking findings (full cohort) and will discuss future directions and implications. On-going longitudinal assessment of these domains over a period of ten years in a diverse, nationwide sample of youth presents an exceptional opportunity to examine the factors influencing the onset and sequela of substance use and its consequences in youth that live in the United States.

IX.

***Enlarging the Toolbox: Using Preclinical Data to Identify New Targets for Medication-assisted Treatment of Opioid Use Disorder***

Chairs: Jane Acri and Kurt Rasmussen

The CDC has reported that more than 42,000 Americans died of opioid overdose in 2016 and that over 2 million Americans live with opioid use disorder (OUD). In response to this public health crisis, the NIH has launched the HEAL (Helping to End Addiction Long-term) Initiative. Part of this initiative includes the development of new treatments for OUD to augment existing agonist/antagonist therapies. In this symposium, we will review preclinical data on several molecular targets that suggest their potential for the development of ligands as treatments for OUD. Dr. Kurt Rasmussen will then discuss how NIDA will help advance medication development efforts through interactions with the private sector, contract work, and new funding opportunities.

**Tuesday, June 18**

X.

***To Smoke or Not to Smoke: That is the Cue-estion***

Chairs: Yasmin Zakiniaieiz and Eric Woodcock

Cue-reactivity, physiological and/or subjective responses to drug-related stimuli, plays a critical role in maintaining drug use and precipitating relapse. Neuroimaging research has highlighted important neural structures and circuits that mediate physiological and subjective responses to cigarette-related cues, which have been linked to continued drug use. This symposium will showcase human neuroimaging and laboratory work to explore the specific brain regions involved in cue reactivity as well as the influence of (1) acute stress, (2) biological sex/hormones, and (3) novel interventions, on cue-reactivity and smoking behavior in cigarette smokers. Insight into factors that influence cue-reactivity are likely to provide new targets for smoking cessation. Novel interventions such as using nicotine-free electronic cigarettes as adjuvant therapy, timing quit dates to coincide with hormonal variation, and reconsolidation-based strategies will be discussed. The speakers, leaders in the field of cigarette smoking cue-reactivity, will present neuroimaging and behavioral findings that highlight the importance of cue-reactivity from drug craving to drug seeking to treatment outcomes. The discussant, an expert in neuroimaging stress and cue-reactivity of addictive disorders, will synthesize study findings and identify knowledge gaps to facilitate audience discussion on the challenges and opportunities of cue-reactivity in smokers.

XI.

***Studies of Medications for Addiction Treatment in Correctional Settings Cooperative (SOMATICS): Addressing the Opioid Crisis in Vulnerable Populations***

Chairs: David Farabee and Redonna Chandler

With more than one in ten inmates in the US reporting regular opioid use, correctional settings offer an excellent opportunity for early identification and treatment of individuals with opioid use disorder (OUD). The importance of initiating treatment in jail is underscored by the fact that the risk of death during the first two weeks following release from prison is nearly 13 times greater than among individuals of similar demographic background, with drug overdose being the leading cause (Binswanger et al., 2007). But the use of medications to treat OUD remains inadequate in US correctional settings, placing persons with OUD at high risk for relapse to drug use, overdose, and mortality immediately following release from incarceration. The Studies on Medications for Addiction Treatment in Correctional Settings (SOMATICS) Collaborative, funded by the National Institute on Drug Abuse (NIDA), was designed to shed light on this critical public health problem. SOMATICS includes three research centers, each conducting an individual randomized trial while sharing the control condition study arm (Enhanced Treatment as Usual [ETAU]) as well as core assessments across all sites. Specifically, the trials compare (1) the initiation of medication (extended-release naltrexone (XR-NTX)—in New York City and in Albuquerque, NM and methadone in Baltimore, MD with vs. without patient navigation compared to ETAU for adult inmates with OUD who are transitioning to the community. This presentation will provide preliminary opioid use outcomes and cost data.

## XII.

### ***Etiology and Treatment of Co-Occurring Substance Use Disorders and Attention-Deficit Hyperactivity Disorder: From Preclinical Studies to Big Data Analytics***

Chairs: Emily Hankosky and Linda Dwoskin

Neuropsychiatric disorders are highly prevalent among individuals with substance use disorders (SUDs). Attention deficit hyperactivity disorder (ADHD) is one of the most prevalent neuropsychiatric disorders, and it is estimated that more than 20% of individuals with SUD have co-occurring ADHD. Emerging data analytics tools and resources provide opportunities for generating new insights into the mechanisms of SUD pathology and these discoveries are most robust in the context of multidisciplinary investigations. This symposium will seek to integrate evidence from multiple scientific domains to understand the most recent findings regarding the etiology and treatment of co-occurring SUD and ADHD. The goals of this symposium are to present evidence spanning the translational science spectrum from preclinical studies to big data analytics on the role of ADHD in the etiology and treatment of SUDs. Specifically, the symposium will cover the following topics: 1) preclinical studies on the impact of ADHD medication exposure on the developing brain and drug-seeking behavior, 2) big data analytics investigating adolescent-onset ADHD medication utilization and SUD risk, and 3) clinical trial evidence on the efficacy of ADHD medications to treat co-occurring ADHD and SUD. The symposium will culminate in a discussion of how future collaborations can most effectively leverage emerging data technologies with existing tools to advance our understanding of risk factors and treatments for SUDs.

## XIII.

### ***Self-sustaining Strategies Offering Nondrug Choices Reduce Long-term Drug Craving and Relapse: Sex Differences***

Chairs: Marilyn Carroll and Wendy Lynch

Addiction to stimulant drugs such as nicotine, methamphetamine and cocaine costs millions of dollars to treat and still leads to millions of lives lost every year. This session explores the problem that after drug use stops through self-imposed abstinence or treatment, craving begins, incubates over weeks-months, and leads to relapse. This session will examine ways to treat “incubation of craving” and implement behavior change that can be self-maintained long after treatment ends. In animal studies this has been done by arranging for voluntary access to competing nondrug rewards that the user chooses in place of using drugs. In the four presentations, 1) Venniro et al. show that rats will choose social interaction with another rat rather over methamphetamine or heroin, and this corresponds with activation of central amygdala AKCo expressing inhibitory neurons; 2) Carroll et al. discusses incubation of cocaine and nicotine craving in rats, and multi-triggered relapse that were blocked by voluntary aerobic exercise during a 4-week period when incubation of craving occurred. Sex differences in incubation of craving will be reported. 3) Lynch et al. will discuss aerobic exercise as an intervention cocaine relapse, as well as the importance of considering sex differences and molecular mechanisms in addiction and its treatment. 4) Silverman and Holtyn will discuss their human work with the therapeutic workplace as a model anti-poverty program to reduce addiction. A common theme is voluntary, self-maintained treatments over long durations to block incubation of craving and relapse.

XIV.

***The Use of Technology to Improve Detection and Treatment  
of Perinatal Substance Use Disorders***

Chairs: Constance Guille and Kimberly Yonkers

The prevalence of perinatal substance use is increasing and associated with significant maternal, fetal, and newborn morbidity and mortality. The 2017 National Survey on Drug Use and Health [NSDUH] demonstrates an increase in past month illicit substance, tobacco and alcohol use among pregnant women compared to NSDUH data collected in 2015 and 2016. According to the 2017 NSDUH survey, in the preceding month 14.7% of pregnant women used tobacco, 11.5% used alcohol and 8.5% used an illicit drug. Early identification and treatment of pregnant women with substance use disorders is vital to improving the health and well-being of mothers, their infants and children. Barriers to care, however prevent pregnant women from accessing treatment. Innovative solutions are needed to improve detection of perinatal substance use and facilitate access to evidence-based treatment. Dr. Kimberly Yonkers will present results from a NIH trial that screened women for substance use and provided a motivational interview to help participants reduce substance misuse (Screening, Brief Intervention and Referral to Treatment; SBIRT). The behavioral intervention was delivered either by a clinician or via a computerized avatar and was compared to usual care. Findings on the impact of the SBIRT intervention on substance misuse, compared to usual care, will be presented. Dr. Constance Guille will present results from a NIDA and Duke Endowment-sponsored trial delivering perinatal opioid use disorder treatment in-person, compared to telemedicine. Using propensity score matching between group (in-person vs. telemedicine) outcomes related to substance use, and obstetrics and newborn health will be presented. Dr. Ariadna Forray will present results from a trial that used hand-held computers to undo the attentional bias that perinatal women who smoked have toward smoking and tobacco-related products.

XV.

***The Implementation Chasm for Harm Reduction Services in Rural Areas***

Chairs: Hannah Cooper and Rich Jenkins

Epicenters of opioid misuse and related harms have expanded from urban centers to rural areas. This expansion is creating wide “implementation chasms” for harm reduction services in rural areas; IOM defines “implementation chasms” as gaps between advances in scientific knowledge and their programmatic applications. Syringe service programs, for example, are vital harm reduction services, and yet 98% of young adults living in rural areas who tested positive for HCV in 2015/2016 had to travel >10 miles to reach such programs, compared with 46% of their urban counterparts. The symposium will present qualitative findings from four rural sites funded through the Rural Opioid Initiative, an initiative supported by NIDA, SAMHSA, the CDC, and the Appalachian Regional Commission. Presentations will illustrate the nature of this implementation chasm; identify novel strategies used in rural areas to close it; and describe opportunities to improve rural harm reduction systems.

**Wednesday, June 19**

**XVI.**

***Novel and Meaningful Clinical Trial Endpoints  
in Substance Use Disorder Treatment***

Chair: Brian Kiluk

Achievement of sustained abstinence from drugs is currently the only valid endpoint accepted by the US Food and Drug Administration (FDA) for evaluating pharmacotherapies for most substance use disorders (alcohol use disorder being the exception). However, sustained abstinence is increasingly regarded as an overly stringent and restrictive outcome that may be a factor contributing to the shortage of approved pharmacotherapies. As part of the federal efforts to combat the opioid crisis, the FDA has recently expressed commitment to the development and use of new non-abstinence-based endpoints as part of product development. Yet despite long-standing interest and rising urgency, the identification of an alternative to sustained abstinence as a clinically meaningful endpoint for clinical trials has been elusive. This symposium will highlight the latest efforts and potential future directions toward the identification of meaningful non-abstinence-based endpoints for various substances of abuse by leveraging data from completed clinical trials. This will include a presentation on novel, reduction-based endpoints for alcohol clinical trials, where is there precedent for regulators accepting outcomes other than abstinence ('no heavy drinking days') that may serve as a useful model for the development of alternative outcomes for other substances. Additional presentations in this symposium will review potential alternative endpoints in clinical trials for cocaine, cannabis, and opioids. The discussant will provide insight into the evolution of clinical trial endpoints and a vision for future directions.

**XVII.**

***Mechanisms for Sex and Gender Differences in Addiction:  
Implications for Prevention and Treatment***

Chairs: Mark Smith and Mariangela Martini

Sex and gender differences have been described for multiple aspects of addiction/substance use disorder including rates of use, vulnerability to use, progression to addiction, relapse, and treatment. In this session, we will explore recent evidence from human and laboratory animals for mechanisms underlying sex and gender differences in addiction focusing on biologically and psychologically based mechanisms. Mariangela Martini (North Carolina State University) will discuss evidence in mice for a role of sex chromosome complement in vulnerability to cocaine use as a mechanism underlying the enhanced vulnerability observed in females. Anousheh Bakhti-Suroosh (University of Virginia) will discuss evidence in rats for the enhancing effects of estradiol on the development of motivational aspects of an addicted phenotype as a mechanism underlying the enhanced progression to addiction observed in females. Mark Smith (Davidson College) will present data in rats showing that estradiol, which is known to enhance vulnerability to stimulants in females, has a different, and sometimes opposite effect, on sensitivity to opioids. Kathleen Brady (Medical University of South Carolina) will present data in humans on sex and gender differences in psychiatric comorbidities and will discuss how differences in the temporal relationship between the first presentation of addiction and the first psychiatric symptoms impact the trajectory of addiction. She will also present data on sex differences in response to stress and discuss implications for prevention and treatment. Finally, Marc Potenza (Yale University) will synthesize the findings from these various research perspectives with a view toward implications for sex/gender-specific prevention and treatment strategies.

## XVIII.

### ***Leveraging Technology to Deploy Innovative Substance Abuse Treatments***

Chairs: Allison Kurti and Stephen Higgins

Substance abuse disorders represent a source of premature morbidity and mortality for which evidence-based treatments exist. Unfortunately, access and utilization of these treatments are not equivalent across the general population, with certain subpopulations experiencing disproportionate geographic and socioeconomic barriers to receiving treatment. This mini-symposium will expose attendees to three novel innovative approaches to surmounting treatment barriers by leveraging technological advancements to deliver evidence-based interventions to populations that remain hard to reach or difficult to treat. Dr. Allison Kurti will describe the promising data that resulted from a pilot study examining the feasibility, efficacy, and cost-effectiveness of a smartphone-based financial incentives intervention to reduce smoking during pregnancy. Smoking monitoring and delivery of incentives in this study were completed using a mobile app developed by DynamiCare Health, Inc. Dr. Donald Dougherty will discuss results from a study using transdermal alcohol monitoring in the context of an incentives-based intervention to reduce risky alcohol consumption. Finally, Dr. Stacy Ryan will present results of an internet-based survey querying parents about their attitudes and expectations regarding a smartphone-based financial incentives program for supporting recovery from opioid use disorder among their adolescent and emerging adult offspring. Considered together, this mini-symposium will provide the audience with an exciting glimpse into the emerging field of mHealth, as well as an enhanced understanding of the feasibility, efficacy, and acceptability of existing technology-based substance abuse treatments.

## XIX.

### ***Methocinnamox: A Novel Antagonist for Treating Opioid Overdose and Abuse***

Chairs: Charles France and James Woods

Deaths from opioid overdose continue to rise and are a major factor contributing to the decreasing life expectancy of Americans. Naloxone is the only antidote currently available to reverse opioid-induced respiratory depression; however, a very short duration of action and surmountability limit its effectiveness. Options that are currently available to treat opioid abuse include methadone and buprenorphine, which are used because they are agonists at the same receptors ( $\mu$ ) as, and therefore share many effects with, abused opioids; consequently, their primary advantage is the ability to mimic some effects of abused opioids. While effective in many patients, both drugs have limitations. For example, methadone and buprenorphine are diverted and abused, and both drugs can have serious unwanted effects, including respiratory depression and death, especially when combined with other drugs such as alcohol or benzodiazepines. A second strategy for treating opioid abuse uses the opioid receptor antagonist naltrexone to block the abuse-related effects of opioids. Naltrexone avoids the diversion, abuse, and serious adverse effects of methadone and buprenorphine; however, like naloxone, a short duration of action and surmountability limit its effectiveness. A medication with a longer duration of action that prevents and reverses the effects of opioid agonists in a manner that cannot be surmounted by increasing doses of agonist could improve significantly treatment of abuse, overdose, and provide extended protection from overdose. This symposium will provide a brief history and overview of the search for non-addictive analgesics and how that resulted in the discovery of methocinnamox (MCAM), a pseudoirreversible,  $\mu$  opioid receptor selective antagonist. We will present results comparing MCAM to naloxone in vitro showing MCAM to be a non-competitive, non-surmountable antagonist selectively at  $\mu$  receptors and demonstrate that in monkeys MCAM blocks, reverses, and protects against the respiratory-depressant effects of heroin as well as blocks the i.v. self-administration of heroin for a week or longer after a single administration. The symposium will propose that MCAM is a safe, effective, and long-acting treatment for opioid overdose and abuse that could be advantageous for many patients (e.g. compliance would be insured by an extended-release formulation of a pseudoirreversible antagonist) and in many treatment settings (e.g. where access to health care or treatment providers is not available or practical).

## WORKSHOPS

**Sunday, June 16**

I.

### ***Navigating a Career in Addiction Science***

Chairs: Denise Vidot and Cecilia Bergeria

The traditional route toward academia within a career in addiction science does not appeal to everyone. If you are a budding addictions investigator with new ideas and eager to find your niche in the world of addiction science, but could use some guidance, then this workshop is for you. It will focus on navigating traditional and non-traditional career trajectories. The workshop will feature a diverse set of speakers who have ‘been there and done that’ and want to share their experiences. Speakers will focus on 1) Pre/Post-Doctoral Fellowships, 2) Early Career Faculty Experience at a Research Institution, 3) Early Career Faculty Experience at a Liberal Arts Institution, 4) Careers in Industry, and 5) Careers in Policy. Each presentation will outline steps that can be taken to maximize your career stage-specific experience and make you a competitive job applicant for the next stage of your career. Examples of topics that will be covered include, how to choose mentors; striking a balance between executing your mentor’s vision and growing as an independent scientist; how to narrow down an innovative and significant research question; publishing amidst other responsibilities; establishing your niche and conveying its importance to potential employers; collaborating and networking; deciding whether or not to teach; life-work balance; and crucial to it all – time management strategies. After the presentations, the remainder of the workshop will be spent in small groups led by each speaker for a more personalized experience to discuss attendee questions as well as an opportunity for networking.

II.

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

Chairs: Howard Chilcoat and Maria Parker

This year’s workshop will focus on how epidemiology can be used to inform development of medications to treat substance use disorder and to address FDA regulatory commitments to assess risk of abuse, misuse, addiction, overdose, and death related to the use of opioids to treat chronic pain. The first talk will demonstrate how epidemiologic approaches can inform all stages of drug development ranging from identification of targets for medication development, clinical trial design, and post marketing research. The second talk will present methods, including use of natural language processing, to measure opioid abuse, overdose, and death and their link to prescribed opioid use using medical claims and electronic medical records data. The third speaker will discuss a study to validate measures of opioid addiction among patients with chronic pain. The final talk will present emerging practices for the use of social media data for pharmacovigilance.

## WORKSHOPS

**Sunday, June 16**

III.

### ***25th 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 strategy 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 25th 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.

IV.

### ***Deep Phenotyping, Drug Development Tools and -omics Biosignatures for SUDs***

Chairs: Tanya Ramey and F. Gerard Moeller

There is a need to advance a composite endophenotypical characterization of substance use disorders clinical manifestations to enable SUDs successful drug development and speedy regulatory approvals. In the context of the current Opioid Crisis, new and expanded range of treatments are needed to address the public health needs. The advent of dimensional Research Domain Criteria (RDoC)-based approach to psychopathology conceptualized as neurofunctional domains, including those related to substance use disorders (SUDs), requires modification and compilation of psychometric measures and behavioral tasks to assess the SUDs phenotypes along key domains. Furthermore, corresponding to addiction-related domains, appropriate clinical outcomes assessments standardization and potential certification as Drug Development Tools could help to move addictions drug development forward. In alignment with the above, we will discuss a battery of clinical assessment measures along the key addiction domains -NIDA Phenotypical Assessments Battery (NIDA PhAB), neurocircuitry underpinning SUDs constructs and sub-constructs. We will also address the search for more elemental peripheral -omics derived components to progress creating potentially composite SUDs endophenotypes, biomarkers and biosignatures. This workshop will bring together efforts from clinical and translational and Big Data fields to continue on the path of addictions biomarkers development, discuss applications of NIDA PhAB in novel studies in SUDs populations.

V.

### ***Social Media: Learning to Tweet Yourself Right***

Chairs: Erin Winstanley and Chris Wolf

Social media facilitates the dissemination of researchers' work to audiences as broadly or selectively as they might wish. This workshop will provide timely, common-sense advice on how to navigate the world of social media for the purpose of promoting your science.

**Monday, June 17**

## **WORKSHOPS**

VI.

### **Communicating Your Science**

Chairs: Erin Winstanley and Margaret Chisolm

The advancement of addiction science relies on effective communication of scientific discoveries to scientists and other addiction research stakeholders including funders, policy makers, clinicians, learners, patients, and families. While publication of scientific findings in peer-reviewed journals is the gold standard, the reach of this communication medium is limited and increasingly scientists are sharing their findings in non-academic outlets (e.g., media, lay publications) and using Internet-based tools to increase reach. Scientists rarely receive training on how to improve communication of their research findings as part of their formal academic education and it is important to ensure that they have information on the key elements of successful communication, as well state-of-the-art strategies. The overall purpose of this workshop is to provide addiction scientists with knowledge and a set of tools that will help them to disseminate effectively their scientific results and to optimize the reach, relevance and impact of their discoveries.

VII.

### ***Introduction to Machine Learning and Applications to Addiction Research***

Chairs: Sarah Yip and Dustin Scheinost

This workshop brings together addiction researchers with expertise in data science, neuroimaging and biomedical engineering to provide a practical introduction to common machine learning methods. In a series of didactic presentations, workshop participants will be (i) introduced to commonly used machine-learning approaches (including pros and cons of different methods); (ii) presented with practical guidelines for incorporating these methods into their work and avoiding common methodological pitfalls; (iii) guided through an interactive analysis of a real-world clinical dataset; and (iv) provided with an overview of valuable resources for future analysis support (e.g., guides to machine learning in Matlab). Finally, the Discussant, a senior program officer at NIDA, will examine the potential of these approaches to inform future addiction research. The goal of this workshop is to provide a practical introduction to machine learning methods. However, our paired Symposium ('Predictive Modeling in Addiction: Recent Findings and Implications for Precision Medicine') will showcase cutting-edge addiction research findings derived from machine learning methods. By attending both sessions, participants will learn how categorical and dimensional machine learning models are generated, and how adoption of these methods can advance understanding of the pathophysiology of addictions and inform clinical decision-making.

## WORKSHOPS

**Monday, June 17**

VIII.

***Reaching Underserved Smokers: New Strategies and How to Implement Them***

Chair: Joy Schmitz

Rates of tobacco smoking remain unacceptably and disproportionately high in subpopulations of smokers who are underserved. Compared to the general population, underserved smokers are less likely to receive evidence-based smoking cessation treatment, and more likely to face economic and other challenges that undermine motivation to quit and treatment adherence. Despite the disparate smoking rates, little attention has been placed on gaining access to and developing treatment models that meet the needs of underserved populations. The specific aims of this workshop are to (1) call attention to the major tobacco-related disparities among underserved populations; and (2) describe new and creative methods being used to identify “hidden” populations and address barriers to tobacco cessation in underserved smokers. Presentations of novel work will provide the audience with broad coverage of this topic. Dr. Yammine will describe how to use the mobile dental clinic as a teachable moment for tobacco intervention in rural counties. In her work with low-income mothers of preterm infants, Dr. Stotts will discuss the neonatal intensive care unit as a setting in which to identify young smokers and deliver smoking cessation interventions. Dr. Cropsey will describe a behavioral approach to improve adherence to smoking pharmacotherapy in low-income patients, while Dr. Vidrine will address strategies targeting health literacy to improve treatment adherence. Dr. Brunette will present data on the efficacy of web-based motivational education and abstinence-contingent monetary incentives for smoking cessation in patients with severe mental illness. Insights from Dr. Higgins, Discussant, will provide the audience with recommendations and research priorities.

IX.

***Using Implementation Science Principles and Interventions to Improve Substance Use Services Linkage for Justice-Involved Adolescents: Findings from the NIDA JJ-TRIALS Cooperative Agreement and Treatment Effectiveness Society for Adolescent Substance Abuse***

Chairs: Steven Belenko and Danica Knight

Substance use (SU) is common among justice-involved youth and a primary predictor of recidivism; 51% of youth have SU problems requiring treatment. Because of limited focus on SU and limited coordination across juvenile justice [JJ] and behavioral health [BH] systems, youth under community supervision often do not receive services that improve clinical outcomes. This workshop presents findings from the Juvenile Justice—Translational Research on Interventions for Adolescents in the Legal System (JJ-TRIALS) project, a NIDA-funded cooperative aiming to improve delivery of services for substance-involved delinquent youth (Knight et al., 2016) and testing the impacts of Core and Enhanced implementation interventions on SU service receipt along the Behavioral Health Services Cascade (Cascade; Belenko et al., 2017). Presentation 1 reports on findings on the characteristics of more than 25,000 youth in 34 counties in 7 states, and individual and contextual factors affecting service receipt along the Cascade. Presentation 2 provides findings from tests of the main hypotheses on the impact of JJ-TRIALS on service receipt, and the additive impact of facilitation in the enhanced condition. Presentation 3 examines the conceptualization and operationalization of the implementation science construct of *site engagement*, using a multidimensional approach to measuring and tracking site engagement. Presentation 4 examines the influence of individual and agency-level factors on interagency service coordination between JJ agencies and BH partners, using multi-level modeling based on staff survey data from 549 JJ and BH staff. The workshop concludes with a discussion of research and practice implications, and ends with a SASATE business meeting.

## WORKSHOPS

### Monday, June 17

X.

#### **Opioid Use Disorder Impacts Diverse Communities Too!**

Chairs: A. Kathleen Burlew and Aimee Campbell

Despite less media attention to the opioid epidemic among racial/ethnic minorities, the impact on the health and well-being of these individuals, families, and communities has been significant. Although Blacks and Hispanic/Latinos had lower opioid overdose rates than either Whites or Native Americans prior to 2016, the Centers for Disease Control and Prevention reports that the overdose death rates are rising faster among Latinos and Blacks than Whites. Given evidence of racial/ethnic differences in etiology, pathways to treatment, treatment response, and retention, research on specific racial/ethnic minorities is warranted.

### Tuesday, June 18

XI.

#### **Manuscript Review: Tips and Traps for Emerging Investigators in Drug Dependence Research**

Chairs: James Sorensen and Joseph Gwydish

The substance use disorders field needs increasingly productive investigators who publish high-quality scientific reports. This workshop focuses on training emerging investigators to review manuscripts submitted to professional journals. Presenters are investigators in preclinical, clinical, and services research, and include current editors of scientific publications. All presenters suggest both conceptual and practical guidelines. While the workshop aims to assist young investigators in becoming proficient peer reviewers, both junior and senior colleagues can benefit and provide their perspective. In this interactive workshop, a third of the time is reserved for audience comments and discussion.

XII.

#### ***Expanding the Impact of Substance Use Disorder Research: Economic Analysis for Program and Policy Evaluation***

Chairs: Sean Murphy and Kathryn McCollister

Access to evidence-based therapies for individuals with substance use disorders (SUD) continues to be a challenge, notably for residents of rural communities and among those without health insurance coverage. Economic evaluation studies can support broadening access to SUD treatment by informing stakeholders how best to allocate limited resources across competing public health initiatives, including SUD treatment. Convincing stakeholders to expand access to treatment or modify current behavioral health services delivery systems requires not only clinical evidence, but also consideration for the additional costs and reallocation of existing resources associated with these changes. Moreover, failure to account for all relevant costs and benefits/cost-offsets associated with an effective intervention can undermine its true value. This workshop introduces participants to economic evaluation methods tailored for the assessment of treatment interventions for SUDs using interactive exercises and group-based learning methods. Featured economic evaluation cases for the workshop are based on recent economic-evaluation studies conducted by our team. The specific aims of this workshop are to 1) provide an overview of economic evaluation methods, and discuss the relative merits of each approach with regard to SUD interventions; 2) promote audience engagement by working through key components to an economic evaluation, such as defining the most appropriate analysis perspective, selecting appropriate measures and data sources for each perspective, calculating and interpreting cost-effectiveness ratios, addressing analytic challenges; and 3) help participants understand how economic evaluations complement clinical effectiveness studies and can expand the impact of such research by addressing feasibility, budgetary, and sustainability concerns of multiple stakeholders.

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## Notes

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