

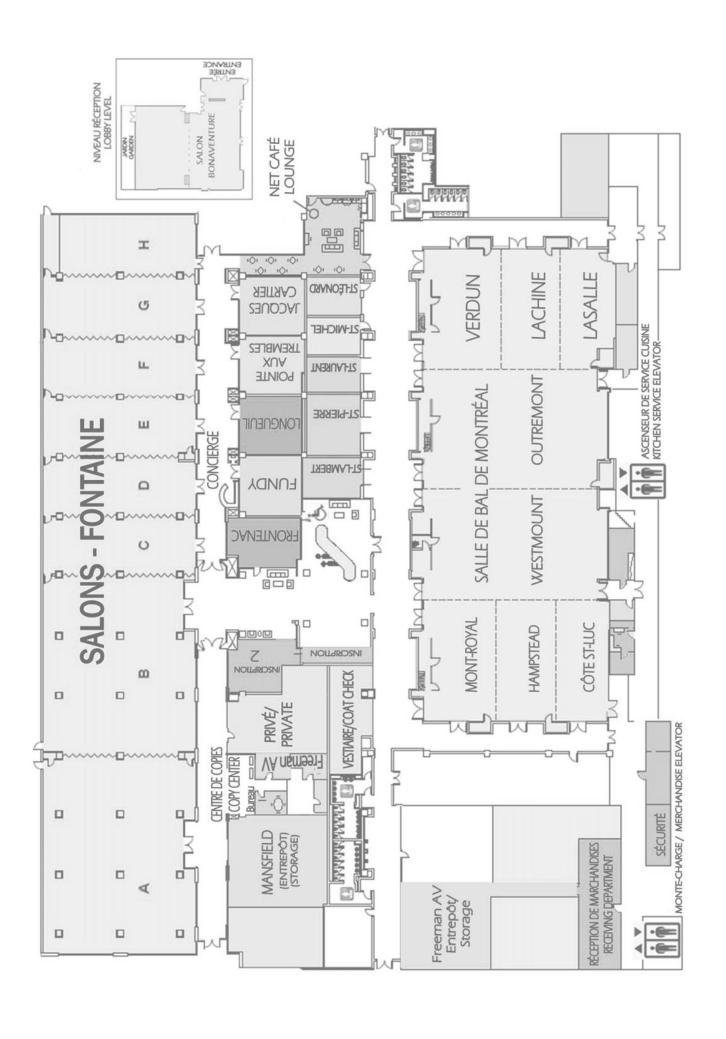
# **CPDD 79th Annual Scientific Meeting Program**

June 17-22, 2017

HÔTEL BONAVENTURE

Montréal, Canada





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#### PRE- MEETING SATELLITES

10th Annual International Women's and Children's Health and Gender Group Conference Chaired by Wendee Wechsberg Friday, June 16, 2017 **Fontaine A&B 9:00 AM – 5:30 PM** 

The 2017 NIDA International Forum: Building International Collaborative Research on Drug Abuse

• NIDA – Drug Flows Research Consortium

Friday, June 16, 2017

Montreal Ballroom – Verdun

1:45 PM – 3:45 PM

• NIDA-Special Issues Group Meeting

Friday, June 16, 2017

**Montreal Ballroom-**

**Mont-Royal** 

3:00 PM - 5:00 PM

 NIDA-ISAJE Workshop & NIDA International Networking Session Friday, June 16, 2017 Montreal Ballroom – Lachine/Lasalle 4:00 PM – 8:00 PM

• NIDA International Plenary

Saturday, June 17, 2017 Montreal Ballroom – Westmount&Outremont 8:30 AM – 4:45 PM

The International Study Group Investigating Drugs as Reinforcers (ISGIDAR)
Chaired by Mark Smith

Saturday, June 17, 2017 **Montreal Ballroom – Verdun** 8:00 AM – 5:00 PM

## Saturday, June 17, 2017

REGISTRATION **Bottom of** 

escalator

1:00 - 5:30 PM

Fontaine A & B NIDA GRANT-WRITING

1:00 - 5:30 PM (Pre-Registrants Only)

Salon Bonaventure & **OPENING RECEPTION** 

> Ville-Marie 7:00 - 9:00 PM

## **Sunday, June 18, 2017**

**Montreal Ballroom Plenary Program** 8:30 - 11:30 AM 8:30 Welcome **CPDD President Leonard Howell** 8:40 Report from the National Institute on Drug Abuse: Drug Abuse and Addiction Research: Progress, Priorities and Challenges Nora D. Volkow, Director, NIDA 9:10 Report from the National Institute on Alcohol Abuse and Alcoholism: NIAAA Update: Priorities Going Forward George F. Koob, Director, NIAAA Presentation of the Stephen G. Holtzman Travel Award for Preclinical Investigators to 9:40 Jibran Y. Khokhar Introduction by Alan Budney 9:50 Presentation of the CPDD/NIDA Media Award to Sam Quinones Introduction by Meg Chisolm Presentation of the Joseph Cochin Young Investigator Award to Matthew Banks 10:05

Introduction by Steve Negus

Presentation of the Mentorship Award to Stephen T. Higgins 10:15 Introduction by Alan J. Budney

10:25 Presentation of the Nathan B. Eddy Award to Walter Ling Introduction by Peggy Compton

10:40 Nathan B. Eddy Lecture: Accidents and Angels: The Man Who Got His Life Philosophy from a Bottle Cap Walter Ling, UCLA

## **CPDD Early Career Travel Awards Luncheon**

(By Invitation Only)

Salon Ville-Marie 11:30 - 1:00 PM

### President's Symposium

Westmount/Outremont 1:00 - 2:30 PM

## ENHANCING RESEARCH ON CONTROLLED SUBSTANCES

1:00	Introduction Leonard Howell, President of CPDD
1:05	William Dewey Public Policy Officer of CPDD
1:10	Perspective from NIDA Susan Weiss, Director of the Division of Extramural Research, NIDA, NIH, Rockville, MD
1:15	Perspective from FDA Dominic Chiapperino, Lead Chemist, FDA, Silver Spring, MD
1:20	Perspective from DEA Terrence Boos, Deputy Section Chief, DEA, Springfield, VA
1:25	Perspective from a researcher  Martin W. Adler, Center for Substance Abuse Research, Lewis Katz School of Medicine at Temple University, Philadelphia, PA
1:30	Questions and comments from audience

#### **Oral Communications 1**

**Mont-Royal 2:45 - 4:45 PM** 

#### DISPARITÉS EN MATIÈRE DE SANTÉ: HEALTH DISPARITIES

Chairs: Qiana Brown and Anna Pagano

- 2:45 The use of the Black Church to improve treatment access for Blacks with SUD A. Jordan, Yale University, New Haven, CT
- 3:00 Exploring factors related to uptake of oral pre-exposure prophylaxis among Black women with substance use problems

  Keosha Bond<sup>1</sup>, Alana Gunn<sup>2</sup>, Porche Williams<sup>3</sup>, <sup>1</sup>NYU Rory Meyers College of Nursing, New York, NY, <sup>2</sup>Binghamton University, Binghamton, NY, <sup>3</sup>National Development and Research Institute, Inc., New York, NY
- 3:15 *Model minorities? Asian-American trauma and drug use*Tanya Saraiya<sup>1</sup>, Denise Hien<sup>2</sup>, Aimee Campbell<sup>3</sup>, <sup>1</sup>TRACC Program, Brooklyn,
  NY, <sup>2</sup>Adelphi University, Garden City, NY, <sup>3</sup>Columbia University and NYSPI, New York,
  NY

- 3:30 Prenatal marijuana use, psychiatric comorbidity, and vulnerable populations in the U.S. Qiana Brown<sup>1</sup>, Aaron Sarvet<sup>2</sup>, Deborah Hasin<sup>2</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>2</sup>Columbia University, New York, NY
- 3:45 Cannabis motives and social anxiety: Effects of race and gender in cannabis use and problems among young adults

  Dawn Foster<sup>1</sup>, Ecker Anthony<sup>2</sup>, Kraus Shane<sup>3</sup>, Stephanie O'Malley<sup>4</sup>, Kristin Dukes<sup>5</sup>,

  Gretchen Blycker<sup>6</sup>, Carolyn Sartor<sup>4</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Michael E.

  DeBakey Veterans Affairs Medical Center, Houston, TX, <sup>3</sup>Edith Nourse Rogers Memorial Veterans Hospital, Bedford, MA, <sup>4</sup>Yale School of Medicine, New Haven, CT, <sup>5</sup>Simmons College, Boston, MA, <sup>6</sup>University of Rhode Island, Kingston, RI
- 4:00 Predictors of smoking behaviors among Latinos in substance abuse treatment Anna Pagano<sup>1</sup>, Noah Gubner<sup>2</sup>, Thao Le<sup>2</sup>, Barbara Tajima<sup>3</sup>, Joseph Guydish<sup>2</sup>, <sup>1</sup>Prevention Research Center, Oakland, CA, <sup>2</sup>UCSF, San Francisco, CA, <sup>3</sup>UCSF, San Francisco, CA
- 4:15 Cultural predictors of intimate partner violence perpetration and victimization in Latino emerging adults
  Carolina Villamil Grest<sup>1</sup>, Hortensia Amaro<sup>2</sup>, Jennifer Unger<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA, <sup>2</sup>ISC School of Social Work, Los Angeles, CA
- 4:30 Racial and ethnic disparities in opioid agonist treatment for opioid use disorder in a U.S. national sample
  Noa Krawczyk¹, Kenneth Feder², Brendan Saloner², ¹Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, ²Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

#### **Oral Communications 2**

Verdun 2:45 - 4:45 PM

#### THE ODD COUPLE: DRUG INTERACTIONS

Chairs: Sally Huskinson and Emily Jutkiewicz

- 2:45 Ethanol reversal of prescription opioid tolerance
  Jacy Jacob<sup>1</sup>, Hamid Akbarali<sup>1</sup>, Graeme Henderson<sup>2</sup>, William Dewey<sup>1</sup>, <sup>1</sup>Virginia
  Commonwealth University, Richmond, VA, <sup>2</sup>University of Bristol, Bristol, UK
- 3:00 A sex comparison of morphine and delta-9-tetrahydrocannabinol interactions on inflammatory pain in rats

  Stevie Britch<sup>1</sup>, Carlie Knox<sup>1</sup>, Jenny Wiley<sup>2</sup>, Rebecca Craft<sup>1</sup>, <sup>1</sup>Washington State University, Pullman, WA, <sup>2</sup>RTI International, Research Triangle Park, NC
- 3:15 Adolescent delta(9)-tetrahydrocannabinol exposure enhances sensitivity to the reinforcing effects of cocaine
  Emily Jutkiewicz<sup>1</sup>, Amy Friedman<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor,
  MI, <sup>2</sup>Wayne State University, Detroit, MI
- 3:30 Abuse-related effects of mixtures of cocaine and caffeine in rats
  Brenda Gannon<sup>1</sup>, Kayla Galindo<sup>1</sup>, Melson Mesmin<sup>1</sup>, Kenner Rice<sup>2</sup>, Gregory
  Collins<sup>3</sup>, <sup>1</sup>University of Texas Health Science Center at San Antonio, San Antonio,
  TX, <sup>2</sup>NIH, NIDA, Rockville, MD, <sup>3</sup>University of Texas Health Science Center, San Antonio, TX

- 3:45 Endorsing cannabis as drug of choice is associated with increased use of other illicit drugs: A longitudinal analysis

  Jesse Hinckley<sup>1</sup>, Christian Hopfer<sup>2</sup>, Michael Stallings<sup>3</sup>, John Hewitt<sup>3</sup>, Susan Young<sup>1</sup>, <sup>1</sup>University of Colorado School of Medicine, Department of Psychiatry, Aurora, CO, <sup>2</sup>University of Colorado School of Medicine, Aurora, CO, <sup>3</sup>University of Colorado, Denver, CO
- 4:00 Self-administration of benzodiazepine and cocaine combinations by monkeys in a choice procedure: Role of GABA-A receptor subtypes

  Sally Huskinson<sup>1</sup>, Kevin Freeman<sup>1</sup>, James Rowlett<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS
- 4:15 Cannabinoid modulation of the analgesic effects of opioids in humans
  Shanna Babalonis<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Paul Sloan<sup>1</sup>, Paul Nuzzo<sup>1</sup>, Laura Fanucchi<sup>1</sup>,
  Sharon Walsh<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky
  College of Medicine, Lexington, KY
- 4:30 The influence of mentholation on usual brand and research cigarettes of varying nicotine content in vulnerable populations

  Danielle Davis<sup>1</sup>, Cecilia Bergeria<sup>1</sup>, Joanna Streck<sup>2</sup>, Janice Bunn<sup>1</sup>, Diann Gaalema<sup>3</sup>, Sarah Heil<sup>1</sup>, Stacey Sigmon<sup>1</sup>, Maxine Stitzer<sup>4</sup>, Jennifer Tidey<sup>5</sup>, Stephen Higgins<sup>1</sup>, 

  <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>3</sup>University of Vermont UHC Campus, Burlington, VT, <sup>4</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>5</sup>Brown University School of Medicine, Providence, RI

## Symposium I

Westmount 2:45 - 4:45 PM

#### WHAT IS THE ROLE OF SLEEP IN SUBSTANCE USE? EVIDENCE FROM STUDIES OF CANNABIS, ALCOHOL AND OPIOID USE

Chairs: Patrick Finan and Brant Hasler

- 2:45 *Mechanisms of sleep disturbance in individuals with opioid use disorder* P. Finan, Johns Hopkins University, Baltimore, MD
- 3:10 Sleep and circadian function in adolescents and young adults who use alcohol B. Hasler, University of Pittsburgh, PA
- 3:35 Subjective and objective assessment of sleep in treatment-seeking cannabis users D. Lee, Johns Hopkins Medicine, Lexington, KY
- 4:00 Sleep and substance use: Effects at varying frequencies of use among cannabis and alcohol users

  D. Conroy, University of Michigan, Ann Arbor, MI
- 4:25 DISCUSSANT: Methodological considerations in sleep research among individuals with substance use disorder
  - P. Morgan, Yale School of Medicine, New Haven, CT

### **Symposium II**

**Outremont** 2:45 - 4:45 PM

## TRANSLATIONAL APPROACHES TO UNCOVERING THE MECHANISMS UNDERLYING NEONATAL ABSTINENCE SYNDROME

Chairs: Lisa Brents and Jessica Coker

2:45	The impact of antenatal buprenorphine use on fetal neurobehavioral profile, obstetrical course, and neonatal outcome
	J. Coker, University of Arkansas for Medical Sciences, Little Rock, AR
3:10	The genetics and epigenetics of neonatal abstinence syndrome
	D. Nielsen, Baylor College of Medicine, Houston, TX
3:35	Opioid addiction treatments during pregnancy and their potential effects on glial cell development and brain myelination
	C. Sato-Bigbee, Virginia Commonwealth University, Richmond, VA
4:00	Preclinical modeling of opioid addiction during pregnancy using self-administration E. Byrne, Treatment Research Institute, Philadelphia, PA
4:25	DISCUSSANT: Clinical and basic science partnerships: The key to future therapeutic breakthroughs in NAS research
	L. Brents, University of Arkansas for Medical Sciences, Little Rock, AR

#### **Oral Communications 3**

Outremont 5:00 - 6:00 PM

#### TRANSLATIONAL KAPPA-TILIZATION

Chairs: Drew Townsend and Thomas Prisinzano

- 5:00 Development of salvinorin A-based kappa opioid receptor agonists for drug abuse therapy
  Rachel Crowley<sup>1</sup>, Thomas Prisinzano<sup>2</sup>, <sup>1</sup>University of Kansas, Lawrence,
  KS, <sup>2</sup>University of Kansas School of Pharmacy, Lawrence, KS
- 5:15 Analgesic effects of kappa opioid receptor agonist 16-ethynyl Salvinorin A in mice Kelly Paton<sup>1</sup>, Samuel Williamson<sup>2</sup>, Thomas Prisinzano<sup>3</sup>, Bronwyn Kivell<sup>1</sup>, <sup>1</sup>Victoria University of Wellington, Wellington, New Zealand, New Zealand, <sup>2</sup>University of Kansas, Department of Medicinal Chemistry, Lawrence, KS, <sup>3</sup>University of Kansas School of Pharmacy, Lawrence, KS

- Effects of nalfurafine on oxycodone reinforcement and thermal antinociception:
  Modeling a candidate abuse-deterrent opioid analgesic in male rats

  Drew Townsend<sup>1</sup>, Jennifer Naylor<sup>2</sup>, S. Stevens Negus<sup>3</sup>, Shelley Rae Edwards<sup>4</sup>, Hina Qureshi<sup>4</sup>, Hunter McLendon<sup>1</sup>, Christopher McCurdy<sup>5</sup>, Kennith Sufka<sup>5</sup>, Kevin Freeman<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>U.S. Food and Drug Administration, Silver Spring, MD, <sup>3</sup>Virginia Commonwealth University, Richmond, VA, <sup>4</sup>Millsaps College, Jackson, MS, <sup>5</sup>University of Mississippi, Mississippi, MS
- A randomized, double-blind, placebo-controlled study of the selective kappa opioid receptor antagonist, cerc 501, in a human laboratory model of smoking behavior Jermaine Jones<sup>1</sup>, Sandra Comer<sup>2</sup>, Sharon Walsh<sup>3</sup>, Shanna Babalonis<sup>3</sup>, Brad Vince<sup>4</sup>, Suky Martinez<sup>5</sup>, Michelle Lofwall<sup>6</sup>, Debra Kelsh, Eileen McNulty<sup>7</sup>, Heather Fraser<sup>7</sup>, Ronald Marcus<sup>7</sup>, <sup>1</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>University of Kentucky, Lexington, KY, <sup>4</sup>Vince and Associates, Malvern, PA, <sup>5</sup>Columbia University Medical Center, New York State Psychiatric Institute, New York, NY, <sup>6</sup>University of Kentucky College of Medicine, Lexington, KY, <sup>7</sup>Cerecor, Inc., Baltimore, MD

#### **Oral Communications 4**

Mont-Royal 5:00 - 6:00 PM

#### FEEDING FRENZY: DIET AND DRUGS

Chairs: Amanda Price and Eric Strain

- DREADD-induced activation of the insular cortex suppresses high fat food intake in a binge eating disorder paradigm
   Amanda Price<sup>1</sup>, Sonja Stutz<sup>1</sup>, Noelle Anastasio<sup>1</sup>, Kathryn Cunningham<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX
   The role of the serotonin 5-HT2C receptor in compulsive and addictive behaviors
   Maylen Perez Diaz<sup>1</sup>, Leonard Howell<sup>1</sup>, Mark Wilson<sup>2</sup>, <sup>1</sup>Emory University, Atlanta, GA, <sup>2</sup>Yerkes National Primate Research Center, Atlanta, GA
- Escalated intake of palatable food in rats with intermittent, extended access is associated with high corticotropin-releasing factor mRNA neuronal density in the ventral tegmental area

  Alison Kreisler<sup>1</sup>, Candice Contet<sup>2</sup>, Daniella Walter<sup>2</sup>, Eric Zorrilla<sup>2</sup>, <sup>1</sup>The Scripps Research Institute, La Jolla, CA, <sup>2</sup>Scripps Research Institute, La Jolla, CA
- 5:45 An exploration of the effect of acute morphine administration on taste acuity and feeding behavior

  Denis Antoine<sup>1</sup>, Eric Strain<sup>1</sup>, <sup>1</sup>Johns Hopkins University School of Medicine,
  Baltimore, MD

#### **Oral Communications 5**

Verdun 5:00 - 6:00 PM

#### TECHNIQUES DE PSYCHOMÉTRIQUE

Chairs: Paul VanVeldhuisen and Lorra Garey

- 5:00 Test characteristics of a 4-item screening instrument for non-alcohol substance use disorders in trauma inpatients
  David Gorelick<sup>1</sup>, Zachary Dezman<sup>2</sup>, Carl Soderstrom<sup>2</sup>, <sup>1</sup>University of Maryland, College Park, MD, <sup>2</sup>University of Maryland School of Medicine, Baltimore, MD
- 5:15 Smoking consequences questionnaire: A reevaluation of the psychometric properties across two independent samples of smokers

  Lorra Garey<sup>1</sup>, Kara Manning<sup>1</sup>, Charles Jardin<sup>1</sup>, Adam Leventhal<sup>2</sup>, Matthew Stone<sup>2</sup>,

  Amanda Raines<sup>3</sup>, Raina Pang<sup>2</sup>, Clayton Neighbors<sup>1</sup>, Norman Schmidt<sup>3</sup>, Michael

  Zvolensky<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX, <sup>2</sup>University of Southern California, Los Angeles, CA, <sup>3</sup>Florida State University, Tallahassee, FL
- 5:30 Concordance of tobacco, alcohol, prescription medications, and substance use tool for unhealthy substance use with timeline follow back
  Paul VanVeldhuisen¹, Gaurav Sharma¹, Jennifer McNeely², Robert Schwartz³, Li-Tzy Wu⁴, Geetha Subramaniam⁵, Jacqueline King¹, Aimee Wahle¹, ¹The Emmes Corporation, Rockville, MD, ²New York University School of Medicine, New York, NY, ³Friends Research Institute, Baltimore, MD, ⁴Duke University School of Medicine, Durham, NC, ⁵NIDA, Bethesda, MD
- 5:45 Development of short, fixed forms of the IRT-based CAT versions of the seven ASI-MV® domains

  Stacey McCaffrey<sup>1</sup>, Stephen Butler<sup>1</sup>, Ryan Black<sup>1</sup>, <sup>1</sup>Inflexxion, Inc, Waltham, MA

#### **Symposium III**

Westmount 5:00 - 6:00 PM

## DARK MINDS: NEURAL AND BIOBEHAVIORAL SUBSTRATES OF NEGATIVE AFFECT REGULATION IN ADDICTION

Chairs: Sarah Yip and Lora Cope

- 5:00 Stress and negative emotion regulation in youth: FMRI findings from substance and behavioral addictions
  - S. Yip, Yale University, New Haven, CT
- 5:20 Neural responses to negative affective cues in relation to future cannabis-use, negative emotionality and binge-drinking
  - J. Hardee, University of Michigan, Ann Arbor, MI
- 5:40 Cognitive and emotion regulation in early abstinence from cocaine: A potential target for medication development
  - H. Fox, Stonybrook University, Department of Psychiatry, Stony Brook, NY

#### Workshop I

Westmount 7:00 - 9:00 PM

## BIG DATA: ETHICAL CONSIDERATIONS IN HUMAN SUBJECT'S RESEARCH

Chairs: Jonathan Stoltman and H. Westley Clark

Can electronic health record data be meaningfully used for SUD research?

G. Bart, University of Minnesota, Minneapolis, MN

Ethical and privacy expections of the participant and researcher: What does "Harm" look like in a big data context?

H. Clark, Public Health Program, Santa Clara University, Santa Clara, CA

Using EHR data for research in the context of a learning health care system: Challenges and opportunities

S. Sterling, Kaiser Permanente, Oakland, CA

Can mobile assessment have stable ethics?

W. Kowalczyk, NIH, Bethesda, MD

#### **Workshop II**

Outremont 7:00 - 9:00 PM

## USING BEHAVIORAL AND IMPLEMENTATION SCIENCE TO ACHIEVE AN AIDS-FREE GENERATION AMONG PEOPLE WHO USE DRUGS

Chairs: Wendee Wechsberg and Don Des Jarlais

Prospects for ending the HIV epidemic among people who inject drugs in Haiphong, Vietnam

D. Des Jarlais, Icahn School of Medicine at Mount Sinai, New York, NY

Adoption and sustainability in treatment of the Women's Health CoOp in South Africa: Real-world challenges in implementation science

W. Wechsberg, RTI International, Research Triangle Park, NC

Effects of marijuana use on neurobehavioral outcomes among persons living with HIV: Harmful or benign?

C. Meade, Duke University School of Medicine, Durham, NC

These genes don't lie: Associations of recent methamphetamine use with gene expression in treated HIV infection

A. Carrico, University of Miami, Miami, FL

What did we hear and where does this lead us? – Followed by Q&A

M. Iguchi, RAND Corporation, Arlington, VA

Please be advised that no photographing of presentations or data is permitted. Badges must be worn at all times and are required for admission into all events and sessions.

#### **Workshop III**

Mont-Royal 7:00 - 9:00 PM

## ASSESSMENT OF ABUSE POTENTIAL IN CLINICAL TRIALS IN THE CONTEXT OF THE FINALIZED FDA GUIDANCE

Chairs: Jack Henningfield and Michael Klein

The process of documenting abuse-related signals from clinical trials S. Calderon, U.S. Food and Drug Administration, Silver Spring, MD

Assessment of abuse potential in clinical trials to contribute to scheduling: Controlled substance act scheduling recommendations and abuse deterrent labeling introduction and issues

J. Henningfield, Pinney Associates, Bethesda, MD

Development of a standardized classification system for assessing abuse potential in clinical trials: ACTTION recommended considerations

S. Smith, University of Rochester School of Medicine and Dentistry, Rochester, NY

Development and feasibility of the misuse, abuse, and diversion drug event reporting system (MADDERS®)

N. Katz, Analgesic Solutions, Natick, MA

Assessing abuse potential from soup to nuts: Nonclinical and clinical study data that inform label claims and CSA scheduling recommendations

K. Bonson, U.S. Food and Drug Administration, Silver Spring, MD

#### Workshop IV

Verdun 7:00 - 9:00 PM

#### ANNUAL CPDD DESIGN AND ANALYSIS WORKSHOP

Chairs: Sterling McPherson and Susan Mikulich-Gilbertson

Using count regression models to evaluate important population level events in quasinatural experiments: Marijuana legalization and prescription opioid reformulation examples

J. Davis, University of Colorado School of Medicine, Aurora, CO

Understanding health utilities and QALYS in substance use research

S. Murphy, Weill Cornell Medicine, New York, NY

Overview of pharmacokinetics and pharmacodynamics in substance use research: Estimating drug exposure and understanding drug/metabolite values

S. Mikulich-Gilbertson, University of Colorado School of Medicine, Aurora, CO

Population PK/PD: What data you need to collect and what you can do with existing substance use data?

T. Henthorn, University of Colorado School of Medicine, Aurora, CO

Using novel methodologies to ask and answer new questions in substance abuse research

D. Feaster, University of Miami Miller School of Medicine, Miami, FL

#### **Poster Session I**

(Breakfast)

Fontaine 8:00 - 10:00 AM

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

Set up time begins Sunday, 1:00 PM Must be removed by Monday, 12:00 noon

#### **PERINATAL**

- 1 The detection of prenatal marijuana exposure using meconium and umbilical cord: A comparison using matched pairs
  Mary Jones¹, Joseph Jones¹, Jason Hulen¹, ¹United States Drug Testing Laboratories, Des Plaines, IL
- 2 White-matter crossing-fiber microstructure in adolescents prenatally exposed to cocaine Kristen Morie<sup>1</sup>, Sarah Yip<sup>1</sup>, Zu Wei Zhai<sup>1</sup>, Jiansong Xu<sup>1</sup>, Rajita Sinha<sup>2</sup>, Linda Mayes<sup>1</sup>, Marc Potenza<sup>2</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale School of Medicine, New Haven, CT
- 3 Receipt of antenatal steroids and respiratory support among substance-exposed premature infants
  Yukiko Washio¹, Neal Goldstein², Amy Mackley³, Matthew Hoffman³, Robert Locke³, David Paul³, ¹Christiana Care Health Services/University of Delaware, Media, PA, ²Christiana Care Health Services/Drexel University, Philadelphia, PA, ³Christiana Care Health Services, Wilmington, DE
- 4 Fetal assessment measured with multi-sensor abdominal array in buprenorphine-maintained women compared to controls
  Jessica Coker¹, Diana Escalona-Vargas¹, Shona Ray-Griffith¹, Curtis Lowery¹, Hari Eswaran¹, Zachary Stowe¹, ¹University of Arkansas for Medical Sciences, Little Rock, AR
- 6 Opioid-dependent pregnant women with higher engagement in methadone maintenance treatment and specialty programming have better maternal, neonatal and family outcomes Leslie Lundahl<sup>1</sup>, Corissa Carlson<sup>1</sup>, Dragana Ostojic<sup>2</sup>, David Ledgerwood<sup>1</sup>, Mark Greenwald<sup>1</sup>, Deepti Challagolla<sup>3</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>University of Windsor, Windsor, ON, <sup>3</sup>University of Mississippi Medical Center, Jackson, MI
- 7 Does maternal drug treatment access affect the relationship between adult opioid misuse and neonatal abstinence syndrome?
  Sebastian Tong¹, Elizabeth Wolf¹, Roy Sabo¹, Alex Krist¹, James Pecsok¹, Kassie Abbinanti², Dace Svikis¹, ¹Virginia Commonwealth University, Richmond, VA, ²University of Virginia, Charlottesville, VA
- 8 Increasing effective contraceptive use among opioid-maintained women at risk for unintended pregnancy
  Sarah Heil<sup>1</sup>, Alexis Matusiewicz<sup>2</sup>, Heidi Melbostad<sup>1</sup>, Stacey Sigmon<sup>1</sup>, Lauren Macafee<sup>1</sup>,
  Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Vermont, Ann
  Arbor, MI

- 9 Delay discounting of pregnancy- and condom-protected sex among methadone-maintained women
  - Dennis Hand<sup>1</sup>, Lindsay Reid<sup>1</sup>, Diane Abatemarco<sup>1</sup>, <sup>1</sup>Thomas Jefferson University, Philadelphia, PA
- 10 Knowledge and attitudes about pregnancy prevention among women who are opioid-maintained
  Heidi Melbostad¹, Alexis Matusiewicz², Sarah Heil¹, ¹University of Vermont, Burlington, VT, ²University of Vermont, Ann Arbor, MI
- 11 The utility of a cigarette purchase task in detecting differences in the reinforcing efficacy of cigarettes between opioid-maintained and non-dependent pregnant cigarette smokers Ivori Zvorsky<sup>1</sup>, Joan Skelly<sup>1</sup>, Stephen Higgins<sup>2</sup>, <sup>1</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT
- 12 Cannabis use in pregnant and recently postpartum cigarette smokers and nonsmokers Cecilia Bergeria<sup>1</sup>, Sarah Heil<sup>1</sup>, Allison Kurti<sup>1</sup>, Taylor Ochalek<sup>1</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT
- Allison Kurti<sup>1</sup>, Ryan Redner<sup>2</sup>, Alexa Lopez<sup>1</sup>, Diana Keith<sup>1</sup>, Cassandra Stanton<sup>3</sup>, Diann Gaalema<sup>4</sup>, Janice Bunn<sup>1</sup>, Nathan Doogan<sup>5</sup>, Megan Roberts<sup>5</sup>, Antonio Cepeda-Benita<sup>1</sup>, Julip Phillips<sup>1</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Southern Illinois University, Carbondale, IL, <sup>3</sup>Westat, Rockville, MD, <sup>4</sup>University of Vermont UHC Campus, Burlington, VT, <sup>5</sup>Ohio State University, Columbus, OH
- 15 The association between medical marijuana law and maternal marijuana use J. Jones, United States Drug Testing Laboratories, Des Plaines, IL
- 16 Characteristics of marijuana-using pregnant women entering and leaving treatment Mishka Terplan<sup>1</sup>, Yukiko Washio<sup>2</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Christiana Care Health Services/University of Delaware, Media, PA
- 17 Predictors of risk of illicit drug use during pregnancy among women attending midwife obstetric units in the Cape Metropole, South Africa
  Petal Petersen¹, Catherine Mathews², Esme Jordaan², Charles Parry³, ¹South African Medical Research Council, Tygerberg, South Africa, South Africa, ²University of Cape Town, Western Cape, South Africa, ³South African Medical Research Council, Tygerberg, South Africa

#### **NICOTINE I**

- Separate and combined effects of the nicotine-specific monoclonal antibody, nic9d9, and a nicotinic receptor antagonist on nicotine discrimination in rats

  Mark Lesage<sup>1</sup>, Paul Pentel<sup>2</sup>, Mylissa Staley<sup>1</sup>, Amy Saykao<sup>1</sup>, Bin Zhou<sup>3</sup>, Kim Janda<sup>3</sup>, Matthew Kalnik<sup>4</sup>, <sup>1</sup>Minneapolis Medical Research Foundation, Minneapolis, MN, <sup>2</sup>Hennepin County Medical Center, Minneapolis, MN, <sup>3</sup>Scripps Research Institute, La Jolla, CA, <sup>4</sup>Antidote Therapeutics, Inc., Bethesda, MD
- Comparison by rat intravenous self-administration of the reinforcing effects of nicotine vs. three C-II drugs
   David Heal<sup>1</sup>, Sharon Smith<sup>1</sup>, <sup>1</sup>RenaSci Ltd, Nottingham, Nottinghamshire, United Kingdom

- Effects of nicotine exposure on behavioral inhibition and self-administration in differentially reared rats
   Dustin Stairs<sup>1</sup>, Nicole Chacho<sup>1</sup>, Rachel Busselman<sup>1</sup>, Madison Wolfe<sup>1</sup>, Scott Christenson<sup>1</sup>, <sup>1</sup>Creighton University, Omaha, NE
- 21 Flavor conditioned reinforcers promote nicotine self-administration in rats
  Amy Patterson<sup>1</sup>, Amanda Smith<sup>1</sup>, Curtis Bradley<sup>1</sup>, Moss Sanders<sup>1</sup>, Jessica Golson<sup>1</sup>,
  Matthew Palmatier<sup>1</sup>, <sup>1</sup>East Tennessee State University, Johnson City, TN
- Dorsal anterior cingulate glutamate is associated with engagement of the default mode network during exposure to smoking cues

  Amy Janes<sup>1</sup>, Jennifer Betts<sup>1</sup>, J. Eric Jensen<sup>1</sup>, Scott Lukas<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- Inhibiting the insula in smokers: Preliminary results using rTMS and fMRI Michael F. Regner<sup>1</sup>, Benzi Kluger<sup>1</sup>, Jason Tregellas<sup>1</sup>, Brianne Mohl<sup>1</sup>, Dorothy Yamamoto<sup>1</sup>, Jody Tanabe<sup>1</sup>, <sup>1</sup>University of Colorado, Boulder, CO
- Neural mechanisms of impaired learning from errors in dependent smokers
  Leonie Duehlmeyer<sup>1</sup>, Bianca Levis<sup>1</sup>, Rob Hester<sup>1</sup>, <sup>1</sup>University of Melbourne, Coburg,
  Victoria, Australia
- Influence of treatment-induced changes in smoking-cue reactivity on long-term smoking abstinence
  Paul Wannas<sup>1</sup>, Peter Selby<sup>2</sup>, Nancy Lobaugh<sup>2</sup>, Laurie Zawertailo<sup>2</sup>, <sup>1</sup>University of Toronto, Toronto, ON, <sup>2</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada
- Development of a measure for affect during cigarette smoking anticipation
  Philip Smith<sup>1</sup>, Neelam Prashad<sup>1</sup>, Lunden Sara<sup>1</sup>, Christine Sheffer<sup>2</sup>, Adam Leventhal<sup>3</sup>,
  Sherry McKee<sup>4</sup>, <sup>1</sup>CUNY School of Medicine, New York, NY, <sup>2</sup>Roswell Park Cancer
  Institute, Buffalo, NY, <sup>3</sup>University of Southern California, Los Angeles, CA, <sup>4</sup>Yale
  School of Medicine, New Haven, CT
- 27 Effects of positive and negative episodic future thinking on delay discounting and behavioral-economic demand for cigarettes

  Jeffrey Stein<sup>1</sup>, Jamie Turner<sup>1</sup>, Patsy Marshall<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA
- An analogue of relapse: Comparing monetary incentives, episodic future thinking, and implementation intentions

  Lara Moody<sup>1</sup>, Lindsey Poe<sup>1</sup>, Olivia Petrusky<sup>1</sup>, Patsy Marshall<sup>1</sup>, <sup>1</sup>Virginia Tech

  Carilion Research Institute, Roanoke, VA
- Priming 2.0: Reducing delay discounting
  Ria Malhotra<sup>1</sup>, Alina Shevorykin<sup>2</sup>, Jami Pittman<sup>1</sup>, Neelam Prashad<sup>1</sup>, Lunden Sara<sup>1</sup>,
  Christine Sheffer<sup>3</sup>, <sup>1</sup>CUNY School of Medicine, New York, NY, <sup>2</sup>Pace University,
  Westchester County, NY, <sup>3</sup>Roswell Park Cancer Institute, Buffalo, NY
- Contingency management for abstinence vs. contingency management for shaping cessation among treatment-seeking smokers in a community setting Carla López Núñez<sup>1</sup>, Roberto Secades Villa<sup>2</sup>, Sara Weidberg<sup>3</sup>, Alba González Roz<sup>3</sup>, <sup>1</sup>Private Technical University, Loja, Ecuador, <sup>2</sup>University of Oviedo, Oviedo, Spain, Spain, <sup>3</sup>University of Oviedo, Oviedo, Spain
- 31 Moderation of four behavioral interventions for smoking among juvenile detainees L. Stein, University of Rhode Island, Kingston, RI

- 32 Doxazosin improves inhibitory control and reduces withdrawal symptoms in smokers Walter Roberts<sup>1</sup>, Sherry McKee<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT
- Real-world effectiveness of bupropion and varenicline for smoking cessation: An internet-based randomized controlled trial
  Helena Zhang<sup>1</sup>, Bernard Le Foll<sup>2</sup>, Peter Selby<sup>3</sup>, Laurie Zawertailo<sup>3</sup>, <sup>1</sup>University of Toronto, Toronto, ON, <sup>2</sup>Centre for Addiction and Mental Health, Toronto, ON, <sup>3</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada
- Autonomy and perceived competence for predicting treatment adherence and abstinence among smokers taking varenicline

  Amir Abdolahi<sup>1</sup>, Geoffrey Williams<sup>2</sup>, <sup>1</sup>Philips, Sterling, VA, <sup>2</sup>University of Rochester Medical Center, Rochester, NY
- Duration, intensity and frequency of physical activity as predictors of smoking cessation outcomes among treatment-seeking patients

  Michael Hoang<sup>1</sup>, Peter Selby<sup>2</sup>, Martin Zack<sup>3</sup>, Laurie Zawertailo<sup>2</sup>, <sup>1</sup>University of Toronto, Toronto, ON, <sup>2</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>3</sup>Centre for Addiction and Mental Health, Toronto, ON
- Cerebral blood flow changes within abstinent vs. satiated smokers

  Bader Chaarani<sup>1</sup>, Philip Spechler<sup>1</sup>, Alexandra Ivanciu<sup>1</sup>, Stephen Higgins<sup>1</sup>, Hugh
  Garavan<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT
- 37 Harm reduction or tool for initiation: Testing two models of e-cigarette and cigarette use in a high-risk longitudinal cohort

  David Fink<sup>1</sup>, Katherine Keyes<sup>1</sup>, Renee Goodwin<sup>2</sup>, Gregory Cohen<sup>3</sup>, Laura Sampson<sup>3</sup>,

  Marijo Tamburrino<sup>4</sup>, Israel Liberzon<sup>5</sup>, Joseph Calabrese<sup>6</sup>, Sandro Galea<sup>3</sup>, <sup>1</sup>Columbia

  University Mailman School of Public Health, Newark, NJ, <sup>2</sup>CUNY School of Medicine,

  New York, NY, <sup>3</sup>Boston University School of Public Health, Boston, MA, <sup>4</sup>University

  of Toledo Health Science Center, Toledo, OH, <sup>5</sup>University of Michigan-Psychology,

  Ann Arbor, MI, <sup>6</sup>University Hospitals Case Medical Center, Case Western Reserve

  School of Medicine, Cleveland, OH

#### STIMULANTS: HUMAN STUDIES

- A randomized controlled trial of a simplified manual-only treatment for caffeine use disorder

  Mary Sweeney<sup>1</sup>, Steven Meredith<sup>2</sup>, Laura Juliano<sup>2</sup>, Daniel Evatt<sup>2</sup>, Roland Griffiths<sup>3</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 School of Medicine, Baltimore, MD
- Effects of N-acetylcysteine on drug seeking and frontocortical glutamate in cocaine abusers
   Mark Greenwald<sup>1</sup>, Eric Woodcock<sup>1</sup>, Leslie Lundahl<sup>1</sup>, Dalal Khatib<sup>1</sup>, Jeffrey Stanley<sup>1</sup>,
   Wayne State University, Detroit, MI
- Mindful attention to drug-cues reduces neural reactivity in reward-relevant brain regions
   Michael Gawrysiak<sup>1</sup>, Kanchana Jagannathan<sup>2</sup>, Stefanie Darnley<sup>2</sup>, Elliott Sturgis-Berkowitz<sup>2</sup>, Kathleen Marquez<sup>2</sup>, Zach Monge<sup>2</sup>, Kyle Kampman<sup>2</sup>, Winnie Thuku<sup>1</sup>, Norna Jules<sup>1</sup>, Anna Rose Childress<sup>2</sup> Delaware State University, Wilmington, DE, <sup>2</sup>University of Pennsylvania, Philadelphia, PA

- 41 Atomoxetine in abstinent cocaine users
  Elise DeVito<sup>1</sup>, Aryeh Herman<sup>2</sup>, Noah Konkus<sup>2</sup>, Huiping Zhang<sup>2</sup>, Mehmet
  Sofuoglu<sup>2</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven,
  CT
- Reduction in cocaine use during a topiramate clinical trial among cocaine and alcoholdependent participants predict better scores of SF-36 for quality of life after treatment Lysa Remy<sup>1</sup>, George Woody<sup>2</sup>, Kevin Lynch<sup>3</sup>, Kyle Kampman<sup>2</sup>, <sup>1</sup>Postgraduate Program in Pharmaceutical Sciences, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>University of Pennsylvania, Department of Psychiatry, Philadelphia, PA
- Impact of alcohol dependence diagnosis on self-reported alcohol and cocaine use in cocaine-dependent patients

  Michael Mancino<sup>1</sup>, Jeff Thostenson<sup>1</sup>, Joseph Guise<sup>1</sup>, Janette McGaugh<sup>1</sup>, Thomas Kosten<sup>2</sup>, Alison Oliveto<sup>1</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AR, <sup>2</sup>Baylor College of Medicine, Houston, TX
- Higher prevalence of detectable troponin I among cocaine users without known cardiovascular disease
   Elise Riley<sup>1</sup>, Priscilla Hsue<sup>1</sup>, Eric Vittinghoff<sup>1</sup>, Alan Wu<sup>1</sup>, Phillip Coffin<sup>2</sup>, Peter Moore<sup>1</sup>, Kara Lynch<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>San Francisco Department of Public Health, San Francisco, CA
- More severe executive abnormalities in crack vs. snorted cocaine dependent patients: A neuropsychological study
  Paulo Jannuzzi Cunha<sup>1</sup>, Hercílio Pereira de Oliveira Junior<sup>2</sup>, Priscila Dib Gonçalves<sup>2</sup>,
  Mariella Ometto<sup>2</sup>, Bernardo Santos<sup>2</sup>, André Malbergier<sup>2</sup>, Ricardo Amaral<sup>2</sup>, Sergio
  Nicastri<sup>2</sup>, Arthur Andrade<sup>2</sup>, <sup>1</sup>University of Sao Paulo Medical School, Sao Paulo SP,
  Brazil, Brazil, <sup>2</sup>University of Sao Paulo Medical School, Sao Paulo SP, Brazil
- Of sleet and snow: Are newly incident crack users at greater risk of developing cocaine dependence problems soon after onset of cocaine use?

  Madhur Chandra<sup>1</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI
- Combating craving with contingency management: Neuroplasticity and methamphetamine abuse in South Africa

  Lara van Nunen<sup>1</sup>, Jonathan Ipser<sup>2</sup>, Dan Stein<sup>2</sup>, Samantha Brooks<sup>2</sup>, Edythe London<sup>3</sup>, Steve Shoptaw<sup>3</sup>, <sup>1</sup>University of Cape Town, Western Cape, South Africa, South Africa, <sup>2</sup>University of Cape Town, Western Cape, South Africa, <sup>3</sup>UCLA, Los Angeles, CA
- Contingency management and strengths-based case management interventions for methamphetamine users in Denver, CO
   Karen Corsi<sup>1</sup>, Jonathan Davis<sup>1</sup>, Janet Spradley<sup>1</sup>, Robert Booth<sup>2</sup>, <sup>1</sup>University of Colorado School of Medicine, Aurora, CO, <sup>2</sup>University of Colorado School of Medicine, Denver, CO
- Baseline urinalysis as a mediator between education level and treatment outcomes in two contingency management stimulant use clinical trials

  Crystal Smith<sup>1</sup>, Michael Orr<sup>2</sup>, John Roll<sup>2</sup>, Sterling McPherson<sup>3</sup>, <sup>1</sup>Washington State University, Program of Excellence in Addictions Research, Spokane, WA,

  <sup>2</sup>Washington State University College of Nursing, Spokane, WA, 3Washington StateUniversity, College of Medicine, Spokane, WA

Delay discounting, financial choices, and drug use in a therapeutic workplace Shrinidhi Subramaniam<sup>1</sup>, Anthony DeFulio<sup>2</sup>, Brantley Jarvis<sup>3</sup>, August Holtyn<sup>1</sup>, Kenneth Silverman<sup>4</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Western Michigan University, Kalamazoo, MI, <sup>3</sup>Johns Hopkins University School of Medicine, Parkville, MD, <sup>4</sup>Johns Hopkins University, Baltimore, MD

#### **IMPULSIVITY**

- Implication of disrupted serotonin: Glutamate synergy upon impulsivity
  Brionna Davis-Reyes<sup>1</sup>, Veronica Campbell<sup>1</sup>, Noelle Anastasio<sup>1</sup>, <sup>1</sup>University of Texas
  Medical Branch, Galveston, TX
- A pilot feasibility and acceptability trial of inhibitory control training with cocaine users

  Erika Pike<sup>1</sup>, Christina Studts<sup>1</sup>, William Stoops<sup>1</sup>, Craig Rush<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY
- Pre-intervention risky decision-making as a predictor of relapse in methamphetamine users undergoing Contingency Management

  Marilyn Lake<sup>1</sup>, Jonathan Ipser<sup>2</sup>, Lara van Nunen<sup>1</sup>, Edythe London<sup>3</sup>, Dan Stein<sup>2</sup>,
  Samantha Brooks<sup>2</sup>, Steve Shoptaw<sup>3</sup>, <sup>1</sup>University of Cape Town, Western Cape, South Africa, South Africa, <sup>2</sup>University of Cape Town, Western Cape, South Africa, <sup>3</sup>UCLA, Los Angeles, CA
- Nonmedical prescription stimulant users experience subjective but not objective impairments in attention and impulsivity

  Alison Looby<sup>1</sup>, Sarah Kittleson<sup>2</sup>, <sup>1</sup>University of Wyoming, Laramie, WY, <sup>2</sup>University of North Dakota, Grand Forks, ND
- Motives, consequences, and personality factors associated with nonmedical fentanyl use

  Tess Kilwein<sup>1</sup>, Alison Looby<sup>1</sup>, <sup>1</sup>University of Wyoming, Laramie, WY
- Translational neuroimaging to predict treatment outcome among patients in residential treatment for prescription opiate use disorder

  S. Bunce<sup>1</sup>, Andrew Huhn<sup>2</sup>, Dean Stankoski<sup>3</sup>, E Deneke<sup>4</sup>, E. Bixler<sup>1</sup>, Roger Meyer<sup>5</sup>, <sup>1</sup>Penn State College of Medicine, Hershey, PA, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Penn State University College of Medicine, Hershey, PA, <sup>4</sup>Caron Treatment Center, Wernersville, PA, <sup>5</sup>Penn State College of Medicine, Psychiatry, Washington, DC
- Thicker frontal lobe regions associated with impulsivity and craving in smokers
  Yasmin Mashhoon<sup>1</sup>, Jennifer Betts<sup>1</sup>, Stacey Farmer<sup>2</sup>, Scott Lukas<sup>1</sup>, <sup>1</sup>McLean Hospital,
  Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Brain Imaging Center,
  Belmont, MA

#### GENES AND MOLECULAR MECHANISMS

- Comparative mammalian genetics of addiction disorders
   E. Vallender, University of Mississippi Medical Center, Jackson, MS
- Increased motivation to self-administer cocaine is linked to enhanced cocaine-induced gene regulation in the frontal cortex and dorsal striatum

  Ellie-Anna Minogianis<sup>1</sup>, Anne-Noël Samaha<sup>1</sup>, <sup>1</sup>Université de Montréal, Department of Pharmacology and Physiology, Outremont, QC, Canada

- Novel antiaddiction target and ligand: Illudalic acid derivatives inhibit recombinant PTPRD phosphatase and are tolerated in vivo

  George Uhl<sup>1</sup>, Paul Paik<sup>2</sup>, Maria MArtinez<sup>3</sup>, Agnes Sulima<sup>1</sup>, Kenner Rice<sup>4</sup>, Jana Drgonova<sup>5</sup>, <sup>1</sup>NIDA, Bethesda, MD, <sup>2</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>3</sup>BRINM, Albuquerque, NM, <sup>4</sup>NIH, NIDA, Rockville, MD, <sup>5</sup>Center for Scientific Review, Bethesda, MD
- Biomarker discovery for marijuana use utilizing modified aptamer and metabolomic panels
  Christian Hopfer<sup>1</sup>, Laura Saba<sup>2</sup>, Kristen Raymond<sup>2</sup>, Jost Klawitter<sup>2</sup>, Uwe Christians<sup>2</sup>, <sup>1</sup>University of Colorado School of Medicine, Aurora, CO, <sup>2</sup>University of Colorado, Denver, CO
- Polymorphisms and stressors associated with alcohol dependence
  Maria Lucia Souza-Formigoni<sup>1</sup>, Isabel Cristina Cespedes<sup>2</sup>, José Carlos Fernandes
  Galduroz<sup>2</sup>, Tatiana Wscieklica<sup>2</sup>, Patricia Varela<sup>2</sup>, João Bosco Pesquero<sup>2</sup>, <sup>1</sup>Universidade
  Federal de São Paulo, São Paulo, Brazil, Brazil, <sup>2</sup>Universidade Federal de São Paulo,
  São Paulo, Brazil
- Association of the DRD2/ANKK1 A1 allele with alcohol consumption in Mexican Native Amerindians and in a non-native population
  Octavio Campollo<sup>1</sup>, Arturo Panduro<sup>2</sup>, Omar Ramos Lopez<sup>2</sup>, Eloy A. Zepeda Carrillo<sup>3</sup>, Karina Gonzalez Aldaco<sup>2</sup>, Rafael Torres Valadez<sup>2</sup>, Sonia Roman<sup>2</sup>, Universidad de Guadalajara, Guadalajara, Jalisco, Mexico, <sup>2</sup>Universidad de Guadalajara, Guadalajara, Jalisco, <sup>3</sup>Universidad de Colima, Colima, Mexico
- Neighborhood drug exposure modifies heritability of cigarette initiation in adolescents
   C. Bares, University of Michigan, Ann Arbor, MI

#### **OPIOIDS I**

- 65 Medial frontal cortex glutathione levels and temperature are increased in GT-tg bigenic mice expressing HIV-Tat protein: A proton MRS study

  Jae Kim<sup>1</sup>, Dionyssios Mintzopoulos<sup>2</sup>, Timothy Gillis<sup>3</sup>, Gordana Vitaliano<sup>2</sup>, Jay McLaughlin<sup>4</sup>, Marc 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>ADARC McLean Hospital, Belmont, MA, <sup>4</sup>University of Florida, Gainesville, FL
- 66 Identification of new psychoactive substances: Opioid receptor agonist in CHO cells expressing the cloned human mu opioid receptor
  M. Funada, NIMH, NCNP, Tokyo, Japan
- Oxycodone addiction: A multimodel magnetic resonance imaging study in response to acute and chronic oxycodone treatment in rats
  S. Iriah, Northeastern, Roxbury, MA
- 68 Efficacy of heroin and oxycodone vaccines for reducing opioid distribution to brain over a range of drug doses in rats

  Michael Raleigh<sup>1</sup>, Megan Laudenbach<sup>1</sup>, Federico Baruffaldi<sup>1</sup>, Samantha Peterson<sup>1</sup>,

  Michaela Roslawski<sup>2</sup>, Angela Birnbaum<sup>2</sup>, F. Ivy Carroll<sup>3</sup>, Scott Runyon<sup>3</sup>, Scott

  Winston<sup>4</sup>, Paul Pentel<sup>5</sup>, Marco Pravetoni<sup>1</sup>, <sup>1</sup>Minneapolis Medical Research

  Foundation, Minneapolis, MN, <sup>2</sup>University of Minnesota College of Pharmacy,

  Minneapolis, MN, <sup>3</sup>RTI International, Research Triangle Park, NC, <sup>4</sup>Winston

  Biopharmaceutical Consulting, <sup>5</sup>Hennepin County Medical Center, Minneapolis, MN

- Safety and efficacy of an oxycodone vaccine: Addressing some of the unique considerations posed by opioid abuse

  Marco Pravetoni<sup>1</sup>, Michael Raleigh<sup>1</sup>, Samantha Peterson<sup>1</sup>, Megan Laudenbach<sup>1</sup>,
  Federico Baruffaldi<sup>1</sup>, F. Ivy Carroll<sup>2</sup>, Scott Runyon<sup>2</sup>, Scott Winston<sup>3</sup>, Paul Pentel<sup>4</sup>,

  <sup>1</sup>Minneapolis Medical Research Foundation, Minneapolis, MN, 2RTI
  International, Research Triangle Park, NC, 3Winston Biopharmaceutical
  Consulting, 4Hennepin County Medical Center, Minneapolis, MN
- Circadian disruption during opioid agonist maintenance: Associations with heroin and cocaine use

  Jeremiah Bertz<sup>1</sup>, David Epstein<sup>1</sup>, Mark Rea<sup>2</sup>, Mariana Figueiro<sup>2</sup>, Greg Ward<sup>2</sup>, Kenzie Preston<sup>1</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>Lighting Research Center, Rensselaer Polytechnic Institute, Troy, NY
- Sleep disturbances in subjects with opioid use disorder on buprenorphine
  Alissa Coffey¹, V.B Krishnamurthy¹, S Yadav¹, J Singh¹, L Kong¹, E. F. Saunders¹,
  A.N Vgontzas¹, E. Bixler¹, Roger Meyer², ¹Penn State College of Medicine, Hershey,
  PA, ²Penn State College of Medicine, Psychiatry, Washington, DC
- 72 Understanding use of buprenorphine without a prescription Howard Chilcoat<sup>1</sup>, Theodore Cicero<sup>2</sup>, Matthew Ellis<sup>2</sup>, <sup>1</sup>Indivior Inc., Richmond, VA, <sup>2</sup>Washington University in St. Louis, St. Louis, MO
- 73 The frequency of tapering off buprenorphine maintenance in a primary care office-based opioid treatment program

  Zoe Weinstein<sup>1</sup>, Jeffrey Samet<sup>1</sup>, Colleen Labelle<sup>1</sup>, Gabriela Gryczynski<sup>2</sup>, Debbie Cheng<sup>1</sup>, Emily Quinn<sup>1</sup>, David Hui<sup>1</sup>, Hyunjoong Kim<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Kaiser Permanente, Oakland, CA
- Acceptability of intravenous buprenorphine as a treatment for opioid dependence:
  Results from a community-based survey among people who inject drugs with high-risk behaviors in France
  Perrine Roux<sup>1</sup>, Daniela Rojas-Castro<sup>2</sup>, Khadim Ndiaye<sup>1</sup>, Virginie Laporte<sup>2</sup>, Marion Mora<sup>1</sup>, Gwenaelle Maradan<sup>1</sup>, Stephane Morel<sup>2</sup>, Bruno Spire<sup>1</sup>, Patrizia Carrieri<sup>1</sup>,

  <sup>1</sup>INSERM, Marseille, France, 2AIDES, France
- Relapse to opioid dependence after inpatient or outpatient treatment: Protective effect of injection naltrexone

  Edward Nunes¹, Michael Gordon², Peter Friedmann³, Mei-Chen Hu⁴, Joshua Lee⁵, Donna Chen⁶, Marc Fishman³, Tamara Boney⁶, Donna Wilson³, Charles O'Brien⁶, ¹Columbia University and NYSPI, New York, NY, ²Friends Research Institute, Baltimore, MD, ³Baystate Health, Springfield, MA, ⁴Columbia University Medical Center, Department of Psychiatry, New York, NY, ⁵New York University School of Medicine, New York, NY, ⁶University of Virginia, Charlottesville, VA, ħountain Manor Treatment Center, Emmitsburg, MD, ⁶University of Pennsylvania, Philadelphia, PA
- Injectable naltrexone, oral naltrexone, and buprenorphine/naloxone utilization and discontinuation among individuals treated for opioid use disorder in a U.S. commercially insured population

  Jake Morgan<sup>1</sup>, Bruce Schackman<sup>2</sup>, Jared Leff<sup>2</sup>, Benjamin Linas<sup>1</sup>, Alexander Walley<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Weill Cornell Medicine, New York, NY

- Baseline characteristics by randomization status in the extended-release naltrexone vs. buprenorphine for opioid treatment clinical trial

  Jeanine May<sup>1</sup>, Dagmar Salazar<sup>1</sup>, Patricia Novo<sup>2</sup>, Dikla Blumberg<sup>1</sup>, Abigail Matthews<sup>1</sup>,

  John Rotrosen<sup>2</sup>, <sup>1</sup>The Emmes Corporation, Rockville, MD, <sup>2</sup>New York University

  School of Medicine, New York, NY
- Baseline characteristics of the opioid use disorder population enrolled in NIDA CTN-0051, "Extended-release naltrexone vs. buprenorphine for opioid treatment"

  Patricia Novo<sup>1</sup>, Edward Nunes<sup>2</sup>, Martina Pavlicova<sup>3</sup>, Jennifer Scodes<sup>2</sup>, Joshua Lee<sup>1</sup>, Jeanine May<sup>4</sup>, Dagmar Salazar<sup>4</sup>, Dikla Blumberg<sup>4</sup>, John Rotrosen<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>4</sup>The Emmes Corporation, Rockville, MD
- Comparison of long-term buprenorphine treatment retention in patients with opioid use disorder in the Veterans Health Administration and in privately insured adults Ajay Manhapra<sup>1</sup>, Edeanya Agbese MPH5<sup>2</sup>, Douglas Leslie<sup>2</sup>, Robert Rosenheck<sup>3</sup>, <sup>1</sup>Yale School of Medicine; Hampton VA Medical Center, Norfolk, VA, <sup>2</sup>Penn State College of Medicine, Department of Public Health Sciences, Hershey, PA, <sup>3</sup>Yale University-Psychiatry, New Haven, CT
- Treatment outcomes among a cohort of African-American buprenorphine patients:
  Follow-up at 12- and 18-months

  Laura Monico<sup>1</sup>, Jan Gryczynski<sup>1</sup>, Robert Schwartz<sup>1</sup>, Jerome Jaffe<sup>1</sup>, Kevin O'Grady<sup>2</sup>,
  Shannon Mitchell<sup>1</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of
  Maryland-Psychology, College Park, MD
- 81 The Recovery Line supports harm reduction in methadone maintenance
  Brent Moore<sup>1</sup>, Frank Buono<sup>1</sup>, Daniel Lloyd<sup>1</sup>, Destiny Printz<sup>1</sup>, Declan Barry<sup>1</sup>, Richard
  Schottenfeld<sup>1</sup>, David Fiellin<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT

#### **HEALTH DISPARITIES**

- Association of race and ethnicity on national prescribing patterns for childhood ADHD

  Leila Vaezazizi<sup>1</sup>, Peter Bearman<sup>2</sup>, Marissa King<sup>3</sup>, Edward Nunes<sup>1</sup>, Helena Hansen<sup>4</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University Department of Sociology, New York, NY, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>New York University Medical Center, New York, NY
- Associations between past-year marijuana use, arrests, and race/ethnicity among 18-49-year-olds in the United States, 2002-2014

  Alexander Perlmutter<sup>1</sup>, Luis Segura<sup>2</sup>, Julian Santaella-Tenorio<sup>2</sup>, Christine Mauro<sup>2</sup>, Pia Mauro<sup>2</sup>, Silvia Martins<sup>3</sup>, <sup>1</sup>Columbia University, New York, NY, France, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, Newark, NJ
- National scope of adults in substance use treatment who attempt suicide

  Jane Pearson<sup>1</sup>, Lisa Colpe<sup>1</sup>, Michael Schoenbaum<sup>1</sup>, <sup>1</sup>National Institute of Mental
  Health, Bethesda, MD
- Racial/ethnic trends of heroin and non-medical use of prescription opioids among entrants to opioid treatment programs, 2005-2016

  Andrew Rosenblum<sup>1</sup>, Enrique Pouget<sup>2</sup>, Chunki Fong<sup>2</sup>, <sup>1</sup>Credit Services, Metuchen, NJ, <sup>2</sup>National Development and Research Institute, Inc., New York, NY

- Extra-medical use of prescription pain relievers: US-born vs. non-US-born residents of 'First Nation' heritage

  Jose Parra-Cardona<sup>1</sup>, Maria Parker<sup>2</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University,

  Lansing, MI, <sup>2</sup>University of Vermont, Burlington, VT
- 67 Gender and race/ethnic differences in the persistence of alcohol, drug, and polysubstance use disorders

  Elizabeth Evans<sup>1</sup>, Christine Grella<sup>2</sup>, Donna Washington<sup>3</sup>, Dawn Upchurch<sup>4</sup>, <sup>1</sup>US

  Department of Veterans Affairs, Woodland Hills, CA, <sup>2</sup>UCLA-ISAP, Los Angeles, CA, <sup>3</sup>VA Greater Los Angeles Healthcare System, Santa Fe Springs, CA, <sup>4</sup>UCLA

  Fielding School of Public Health, Los Angeles, CA

#### **PSYCHIATRIC COMORBIDITY**

- How patients with PTSD+SUD change across CBT treatments: A secondary analysis of two randomized clinical trials

  Denise Hien<sup>1</sup>, Kathryn Smith<sup>2</sup>, Max Owens<sup>3</sup>, Teresa Lopez-Castro<sup>4</sup>, Lesia M. Ruglass<sup>5</sup>, <sup>1</sup>Adelphi University, Garden City, NY, <sup>2</sup>Columbia University Medical Center, New York State Psychiatric Institute, New York, NY, <sup>3</sup>University of South Florida, Tampa, FL, <sup>4</sup>The City College of New York, New York City, NY, <sup>5</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY
- Coping-oriented cannabis use interacts with PTSD symptoms to predict veteran psychosocial functioning

  James Sottile<sup>1</sup>, Kimberly Babson<sup>2</sup>, Danielle Morabito<sup>2</sup>, Mallory Loflin<sup>3</sup>, Marcel Bonn-Miller<sup>2</sup>, <sup>1</sup>Palo Alto University, East Palo Alto, CA, <sup>2</sup>VA Palo Alto Health Care System, San Francisco, CA, <sup>3</sup>National Center for PTSD, Dissemination & Training Division, San Diego, CA
- Substance use is associated with increased risk-taking behavior in heavy drinking veterans with posttraumatic stress disorder

  David Pennington<sup>1</sup>, Lamisha Muquit<sup>2</sup>, Jennifer Bielenberg<sup>1</sup>, Jennifer Dack<sup>1</sup>,
  Melissa O'Donnell<sup>1</sup>, Brooke Lasher<sup>1</sup>, Alexander Kinzler<sup>1</sup>, Ellen Herbst<sup>1</sup>, Steven Batki<sup>1</sup>, <sup>1</sup>San Francisco VA Medical Center, San Francisco, CA, <sup>2</sup>Palo Alto University, Union City, CA
- Prediction of alcohol use disorder onset by latent internalizing psychopathology risk profiles in adolescence and young adulthood
  Silke Behrendt<sup>1</sup>, Gerhard Bühringer<sup>1</sup>, Michael Höfler<sup>2</sup>, Roselind Lieb<sup>2</sup>, Katja Beesdo-Baum<sup>3</sup>, <sup>1</sup>Technische Universität Dresden, Dresden, Germany, <sup>2</sup>University Basel, Division of Clinical Psychology and Epidemiology, Basel, Switzerland, <sup>3</sup>Behavioral Epidemiology, Technische Universität Dresden, Dresden, Germany
- A pilot test of a brief intervention for hazardous/harmful alcohol use and depression among chronic disease patients in the Western Cape, South Africa Bronwyn Myers<sup>1</sup>, Katherine Sorsdahl<sup>2</sup>, Petal Petersen<sup>1</sup>, Claire van der Westhuizen<sup>2</sup>, Tracey Naledi<sup>3</sup>, Crick Lund<sup>2</sup>, Carl Lombard<sup>4</sup>, Chris Butler<sup>5</sup>, Naomi Levitt<sup>2</sup>, John Joska<sup>2</sup>, Peter Milligan<sup>3</sup>, Dan Stein<sup>2</sup>, <sup>1</sup>South African Medical Research Council, Tygerberg, South Africa, Africa, <sup>2</sup>University of Cape Town, Western Cape, South Africa, <sup>3</sup>Western Cape Department of Health, Western Cape, South Africa, <sup>4</sup>South African Medical Research Council, Tygerberg, South Africa, <sup>5</sup>University of Oxford, Oxford, UK

- Seriously mentally ill adults who are stably housed are more likely to complete a contingency management intervention for alcohol dependence

  Emily Leickly¹, Jordan Skalisky², Oladunni Oluwoye¹, Sterling McPherson³,
  Debra Srebnik⁴, John Roll⁵, Richard Ries⁴, Michael McDonell¹, ¹Washington State
  University, Program of Excellence in Addictions Research, Spokane,
  WA, ²Washington State University, Pullman, WA, ³Washington State University,
  College of Medicine, Spokane, WA, ⁴University of Washington, Seattle,
  WA, ⁵Washington State University College of Nursing, Spokane, WA
- Depression among people living with HIV/AIDS receiving smoking cessation treatment

  David Ledgerwood<sup>1</sup>, Leslie Lundahl<sup>1</sup>, Mark Greenwald<sup>1</sup>, Cynthia Arfken<sup>1</sup>,

  Manuel Tancer<sup>1</sup>, Jonathan Cohn<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI
- Association between depressive symptoms and smoking status in individuals receiving behavioral activation treatment

  Alba González-Roz<sup>1</sup>, Sara Weidberg<sup>2</sup>, Víctor Martínez-Loredo<sup>1</sup>, Aris Grande-Gonsende<sup>2</sup>, Roberto Secades Villa<sup>2</sup>, <sup>1</sup>University of Oviedo, Addictive Behaviors Group, Oviedo, Spain, <sup>2</sup>University of Oviedo, Oviedo, Spain
- Effects of smoking abstinence on delay discounting in smokers with depression Sara Weidberg<sup>1</sup>, Alba González-Roz<sup>2</sup>, Ángel García-Pérez<sup>1</sup>, Irene Pericot-Valverde<sup>3</sup>, Roberto Secades Villa<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>University of Vermont, Burlington, VT, <sup>4</sup>University of Oviedo, Oviedo, Spain
- Synthetic cannabinoid use in relation to psychosis: Evaluation of the role of stress and immune systems

  Anahita Bassir Nia<sup>1</sup>, Sharron Spriggs<sup>1</sup>, Charles Perkel<sup>1</sup>, Chloe Tessereau<sup>1</sup>, Hadi Estakhri<sup>1</sup>, Samantha Jankowski<sup>1</sup>, Afshan Husain<sup>1</sup>, Anna Oprescu<sup>1</sup>, Igor Galynker<sup>1</sup>, Yasmin Hurd<sup>1</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY
- Is nonmedical prescription opioid and/or marijuana use associated with higher major depression prevalence among U.S. young adults?

  Luis Segura<sup>1</sup>, Julian Santaella-Tenorio<sup>1</sup>, Christine Mauro<sup>1</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY
- Gender differences in effects of interim buprenorphine treatment on psychiatric symptoms

  Joanna Streck<sup>1</sup>, Taylor Ochalek<sup>2</sup>, Gary Badger<sup>2</sup>, Stacey Sigmon<sup>2</sup>, <sup>1</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT

#### PROGRAM DESCRIPTIONS

- The National Institute on Drug Abuse drug supply program: Facilitating research through compound inventory and supply
  Richard Kline, Ph.D.<sup>1</sup>, Kevin Gormley<sup>2</sup>, Steven Gust<sup>3</sup>, Robert
  Walsh<sup>4</sup>, <sup>1</sup>CPB/DTMC/NIDA/NIH, Rockville, MD, <sup>2</sup>RTI International, Research
  Triangle Park, NC, <sup>3</sup>OD/NIDA/NIH, Bethesda, MD, <sup>4</sup>NIDA NIH, Bethesda, MD
- NIDA addiction treatment discovery program: Evaluation of potential pharmacotherapies for substance use disorders

  David White<sup>1</sup>, Jane Acri<sup>2</sup>, <sup>1</sup>Medications Discovery and Toxicology Branch, Bethesda, MD, <sup>2</sup>NIDA, Bethesda, MD

102 Safety interactions of potential cocaine treatment medications: Example of a dopamine D3 antagonist Jane Acri<sup>1</sup>, Nathan Appel<sup>2</sup>, <sup>1</sup>NIDA, Bethesda, MD, <sup>2</sup>NIDA, DTMC, Bethesda, MD 103 Exploring various approaches to account for prescribed availability when estimating prescription opioid abuse rates using the ASI-MV® Ryan Black<sup>1</sup>, Stephen Butler<sup>1</sup>, Paul Coplan<sup>2</sup>, <sup>1</sup>Inflexxion, Inc, Waltham, MA, <sup>2</sup>Purdue Pharma L.P., Stamford, CT 104 Improving care with standardized triage, assessment, placement and utilization review David Gastfriend<sup>1</sup>, Desiree Crevecouer-MacPhail<sup>2</sup>, Brian Hurley<sup>2</sup>, Tina Kim<sup>3</sup>, Gary Tsai<sup>3</sup>, <sup>1</sup>Treatment Research Institute, Philadelphia, PA, <sup>2</sup>UCLA, Los Angeles, CA, <sup>3</sup>Los Angeles County, Dept of Public Health, Substance Abuse Prevention and Control, Los Angeles, CA 105 INTAC® – a technology platform for extended release, immediate release and fixed-dose combination opioids with abuse deterrent characteristics Hans-Jürgen Stahlberg<sup>1</sup>, Sebastian Schwier<sup>1</sup>, Klaus Wening<sup>1</sup>, Eric Galia<sup>1</sup>, <sup>1</sup>The Grünenthal Group, Aachen, Germany 106 The NIDA behavioral therapy development program Wil Aklin<sup>1</sup>, Kevin Walton<sup>1</sup>, <sup>1</sup>NIH, Bethesda, MD 107 An investigation of an open access model for scaling up methadone maintenance treatment Lynn Madden<sup>1</sup>, Kathryn Eggert<sup>1</sup>, Scott Farnum<sup>1</sup>, Robert Freeman<sup>1</sup>, Declan Barry<sup>2</sup>, <sup>1</sup>APT Foundation, Inc., New Haven, CT, <sup>2</sup>Yale School of Medicine, New Haven, CT 108 Developing a shared decision-making graphic novel curriculum on medicationassisted treatment Adam Brooks<sup>1</sup>, Lawrence Schoen<sup>2</sup>, Carolyn Carpenedo<sup>1</sup>, Elizabeth Byrne<sup>1</sup>, Douglas Boyd<sup>1</sup>, <sup>1</sup>Treatment Research Institute, Philadelphia, PA, <sup>2</sup>Wedge Medical Center, Philadelphia, PA 109 Mulitisite study on comprehensive opioid overdose prevention strategies with special emphasis on community settings and the use of injectable or intranasal naloxone Anja Busse<sup>1</sup>, Gilberto Gerra<sup>2</sup>, Vladimir Poznyak<sup>3</sup>, Rebecca McDonald<sup>4</sup>, Nicolas Clark<sup>3</sup>, Elizabeth Saenz<sup>5</sup>, Wataru Kashino<sup>5</sup>, Gabriele Aiello<sup>5</sup>, John Strang<sup>6</sup>, <sup>1</sup>United National Office on Drugs and Crime, Vienna, Austria, Austria, <sup>2</sup>Global Challenges Section, Vienna, Austria, Austria, World Health Organization, Geneva, Switzerland, King's College, London, UK, <sup>5</sup>United National Office on Drugs and Crime, Vienna, Austria, <sup>6</sup>King's College, London, UK, United Kingdom 110 A case study of the public response to the opioid overdose epidemic: The Philadelphia story Silvana Mazzella<sup>1</sup>, Jerry Stahler<sup>2</sup>, <sup>1</sup>Prevention Point Philadelphia, Temple University, Philadelphia, PA, <sup>2</sup>Temple University, Philadelphia, PA Pain and affective symptoms in chronic pain patients in opioid addiction treatment 111 recruited to test an online pain self-management program Myles Finlay<sup>1</sup>, Marian Wilson<sup>1</sup>, Michael Orr<sup>1</sup>, Mary Lee A. Roberts<sup>1</sup>, Celestina Barbosa-Leiker<sup>1</sup>, John Roll<sup>1</sup>, <sup>1</sup>Washington State University College of Nursing, Spokane, WA

Monday,	June	19,	2017
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112	Achieving opioid safety with patient, clinician and pharmacist partnership Miltika Kanabar <sup>1</sup> , Kimberly Kwok <sup>1</sup> , Kevin Miller <sup>1</sup> , Murtuza Ghadiali <sup>1</sup> , David Pating <sup>1</sup> , Julie Lim <sup>1</sup> , <sup>1</sup> Kaiser Permanente, Oakland, CA
113	The catalyst clinic: Implementing a primary care-based, multidisciplinary team approach for adolescents and young adult who use substances Brittany Carney <sup>1</sup> , Scott Hadland <sup>1</sup> , Sarah Bagley <sup>1</sup> , <sup>1</sup> Boston University School of Medicine, Boston, MA
114	Successful of non-scheduled urine drug tests among all students in a private high school in Las Vegas  Miriam Adelson <sup>1</sup> , Shirley Linzy <sup>2</sup> , Mary Jeanne Kreek <sup>3</sup> , Paul Schiffman <sup>4</sup> , Einat Peles <sup>5</sup> , <sup>1</sup> Adelson Clinic, Tel Aviv Medical Center, Tel Aviv, Israel, <sup>2</sup> Adelson Clinic, Las Vegas, NV, <sup>3</sup> The Rockefeller University, New York, NY, <sup>4</sup> Dr. Miriam and Sheldon G. Adelson Educational Campus, Las Vegas, NV, <sup>5</sup> Tel Aviv University, Reut, Israel
115	Acceptability of hair collection for drug testing among pregnant women Victoria Coleman-Cowger <sup>1</sup> , Katrina Mark <sup>2</sup> , <sup>1</sup> Battelle Memorial Institute, Baltimore, MD, <sup>2</sup> University of Maryland, College Park, MD
116	Characteristics of participants in a specialty court for commercially sexually exploited girls with substance use and mental health problems  Eraka Bath <sup>1</sup> , Lindsey Thompson <sup>2</sup> , Elizabeth Barnert <sup>2</sup> , Mekeila Cook <sup>1</sup> , <sup>1</sup> UCLA, Los Angeles, CA, <sup>2</sup> UCLA-Pediatrics, Los Angeles, CA
117	Group prenatal care in a community based substance abuse treatment center Elizabeth Zadzielski <sup>1</sup> , Yukiko Washio <sup>2</sup> , Michelle Drew <sup>1</sup> , Gina Scott <sup>1</sup> , <sup>1</sup> Christiana Care Health System, Newark, DE, <sup>2</sup> Christiana Care Health Services/University of Delaware, Media, PA
118	Provision of care in a hub-and-spoke outpatient treatment model James Sorensen <sup>1</sup> , Jasmin Llamas <sup>2</sup> , Robin Stuart <sup>3</sup> , <sup>1</sup> UCSF at Zuckerberg San Francisco General Hospital, San Francisco, CA, <sup>2</sup> Santa Clara University, Santa Clara, CA, <sup>3</sup> CHI Recovery, Sebastopol, CA
119	eClipse: An online portal to facilitate access to evidence-based eHealth treatments for substance use and mental health comorbidity Sally Hunt <sup>1</sup> , Frances Kay-Lambkin <sup>2</sup> , Katherine Mills <sup>1</sup> , Louise Thornton <sup>1</sup> , Maree Teesson <sup>1</sup> , <sup>1</sup> University of New South Wales, Sydney, New South Wales, Australia <sup>2</sup> University of Newcastle, New Castle, New South Wales, Australia
120	Honoring our Native American warriors Anne Skinstad <sup>1</sup> , Sean A Bear <sup>2</sup> , <sup>1</sup> University of Iowa, Iowa City, IA, <sup>2</sup> University of Iowa College of Public Health, National American Indian and Alaska Native ATTC, Iowa City, IA
121	Development and validation of an Embodied Conversational Agent to detect problematic use of tobacco and alcohol: Study description  Sarah Moriceau <sup>1</sup> , Fuschia Serre <sup>1</sup> , Melina Fatseas <sup>2</sup> , Jean-Arthur Micoulaud-Franchi <sup>1</sup> , Etienne de Sevin <sup>1</sup> , Emilien Bonhomme <sup>1</sup> , Pierre Philip <sup>1</sup> , Marc Auriacombe <sup>1</sup> , <sup>1</sup> Université de Bordeaux, Bordeaux, France, <sup>2</sup> Centre Hospitalier Charles Perrens, Bordeaux, France

122	The supera distance-learning course: A ten-year Brazilian experience on training professionals in screening and brief intervention to substance users
	Maria Lucia Souza-Formigoni <sup>1</sup> , Ana Paula Leal Carneiro <sup>1</sup> , Ana Regina Noto <sup>2</sup> , José Carlos Fernandes Galduroz <sup>1</sup> , <sup>1</sup> Universidade Federal de São Paulo, São Paulo, Brazil, <sup>2</sup> Universidade Federal de São Paulo, Department of Psychobiology, São Paulo, Brazil
123	Personal goal setting: Factors in substance use and academic achievement Dominique Morisano <sup>1</sup> , Michaéla Schippers <sup>2</sup> , Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands, University of Toronto, ON, Canada
124	The effect of medical marijuana laws and regulations on prevalence of marijuana use and cannabis use disorder  Arthur Robin Williams <sup>1</sup> , Silvia Martins <sup>2</sup> , Christine Mauro <sup>2</sup> , Frances Levin <sup>3</sup> , Julian Santaella-Tenorio <sup>2</sup> , <sup>1</sup> Columbia University Division on Substance Use Disorders, New York, NY, <sup>2</sup> Columbia University, New York, NY, <sup>3</sup> Columbia University and NYSPI, New York, NY

### **Oral Communications 6**

Mont-Royal 10:00 - 12:00 PM

#### WHEN ONE ISN'T ENOUGH: POLYDRUG USE

Medicine, Gainsville, FL

Chairs: Jo	hannes Thrul and Linda Cottler
10:00	Marijuana, tobacco, and prescription sedatives: Differences in non-medical, medical, and no use  Verlin Joseph <sup>1</sup> , Linda Cottler <sup>1</sup> , Catherine Woodstock Striley <sup>1</sup> , <sup>1</sup> University of Florida, Gainesville, FL
10:15	Polydrug use among opioid users: Results from the national and local studies Georgiy Bobashev <sup>1</sup> , Lee Hoffer <sup>2</sup> , Kira Tebbe <sup>3</sup> , <sup>1</sup> RTI International, Research Triangle Park, NC, <sup>2</sup> Case Western Reserve University, Cleveland, OH, <sup>3</sup> Yale University, New Haven, CT
10:30	Nonmedical prescription tranquilizer use among individuals with opioid use disorder in anationally representative sample Victoria Votaw <sup>1</sup> , Olivera Bogunovic <sup>2</sup> , R. Kathryn McHugh <sup>1</sup> , <sup>1</sup> McLean Hospital, Belmont, MA, <sup>2</sup> McLean Hospital, Harvard Medical School, Belmont, MA
10:45	Illicit drug use is associated with increased cigarette smoking among buprenorphine- maintained adults Maria Parker <sup>1</sup> , Taylor Ochalek <sup>1</sup> , Stacey Sigmon <sup>1</sup> , <sup>1</sup> University of Vermont, Burlington, VT
11:00	Rapid-onset cannabis problems: Excess risk for polydrug users? Karl Alcover <sup>1</sup> , James Anthony <sup>1</sup> , <sup>1</sup> Michigan State University, Lansing, MI
11:15	Typologies of female cocaine use rely on transitions from initiation, to first symptom, to heaviest use, by age and comorbid marijuana use Linda Cottler <sup>1</sup> , Yiyang Liu <sup>1</sup> , Catherine Woodstock Striley <sup>1</sup> , Barry Setlow <sup>2</sup> , Lori

Knackstedt<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida College of

- Differences in co-use of cigarettes with alcohol vs. marijuana among young adults:
  Adaily diary study
  Johannes Thrul<sup>1</sup>, Noah Gubner<sup>1</sup>, Louisa Holmes<sup>2</sup>, Danielle Ramo<sup>1</sup>, Pamela Ling<sup>1</sup>,
  <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>State University of New York at Binghamton, Vestal, NY
- Electronic- and clinician-delivered screening, brief intervention, and referral to treatment for women in reproductive healthcare centers: A randomized clinical trial Steve Martino<sup>1</sup>, Steven Ondersma<sup>2</sup>, Ariadna Forray<sup>1</sup>, Todd Olmstead<sup>3</sup>, Heather Howell<sup>1</sup>, Kathryn Gilstad-Hayden<sup>1</sup>, Trace Kershaw<sup>4</sup>, Kimberly Yonkers<sup>1</sup>, <sup>1</sup>Yale University-Psychiatry, New Haven, CT, <sup>2</sup>Wayne State University-Psychiatry and Behavioral Neurosciences, Detroit, MI, <sup>3</sup>University of Texas at Austin, Lyndon B. Johnson School of Public Affairs, <sup>4</sup>Yale School of Public Health, New Haven, CT

#### **Oral Communications 7**

Verdun 10:00 - 12:00 PM

#### ADDICTION-INFECTION CONNECTION

Chairs: Kristen McLaurin and Jennifer Havens

- 10:00 Protracted sex differences in the core components of executive function in the HIV-1 transgenic rat
  Kristen McLaurin<sup>1</sup>, Rosemarie Booze<sup>1</sup>, Charles F Mactutus<sup>1</sup>, <sup>1</sup>University of South Carolina, Columbia, SC

  10:15 Cocaine use and HIV have independent effects on the neural processing of ambiguous decisions
  Andréa L. Hobkirk<sup>1</sup>, Bennett W. Hartley<sup>1</sup>, Sheri Towe<sup>1</sup>, Christina Meade<sup>1</sup>, <sup>1</sup>Duke University School of Medicine, Durham, NC

  10:30 Respondent-driven sampling as a strategy to increase awareness of hepatitis C infection in stimulant users
  Christina Meade<sup>1</sup>, Sheri Towe<sup>1</sup>, Ehi Ihionkhan<sup>1</sup>, <sup>1</sup>Duke University School of Medicine, Durham, NC
- 10:45 Transience, networks and hepatitis C and HIV risk among young persons who inject drugs Basmattee Boodram<sup>1</sup>, Louis Shekhtman<sup>2</sup>, Anna Hotton<sup>3</sup>, Alexander Gutfraind<sup>4</sup>, Mary-Ellen Mackesy-Amiti<sup>3</sup>, Carl Latkin<sup>5</sup>, Harel Dahari<sup>4</sup>, <sup>1</sup>University of Illinois, Chicago, IL, <sup>2</sup>Bar-Ilan University, Department of Physics, Ramat Gan, Israel, <sup>3</sup>University of Illinois, Division of Epidemiology and Biostatistics, Chicago, IL, <sup>4</sup>Loyola University Medical Center, Division of Hepatology, Maywood, IL, <sup>5</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 11:00 The association between cigarette smoking and virologic suppression in HIV-infected substance users

  Theresa Winhusen<sup>1</sup>, Daniel Feaster<sup>2</sup>, Rui Duan<sup>3</sup>, Jennifer Brown<sup>1</sup>, Lisa Metsch<sup>4</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>3</sup>University of Miami, Miami, FL, <sup>4</sup>Columbia University, New York, NY

- 11:15 Availability of HIV-related services in buprenorphine treatment: Data from a national survey

  Hannah Knudsen<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Sharon Walsh<sup>1</sup>, Jamie Studts<sup>1</sup>, Jennifer Havens<sup>3</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky College of Medicine, Lexington, KY, <sup>3</sup>University of Kentucky College of Medicine, Lexington, KY
- Assessment of the behavioral intervention "Steps towards Health" for HIV-positive persons who inject drugs in Ukraine
  Tetiana Kiriazova<sup>1</sup>, Yuliia Sereda<sup>2</sup>, Roman Yorick<sup>3</sup>, Inna Shvab<sup>3</sup>, Sergii
  Dvoriak<sup>1</sup>, <sup>1</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>2</sup>Ukrainian Institute on Public Health Policy, Kiev, Ukraine, <sup>3</sup>USAID RESPOND Project, Pact Inc., Kyiv, Ukraine
- Naltrexone implant, compared to oral naltrexone, improves HIV treatment outcomes of opioid-addicted patients
   Evgeny Krupitsky¹, Edwin Zvartau², Elena Blokhina², Elena Vladimirovna Verbitskaya³, Dmitry Lioznov³, Tatyana Yaroslavtseva³, Vladimir Palatkin³, Maryia Vetrova³, Natalia Bushara³, Andrey Burakov³, Dmitry Masalov³, Olga Mamontova³, Sabrina Poole⁴, Robert Gross⁴, George Woody⁴, ¹St. Petersburg Bekhterev Research Psychoneurological Institute, St.-Peterburg, Russia, Russian Federation, ²First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russia, Russian Federation, ³First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russia, ⁴University of Pennsylvania, Philadelphia, PA

#### Symposium IV

Westmount 10:00 - 12:00 PM

## BRAIN RECOVERY IN ADDICTION: FROM BIOMARKERS TO FUNCTIONAL OUTCOMES

Chairs: Rajita Sinha and Carlos Blanco

- 10:00 Functional recovery in neural substrates underlying aversive interception and allostasis in substance use disorders
  - M. Paulus, Laureate Institute for Brain Research; UCSD Psychiatry, Tulsa, OK
- 10:25 Recovery of the neural substrates of iRISA (impairments in response inhibition and salience attribution) in cocaine addiction

  R. Goldstein, Icahn School of Medicine at Mount Sinai, New York, NY
- 10:50 Structural and functional brain changes associated with improved cognitive control in abstinence from substance use disorders
  - H. Garavan, University of Vermont, Burlington, VT
- 11:15 Substance use recovery in neural stress and drug craving circuitry: Relations to clinical outcomes
  - R. Sinha, Yale School of Medicine, New Haven, CT
- 11:40 DISCUSSANT: Identifying brain recovery biomarkers to impact precision medicine in addition
  - N. Volkow, NIDA, Bethesda, MD

## Symposium V

Outremont 10:00 - 12:00 PM

## INFORMING TOBACCO PRODUCT REGULATORY POLICIES THROUGH ADDICTION-RELATED RESEARCH

Chairs: Jennifer Naylor and Lynn Hull

10:00	Investigating the abuse liability of tobacco product constituents in nonhuman primates  A. Goodwin, U.S. Food and Drug Administration - National Center for Toxicological Research, Jefferson, AR
10:25	Translational behavioral neuroimaging model of nicotine dependence E. Stein, NIDA Intramural Research Program, Baltimore, MD
10:50	Modulation of nicotine perception and use profiles by flavorants E. DeVito, Yale School of Medicine, New Haven, CT
11:15	Behavioral economics to inform tobacco policy, from lab to marketplace M. Koffarnus, Virginia Tech Carilion Research Institute, Roanoke, VA
11:40	DISCUSSANT: How can addiction-related research inform CTP's regulatory decisions?  K. Jackson, U.S. Food and Drug Administration - Center for Tobacco Products, Silver Spring, MD

#### **Policy Forum**

Westmount 12:15 - 1:45 PM

Chairs: Martin Iguchi and William Dewey

Update of activities and accomplishments of Friends of NIDA - Report from Capitol F. W. Dewey, Virginia Commonwealth University, Richmond, VA

Implications for NIDA's research portfolio

E. Long, Van Scoyoc Associates, Washington, DC

Treatment instead of incarceration: Police-assisted addiction recovery initiatives in Gloucester and 150 other communities: First-year experience

D. Rosenblum, Boston University School of Medicine and Public Health, Department of Health Law, Policy & Management, Boston, MA

Naloxone and good samaritan laws in two New England states: Impacts on law enforcement and opioid consumers

T. Green, Boston University School of Medicine, Boston, MA

Prescription drug monitoring programs: Of law enforcement or public health?

L. Beletsky, Northeastern University School of Law & Bouve College of Health Sciences, Boston, MA

#### **Oral Communications 8**

Mont-Royal 2:00 - 4:00 PM

## CHAUD, CHAUD: NOVEL TREATMENT STRATEGIES

Chairs: Eric Maltbie and Sandra Comer

- JPC-089, a 1,4-diphenethyl substituted piperidine, inhibits the neurotoxic, psychomotor 2:00 stimulant and reinforcing effects of methamphetamine Justin Nickell<sup>1</sup>, Arlington Wilson<sup>1</sup>, Emily Denehy<sup>1</sup>, John Culver<sup>1</sup>, Venumadhav Janganati<sup>2</sup>, Peter Crooks<sup>2</sup>, Michael Bardo<sup>1</sup>, Linda Dwoskin<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Arkansas for Medical Sciences, Little Rock, AR Suvorexant, a clinically available hypocretin/orexin receptor antagonist, attenuates 2:15 positive affect and drug seeking associated with psychostimulant self-administration in Steven Simmons<sup>1</sup>, Helene Philogene<sup>2</sup>, Rose Martorana<sup>1</sup>, Lili Mo<sup>1</sup>, Fionya Tran<sup>1</sup>, Taylor Gentile<sup>1</sup>, Scott Rawls<sup>2</sup>, John Muschamp<sup>1</sup>, <sup>1</sup>Lewis Katz School of Medicine, Temple University Philadelphia, PA, <sup>2</sup>Temple University, Philadelphia, PA 2:30 Effects of BU08028, a mixed mu and nociceptin/orphanin FQ peptide receptor agonist, on alcohol drinking in rhesus monkeys Paul Czoty<sup>1</sup>, Phillip Epperly<sup>1</sup>, April Davenport<sup>1</sup>, Mei-Chuan Ko<sup>2</sup>, Stephen Husbands<sup>3</sup>, James Daunais<sup>1</sup>, Shawn Flynn<sup>1</sup>, <sup>1</sup>Wake Forest School of Medicine, Winston-Salem, NC, <sup>2</sup>University of Michigan, Ann Arbor, MI, <sup>3</sup>University of Bath, Bath, UK Investigating the effects of ketamine treatment on reinstatement of cocaine self-2:45 administration in rhesus monkeys Eric Maltbie<sup>1</sup>, Leonard Howell<sup>1</sup>, <sup>1</sup>Emory University, Atlanta, GA Reduction of smoking urges with intranasal insulin: A randomized, crossover, placebo-3:00 controlled clinical trial
- A. Hamidovic, University of Illinois, Chicago, IL

  Effects of pioglitazone, a PPARy agonist, on the subjective and reinforcing effects of
- 3:15 Effects of pioglitazone, a PPARy agonist, on the subjective and reinforcing effects of tobacco cigarettes

  Suky Martinez<sup>1</sup>, Jermaine Jones<sup>2</sup>, Sandra Comer<sup>3</sup>, Adam Bisaga<sup>3</sup>, <sup>1</sup>Columbia University Medical Center, New York State Psychiatric Institute, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY
- 3:30 Effects of ibudilast on subjective, reinforcing and analgesic effects of oxycodone and drug craving in recently detoxified adults with opioid dependence

  Verena Metz<sup>1</sup>, Jermaine Jones<sup>2</sup>, Jeanne Manubay<sup>3</sup>, Maria Sullivan<sup>4</sup>, Shanthi Mogali<sup>1</sup>,

  Andrew Segoshi<sup>5</sup>, Gabriela Madera<sup>3</sup>, Kirk Johnson<sup>6</sup>, Sandra Comer<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons,

  New York, NY, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>Alkermes, Inc., Waltham,

  MA, <sup>5</sup>New York State Psychiatric Institute, New York, NY, <sup>6</sup>Xoma Corporation,

  Berkeley, CA

3:45

A Phase III outpatient randomized, double-blind, double-dummy controlled trial evaluating efficacy of CAM2038 (weekly and monthly buprenorphine FluidCrystal® injection depot) for opioid use disorder

Michelle Lofwall¹, Edward Nunes², Genie Bailey³, Sharon Walsh⁴, Stacey Sigmon⁵, Fredrik Tiberg⁶, Margareta Linden⁻, Behshad Sheldon⁶, Sonnie Kim⁶, ¹University of Kentucky College of Medicine, Lexington, KY, ²Columbia University and NYSPI, New York, NY, ³Warren Alpert Medical School of Brown University, Providence, RI, ⁴University of Kentucky, Lexington, KY, ⁵University of Vermont, Burlington, VT, ⁶Camurus, Lund, Sweden, ⁶Camurus, Lund, Sweden, ⁶Braeburn Pharmaceuticals, Princeton, NJ

#### **Oral Communications 9**

Verdun 2:00 - 4:00 PM

#### TRAUMA, VIOLENCE AND ADDICTION

Chairs: Therese Killeen and Gregory Homish

- 2:00 Trauma, substance use, and mental health problems among homeless veteran parents in Los Angeles: Lessons in stress and resilience Roya Ijadi-Maghsoodi<sup>1</sup>, Sophie Feller<sup>2</sup>, Gery Ryan<sup>3</sup>, Sheryl Kataoka<sup>2</sup>, Donna Washington<sup>4</sup>, Lisa Altman<sup>4</sup>, Lillian Gelberg<sup>5</sup>, <sup>1</sup>UCLA, Los Angeles, CA, <sup>2</sup>Semel Institute for Neuroscience and Human Behavior (UCLA), Los Angeles, CA, <sup>3</sup>RAND Corporation, Arlington, VA, <sup>4</sup>VA Greater Los Angeles Healthcare System, Santa Fe Springs, CA, <sup>5</sup>UCLA Family Medicine, Los Angeles, CA 2:15 Combat exposure, emotional and physical role limitations, and substance use among male reserve soldiers Rachel Hoopsick<sup>1</sup>, D. Lynn Homish<sup>1</sup>, Gregory Homish<sup>1</sup>, <sup>1</sup>State University of New York at Buffalo, Buffalo, NY 2:30 Association between PTSD symptom severity, mindfulness and emotional regulation Therese Killeen<sup>1</sup>, Nathaniel Baker<sup>1</sup>, Caroline Vrana<sup>1</sup>, Victoria Brant<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC 2:45 Childhood traumatic experience and criminal justice involvement among women: Evaluating mediation by drug use and depression Joy Scheidell<sup>1</sup>, Christopher Frueh<sup>2</sup>, Maria Khan<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>University of Hawaii at Hilo, Hilo, Hawaii Trauma exposure, sex and stress responding among cannabis smokers Thomas Chao<sup>1</sup>, 3:00 Vanja Radoncicic<sup>2</sup>, Denise Hien<sup>2</sup>, Gillinder Bedi<sup>3</sup>, Margaret Haney<sup>4</sup>, <sup>1</sup>New York State Psychiatric Institute, New York, NY, <sup>2</sup>Adelphi University, Garden City, NY, <sup>3</sup>Columbia University, New York, NY, <sup>4</sup>Columbia University Medical Center, New York, NY 3:15 The self and susceptibility: The role of the medial prefrontal cortex in addiction
  - comorbidity
    Bradford Martins<sup>1</sup>, Ricardo Caceda<sup>1</sup>, Josh Cisler<sup>2</sup>, G. Andrew James<sup>1</sup>, Clinton
    Kilts<sup>1</sup>, <sup>1</sup>University of Arkansas for Medical Sciences, Little Rock, AR, <sup>2</sup>University of
    Wisconsin-Madison, Madison, WI

3:30 Age trajectories of the association between violence exposure and past-30-day substance use

Jason Goldstick<sup>1</sup>, Justin Heinze<sup>1</sup>, Sarah Stoddard<sup>1</sup>, Rebecca Cunningham<sup>1</sup>, Marc Zimmerman<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI

3:45 The relationship between hazardous alcohol use and violence among street-involved youth

Nadia Fairbarin<sup>1</sup>, Evan Wood<sup>1</sup>, Huiru Dong<sup>2</sup>, Sabina Dobrer<sup>3</sup>, Thomas Kerr<sup>2</sup>, Kora DeBeck<sup>4</sup>, <sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>University of British Columbia, Vancouver, BC, <sup>3</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC, <sup>4</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC

#### **Oral Communications 10**

Outremont 2:00 - 4:00 PM

#### THE CHANGING LANDSCAPE: HEALTH AND POLICY

Chairs: Samuel Friedman and Lilian Ghandour

2:00	Assessing the impacts of minimum legal drinking age laws on police-reported criminal victimization in Canada from 2009-2013 Claire Benny <sup>1</sup> , Jodi Gatley <sup>1</sup> , Marcos Sanches <sup>2</sup> , Russell Callaghan <sup>3</sup> , <sup>1</sup> University of Northern British Columbia, Prince George, BC, <sup>2</sup> Centre for Addiction and Mental Health, Toronto, ON, <sup>3</sup> Northern Medical Program, Prince George, BC, Canada
2:15	Social causation and neighborhood selection processes underlie associations among neighborhoods, social networks and illicit drug use among adults relocating from public housing Sabriya Linton <sup>1</sup> , Danielle Haley <sup>2</sup> , Josalin Hunter-Jones <sup>1</sup> , Zev Ross <sup>3</sup> , Hannah Cooper <sup>1</sup> , <sup>1</sup> Emory University, Atlanta, GA, <sup>2</sup> University of North Carolina at Chapel Hill, Chapel Hill, NC, <sup>3</sup> ZevRoss Spatial Analysis
2:30	Research on determinants of service provision for people who use drugs S. Friedman, National Development and Research Institute, Inc., New York, NY
2:45	Modelling youths' demand and ethanol intake responsiveness to alcohol taxes using Discrete Choice Experiment Lilian Ghandour <sup>1</sup> , Ali Chalak <sup>2</sup> , Nasser Yassin <sup>2</sup> , Rima Nakkash <sup>2</sup> , Sirine Anouti <sup>2</sup> , Rima Afifi <sup>2</sup> , <sup>1</sup> American University of Beirut, Beirut, Lebanon, Lebanon, <sup>2</sup> American University of Beirut, Beirut, Lebanon
3:00	Social determinants of recovery from substance abuse among justice-involved community members  Linda Kahn <sup>1</sup> , Bonnie Vest <sup>1</sup> , Diane Berdine <sup>1</sup> , Robert Granfield <sup>1</sup> , Gregory Homish <sup>1</sup> , <sup>1</sup> State University of New York at Buffalo, Buffalo, NY
3:15	Medical marijuana laws and sedative/hypnotic overdose mortality in the United States Stephanie Peglow <sup>1</sup> , Marilyn Stoler <sup>2</sup> , William Becker <sup>2</sup> , <sup>1</sup> Eastern Virginia Medical School

and Yale University, Stamford, CT, <sup>2</sup>Yale University, New Haven, CT

3:30	Impact of mandatory minimum sentencing on crack and powder cocaine use
	Lauryn Walker <sup>1</sup> , Briana Mezuk <sup>1</sup> , <sup>1</sup> Virginia Commonwealth University, Richmond, VA
3:45	Behavioral health provider network structures and adequacy standards in private
	health plans
	Maureen Stewart <sup>1</sup> , Constance Horgan <sup>2</sup> , Sharon Reif <sup>2</sup> , Deborah Garnick <sup>1</sup> , Brooke Evans <sup>1</sup> ,
	Timothy Creedon <sup>1</sup> , <sup>1</sup> Brandeis University, Waltham, MA, <sup>2</sup> Brandeis University, Heller
	School for Social Policy and Management, Waltham, MA

### Symposium VI

Westmount 2:00 - 4:00 PM

SEX AS A BIOLOGICAL VARIABLE: RESEARCH FINDINGS FROM NIH OFFICE OF RESEARCH ON WOMEN'S HEALTH AND NIDA CENTER GRANTS – AHEAD OF ITS TIME OR LONG OVERDUE?

Chairs: Cora Lee Wetherington and Sherry McKee

2:00	Beyond mice and men: Innovations in translational sex and gender-sensitive tobacco treatment development S. McKee, Yale School of Medicine, New Haven, CT
2:25	The stress – addictions relationship: A focus on sex/gender differences K. Brady, Medical University of South Carolina, Charleston, SC
2:50	Treatments to reduce impulsivity decrease incubation of cocaine and nicotine craving and relapse in rats: Sex differences M. Carroll, University of Minnesota, Minneapolis, MN
3:15	Sex as a biological variable in addiction research J. Becker, University of Michigan, Ann Arbor, MI
3:40	DISCUSSANT: Sex as a biological variable we all knew about, but ignored R. Foltin, Columbia University Medical Center, New York, NY

## Marian W. Fischman Memorial Award Lecture

Westmount/Outremont 4:15 - 5:15 PM

Presentation of the Marian W. Fishman Award to Sharon Walsh

Introduction by Michelle Lofwall

Lecture: Opioid Euphoria and Dysphoria: A Tale of Two Cities Sharon L. Walsh

#### **Student/Trainees Mixer**

Salon Bonaventure 5:15 - 6:45 PM

#### **2017 NIDA International Forum Abstracts**

#### Fontaine A&B

7:00 to 9:00 PM

#### Information

- 100 National Institute on Drug Abuse International Program: Promoting diplomacy and addiction research
  - S. Gust<sup>1</sup>, J. McCormally<sup>2</sup>. <sup>1</sup>National Institute on Drug Abuse International Program, United States; <sup>2</sup>National Institute on Drug Abuse International Program Contractor Staff, United States
- 101 The 4th Africa and Middle East Congress on Addiction: Research outreach and capacity-building activities
  - M. al'Absi<sup>1</sup>, S. El Mhamdi<sup>2</sup>. <sup>1</sup>University of Minnesota, United States; <sup>2</sup>University of Monastir, Tunisia
- 102 Public availability of raw data in articles published in journals indexed in the Journal Citation Reports substance abuse category
  - R. Aleixandre-Benavent<sup>1,2</sup>, F.J. Bueno-Canigral<sup>3</sup>, A. Vidal-Infer<sup>4</sup>. <sup>1</sup>Ingenio, Spain; <sup>2</sup>Universitat de Valencia-Consejo Superior de Investigaciones Científicas, Spain; <sup>3</sup>Plan Municipal de Drogodependencias, Ajuntament de Valencia, Regidoria de Sanitat, Salut i Esports, Spain, <sup>4</sup>Departamento de Historia de la Ciencia y Documentacion, Universidad de Valencia, Spain
- 103 Addiction medicine for medical staff in the National Institute of Neurology and Neurosurgery in Mexico City: Pilot course
  - M. Azcarraga-Quiza<sup>1,2</sup>, P. Leon-Ortiz<sup>1</sup>. <sup>1</sup>National Institute of Neurology and Neurosurgery, Mexico; <sup>2</sup>Virginia Commonwealth University, United States
- 104 Analysis of scientific subjects over consumption of addictive substances and road safety
  F.J. Bueno-Canigral<sup>1</sup>, D. Melero-Fuentes<sup>2</sup>, R. Aleixandre-Benavent<sup>3,4</sup>, J-C. Valderrama-Zurian<sup>5</sup>. <sup>1</sup>Plan Municipal de Drogodependencias, UPCCA, Ajuntament de Valencia,
  Regidoria de Sanitat, Salut i Esports, Spain; <sup>2</sup>Institute of Documentation and Information
  Technologies, Catholic University of Valencia, Spain; <sup>3</sup>Ingenio, Spain; <sup>4</sup>Universitat de
  Valencia-CSIC, Spain; <sup>5</sup>Departamento de Historia de la Ciencia y Documentacion,
  Universidad de Valencia, Spain
- 105 An alternative to prohibition and commercialization of cannabis: The experience of Uruguay M.E. Cabrera<sup>1,2</sup>, J.R. Koch<sup>3</sup>. <sup>1</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>National Drug Board of Uruguay, Uruguay; <sup>3</sup>Virginia Commonwealth University, United States
- 106 Management of substance use problems among children and adolescents in Iran M. Chawarski<sup>1</sup>, H.R. Fathi<sup>2</sup>. <sup>1</sup>Yale University School of Medicine, United States; <sup>2</sup>Addiction Studies Department, School of Advanced Medical Technologies, Tehran University of Medical Sciences, Iran
- 107 Increased smoking and reduced well-being following missile attacks in Israeli youth P. Findley<sup>1</sup>, I. Pruginin<sup>2</sup>, R. Isralowitz<sup>2</sup>. <sup>1</sup>Rutgers University, United States; <sup>2</sup>Regional Alcohol and Drug Abuse Research Center, Ben Gurion University, Israel

- 108 Addiction education in Thai medical schools
  - W. Jiraporncharoen, S. Lkhitsathian, C. Angkurawaranon, A. Aramrattana. Chiang Mai University (CMU), Thailand; Substance Abuse and Mental Health Services Administration-University of California Los Angeles-CMU Southeast Asia HIV-Addiction Technology Transfer Center, Thailand
- 109 The Hubert H. Humphrey Fellowship Program at Virginia Commonwealth University J.R. Koch, R.L. Balster, A. Breland, W.L. Kliewer. Virginia Commonwealth University, United States
- 110 The International Society of Substance Use Professionals
  J.T. Lee. The International Society of Substance Use Prevention and Treatment Professionals, United Kingdom
- 111 The Virginia Commonwealth University Hubert H. Humphrey Fellowship 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>, A. Breland<sup>2</sup>. North Carolina State University, United States; Virginia Commonwealth University, United States
- 112 Emerging viral pathways among drug-using populations: Future directions of scientific studies C. McCoy<sup>1</sup>, A.J. McCoy Bengoa<sup>1</sup>, B. Hayden<sup>2</sup>, H.V. McCoy<sup>3</sup>, D. McBride<sup>4</sup>, S. Puri<sup>1</sup>, P. Shapshak<sup>5</sup>. <sup>1</sup>University of Miami, United States; <sup>2</sup>Banyan Health, United States; <sup>3</sup>Florida International University, United States; <sup>4</sup>Andrews University, United States; <sup>5</sup>University of South Florida, United States
- 113 Face-to-face and virtual training programs to address late diagnosis of HIV among people who use drugs in Argentina
  - D. Rossi, P. Cymerman, P. Goltzman, M.P. Pawlowicz, G. Touze. Intercambios Civil Association, Argentina; University of Buenos Aires, Argentina
- 114 Indonesia policy review of people who inject drugs and HIV

  R. Sarasvita<sup>1,2</sup>, H. Susami<sup>2,3</sup>, D. Utami<sup>1,3</sup>, S. Rose<sup>4</sup>, D.S. Metzger<sup>5</sup>. <sup>1</sup>Indonesia National Narcotics Board, Indonesia; <sup>2</sup>HPTN 074 Indonesia Site–Cipto Mangunkusumo Hospital, Indonesia; <sup>3</sup>Abhipraya Foundation, Indonesia; <sup>4</sup>FHI 360, HIV Prevention Trials Network, United States; <sup>5</sup>Treatment Research Institute, University of Pennsylvania, United States

#### **Basic Science**

- 200 Acute and residual effects of cannabis on simulated driving performance of young adults
  Bruna Brands<sup>1,2</sup>, Robert Mann<sup>1,3</sup>, Bernard Lefoll<sup>1,3</sup>, Gina Stoduto<sup>3</sup>, Christine Wickens<sup>3</sup>,
  Marilyn Huestis<sup>4</sup>. <sup>1</sup>University of Toronto, Canada; <sup>2</sup>Health Canada, Canada; <sup>3</sup>Centre for
  Addiction and Mental Health, Canada; <sup>4</sup>University of Maryland School of Medicine, United
  States
- 201 Recovery and withdrawal after suspending chronic toluene exposure in adolescent rats
  S. Cruz<sup>1</sup>, V. Nava-Rodriguez<sup>1</sup>, M-T. Rivera-Garcia<sup>1,2</sup>, C. Lopez-Rubalcava<sup>1</sup>. <sup>1</sup>Department of Pharmacobiology, Cinvestav, Mexico; <sup>2</sup>Department of Basic Science, Oregon Health & Science University, United States
- 202 Hepatotoxicity and nephrotoxicity induced by solvent inhalants Alaaeldin Elkoussi. Assiut College of Medicine, Egypt
- 203 Discriminative stimulus effects of cocaine in rats: Training via the oral route of administration C. Froger-Colleaux, S. Paillard, K. Davoust, V. Castagne. Porsolt, France

Center, Taiwan

204 Greater impact on brain volume change in chronic ketamine users with adolescent onset C-C. Hung<sup>1,2</sup>, T. Szu-Hsien Lee<sup>3</sup>, C-C. Huang<sup>4</sup>, C-Po Lin<sup>4,5</sup>, Y-S. Liu<sup>4</sup>, C-S.R. Li<sup>6</sup>, J-R. Duann<sup>7</sup>

<sup>1</sup>Institute of Brain Science, National Yang Ming University, Taiwan; <sup>2</sup>Bali Psychiatry Center, Ministry of Health and Welfare, Taiwan; <sup>3</sup>Department of Health Promotion and Education, National Taiwan Normal University, Taiwan; <sup>4</sup>Brain Connectivity Lab, National Yang Ming University, Taiwan; <sup>5</sup>Institute of Neuroscience, National Yang Ming University, Taiwan; <sup>6</sup>Departments of Psychiatry and Neuroscience, Yale University School of Medicine, United

States; <sup>7</sup>China Medical University, Biomedical Engineering Research and Development

- 205 Using portable imaging to determine marijuana intoxication in humans H.O. Keles, J. Gilman, S. Sobolewski, M. Radoman, G. Pachas, A.E. Evins. Massachusetts General Hospital, United States
- 206 Acute effects of cannabis on verbal memory in young adults: Relationship to tobacco use J. Matheson<sup>1,2</sup>, R. Mann<sup>1,2</sup>, B. Lefoll<sup>1,2</sup>, G. Stoduto<sup>2</sup>, C. Wickens<sup>2</sup>, M. Huestis<sup>3</sup>, B. Brands<sup>1,2</sup>. <sup>1</sup>University of Toronto, Canada; <sup>2</sup>Centre for Addiction and Mental Health, Canada; <sup>3</sup>University of Maryland School of Medicine, United States
- 207 Influence of nicotinic receptor gene—CHRNA5—on crack cocaine dependence and severity
  J. Schuch<sup>1,2</sup>, A. Aroche<sup>2</sup>, D.L. Rovaris<sup>2</sup>, A. Stolf<sup>3</sup>, T. Roman<sup>2</sup>, B. Sanvicente-Vieira<sup>4</sup>, E.
  Vitola<sup>5</sup>, E. Grevet<sup>5</sup>, F. Pechansky<sup>1</sup>, F. Kessler<sup>3,5</sup>, L. von Diemen<sup>3</sup>, R. Grassi-Oliveira<sup>4</sup>, C.
  Bau<sup>2</sup>. <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul
  (UFRGS), Brazil; <sup>2</sup>Department of Genetics, UFRGS, Brazil; <sup>3</sup>Center for Drug and Alcohol
  Research, Hospital de Clinicas de Porto Alegre, UFRGS, Brazil; <sup>4</sup>Pontifical Catholic
  University of Rio Grande do Sul, Brazil; <sup>5</sup>Department of Psychiatry and Legal Medicine,
  UFRGS, Brazil
- 208 Gambling-induced stimulant craving in regular stimulant users: A cross-priming study
  S. Stewart<sup>1</sup>, Z. Ghaferi<sup>1</sup>, P. Collins<sup>1</sup>, M. Cowie<sup>1</sup>, M. Zack<sup>2</sup>, B. Horiachka<sup>3</sup>, D. McGrath<sup>3</sup>.

  <sup>1</sup>Dalhousie University, Canada; <sup>2</sup>Centre for Addiction and Mental Health, Canada;

  <sup>3</sup>University of Calgary, Canada
- 209 The regulatory role of trace amine-associated receptor 1 in acute and chronic effects of nicotine I. Sukhanov<sup>1</sup>, A. Dolgorukova<sup>1</sup>, A. Dorotenko<sup>1</sup>, M. Dorofeikova<sup>1</sup>, R. Gainetdinov<sup>2</sup>, E. Zvartau<sup>1</sup>. <sup>1</sup>First Pavlov State Medical University, Russia; <sup>2</sup>Saint Petersburg State University, Russia
- 210 Low insula glutamate/glutamine in chronic methamphetamine users: Association with depressive symptoms
  - J. Tang<sup>1,2</sup>, J. O'Neill<sup>2</sup>, J.R. Alger<sup>2</sup>, E.D. London<sup>2</sup>. <sup>1</sup>Mental Health Institute, the Second Xiangya Hospital of Central South University, China; <sup>2</sup>David Geffen School of Medicine, University of California Los Angeles, United States
- 211 Assessment of oxidative DNA damage among adolescent inhalant users seeking treatment at a tertiary care centre
  - A. Verma, R. Jain, A. Dhawan, R. Lakshmy, R. Raghav. All India Institute of Medical Sciences, India

#### **Epidemiology**

- 300 Impact of legal highs on HIV vertical transmission in female injection drug users in Romania A. Abagiu<sup>1,2</sup>, A. Koulosousas<sup>2</sup>, L. Stoica<sup>1</sup>, C. Blaga<sup>1</sup>, F. Duna<sup>1</sup>, C. Petre<sup>1</sup>, R. Ungurianu<sup>1</sup>, M. Mardarescu<sup>1,3</sup>, A.M. Tudor<sup>1,4</sup>, M. Mitran<sup>5</sup>, A. Streinu-Cercel<sup>1,4</sup>. <sup>1</sup>National Institute for Infectious Diseases Prof. Dr. Matei Bals, Romania; <sup>2</sup>Romanian Association Against AIDS, Romania; <sup>3</sup>European Centre for Disease Prevention and Control, Sweden; <sup>4</sup>Carol Davila University of Medicine and Pharmacy, Romania; <sup>5</sup>Panait Sarbu Maternity Hospital, Romania
- 301 Gender differences in tramadol use and abuse in university students, Egypt M. Abdelghan, G. Salah El-deen, M. Bassiouny. Zagazig University, Egypt
- 302 Khat use and the occurrence of psychotic symptoms: Suggestive evidence for a mediating role of traumatic experiences
  - K. Adorjan, M. Odenwald, M. Widmann, M. Tesfaye, F. Tessema, S. Toennes, S. Suleman, M. Soboka, Z. Mekonnen, E. Susser, T.G. Schulze. IPPG, Germany
- 303 Characteristic trends in prevalence of synthetic designer drugs over the Territory of the Republic of Bashkortostan
  - E. Akhmetova, A. Azat. Bashkir State Medical University, Russia
- 304 Prevalence of simultaneous polydrug use and associated factors in first-year and last-year students from different areas of study at Universidad Politécnica de Nicaragua, Recinto Universitario Regional Esteli, Nicaragua, 2016
  - T. Aleman, A. Herrera, I.M. Videa. Universidad Nacional Autonoma de Nicaragua-Leon, Nicaragua
- 305 Risk of hepatitis C infection among heroin and methamphetamine users
  - Z. Alexandercikova, L. Okruhlica. Center for Treatment of Drug Dependencies, Slovakia
- 306 Prescription painkiller misuse and labor market: Misuse levels and differential effects
  P. Alexandre, V. Paz. Health Administration, College of Business, Florida Atlantic
  University, United States
- 307 Substance abuse in Iraq: Psychiatrists' experience
  R. Agrawi. Ministry of Health–Kurdistan Region, Iraq
- 308 Substance use in Jamaican 12- to 65-year-olds
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- 310 Relationship between psychopathy and HIV risk behaviors among heroin and amphetamine users K. Bozgunov<sup>1</sup>, E. Psederska<sup>1</sup>, G. Vasilev<sup>1</sup>, D. Nedelchev<sup>1</sup>, J. Vassileva<sup>2</sup>. <sup>1</sup>Bulgarian Addictions Institute, Bulgaria; <sup>2</sup>Virginia Commonwealth University, United States
- 311 Severity of dependence scale: Diagnostic cut-off for pharmaceutical opioid dependence R. Bruno<sup>1,2</sup>, A. Peacock<sup>1,2</sup>, B. Larance<sup>2</sup>, N. Lintzeris<sup>3</sup>, R. Ali<sup>4</sup>, L. Degenhardt<sup>2</sup>. <sup>1</sup>Department of Psychology, University of Tasmania School of Medicine, Australia; <sup>2</sup>National Drug and Alcohol Research Centre, The University of New South Wales, Australia; <sup>3</sup>Sydney University Medical School, Australia; <sup>4</sup>The University of Adelaide, Australia

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- 314 Using Twitter for monitoring marijuana use and perceptions in Chile: An online approach to get real-time national data
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  - C. Coutinho<sup>1</sup>, L. Toledo<sup>1</sup>, N. Bertoni<sup>2</sup>, F. Bastos<sup>1</sup>. Oswaldo Cruz Foundation, Brazil; <sup>2</sup>Brazilian National Cancer Institute, Brazil
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- 319 The opioid epidemic in Canada: Trends in diversion of commonly abused prescription drugs in Ontario
  - O. Dziadkowiec<sup>1</sup>, M-C. Lelait<sup>1</sup>, Z. Margolin<sup>1</sup>, T. Rosen<sup>1</sup>, J. Green<sup>2</sup>, R. Dart<sup>2</sup>, S. Kurtz<sup>3</sup>. <sup>1</sup>Rocky Mountain Poison and Drug Center, United States; <sup>2</sup>Canadian Consumer Product and Pharmaceutical Safety, Inc., Canada; <sup>3</sup>Center for Applied Research on Substance Use and Health Disparities, Nova Southeastern University, United States
- 320 Association between prenatal exposure to cannabis and child behavior: A multi-informant approach
  - H. El Marroun<sup>1</sup>, I. Franken<sup>2</sup>, F. Verhulst<sup>1</sup>, H. Tiemeier<sup>3</sup>. <sup>1</sup>Erasmus University Medical Center (Erasmus MC), Sophia Children's Hospital, The Netherlands; <sup>2</sup>Erasmus University Rotterdam, The Netherlands; <sup>3</sup>Erasmus MC, The Netherlands

- 321 Assessment of exclusive and dual cigarette and hookah smoking among a sample of pregnant women in Egypt
  - O. El Shahawy<sup>1,2</sup>, K. Labib<sup>3</sup>, E. Mead<sup>4</sup>, A. Naghib<sup>3</sup>, S. Sherman<sup>1,2</sup>, C. Oncken<sup>4</sup>. <sup>1</sup>New York University School of Medicine, United States; <sup>2</sup>Public Health Research Center, New York University–Abu Dhabi, United Arab Emirates; <sup>3</sup>Ain Shams University, Egypt; <sup>4</sup>University of Connecticut, United States
- 322 Prevalence of personality disorders in parents of patients with substance dependence disorder M. Elhamshary<sup>1,2</sup>, D. Radwan<sup>2,3</sup>, A. Haroun El Rasheed<sup>2</sup>. <sup>1</sup>Psychological Medicine Hospital, Egypt; <sup>2</sup>Ain Shams University, Egypt; <sup>3</sup>National Research Center–Abu Dhabi, United Arab Emirates
- 323 Global prevalence of illicit and prescription opioid misuse

  J. Ellerstrand<sup>1</sup>, J. Leung<sup>1,2,3</sup>, A. Ferrari<sup>1,2,3</sup>, H. Whiteford<sup>1</sup>, L. Degenhardt<sup>3,4</sup>. <sup>1</sup>School of Public Health, The University of Queensland, Australia; <sup>2</sup>Policy and Epidemiology Group, Queensland Centre for Mental Health Research, Australia; <sup>3</sup>Institute for Health Metrics and Evaluation, University of Washington, United States; <sup>4</sup>National Drug and Alcohol Research Centre, The University of New South Wales, Australia
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  - T. Feyissa. Ambo University, Ethiopia; Addis Ababa University, Ethiopia
- 325 The Network for the Improvement of Addiction Treatment (NIATx): Ukraine's experience T. Fomenko<sup>1</sup>, A. Mazhnaya<sup>1,2</sup>, A. Meteliuk<sup>1</sup>. <sup>1</sup>ICF Alliance for Public Health, Ukraine; <sup>2</sup>Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, United States
- 326 Patterns of cannabis use in patients admitted for addiction treatment in Spain

  F. Fonseca<sup>1,2</sup>, M. Torrens<sup>1,2</sup>, M. Farre<sup>1,2,3</sup>, K. McBride<sup>4</sup>, I. Maremmani<sup>5,6</sup>, M. Guareschi<sup>6</sup>, J. Green<sup>4</sup>, R. Dart<sup>4,7</sup>. <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Hospital del Mar and Institut Hospital del Mar d'Investigacions Mèdiques, Spain; <sup>2</sup>Universitat Autònoma de Barcelona, Spain; <sup>3</sup>Germans Trias University I Pujol Hospital, Institute for Health Science Research Germans Trias i Pujol, Spain; <sup>4</sup>Rocky Mountain Poison and Drug Center, United States; <sup>5</sup>Department of Neurosciences, Santa Chiara University Hospital, University of Pisa, Italy; <sup>6</sup>Association for the Application of Neuroscientific Knowledge to Social Aims, Italy; <sup>7</sup>University of Colorado-Denver School of Medicine, United States
- 327 The interplay between trajectories of drug injecting and housing instability over a 12-month period among people who inject drugs
  - E. Fortier<sup>1,2</sup>, M-P. Sylvestre<sup>2</sup>, A.A. Artenie<sup>2</sup>, D. Jutras-Aswad<sup>2</sup>, E. Roy<sup>3,4</sup>, J. Grebely<sup>5</sup>, J. Bruneau<sup>2</sup>. <sup>1</sup>Department of Family and Emergency Medicine, Faculty of Medicine, Université de Montréal, Canada; <sup>2</sup>Centre Hospitalier de l'Université de Montreal Research Center, Canada; <sup>3</sup>Université de Sherbrooke, Canada; <sup>4</sup>Institut National de Santé Publique du Québec, Canada; <sup>5</sup>Kirby Institute, The University of New South Wales, Australia
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- 329 Smokeless tobacco use and low-birth-weight children among women in a rural setting of Chennai, India
  - D.L. Francis. Tamil Nadu Dr. M.G.R. Medical University, India

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  D. Fuster<sup>1,2</sup>, X. Garcia<sup>1,2</sup>, Y. Zuluaga<sup>1,2</sup>, J. Tor<sup>1,2</sup>, A. Sanvisens<sup>1,2</sup>. <sup>1</sup>Internal Medicine Department, Germans Trias University i Pujol Hospital, Spain; <sup>2</sup>Universitat Autonoma de Barcelona, Spain
- 331 Traumatic events in childhood and drug abuse: A systematic review and meta-analysis of longitudinal studies
  - S. Halpern<sup>1</sup>, F. Schuch<sup>1</sup>, A. Sordi<sup>1</sup>, J. Scherer<sup>2</sup>, M. Pachado<sup>1</sup>, L. Fara<sup>1</sup>, C. Dalbosco<sup>1</sup>, F. Pechansky<sup>2</sup>, F. Kessler<sup>2,3</sup>, L. von Diemen<sup>2</sup>. <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul (UFRGS), Brazil; <sup>2</sup>Center for Drug and Alcohol Research, Hospital de Clinicas de Porto Alegre, UFRGS, Brazil; <sup>3</sup>Department of Psychiatry and Legal Medicine, UFRGS, Brazil
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  - H. Hoseyny<sup>1</sup>, S. Momtazi<sup>2,3</sup>, M. Ayubi<sup>2</sup>, F. Taremian<sup>4</sup>, S. Mazloomzadeh<sup>2,3</sup>. <sup>1</sup>Iran University of Medical Sciences, Iran; <sup>2</sup>Zanjan University of Medical Sciences, Iran; <sup>3</sup>Social Determinants of Health Research Center, Iran; <sup>4</sup>Addiction Research Center, University of Welfare Sciences, Iran
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  - R. Isralowitz, A. Reznik. Ben Gurion University, Regional Alcohol and Drug Abuse Research Center, Israel
- 334 Drug use patterns, risk behavior, and psychosis in ketamine users L. Jia-Jin<sup>1</sup>, L. Chiang-shan<sup>2</sup>, Z. Sheng<sup>2</sup>, C-C. Hung<sup>3</sup>, T. Szu-Hsien Lee<sup>1</sup>. <sup>1</sup>National Taiwan Normal University, Taiwan; <sup>2</sup>Yale University School of Medicine, United States; <sup>3</sup>Institute of Brain Science, National Yang Ming University, Taiwan
- 335 Psychosocial interventions for reducing marijuana smoking by pregnant women B. Kariuki. Teenagers Plus Community-Based Organization, Kenya
- 336 Female crack users: High rates of social vulnerability in Brazil F. Kessler<sup>1,2</sup>, T. Vernaglia<sup>3</sup>, M. Siqueira<sup>4</sup>, T. Leite<sup>3</sup>, S. Faller<sup>5</sup>, F. Pechansky<sup>5</sup>, F. Sudbrack<sup>6</sup>, M. Cruz<sup>3</sup>. <sup>1</sup>Department of Psychiatry and Legal Medicine, Federal University of Rio Grande do Sul (UFRGS), Brazil; <sup>2</sup>Center for Drug and Alcohol Research (CPAD), Hospital de Clinicas de Porto Alegre, UFRGS, Brazil; <sup>3</sup>Federal University of State of Rio de Janeiro, Brazil; <sup>4</sup>Federal University of Espirito Santo, Brazil; <sup>5</sup>CPAD, UFRGS, Brazil; <sup>6</sup>Brasilia University, Brazil
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  - I. Kirtadze<sup>1,2</sup>, D. Otiashvili<sup>1</sup>, M. Tabatadze<sup>1,2</sup>, I. Vardanashvili<sup>2</sup>, L. Sturua<sup>3</sup>, T. Zabransky<sup>4</sup>, J. Anthony<sup>5</sup>. <sup>1</sup>Addiction Research Centre, Alternative Georgia, Georgia; <sup>2</sup>Ilia State University, Georgia; <sup>3</sup>National Center of Disease Control and Public Health, Georgia; <sup>4</sup>ResAd Institute, Czech Republic; <sup>5</sup>Michigan State University, United States
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  - S. Kulis<sup>1</sup>, F. Marsiglia<sup>1</sup>, S. Ayers<sup>1</sup>, B. Nuno-Gutierrez<sup>2</sup>, A. Gonzalvez<sup>1</sup>. <sup>1</sup>Arizona State University, United States; <sup>2</sup>Universidad de Guadalajara, Mexico
- 342 Geographical inequalities in drug abuse risk in Taiwan due to sociodemographic, degree of industrialization, and health status differences
  - Y-C. Lan<sup>1</sup>, P-C. Kuo<sup>2</sup>. <sup>1</sup>Department of Health Risk Management, China Medical University, China; <sup>2</sup>Department of Public Health, China Medical University, China
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  - B. Larance<sup>1</sup>, A. Peacock<sup>1</sup>, R. Ali<sup>2</sup>, M. Farrell<sup>1</sup>, R. Bruno<sup>3</sup>, N. Lintzeris<sup>4</sup>, T. Dobbins<sup>1</sup>, L. Degenhardt<sup>1</sup>. <sup>1</sup>National Drug and Alcohol Research Centre, The University of New South Wales, Australia; <sup>2</sup>The University of Adelaide, Australia; <sup>3</sup>Department of Psychology, University of Tasmania School of Medicine, Australia; <sup>4</sup>Drug and Alcohol Services, South Eastern Sydney Local Health District, Australia
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  - M. Lawental<sup>1,2</sup>, C. Zlotnick<sup>2</sup>, D. Pud<sup>2</sup>. <sup>1</sup>University of South Florida, United States; <sup>2</sup>University of Haifa, Israel
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  - T. Szu-Hsien Lee<sup>1</sup>, D.S. Metzger<sup>2,3</sup>, C-C. Hung<sup>4</sup>, J-J. Lee<sup>1</sup>. <sup>1</sup>Department of Health Promotion and Education, National Taiwan Normal University, Taiwan; <sup>2</sup>University of Pennsylvania, United States; <sup>3</sup>Treatment Research Institute, United States; <sup>4</sup>Institute of Brain Science, National Yang Ming University, Taiwan
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  - J. Leung<sup>1,2,3</sup>, A. Ferrari<sup>1,2,3</sup>, F. Charlson<sup>1,2,3</sup>, H. Whiteford<sup>1,2,3</sup>, T. Vos<sup>3</sup>, L. Degenhardt<sup>4</sup>. <sup>1</sup>The University of Queensland School of Public Health, Australia; <sup>2</sup>Policy and Epidemiology Group, Queensland Centre for Mental Health Research, Australia; <sup>3</sup>Institute for Health Metrics and Evaluation, University of Washington, United States; <sup>4</sup>National Drug and Alcohol Research Centre, The University of New South Wales, Australia
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  S. Likhitsathian, M. Srisurapanont, W. Jiraporncharoen, C. Angkurawaranon, A. Aramrattana. Chiang Mai University, Thailand
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  - R. Marin-Navarrete<sup>1</sup>, M.E. Medina-Mora<sup>1</sup>, V. Horigian<sup>2</sup>, I. Salloum<sup>2</sup>, L. Villalobos-Gallegos<sup>1</sup>. <sup>1</sup>National Institute of Psychiatry, Mexico; <sup>2</sup>University of Miami Miller School of Medicine, United States
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  - J. Melo<sup>1</sup>, R. Garfein<sup>1</sup>, K. Hayashi<sup>2,3</sup>, M-J. Milloy<sup>2</sup>, K. Debeck<sup>2</sup>, S. Sun<sup>1</sup>, S. Jain<sup>1</sup>, S. Strathdee<sup>1</sup>, D. Werb<sup>1</sup>. <sup>1</sup>University of California San Diego, United States; <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, Canada; <sup>3</sup>St. Paul's Hospital, Simon Fraser University, Canada
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  - J. Mendes<sup>1,2</sup>, O. Jacobina<sup>3</sup>, C. Passos<sup>1</sup>. <sup>1</sup>National Secretariat on Drugs Policy, Brazil; <sup>2</sup>Institute of Higher Education of Brasília, Brazil; <sup>3</sup>State Secretariat on Human Rights, Brazil; <sup>4</sup>University of Brasilia, Brazil
- 353 Opium abuse and its relationship to depression among medical/surgical hospitalized patients S. Momtazi<sup>1</sup>, Y. Abolghasemi Fakhri<sup>2</sup>, S. Faghihzadeh<sup>1</sup>. <sup>1</sup>Zanjan University of Medical Sciences, Iran; <sup>2</sup>Tabriz University of Medical Sciences, Iran
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  - R. Muga<sup>1</sup>, A. Sanvisens<sup>1</sup>, F. Bolao<sup>2</sup>, Y. Zuluaga<sup>1</sup>, D. Fuster<sup>1</sup>, I. Rivas<sup>3</sup>, J. Tor<sup>1</sup>. <sup>1</sup>Internal Medicine Department, Hospital Universitari Germans Trias i Pujol, Universitat Autonoma de Barcelona, Spain; <sup>2</sup>Hospital Universitari de Bellvitge, Spain; <sup>3</sup>Centre Delta, Institute for Safe Medication Practices, Spain
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  D. Ocana<sup>1</sup>, W.L. Kliewer<sup>2</sup>, E. Prom-Wormley<sup>3</sup>. <sup>1</sup>Humphrey Fellowship Program, Virginia
  Commonwealth University, United States; <sup>2</sup>Department of Psychology, Virginia
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  - M. Ojo, A. Adegbohun, G. Morakinyo. Federal Neuropsychiatric Hospital Yaba, Nigeria
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  - P. Okwarah<sup>1,2</sup>, R. Gakunju<sup>1,3</sup>, R. Kahuthia<sup>4</sup>, J. Thungu<sup>5</sup>. <sup>1</sup>Movement Against Substance Abuse in Africa, Kenya; <sup>2</sup>Jomo Kenyatta University of Agriculture and Technology, Kenya; <sup>3</sup>National Authority for the Campaign Against Alcohol and Drug Abuse, Kenya; <sup>4</sup>Kenyatta University, Kenya; <sup>5</sup>Thogoto Teachers College, Kenya
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  - U. Onukogu. Federal Neuropsychiatric Hospital Calabar, Cross River State, Nigeria

- 360 High rates of incarceration due to drug trafficking in the last decade in Brazil

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- 361 Exploring the new phenomena of homemade extraction and injection of ephedra plant product in Georgia
  - D. Otiashvili<sup>1,2</sup>, I. Kirtadze<sup>1</sup>, D. Bergen-Cico<sup>3</sup>. <sup>1</sup>Addiction Research Centre, Alternative Georgia, Georgia; <sup>2</sup>Georgian Institute of Public Affairs, Georgia; <sup>3</sup>Department of Public Health, Syracuse University, United States
- 262 Causal pathways between impulsiveness, crack cocaine use consequences, and attention deficit hyperactivity disorder
  - M. Pachado<sup>1</sup>, A. Willhelm<sup>2</sup>, L.S.P. Guimaraes<sup>3</sup>, F. Pechansky<sup>1</sup>, F. Kessler<sup>4,5</sup>, R.M. Martins De Almeida<sup>2</sup>. <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul (UFRGS), Brazil; <sup>2</sup>Departament of Psychology, UFRGS, Brazil; <sup>3</sup>Department of Epidemiology and Statistics, Hospital de Clinicas de Porto Alegre (HCPA), Brazil; <sup>4</sup>Department of Psychiatry and Legal Medicine, UFRGS, Brazil; <sup>5</sup>Center for Drug and Alcohol Research, HCPA, UFRGS, Brazil
- 363 Alcohol, substance use, and violence among secondary school students in Northeastern Thailand S. Paileeklee<sup>1</sup>, S. Dithisawatwet<sup>2</sup>. <sup>1</sup>Faculty of Medicine, Khon Kaen University, Thailand; <sup>2</sup>The Office of Disease Prevention and Control, Region 8, Thailand
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  - P. Petersen Williams<sup>1,2</sup>, C. Mathews<sup>1,2</sup>, E. Jordaan<sup>1,3</sup>, C. Parry<sup>1,4</sup>. <sup>1</sup>South African Medical Research Council, South Africa; <sup>2</sup>University of Cape Town, South Africa; <sup>3</sup>University of the Western Cape, South Africa; <sup>4</sup>Stellenbosch University, South Africa
- 365 Driving under the effect of marijuana: Cross-sectional study using the 2014 Chilean National Drugs Survey
  - E. Pizarro<sup>1</sup>, J. Marin<sup>1</sup>, N. Rodriguez<sup>1</sup>, C. Ibanez<sup>2</sup>. <sup>1</sup>Research Department, National Service for Prevention and Rehabilitation of Drug and Alcohol Consumption, Chile; <sup>2</sup> Department of Psychiatry and Mental Health, University of Chile, Chile
- 366 Characteristics of contemporary patients with heroin use disorder at the first treatment I. Rivas<sup>1</sup>, A. Sanvisens<sup>2</sup>, E. Faure<sup>1</sup>, M. Rubio<sup>1</sup>, N. Espinach<sup>1</sup>, T. Munoz<sup>1</sup>, Y. Zuluaga<sup>2</sup>, D. Fuster<sup>2</sup>. <sup>1</sup>Municipal Center for Substance Abuse Treatment (IMSP Centre Delta), Spain; <sup>2</sup>Internal Medicine Department, Hospital Universitari Germans Trias i Pujol, Universitat Autonoma de Barcelona, Spain
- 367 The Great Lakes effect: Discovering hot spots for rates of diversion of prescription opioids within Ontario, Canada
  - T. Rosen<sup>1</sup>, Z. Margolin<sup>1</sup>, M-C. Lelait<sup>1</sup>, O. Dziadkowiec<sup>1</sup>, J. Green<sup>2</sup>, R. Dart<sup>2</sup>, S. Kurtz<sup>3</sup>. <sup>1</sup>Rocky Mountain Poison and Drug Center, United States; <sup>2</sup>Canadian Consumer Product and Pharmaceutical Safety, Inc., Ontario; <sup>3</sup>Center for Applied Research on Substance Use and Health Disparities, Nova Southeastern University, United States

- 368 Effects of telomere length on depression in a crack cocaine addiction background
  D.L. Rovaris<sup>1</sup>, A. de Castro<sup>1</sup>, B. Sanvicente-Vieira<sup>2</sup>, C. Winkler<sup>1</sup>, G. Xavier<sup>3</sup>, S.I.N.
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- 371 Psychometric properties of the stigma scale among Pakistanis with substance use disorders S. Shahzad<sup>1,2</sup>, N. Begum<sup>3</sup>, W. Kliewer<sup>2</sup>. <sup>1</sup>University of Karachi, Pakistan; <sup>2</sup>Virginia Commonwealth University, United States; <sup>3</sup>Area Study Center for Europe, University of Karachi, Pakistan
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  of North Carolina, United States; <sup>5</sup>FHI 360, HIV Prevention Trials Network, United States;
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T. Zabransky<sup>1,2,3</sup>, V. Mravcik<sup>1,4</sup>, A. Talu<sup>5</sup>, E. Jasaitis<sup>6</sup>. <sup>1</sup>ResAd Institute, Czech Republic; <sup>2</sup>Palacky University, Czech Republic; <sup>3</sup>Charles University in Prague, Czech Republic; <sup>4</sup>National Monitoring Centre for Drugs and Addiction, Czech Republic; <sup>5</sup>Department of Public Health, University of Tartu, Estonia; <sup>6</sup>Drug Control Department Under the Government of the Republic of Lithuania, Réseau Européen d'Information sur les Drogues et les Toxicomanies (REITOX), National Focal Point, Lithuania

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  - A. Bakhoum<sup>1,2</sup>, A. Stock<sup>3</sup>, E. El Kharrat<sup>1,4</sup>. <sup>1</sup>Freedom Drugs and HIV Program, Egypt; <sup>2</sup>National Hepatology and Tropical Medicine Research Institute, Egypt; <sup>3</sup>University of East Anglia, Norwich Medical School, United Kingdom; <sup>4</sup>World Federation of Therapeutic Communities, Egypt
- 402 Intervening with young substance-using women who have left school early: Results of a pilot study in Cape Town
  - T. Carney<sup>1,2</sup>, F. Browne<sup>3</sup>, B. Myers<sup>1,2</sup>, T. Kline<sup>3</sup>, W. Wechsberg<sup>3,4,5,6</sup>. <sup>1</sup>South African Medical Research Council, South Africa; <sup>2</sup>University of Cape Town, South Africa; <sup>3</sup>Research Triangle Institute International, United States; <sup>4</sup>The University of North Carolina, United States; <sup>5</sup>North Carolina State University, United States; <sup>6</sup>Duke University, United States
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  A. Meteliuk<sup>1</sup>, A. Mazhnaya<sup>2</sup>, S. Filippovich<sup>1</sup>, A. Zelenev<sup>3</sup>, F.L. Altice<sup>4,5</sup>. <sup>1</sup>Alliance for Public Health, Ukraine; <sup>2</sup>Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, United States; <sup>3</sup>Center for Interdisciplinary Research on AIDS, Yale University, United States; <sup>4</sup>AIDS Program, Section of Infectious Diseases, Yale University School of Medicine, United States; <sup>5</sup>Division of Epidemiology of Microbial Diseases, Yale University School of Public Health, United States

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  - M. Muslim<sup>1,2</sup>, H. Susami<sup>1,3</sup>, Z. Djoerban<sup>1,3</sup>, S. Djauzi<sup>1,3</sup>, R. Sarasvita<sup>1,3,4</sup>, D. Imran<sup>1</sup>, P. Richardson<sup>5</sup>, E. Piwowar-Manning<sup>5</sup>, W. Miller<sup>6</sup>, I. Hoffman<sup>7</sup>, S. Rose<sup>8</sup>, D. Metzger<sup>9,10</sup>. 

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  - B. Myers<sup>1</sup>, T. Carney<sup>1</sup>, F. Browne<sup>2</sup>, W. Wechsberg<sup>2</sup>. <sup>1</sup>South African Medical Research Council, South Africa; <sup>2</sup>Research Triangle Institute International, United States
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  - D. Vashishtha<sup>1</sup>, M.L. Mittal<sup>1</sup>, R. Garfein<sup>1</sup>, K. Hayashi<sup>2</sup>, M-J. Milloy<sup>2</sup>, J. Cuevas-Mota<sup>1</sup>, S. Sun<sup>1</sup>, S. Jain<sup>1</sup>, S. Strathdee<sup>1</sup>, D. Werb<sup>1</sup>. <sup>1</sup>University of California San Diego, United States; <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, Canada
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  - S. Acharya<sup>1,2</sup>, S. Paudel<sup>2,3</sup>. <sup>1</sup>Tribhuvan University, Nepal; <sup>2</sup>National Association of People Living With HIV in Nepal, Nepal; <sup>3</sup>University of Western Sydney, Australia

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  - G. Ahumada<sup>1</sup>, F. Cumsille<sup>2</sup>, M. Hynes<sup>2</sup>, A.C. Camarotti<sup>3,4</sup>, L. De Oliveira Pinto<sup>5</sup>, N. Del Valle<sup>6</sup>, M. Oliva<sup>7</sup>, H. Suarez<sup>8</sup>. <sup>1</sup>Red Latinoamericana de Investigadores en Drogas, Argentina; <sup>2</sup>The Inter-American Observatory on Drugs, Inter-American Drug Abuse Control Commission, Organization of American States, United States; <sup>3</sup>Secretariat of Programming for the Prevention of Drug Addiction and Fight Against Drug Trafficking, Argentina; <sup>4</sup>Instituto Gino Germani, Universidad de Buenos Aires, Argentina; <sup>5</sup>Secretary of Health of the State of Bahia, Brazil; <sup>6</sup>National Secretariat for Drug Policy (SENAD), Paraguay; <sup>7</sup>SENAD, Chile; <sup>8</sup>Junta Nacional de Drogas, Uruguay
- 502 Marijuana and amphetamine use among patients on methadone treatment in Malaysia
  N. Ali<sup>1</sup>, S. Aziz<sup>2</sup>, S. Nordin<sup>3</sup>, N. Che Mi<sup>2</sup>, N. Abdullah<sup>4</sup>, M. Mahmud<sup>5</sup>, V. Paranthaman<sup>6</sup>, M. Mazlan<sup>7</sup>. <sup>1</sup>Masjid Tanah Health Clinic, Melaka, Malaysia; <sup>2</sup>Kuala Lumpur Hospital, Malaysia; <sup>3</sup>Batu 9 Health Clinic, Malaysia; <sup>4</sup>Tengku Ampuan Rahimah Hospital, Malaysia; <sup>5</sup>Selangor Buluh Health Clinic, Malaysia; <sup>6</sup>Jelapang Health Clinic, Malaysia; <sup>7</sup>Muar Substance Abuse Research Centre, Malaysia
- 503 Depenalizing drug use: A pilot project to move arrested people who use drugs from police detention to treatment in Besut, Terengganu, Malaysia
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  A. Busse<sup>1</sup>, G. Gerra<sup>1</sup>, V. Poznyak<sup>2</sup>, R. McDonald<sup>3</sup>, N. Clark<sup>2</sup>, E. Saenz<sup>1</sup>, W. Kashino<sup>1</sup>, G. Aiello<sup>1</sup>, J. Strang<sup>3</sup>. <sup>1</sup>United Nations Office on Drugs and Crime, Austria; <sup>2</sup>World Health Organization, Switzerland; <sup>3</sup>King's College London, United Kingdom
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  A. Campbell, S. Millen. Drug and Alcohol Research Network, Queens University Belfast, Ireland
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  R. de Cerqueira Campos<sup>1</sup>, F. De Conto<sup>1</sup>, M. Pereira<sup>1</sup>, P. Alexander<sup>2</sup>. <sup>1</sup>City Health
  Department of Florianopolis–Santa Catarina, Brazil; <sup>2</sup>Health Administration, College of
  Business, Florida Atlantic University, United States
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- 511 Correlates of retention in opioid agonist treatment of opioid dependence in Ukraine

  K. Dumchev<sup>1</sup>, S. Dvoriak<sup>1</sup>, O. Chernova<sup>1</sup>, O. Morozova<sup>2</sup>, F.Altice<sup>3</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Yale University School of Public Health, United States; <sup>3</sup>AIDS Program, Section of Infectious Diseases, Yale University School of Medicine, United States
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- 513 Challenges in detoxification of addicted traumatized patients in Nigeria
  E. Ehikhamenor<sup>1,2</sup>, P. Aliu<sup>2,3</sup>. <sup>1</sup>University of Benin, Nigeria; <sup>2</sup> Save Accident Victims Association of Nigeria, Nigeria; <sup>3</sup>National Open University, Nigeria
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  - S.C. Hanu. Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; Mental Health Authority, Ghana

- 518 A mixed-methods evaluation of HIV risk among opioid-dependent women in Ukraine
  E. Hoff<sup>1</sup>, R. Marcus<sup>2</sup>, F. Altice<sup>2,3,4</sup>, J. Meyer<sup>2</sup>. <sup>1</sup>Yale University School of Medicine, United States; <sup>2</sup>AIDS Program, Section of Infectious Diseases, Yale University School of Medicine, United States; <sup>3</sup>Department of Epidemiology of Microbial Diseases, Yale University School of Public Health, United States; <sup>4</sup>University of Malaya-Kuala Lumpur, Malaysia
- B. Idrisov<sup>1,2</sup>, K. Lunze<sup>1</sup>, D. Cheng<sup>1</sup>, E. Blokhina<sup>3,4</sup>, N. Gnatienko<sup>1,4</sup>, E. Quinn<sup>5</sup>, C. Bridden<sup>1,4</sup>, A. Walley<sup>1,6</sup>, K.J. Bryant<sup>7</sup>, D. Lioznov<sup>8,9</sup>, E. Krupitsky<sup>10,11</sup>, J. Samet<sup>1,5</sup>. <sup>1</sup>Boston Medical Center, United States; <sup>2</sup>Bashkir State Medical University, Russia; <sup>3</sup>First Pavlov State Medical University, Russia; <sup>4</sup>Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/AIDS, United States; <sup>5</sup>Boston University, United States; <sup>6</sup>Boston Public Health Commission, United States; <sup>7</sup>National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, United States; <sup>8</sup>Pasteur Research Institute of Epidemiology and Microbiology, Russia; <sup>9</sup>Department of Infectious Diseases and Epidemiology, First St. Petersburg Pavlov State Medical University, Russia; <sup>10</sup>St. Petersburg Bekhterev Research Psychoneurological Institute, Russia; <sup>11</sup>Laboratory of Clinical Pharmacology of Addictions, First St. Petersburg Pavlov State Medical University, Russia
- 520 Design of a multicenter randomized double-blind controlled trial of buprenorphine/naloxone versus placebo for treatment of opioid dependence in China

  H. Jiang<sup>1</sup>, J. Li<sup>2</sup>, L. Sheng<sup>3</sup>, Y. Li<sup>4</sup>, W. Ling<sup>5</sup>, M. Zhao<sup>1</sup>, W. Hao<sup>6</sup>. <sup>1</sup>Shanghai Jiao Tong University School of Medicine, Shanghai Mental Health Center, China; <sup>2</sup>West Hospital of Sichuan University, China; <sup>3</sup>Capital Medical University, Beijing An Ding Hospital, China; <sup>4</sup>Wuhan Mental Health Center, China; <sup>5</sup>Department of Psychiatry, Integrated Substance Abuse Program, University of California Los Angeles, United States; <sup>6</sup>Mental Health Institute & Faculty of Psychiatry, Central South University, China
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  - D. Nguyen<sup>1</sup>, H. Vu<sup>2</sup>. <sup>1</sup>National Committee for AIDS, Drugs, Prostitution Prevention and Control, Vietnam; <sup>2</sup>Substance Abuse and Mental Health Services Administration, Vietnam

- 532 Longitudinal study of pharmaceutical opioid dependence in Australia: Patterns and correlates of substance use over 24 months
  - S. Nielsen<sup>1,2</sup>, S. Cooper<sup>1</sup>, B. Larance<sup>1</sup>, R. Bruno<sup>1,3</sup>, B. Murnion<sup>4</sup>, N. Lintzeris<sup>2,4</sup>, S. Ling<sup>5</sup>, C. Sadler<sup>5</sup>, A. Dunlop<sup>5</sup>, M. Hardy<sup>6</sup>, P. Claire<sup>1</sup>, J. Houseman<sup>6</sup>, N. Phung<sup>7</sup>, A. Brown<sup>5</sup>, P. Haber<sup>4</sup>, L. Degenhardt<sup>1</sup>. <sup>1</sup>National Drug and Alcohol Research Centre, The University of New South Wales, Australia; <sup>2</sup>Drug and Alcohol Services, South Eastern Sydney Local Health District, Australia; <sup>3</sup>Department of Psychology, University of Tasmania School of Medicine, Australia; <sup>4</sup>University of Sydney, Australia; <sup>5</sup>Drug and Alcohol Services, Hunter New England Local Health District, Australia; <sup>6</sup>Northern Sydney Local Health District, Australia; <sup>7</sup>Drug Health, Western Sydney Local Health District, Australia
- 533 Contingency management for abstinence versus contingency management for shaping cessation among treatment-seeking Smokers
  - C. Lopez Nunez<sup>1,2</sup>, R. Secades-Villa<sup>2</sup>, S. Weidberg<sup>2</sup>, A. Gonzalez De La Roz<sup>2</sup>. <sup>1</sup>Private Technical University of Loja, Ecuador; <sup>2</sup>University of Oviedo, Spain
- 534 Influence of family support toward antiretroviral therapy adherence among HIV-infected people who inject drugs
  - I. Octavianto<sup>1,2</sup>, A. Fahrudin<sup>3,4</sup>, H. Susami<sup>1,5</sup>, R. Sarasvita<sup>1,5</sup>, D.S. Metzger<sup>6,7</sup>. <sup>1</sup>HPTN 074 Indonesia Site–Cipto Mangunkusumo Hospital, Indonesia; <sup>2</sup>Karisma Foundation, Indonesia; <sup>3</sup>Universitas Muhammadiyah Jakarta, Indonesia; <sup>4</sup>Asiana Foundation, Indonesia; <sup>5</sup>Abhipraya Foundation, Indonesia; <sup>6</sup>University of Pennsylvania, United States; <sup>7</sup>Treatment Research Institute, United States
- 535 Marijuana disorder among outpatients receiving treatment in Uruguay: Examining consequences in cannabis policy changes
  - A. Pascale<sup>1,2</sup>, C. Bares<sup>3</sup>, M. Valdez<sup>1</sup>, C. Herrera<sup>1</sup>, A. Usher<sup>1</sup>, O. Binagi<sup>1</sup>, C. Lopez<sup>1</sup>, C. Mediza<sup>1</sup>, L. Oliver<sup>1</sup>. <sup>1</sup>Grupo de Cavia Outpatient Clinic, Uruguay; <sup>2</sup>Red Latinoamericana de Investigadores en Drogas, Uruguay; <sup>3</sup>University of Michigan, United States
- 536 Key challenges of an opioid substitution treatment program in Ukraine T. Prokhorova, O. Burgay. ICF "Alliance for Public Health," Ukraine
- 537 Patients' attitudes toward opioid agonist therapy in primary health care settings in Ukraine I. Pykalo<sup>1</sup>, O. Morozova<sup>2</sup>, S. Dvoriak<sup>1</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Yale University, United States
- 538 Cognitive rehabilitation for individuals with opioid use disorder: A randomized controlled trial T. Rezapour<sup>1,2</sup>, H. Ekhtiari<sup>1,2</sup>, J. Hatami<sup>1,3</sup>, A. Farhoudian<sup>4</sup>, R. Daneshmand<sup>4</sup>, M. Sofuoglu<sup>5,6</sup>, A. Noroozi<sup>2,7</sup>, A. Samiei<sup>8</sup>. <sup>1</sup>Translational Neuroscience Program, Institute for Cognitive Science Studies, Iran; <sup>2</sup>Neurocognitive Laboratory, Iranian National Center for Addiction Studies, Iran; <sup>3</sup>Department of Psychology, Faculty of Psychology and Education, University of Tehran, Iran; <sup>4</sup>Substance Abuse and Dependence Research Center, University of Social Welfare and Rehabilitation Sciences, Iran; <sup>5</sup>Department of Psychiatry, Yale University School of Medicine, United States; <sup>6</sup>VA Connecticut Healthcare System, United States; <sup>7</sup>Iranian Institute for Reduction of High-Risk Behaviors, Tehran University of Medical Sciences, Iran; <sup>8</sup>School of Medicine, Arak University of Medical Sciences, Iran
- 539 Evaluation of two screening devices for cocaine detection in oral fluid

  J. Scherer<sup>1</sup>, T. Fiorentin<sup>2</sup>, T. Sousa<sup>1</sup>, R. Limberger<sup>2</sup>, F. Pechansky<sup>1</sup>. <sup>1</sup>Center for Drug and
  Alcohol Research, Hospital de Clinicas de Porto Alegre, Federal University of Rio Grande
  do Sul, Brazil; <sup>2</sup>Faculdade de Farmacia, Universidade Federal do Rio Grande do Sul, Brazil

- 540 Effects of khat (Catha edulis) on electrophysiologic properties of the heart and lung function indices
  - Y. Sewiye. Department of Physiology, Jimma University, Ethiopia
- 541 Feasibility, acceptability, and efficacy of a cognitive behavioral therapy for methamphetamine use disorders in South Africa
  - K. Sorsdahl<sup>1</sup>, D.J. Štein<sup>1</sup>, S. Pasche<sup>2</sup>, Y. Jacobs<sup>3</sup>, R. Kader<sup>1</sup>, S. Richter<sup>4</sup>, B. Myers<sup>3</sup>, J. Grant<sup>5</sup>. <sup>1</sup>University of Cape Town, South Africa; <sup>2</sup>Stellenbosch University, South Africa; <sup>3</sup>South African Medical Research Council, South Africa; <sup>4</sup>Professional Data Analysts, Inc., United States; <sup>5</sup>University of Chicago, United States
- 542 The efficacy of computerized interventions to reduce cannabis use: A systematic review and metaanalysis
  - J. Tirado Munoz<sup>1</sup>, A. Olmos<sup>2</sup>, M. Farre Albadalejo<sup>3,4</sup>, M. Torrens Melich<sup>4,5</sup>. <sup>1</sup>Addiction Research Group, Institut Hospital del Mar d' Investigacions Mediques (IMIM), Spain; <sup>2</sup>Universitat Pompeu Fabra-Universitat Autonoma de Barcelona, Spain; <sup>3</sup>Clinical Pharmacology Department, Hospital Universitari Germans Trias i Pujol-IGTP, Spain; <sup>4</sup>Universitat Autònoma de Barcelona, Spain; <sup>5</sup>Institut de Neuropsiquiatria i Addiccions, Hospital del Mar, Barcelona and IMIM, Spain
- 543 HIV infection in a methadone maintenance treatment program: Impact on retention M. Torrens<sup>1,2</sup>, F. Fonseca<sup>1,2</sup>, C. Castillo<sup>1</sup>, G. Vallecillo<sup>1</sup>, C. Tamarit<sup>1</sup>, A. Roquer<sup>3</sup>, M. Farre<sup>2,4</sup>. 
  <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Hospital el Mar and Institut Hospital del Mar d'Investigacions Mediques, Spain; <sup>2</sup>Universitat Autònoma de Barcelona, Spain; <sup>3</sup>Institut de Neuropsiquiatria i Addicions–Parc de Salut Mar, Spain; <sup>4</sup>Hospital Universitari Germans Trias i Pujol-IGTP, Spain
- 544 Quality of life after treatment in a private residential addiction treatment center T. Tsarouk, G. Thompson. Sunshine Coast Health Centre, Canada
- 545 Drug rehabilitation model of amphetamine-type stimulants users

  D. Utami<sup>1,2</sup>, R. Sarasvita<sup>1,3</sup>. <sup>1</sup>Indonesia National Narcotics Board, Indonesia; <sup>2</sup>Abhipraya Foundation, Indonesia; <sup>3</sup>HPTN 074 Indonesia Site–Cipto Mangunkusumo Hospital, Indonesia
- 546 The effect of agomelatine treatment on depression and methamphetamine withdrawal in methamphetamine-dependent patients with comorbid heroin dependence in a methadone maintenance treatment program: A randomized controlled trial

  S. Wahah<sup>1</sup> N. Ali<sup>2</sup> H. Mohd Yusof<sup>3</sup> N. A. Muhamad<sup>4</sup> M. Mazlan<sup>5</sup> <sup>1</sup>Universiti Keh
  - S. Wahab<sup>1</sup>, N. Ali<sup>2</sup>, H. Mohd Yusof<sup>3</sup>, N.A. Muhamad<sup>4</sup>, M. Mazlan<sup>5</sup>. <sup>1</sup>Universiti Kebangsaan Malaysia Medical Centre, Malaysia; <sup>2</sup>Masjid Tanah Health Clinic, Melaka, Malaysia; <sup>3</sup>Permai Hospital Johor Bharu, Malaysia; <sup>4</sup>Ministry of Health, Malaysia; <sup>5</sup>Muar Substance Abuse Center, Malaysia
- 547 Effects of smoking abstinence on delay discounting in smokers with depression

  S. Weidberg<sup>1,2</sup>, A. Gonzalez-Roz<sup>1</sup>, A. Garcia-Perez<sup>1</sup>, I. Pericot-Valverde<sup>3</sup>, R. Secades-Villa<sup>1</sup>.

  <sup>1</sup>University of Oviedo, Spain; <sup>2</sup>International University of la Rioja, Spain; <sup>3</sup>University of Vermont, United States
- 548 Efficacy of prefrontal theta-burst stimulation in methamphetamine addiction: A randomized sham-controlled study
  - M. Zhao. Shanghai Jiao Tong University School of Medicine, Shanghai Mental Health Center, China

## Workshop V

Westmount 7:00 - 9:00 PM

# NAVIGATING KEY STAGES OF A CAREER IN ADDICTION SCIENCE

Chairs: Denise Vidot and Qiana Brown

Navigating the pre-doctoral stage: Achieving the impossible!

Q. Brown, Columbia University Mailman School of Public Health, Newark, NJ

*Navigating the post doctoral stage: I made it! Now what?* 

T. Franklin, University of Pennsylvania, Philadelphia, PA

Navigating the early career stage: How do I obtain NIH funding?

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

### Workshop VI

Outremont 7:00 - 9:00 PM

DEVELOPMENT OF ADAPTIVE TREATMENT STRATEGIES IN THE MANAGEMENT OF DRUG DEPENDENCE: LESSONS LEARNED FROM CLINICAL TRIALS CURRENTLY IN THE FIELD

Chairs: Joy Schmitz and Charles Green

Rationale and design of a SMART for facilitating treatment entry and family planning in substance-using NICU mothers

A. Stotts, University of Texas Medical School at Houston, Houston, TX

Rationale and design of a SMART for adolescent marijuana use

C. Stanger, Dartmouth College, Hanover, NH

Rationale and design of a SMART for cocaine cessation and relapse prevention

J. Schmitz, University of Texas Health Science Center, Houston, TX

Rational and design of a SMART for smoking cessation

C. Green, University of Texas Health Science Center, McGovern Medical School, Houston, TX

Discussant:

I. Nahum-Shani, University of Michigan, Ann Arbor, MI

# **Workshop VII**

Mont-Royal 7:00 - 9:00 PM

# PRESCRIPTION MONITORING PROGRAMS – ISSUES AND IMPACT

Chairs: Suzanne Nielsen and Beth Sproule

National implementation of prescription monitoring programs in Australia

S. Nielsen, University of South Wales, Sydney, Australia

Using Florida's prescription drug monitoring program to monitor pharmacoepidemiologic outcomes before and after the US Centers for Disease Control and Prevention Opioid Prescribing Guidelines

C. Delcher, University of Florida, Gainesville, FL

Evaluation of the effectiveness of prescription monitoring programs

B. Sproule, Centre for Addiction and Mental Health, Toronto, ON, Canada

DISCUSSANT: Interventions in prescription opioid abuse – Do (or can) prescription monitoring programs make a difference?

R. Dart, Rocky Mountain Poison and Drug Center, Denver, CO

## Workshop VIII

Verdun 7:00 - 9:00 PM

# 23ND ANNUAL CONTINGENCY MANAGEMENT WORKING GROUP

Chairs: Diann Gaalema and August Holtyn

#### **Poster Session II**

(Breakfast)

Fontaine 8:00 - 10:00 AM

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

Set up time begins Monday, 1:00 PM Must be removed by Tuesday, 12:00 noon

#### **POLYDRUG**

- Medical marijuana laws and youth alcohol and marijuana use in 45 states

  Julie Johnson<sup>1</sup>, Renee Johnson<sup>2</sup>, Sion Harris<sup>3</sup>, Ann-Marie Matteucci<sup>4</sup>, Dominic

  Hodgkin<sup>4</sup>, Abenaa Jones<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health,

  Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Department of

  Mental Health, Baltimore, MD, <sup>3</sup>Harvard Medical School, Boston, MA, <sup>4</sup>Brandeis

  University, Heller School for Social Policy and Management, Waltham, MA
- Marijuana use and cigar use initiation: Prospective studies of adolescents
  Grace Kong<sup>1</sup>, Jessica Barrington-Trimis<sup>2</sup>, Margaret Mayer<sup>1</sup>, Adam Leventhal<sup>2</sup>, Rob
  McConnell<sup>2</sup>, Suchitra Krishnan-Sarin<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven,
  CT, <sup>2</sup>University of Southern California, Los Angeles, CA
- Prevalence of stimulant and opioid use among medical cannabis, non-medical cannabis, and non-cannabis using homeless and unstably housed women

  Meredith Meacham<sup>1</sup>, Danielle Ramo<sup>1</sup>, Alex Kral<sup>2</sup>, Elise Riley<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>RTI International, Research Triangle Park, NC
- Subjective effects of smoking among opioid-maintained individuals: Results from a pilot study examining reduced nicotine content cigarettes

  Stacey Sigmon<sup>1</sup>, Joanna Streck<sup>2</sup>, Sarah Heil<sup>1</sup>, Maxine Stitzer<sup>3</sup>, Jennifer Tidey<sup>4</sup>, Diann Gaalema<sup>5</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>3</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>4</sup>Brown University School of Medicine, Providence, RI, <sup>5</sup>University of Vermont UHC Campus, Burlington, VT
- The association between parental history and delay discounting among individuals in recovery from addiction
  Liqa Athamneh<sup>1</sup>, Jeffrey Stein<sup>1</sup>, Amanda Quisenberry<sup>2</sup>, Derek Pope<sup>1</sup>, Patsy Marshall<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute, Roanoke, VA, <sup>2</sup>Ohio State University, Columbus, OH
- Substance-using mothers experiencing suicidal thoughts: Impact of parenting behaviors on child behavior problems

  Brittany Brakenhoff<sup>1</sup>, Natasha Slesnick<sup>1</sup>, Quiong Wu<sup>1</sup>, <sup>1</sup>Ohio State University, Columbus, OH

- Substance use escalation into early adulthood among the children in the MTA Andrea Howard<sup>1</sup>, Brooke Molina<sup>2</sup>, John Mitchell<sup>3</sup>, Traci Kennedy<sup>2</sup>, Annamarie Stehli<sup>4</sup>, James Swanson<sup>4</sup>, <sup>1</sup>Carleton University, Department of Psychology, Ottawa, ON, Canada, <sup>2</sup>University of Pittsburgh, Pittsburgh, PA, <sup>3</sup>Duke University School of Medicine, Durham, NC, <sup>4</sup>University of California Irvine, Irvine, CA
- 8 Profiles of adverse childhood experiences and young adults' substance use Sunny Shin<sup>1</sup>, Shelby McDonald<sup>1</sup>, Michael Massey<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA
- 9 Effects of trauma type on substance use in reserve soldiers and spouses
  Bonnie Vest<sup>1</sup>, Rachel Hoopsick<sup>1</sup>, D. Lynn Homish<sup>1</sup>, Rachel Daws<sup>1</sup>, Gregory
  Homish<sup>1</sup>, <sup>1</sup>State University of New York at Buffalo, Buffalo, NY
- Associations between employment and addiction type and severity
  Camille Cibiel-Heintz<sup>1</sup>, Fuschia Serre<sup>1</sup>, Melina Fatseas<sup>2</sup>, Marc
  Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Centre Hospitalier Charles
  Perrens, Bordeaux, France
- 11 Interoceptive awareness, emotion regulation and relapse among women in SUD treatment

  Cynthia Price<sup>1</sup>, Sheila Crowell<sup>2</sup>, Megan Puzia<sup>2</sup>, Chieh Cheng<sup>1</sup>, Elaine
  Thompson<sup>1</sup>, <sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>University of Utah, Salt Lake City, UT
- Life in recovery from addiction in Canada: A focus on barriers, relapse, and stigma Robyn McQuaid<sup>1</sup>, Aqsa Malik<sup>2</sup>, Amy Porath<sup>1</sup>, <sup>1</sup>Canadian Centre on Substance Abuse, Ottawa, ON, Canada, <sup>2</sup>Canadian Centre on Substance Abuse, Ottawa, ON
- The burden of disease attributable to alcohol and illicit drug use: Findings from the Global Burden of Disease Study 2015

  Louisa Degenhardt<sup>1</sup>, Janni Leung<sup>2</sup>, Alize Ferrari<sup>2</sup>, Fiona Charlson<sup>3</sup>, Holly Erskine<sup>4</sup>, Damian Santomauro<sup>4</sup>, Whiteford Harvey<sup>3</sup>, Theo Vos<sup>5</sup>, <sup>1</sup>National Drug and Alcohol Research Centre, Sydney, Australia, Australia, <sup>2</sup>Queensland Centre for Mental Health Research, Archerfield, Queensland, Australia, <sup>3</sup>Queensland Centre for Mental Health Research, Archerfield, Queensland, <sup>4</sup>University of Queensland, Brisbane, Austria, <sup>5</sup>University of Washington, Institute for Health Metrics and Evaluation, Seattle, WA
- A randomized controlled analog trial for alcohol and tobacco smoking co-addiction using contingency management
  Michael Orr<sup>1</sup>, Crystal Smith<sup>2</sup>, Samantha Martin<sup>2</sup>, Myles Finlay<sup>1</sup>, Olivia Brooks<sup>2</sup>,
  Oladunni Oluwoye<sup>2</sup>, Emily Leickly<sup>2</sup>, Michael McDonell<sup>2</sup>, Matt Layton<sup>2</sup>, John Roll<sup>1</sup>,
  Sterling McPherson<sup>3</sup>, <sup>1</sup>Washington State University College of Nursing, Spokane,
  WA, <sup>2</sup>Washington State University, Program of Excellence in Addictions Research,
  Spokane, WA, <sup>3</sup>Washington State University, College of Medicine, Spokane, WA
- Overcoming barriers to adopting and implementing medication-assisted addiction treatment: The medication research partnership

  Croff Raina<sup>1</sup>, Kim Hoffman<sup>1</sup>, Kelly Alanis-Hirsch<sup>2</sup>, James Ford,II<sup>3</sup>, Dennis McCarty<sup>1</sup>, Laura Schmidt<sup>4</sup>, <sup>1</sup>Oregon Health and Science University, Hillsboro, OR, <sup>2</sup>Services Effectiveness Research Program, Durham, NC, <sup>3</sup>University of Wisconsin-Madison, Madison, WI, <sup>4</sup>UCSF, San Francisco, CA

- Feasibility of an ED-based multi-session remote therapy intervention for drug use and violence

  Patrick Carter<sup>1</sup>, Jessica Roche<sup>1</sup>, Maureen Walton<sup>2</sup>, Rebecca Cunningham<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan-Addiction Research Center, Ann Arbor, MI
- Baseline attitudes toward addressing patient drug use: Differences across health professional training programs
  Aaron Johnson<sup>1</sup>, Yunmi Chung<sup>1</sup>, <sup>1</sup>Augusta University, Augusta, GA
- Training the future of health and social care providers: Outcomes from screening, brief intervention, and referral to treatment for substance use trainings

  Emily Sargent<sup>1</sup>, Tess Kilwein<sup>2</sup>, Joseph Miller<sup>1</sup>, <sup>1</sup>University of North Dakota, Grand Forks, ND, <sup>2</sup>University of Wyoming, Laramie, WY
- Private health plans' role in delivery and payment reform to support integrated care Constance Horgan<sup>1</sup>, Sharon Reif<sup>1</sup>, Maureen Stewart<sup>2</sup>, Deborah Garnick<sup>2</sup>, Amity Quinn<sup>2</sup>, Timothy Creedon<sup>2</sup>, Brooke Evans<sup>2</sup>, <sup>1</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>2</sup>Brandeis University, Waltham, MA
- A qualitative study of barriers and facilitators affecting implementation of electronic health record-integrated screening for substance use in primary care

  Jennifer McNeely<sup>1</sup>, Pritika Kumar<sup>1</sup>, Traci Rieckmann<sup>2</sup>, Erica Sedlander<sup>1</sup>, Sarah Farkas<sup>1</sup>, Joseph Kannry<sup>3</sup>, Aida Vega<sup>3</sup>, Eva Waite<sup>3</sup>, Lauren Peccoralo<sup>3</sup>, Richard Rosenthal<sup>3</sup>, Dennis McCarty<sup>2</sup>, John Rotrosen<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Oregon Health and Science University, Hillsboro, OR, <sup>3</sup>Icahn School of Medicine at Mount Sinai, New York, NY
- Elevated risk of leaving hospital against medical advice for substance users admitted to a Canadian hospital
  Alexander Caudarella<sup>1</sup>, Tim Guimond<sup>2</sup>, Wiplove Lamba<sup>2</sup>, Mary Yang<sup>2</sup>, <sup>1</sup>University of Toronto, Toronto, ON, Canada, <sup>2</sup>University of Toronto, Toronto, ON
- Substance misuse screening in primary care: TAPS Tool vs. ASSIST
  Robert Schwartz<sup>1</sup>, Jennifer McNeely<sup>2</sup>, Li-Tzy Wu<sup>3</sup>, Gaurav Sharma<sup>4</sup>, Aimee Wahle<sup>4</sup>,
  Carol Cushing<sup>5</sup>, courtney Nordeck<sup>1</sup>, Anjalee Sharma<sup>1</sup>, Kevin O'Grady<sup>6</sup>, Jan
  Gryczynski<sup>1</sup>, Shannon Mitchell<sup>1</sup>, Robert Ali<sup>7</sup>, John Marsden<sup>8</sup>, Geetha
  Subramaniam<sup>5</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>New York University
  School of Medicine, New York, NY, <sup>3</sup>Duke University School of Medicine, Durham,
  NC, <sup>4</sup>The Emmes Corporation, Rockville, MD, <sup>5</sup>NIDA, Bethesda, MD, <sup>6</sup>University
  of Maryland-Psychology, College Park, MD, <sup>7</sup>WHO Collaborating Centre for the
  Treatment of Drug and Alcohol Problems, Adelaide, South Australia,
  Australia, <sup>8</sup>National Addiction Centre, Institute of Psychiatry, London, UK, United
  Kingdom
- Satisfaction, alliance and intervention experience: Comparing provider- vs. computer-delivered brief, motivational interventions for substance use among childbearing-aged women

  Amy Loree<sup>1</sup>, Kimberly Yonkers<sup>2</sup>, Steven Ondersma<sup>3</sup>, Kathryn Gilstad-Hayden<sup>2</sup>, Steve Martino<sup>2</sup>, <sup>1</sup>VA Connecticut/Yale University School of Medicine, New Haven, CT, <sup>2</sup>Yale University-Psychiatry, New Haven, CT, <sup>3</sup>Wayne State University-Psychiatry and Behavioral Neurosciences, Detroit, MI

#### **OPIOIDS II**

- An assessment of prevalence of substance abuse and associated factors among the medical and dental students in Chennai City, India
  D. Francis, The Tamil Nadu Dr. M.G.R. Medical University, Chennai, India
- 25 Estimating heroin incidence in males and females using a back-calculation approach: Potential biases and re-calibration approaches

  Hsueh-Han Yeh<sup>1</sup>, Samantha J. Bauer<sup>1</sup>, Qing Lu<sup>2</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI, <sup>2</sup>Michigan State University, Department of Epidemiology and Biostatics/College of Human Medicine, East Lansing, MI
- Wet behind the ears? A Bayesian approach to estimating heroin incidence age by age Samantha J. Bauer<sup>1</sup>, Chris Thompson<sup>1</sup>, Olga Vselvolozhskaya<sup>2</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI, <sup>2</sup>College of Public Health, Lexington, KY

  Provider characteristics and opioid prescribing among primary care physicians treating Medicare patients in the US
  Lewei (Allison) Lin<sup>1</sup>, Amy Bohnert<sup>1</sup>, Paul Christine<sup>1</sup>, Donovan Maust<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI
- Assessing the risk of opioid abuse among individuals with high emergency department utilization

  Henry Young<sup>1</sup>, Mirsada Serdarevic<sup>1</sup>, Hannah Crooke<sup>1</sup>, Joseph Tyndall<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- 29 Gun-carrying and suicidal behavior among substance-using women Krishna Vaddiparti<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- 30 Survey of treatment preferences for opioid use disorder
  Ravi Nahata<sup>1</sup>, Michael Mancino<sup>2</sup>, Jeff Thostenson<sup>2</sup>, Alison Oliveto<sup>2</sup>, <sup>1</sup>Central VA
  Healthcare System, North Central, VA, <sup>2</sup>University of Arkansas for Medical Sciences,
  Little Rock, AR
- Prescription and over-the counter opioids: A three country comparative analysis of pharmacists' perspectives on codeine use and misuse

  Tara Carney¹, John Wells², Charles Parry³, Padraig McGuinness⁴, Richard Harris⁵,
  Marie Claire van Hout², ¹South African Medical Research Council, Tygerberg, South Africa, South Africa, ²Waterford Institute of Technology, Waterford, Ireland, ³South African Medical Research Council, Tygerberg, South Africa, ⁴CARA Pharmacy, Dublin, Ireland, ⁵Weldricks Pharmacy, UK
- The global burden of opioid use disorders 1990-2015: Results on sex and age differences from the Global Burden of Disease Study 2015

  Janni Leung<sup>1</sup>, Alize Ferrari<sup>1</sup>, Fiona Charlson<sup>2</sup>, Whiteford Harvey<sup>2</sup>, Theo Vos<sup>3</sup>, Louisa Degenhardt<sup>4</sup>, <sup>1</sup>Queensland Centre for Mental Health Research, Archerfield, Queensland, Australia, <sup>2</sup>Queensland Centre for Mental Health Research, Archerfield, Queensland, <sup>3</sup>University of Washington, Institute for Health Metrics and Evaluation, Seattle, WA, <sup>4</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 33 A brief form of the SOAPP-R
  Stephen Butler<sup>1</sup>, Stacey McCaffrey<sup>1</sup>, Simon Budman<sup>1</sup>, Ryan Black<sup>1</sup>, <sup>1</sup>Inflexxion, Inc,
  Waltham, MA

- 34 Strengths can decrease likelihood of drug use among high-risk rural women following brief intervention
  - Katherine Marks<sup>1</sup>, Justin Strickland<sup>1</sup>, Carl Leukefeld<sup>1</sup>, Carrie Oser<sup>1</sup>, Michele Staton<sup>2</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky College of Medicine, Lexington, KY
- 35 Severity of dependence scale: Diagnostic cut-off for pharmaceutical opioid dependence
  - Raimondo Bruno<sup>1</sup>, Amy Peacock<sup>2</sup>, Briony Larance<sup>3</sup>, Nichola Lintzeris<sup>4</sup>, Robert Ali<sup>5</sup>, Louisa Degenhardt<sup>6</sup>, <sup>1</sup>University of Tasmania, Sydney, New South Wales, Australia, <sup>2</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>3</sup>University of South Wales, Sydney, Australia, <sup>4</sup>Drug and Alcohol Services, South Eastern Sydney Local Health District, Sydney, Australia, <sup>5</sup>WHO Collaborating Centre for the Treatment of Drug and Alcohol Problems, Adelaide, South Australia, <sup>6</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- A prospective, observational study of hospitalized persons who inject drugs with severe infections: Substance use severity, risk behaviors, and motivation for treatment

  Laura Fanucchi<sup>1</sup>, Michelle Lofwall<sup>2</sup>, Paul Nuzzo<sup>1</sup>, Sharon Walsh<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky College of Medicine, Lexington, KY
- 37 Developing domains of negative consequences of regular heroin use Tabitha Moses<sup>1</sup>, Eric Woodcock<sup>1</sup>, Jamey Lister<sup>1</sup>, Leslie Lundahl<sup>1</sup>, Mark Greenwald<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI

#### SEDATIVE, HYPNOTICS, INHALANTS

- Cues and stressors but not primes produce reinstatement of midazolam-maintained behavior in rats

  James Cook<sup>1</sup>, Barak Gunter<sup>2</sup>, Sally Huskinson<sup>1</sup>, Kevin Freeman<sup>1</sup>, James Rowlett<sup>1</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>Vanderbilt University Medical Center, Nashville, TN
- An investigation of the reinforcing effects of diazepam and midazolam in rats trained to self-administer heroin
  Sharon Smith<sup>1</sup>, Royston Gray<sup>2</sup>, David Heal<sup>1</sup>, <sup>1</sup>RenaSci Ltd, Nottingham,
  Nottinghamshire, United Kingdom, <sup>2</sup>GW Pharmaceuticals PLC, Cambridge, UK,
  United Kingdom
- A comparison of the physical dependence syndromes produced in rats by morphine and diazepam

  David Heal<sup>1</sup>, Simon Goddard<sup>2</sup>, Sharon Smith<sup>1</sup>, <sup>1</sup>RenaSci Ltd, Nottingham,

  Nottinghamshire, United Kingdom, <sup>2</sup>RenaSci Ltd, Nottingham, Nottinghamshire
- Subjective abuse potential of brivaracetam compared to alprazolam, levetiracetam, and placebo in recreational CNS depressant users

  Edward Sellers<sup>1</sup>, Armel Stockis<sup>2</sup>, Kerri Schoedel<sup>3</sup>, <sup>1</sup>University of Toronto, Toronto, ON, Canada, <sup>2</sup>UCB Pharma, Belgium, <sup>3</sup>Altreos Research Partners Inc., Toronto, ON, Canada
- Driving under the influence of benzodiazepines among high-risk rural women

  Matt Webster<sup>1</sup>, Megan Dickson<sup>1</sup>, Michele Staton<sup>2</sup>, Carl Leukefeld<sup>1</sup>, <sup>1</sup>University of
  Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky College of Medicine, Lexington,
  KY

43 Toxic effects of solvent inhalants on liver and kidney functions in rats A. Elkoussi, Assiut College of Medicine, Assiut, Egypt, Egypt

#### **PHARMACOKINETICS**

- Incremental validity of estimated marijuana grams as a predictor of marijuanarelated problems and urine cannabinoid level: Evidence from a clinical trial Rachel Tomko<sup>1</sup>, Nathaniel Baker<sup>1</sup>, Erin McClure<sup>1</sup>, Kevin Gray<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC
- PK/PD correlation in hydrocodone ER abuse potential studies
  Naama Levy-Cooperman<sup>1</sup>, Michael Gillespie<sup>2</sup>, Megan Shram<sup>1</sup>, Laura Rabinovich-Guilatt<sup>2</sup>, Kerri Schoedel<sup>1</sup>, <sup>1</sup>Altreos Research Partners Inc., Toronto, ON, Canada, <sup>2</sup>Teva Pharmaceuticals, Inc., Malvern, PA
- Assessment of the pharmacokinetic-pharmacodynamic relationship of the rate of drug onset and abuse liability with intranasally administered oxycodone and hydrocodone Sarah Boden<sup>1</sup>, Megan Shram<sup>2</sup>, Mark Leggas<sup>1</sup>, Paul Nuzzo<sup>1</sup>, Salvatore Colucci<sup>3</sup>, Steve Harris<sup>3</sup>, Sharon Walsh<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>Altreos Research Partners Inc., Toronto, ON, Canada, <sup>3</sup>Purdue Pharma L.P., Stamford, CT
- Characterization of recombinant humanized anti-cocaine monoclonal antibody from 3 clones: Selecting the master cell bank
  Rose Webster<sup>1</sup>, Fatima Saeed<sup>2</sup>, Hanna Wetzel<sup>1</sup>, Cinder Cohen<sup>2</sup>, William James Ball, Jr.<sup>1</sup>, Andrew Norman<sup>2</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University of Cincinnati College of Medicine, Cincinnati, OH

#### **CHEMISTRY**

- 48 Diarylurea-based allosteric modulators of the cannabinoid CB1 receptor
  Yanan Zhang<sup>1</sup>, Thuy Nguyen<sup>1</sup>, Ann Decker<sup>1</sup>, Thomas Gamage<sup>1</sup>, Jun-Xu Li<sup>2</sup>, Brian
  Thomas<sup>1</sup>, Jenny Wiley<sup>1</sup>, Terrence Kenakin<sup>3</sup>, <sup>1</sup>RTI International, Research Triangle
  Park, NC, <sup>2</sup>State University of New York at Buffalo, Buffalo, NY, <sup>3</sup>University of
  North Carolina at Chapel Hill, Chapel Hill, NC
- 49 4-Hydroxyphenylglycine derivatives as agonists for the orphan receptor GPR88, a potential target for drug abuse Chunyang Jin<sup>1</sup>, Ann Decker<sup>1</sup>, Tiffany Langston<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC
- Benzylideneoxymorphone: A new lead for development of bifunctional mu/delta opioid receptor ligands

  Andrea Devereaux<sup>1</sup>, Jason Healy<sup>2</sup>, Nicholas Griggs<sup>3</sup>, John Traynor<sup>3</sup>, Rae Matsumoto<sup>4</sup>, Andrew Coop<sup>5</sup>, Christopher Cunningham<sup>6</sup>, <sup>1</sup>Concordia University Wisconsin School of Pharmacy, Neenah, WI, <sup>2</sup>Thomas Jefferson University, Philadelphia, PA, <sup>3</sup>University of Michigan, Ann Arbor, MI, <sup>4</sup>Touro University California, Vallejo, CA, <sup>5</sup>University of Maryland School of Pharmacy, Baltimore, MD, <sup>6</sup>Concordia University Wisconsin, Mequon, WI
- Modular total synthesis approach towards salvinorin A-inspired designer opioids
  Alexander Sherwood<sup>1</sup>, Samuel Williamson<sup>2</sup>, Rachel Crowley<sup>1</sup>, Thomas
  Prisinzano<sup>3</sup>, <sup>1</sup>University of Kansas, Lawrence, KS, <sup>2</sup>University of Kansas, Department of Medicinal Chemistry, Lawrence, KS, <sup>3</sup>University of Kansas School of Pharmacy, Lawrence, KS

The Fab fragment of a humanized anti-cocaine monoclonal antibody: Development of a quality control method and its application to an ELISA

Cinder Cohen<sup>1</sup>, Hanna Wetzel<sup>2</sup>, Fatima Saeed<sup>1</sup>, Terence Kirley<sup>1</sup>, Andrew Norman<sup>1</sup>,

Jordan Marckel<sup>1</sup>, William Ball<sup>1</sup>, Rose Webster<sup>1</sup>, <sup>1</sup>University of Cincinnati College of Medicine, Cincinnati, OH, <sup>2</sup>University of Cincinnati, Cincinnati, OH

#### STIMULANTS: PRECLINICAL

- Dramatically slower onset of DAT occupancy by dasotraline compared to methylphenidate
  Robert Lew<sup>1</sup>, Cristian Constantinescu<sup>2</sup>, Daniel Holden<sup>3</sup>, Evan Morris<sup>3</sup>, Richard Carson<sup>3</sup>, Vincent Carroll<sup>4</sup>, Olivier Barret<sup>2</sup>, Gilles Tamagnan<sup>2</sup>, Kenneth Koblan<sup>1</sup>, Seth C. Hopkins<sup>1</sup>, <sup>1</sup>Sunovion Pharmaceuticals Inc., Marlborough, MA, <sup>2</sup>Molecular NeuroImaging LLC, New Haven, CT, <sup>3</sup>Yale University, New Haven, CT, <sup>4</sup>Institute for Neurodegenerative Disorders, New Haven, CT
- Potential abuse liability of orally self-administered methylphenidate in HIV-1 transgenic rats

  Steven Harrod<sup>1</sup>, Hailong Li<sup>1</sup>, Jessica Illenberger<sup>1</sup>, Robert Roscoe<sup>1</sup>, Srimal Samaranayake<sup>1</sup>, Parastoo Hashemi<sup>1</sup>, Charles Mactutus<sup>1</sup>, Rosemarie Booze<sup>1</sup>, <sup>1</sup>University of South Carolina, Columbia, SC
- Effects of GABAA receptor positive allosteric modulators on the behavioral and neurochemical effects of methamphetamine in rhesus monkeys

  Lais Berro<sup>1</sup>, Monica Andersen<sup>2</sup>, Cydney Eisenberg<sup>1</sup>, Melis Odabas-Geldiay<sup>1</sup>, Leonard Howell<sup>1</sup>, <sup>1</sup>Emory University, Atlanta, GA, <sup>2</sup>Universidade Federal de São Paulo, Department of Psychobiology, São Paulo, Brazil
- Reinforcing effects of l-methamphetamine in nonhuman primates

  Stephen Kohut<sup>1</sup>, Bruce Blough<sup>2</sup>, Jack Bergman<sup>3</sup>, <sup>1</sup>McLean Hospital / Harvard Medical School, Belmont, MA, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>ADARC McLean Hospital, Belmont, MA
- Continuous D-amphetamine treatment during intermittent cocaine intake reduces addiction-like behaviors

  Florence Allain<sup>1</sup>, Anne-Noël Samaha<sup>1</sup>, <sup>1</sup>Université de Montréal, Department of Pharmacology and Physiology, Outremont, QC, Canada
- Social rank change and dopamine in pigs
  Hui Cheng<sup>1</sup>, Abiy Mohammed<sup>1</sup>, Anthony Pease<sup>1</sup>, Joshua Gehrke<sup>1</sup>, George Bohart<sup>1</sup>,
  Michael Nader<sup>2</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI, <sup>2</sup>Wake
  Forest School of Medicine, Winston-Salem, NC
- The effects of social influence on cocaine self-administration in female rats Mark Smith<sup>1</sup>, Andrea Robinson<sup>1</sup>, Gaylen Fronk<sup>1</sup>, Huailin Zhang<sup>1</sup>, Scott Tonidandel<sup>1</sup>, <sup>1</sup>Davidson College, Davidson, NC
- Contributions of central dopamine mechanisms to antipsychotic-induced dopamine supersensitivity

  Alice Servonnet<sup>1</sup>, Pierre-Paul Rompré<sup>2</sup>, Anne-Noël Samaha<sup>3</sup>, <sup>1</sup>Neuroscience Department; Université de Montréal, Montreal, QC, Canada, <sup>2</sup>Neuroscience Department, Université de Montréal, Montreal, QC, Canada, <sup>3</sup>Université de Montréal, Department of Pharmacology and Physiology, Outremont, QC, Canada

- Regulation of goal-directed action selection by cocaine, MDMA, and orbitofrontal BDNF-trkB
  - Elizabeth Pitts<sup>1</sup>, Shannon Gourley<sup>1</sup>, <sup>1</sup>Emory University, Atlanta, GA
- Pathologic changes in the NAc post experimental TBI and susceptibility to the rewarding effects of a subthreshold dose of cocaine following brain injury Marquis Maynard<sup>1</sup>, Lee Anne Cannella<sup>2</sup>, Scott Rawls<sup>3</sup>, Servio Ramirez<sup>2</sup>, <sup>1</sup>Temple University Lewis Katz School of Medicine, Philadelphia, PA, <sup>2</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA, <sup>3</sup>Temple University, Philadelphia, PA
- Dexamethasone attenuates the enhanced rewarding effects of cocaine following experimental TBI

  Lee Anne Cannella<sup>1</sup>, Steven F. Merkel<sup>1</sup>, Allison Andrews<sup>2</sup>, Evan M. Lutton<sup>1</sup>,

  Roshanak Razmpour<sup>1</sup>, Servio Ramirez<sup>1</sup>, <sup>1</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA, <sup>2</sup>Temple University, Philadelphia, PA
- Evaluating the cellular effects of drugs of abuse using a next generation microfluidic model that recapitulates the human neurovascular unit
  Allison Andrews<sup>1</sup>, Servio Ramirez<sup>2</sup>, <sup>1</sup>Temple University, Philadelphia, PA, <sup>2</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- Cocaine-induced changes in perineuronal net and parvalbumin cell intensity in the rat medial prefrontal cortex

  Barbara Sorg<sup>1</sup>, Megan Slaker<sup>2</sup>, Kyrie-Anne Reyes<sup>3</sup>, <sup>1</sup>Washington State University, Pullman, WA, <sup>2</sup>Medical College of Wisconsin, Milwaukee, WI, <sup>3</sup>Oregon Health and Science University, Hillsboro, OR
- Dynorphin counteracts the effects of orexin in the paraventricular nucleus of the thalamus

  Remi Martin-Fardon<sup>1</sup>, Marsida Kallupi<sup>1</sup>, Friedbert Weiss<sup>1</sup>, Olivier George<sup>1</sup>, Paul Schweitzer<sup>1</sup>, Alessandra Matzeu<sup>1</sup>, <sup>1</sup>Scripps Research Institute, La Jolla, CA
- Activation of orexin neurons following orexin-A administration in the paraventricular nucleus of the thalamus in animals with a history of cocaine dependence

  Alessandra Matzeu<sup>1</sup>, Friedbert Weiss<sup>1</sup>, Remi Martin-Fardon<sup>1</sup>, <sup>1</sup>Scripps Research Institute, La Jolla, CA
- Role of anterior dorsal lateral hypothalamic area perineuronal nets in the acquisition of cocaine-induced conditioned place preference and self-administration

  J. Blacktop, Washington State University, Pullman, WA
- A novel neuropeptide regulator of cocaine self-administration

  James Kasper<sup>1</sup>, David McCue<sup>1</sup>, Jonathan Hommel<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX
- Brain region and mechanism underlying 17beta-estradiol-potentiated reinstatement of cocaine-seeking behavior in female rats

  Elizabeth Doncheck<sup>1</sup>, Margot DeBaker<sup>1</sup>, Luke Urbanik<sup>1</sup>, Laura Barron<sup>1</sup>, Gage Liddiard<sup>1</sup>, Jennifer Tuscher<sup>2</sup>, Karyn Frick<sup>2</sup>, Qing-song Liu<sup>3</sup>, Cecilia Hillard<sup>3</sup>, John Mantsch<sup>1</sup>, <sup>1</sup>Marquette University, Milwaukee, WI, <sup>2</sup>University of Wisconsin-Milwaukee, Milwaukee, WI, <sup>3</sup>Medical College of Wisconsin, Milwaukee, WI
- 71 Mechanisms of caffeine self-administration in rats
  Curtis Bradley<sup>1</sup>, Moss Sanders<sup>1</sup>, Amy Patterson<sup>1</sup>, Samantha Malone<sup>1</sup>, Amanda Smith<sup>1</sup>,
  Matthew Palmatier<sup>1</sup>, <sup>1</sup>East Tennessee State University, Johnson City, TN

72 Effect of adolescent caffeine self-administration on adult nicotine self-administration in rats

Jessica Golson<sup>1</sup>, Amy Patterson<sup>1</sup>, Moss Sanders<sup>1</sup>, Samantha Malone<sup>1</sup>, Curtis Bradley<sup>1</sup>, Matthew Palmatier<sup>1</sup>, <sup>1</sup>East Tennessee State University, Johnson City, TN

#### **ALCOHOL**

- Variable response to nucleus accumbens deep brain stimulation in a rat model of alcohol drinking

  Angela Henricks<sup>1</sup>, Nicholas Deveau<sup>1</sup>, Lucas Dwiel<sup>1</sup>, Amanda Simon<sup>1</sup>, Alan Green<sup>1</sup>, Wilder Doucette<sup>1</sup>, <sup>1</sup>Dartmouth College, Hanover, NH
- Considering sleep-related fatigue as a motivating factor in substance use

  Brett M Millar<sup>1</sup>, Christian Grov<sup>1</sup>, Jeffrey Parsons<sup>2</sup>, <sup>1</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>2</sup>Hunter College, CUNY, New York, NY
- Cognitive enhancer modafinil: A pharmacological intervention to decrease behavioral economic demand for alcohol
  Sarah Snider<sup>1</sup>, Quan Phung<sup>2</sup>, Stephen LaConte<sup>2</sup>, Patsy Marshall<sup>2</sup>, <sup>1</sup>Addiction Recovery Research Center, Roanoke, VA, <sup>2</sup>Virginia Tech Carilion Research Institute, Roanoke, VA
- What predicts underage drinking? Investigating patterns of attachment, saying 'no', and alcohol expectancies

  Laura Anderson<sup>1</sup>, Kiri Patton<sup>2</sup>, Jeanie Sheffield<sup>2</sup>, Andrew Wood<sup>3</sup>, Jason Connor<sup>2</sup>,

  Matthew Gullo<sup>2</sup>, <sup>1</sup>University of Queensland, Brisbane, Austria, Australia, <sup>2</sup>University of Queensland, Brisbane, Austria, <sup>3</sup>University of the Sunshine Coast, Queensland, Australia
- 77 Goal commitment predicts outcome for adolescents with alcohol use disorder
  Yifrah Kaminer<sup>1</sup>, Christine Ohannessian<sup>1</sup>, James McKay<sup>2</sup>, Rebecca Burke<sup>3</sup>, Kaitlin
  Flannery<sup>3</sup>, <sup>1</sup>University of Connecticut School of Medicine, Farmington,
  CT,<sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>University of Connecticut, Storrs,
  CT
- 78 The structure of neuroticism and its relationship to problematic drinking in youth Nina Pocuca<sup>1</sup>, Leanne Hides<sup>2</sup>, Catherine Quinn<sup>3</sup>, Melanie White<sup>2</sup>, Louise Mewton<sup>3</sup>, <sup>1</sup>University of Queensland, Brisbane, Austria, Australia, <sup>2</sup>University of Queensland, Brisbane, Austria, <sup>3</sup>Centre for Youth Substance Abuse Research, Herston, Queensland
- Effectiveness of a brief Internet-based alcohol intervention among risky college drinkers: Four-arm randomized controlled trial

  Andre Bedendo<sup>1</sup>, Andre Luiz Monezi Andrade<sup>2</sup>, Ana Regina Noto<sup>2</sup>, <sup>1</sup>Universidade Federal de Sao Paulo, São Paulo, Brazil, <sup>2</sup>Universidade Federal de São Paulo, Department of Psychobiology, São Paulo, Brazil
- Heavy drinking mediates the association between child maltreatment and violence victimization in adolescence, but not adulthood

  Kathryn Smith<sup>1</sup>, Philip Smith<sup>2</sup>, Lindsay Oberleitner<sup>3</sup>, Emily Grekin<sup>4</sup>, Sherry McKee<sup>5</sup>, <sup>1</sup>Columbia University Medical Center, New York State Psychiatric Institute, New York, NY, <sup>2</sup>CUNY School of Medicine, New York, NY, <sup>3</sup>Yale University, Milford, CT, <sup>4</sup>Wayne State University, Detroit, MI, <sup>5</sup>Yale School of Medicine, New Haven, CT

Public Health, Baltimore, MD

- Unpacking the association between alcohol use and intimate partner violence in sub-Saharan Africa
  M. Claire Greene<sup>1</sup>, Jeremy Kane<sup>1</sup>, Wietse Tol<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of
- 82 The contribution of COMT genotype and childhood trauma to alcohol approach and altruism in individuals with AUD

  Jennifer Mitchell<sup>1</sup>, Dawn Weinstein<sup>1</sup>, Josh Woolley<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA
- Approach bias modification training during detoxification: 3-Month outcomes of a pilot RCT

  Victoria Manning<sup>1</sup>, Petra Staiger<sup>2</sup>, Hall Kate<sup>3</sup>, Joshua Garfield<sup>4</sup>, Daniel Lubman<sup>4</sup>,
  Pinar Thorn<sup>4</sup>, Leung Daniel<sup>2</sup>, Jarrad Lum<sup>2</sup>, Antonio Verdejo-Garcia<sup>5</sup>, <sup>1</sup>Turning Point,
  Fitzroy, Victoria, Australia, <sup>2</sup>Deakin University, Burwood, Australia, <sup>3</sup>Deakin
  University, Burwood, Australia, <sup>4</sup>Turning Point, Fitzroy, Victoria, <sup>5</sup>Monash University,
  Victory, Australia
- Project engage program evaluation
  Anna Pecoraro<sup>1</sup>, Terry Horton<sup>2</sup>, Bailey Ingraham<sup>2</sup>, Beverly Wilson<sup>2</sup>, Claudine
  Jurkovitz<sup>2</sup>, George Woody<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Christiana
  Care Health System, Newark, DE
- Integration of transcendental meditation into alcohol use disorder treatment Jan Gryczynski<sup>1</sup>, Robert Schwartz<sup>1</sup>, courtney Nordeck<sup>1</sup>, Marc Fishman<sup>2</sup>, Kevin O'Grady<sup>3</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>Mountain Manor Treatment Center, Emmitsburg, MD, <sup>3</sup>University of Maryland-Psychology, College Park, MD
- Evaluation of the factor structure of the Brazilian-Portuguese version of the Readiness to Change questionaire applied to problem drinkers in the beginning of a web-based intervention

  Maria Lucia Souza-Formigoni<sup>1</sup>, Andre Luiz Monezi Andrade<sup>2</sup>, Henrique Gomide<sup>3</sup>, Laisa M A Sartes<sup>3</sup>, Leonardo Martins<sup>3</sup>, Telmo MotaEonzani<sup>3</sup>, Roseli Boerngen Lacerda<sup>4</sup>, <sup>1</sup>Universidade Federal de São Paulo, São Paulo, Brazil, <sup>2</sup>Universidade Federal de São Paulo, Department of Psychobiology, São Paulo, Brazil, <sup>3</sup>Universidade Federal de Juiz de Fora, Minas Gerais, Brazil, <sup>4</sup>Universidade Federal do Paraná, Curitiba, Brazil

#### **FOOD**

- Body mass index and prevalence of obesity among individuals with substance dependence
  Abigail Matthews<sup>1</sup>, Jacqueline King<sup>1</sup>, Aimee Wahle<sup>1</sup>, Lian Hu<sup>1</sup>, Dikla Blumberg<sup>1</sup>, <sup>1</sup>The Emmes Corporation, Rockville, MD
- Impact of quality of life and distress tolerance on successful behaviour change in separate cohorts of individuals with alcohol use disorder and obesity

  Daisy Thompson-Lake<sup>1</sup>, Richard De La Garza, II<sup>2</sup>, Peter Hajek<sup>3</sup>, <sup>1</sup>Queen Mary University of London, UK, <sup>2</sup>Baylor College of Medicine, Houston, TX, <sup>3</sup>Queen Mary University of London, London, UK
- Eating behaviors, weight loss practices and marijuana use among emerging adults Denise Vidot<sup>1</sup>, Krystal Sardinas<sup>2</sup>, Abenaa Jones<sup>3</sup>, Sarah Messiah<sup>1</sup>, <sup>1</sup>University of Miami, Miami, FL, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD

#### HIV

- Short circuit: Disaggregation of adrenocorticotropic hormone and cortisol levels in HIV-positive methamphetamine users

  Adam Carrico<sup>1</sup>, Deborah Jones<sup>1</sup>, Violeta Rodriguez<sup>1</sup>, Mahendra Kumar<sup>1</sup>, <sup>1</sup>University of Miami, Miami, FL
- Association between cumulative marijuana use and executive function and processing speed in HIV-positive and HIV-negative men
  Chukwuemeka Okafor¹, Michael Plankey², Xinguang Chen³, Pamela J Surkan⁴, Steve Shoptaw¹, Eileen Martin⁵, Ronald Cohen⁶, Ned Sacktor³, Robert L Cook³,¹UCLA, Los Angeles, CA,²Georgetown University Medical Center, Division of Infectious Diseases, Washington, DC, ³College of Medicine, University of Florida, Gainesville, FL, ⁴Johns Hopkins Bloomberg School of Public Health, Social and Behavioral Interventions Program, Baltimore, MD, ⁵Rush University Medical Center, Chicago, IL, ⁶University of Florida, Gainesville, FL, ¬Johns Hopkins University, Department of Neurology, Baltimore, MD
- Comparison of motives for cannabis initiation and continued use in HIV+ and HIV-cannabis users

  Sheri Towe<sup>1</sup>, Bianca Martin<sup>1</sup>, Christina Meade<sup>1</sup>, <sup>1</sup>Duke University School of Medicine, Durham, NC
- Understanding syringe distribution policy change in Baltimore, MD: Effects on syringe distribution and HIV incidence among people who inject drugs Sean Allen<sup>1</sup>, Ju Park<sup>1</sup>, Brian Weir<sup>1</sup>, David Holtgrave<sup>1</sup>, Susan Sherman<sup>1</sup>, <sup>1</sup>Johns Hopkins University, Baltimore, MD
- 94 HIV risk behaviors and providing recent injection initiation assistance among people who inject drugs in the San Diego Tijuana border region
  Claudia Rafful<sup>1</sup>, Richard S Garfein<sup>1</sup>, Jazmine Cuevas<sup>1</sup>, Shelly Sun<sup>1</sup>, Sonia Jain<sup>1</sup>,
  Steffanie Strathdee<sup>1</sup>, Dan Werb<sup>1</sup>, <sup>1</sup>UCSan Diego, La Jolla, CA
- Characteristics of attenders of safer injecting facilities among people who inject drugs in France: Baseline results from the COSINUS cohort study

  Charlotte Kervran<sup>1</sup>, Marc Auriacombe<sup>2</sup>, Marie Jauffret-Roustide<sup>3</sup>, Laurence Lalanne-Tongio<sup>4</sup>, Perrine Roux<sup>3</sup>, Laelia Briand-Madrid<sup>3</sup>, Antoine Vilotitch<sup>3</sup>, Patrizia Carrieri<sup>3</sup>, Cecile Denis<sup>5</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Université de Bordeaux, Bordeaux, France, <sup>5</sup>University of Pennsylvania, Philadelphia, PA
- Prescribing narcotics and recommending medicinal marijuana as incentives to retain patients in HIV care

  Kasey Claborn<sup>1</sup>, Elizabeth Aston<sup>2</sup>, Michael Saccoccio<sup>1</sup>, Susan Ramsey<sup>1</sup>, <sup>1</sup>Rhode Island Hospital, Providence, RI, <sup>2</sup>Center for Alcohol and Addiction Studies, Brown University School of Public Health, Providence, RI
- Eligibility for heroin-assisted treatment among people who inject opioids and who live with HIV in a Canadian setting

  Jan Klimas<sup>1</sup>, Evan Wood<sup>2</sup>, Thomas Kerr<sup>3</sup>, huiru dong<sup>3</sup>, julio montaner<sup>3</sup>, MJ

  Milloy<sup>3</sup>, <sup>1</sup>UCD School of Medicine, Dublin, Ireland, Ireland, <sup>2</sup>University of British Columbia, Vancouver, BC, Canada, <sup>3</sup>University of British Columbia, Vancouver, BC

- Opioid prescribing attitudes and risk mitigation practices in two HIV clinics
  Judith Tsui<sup>1</sup>, Alexander Walley<sup>2</sup>, Marlene C. Lira<sup>2</sup>, Debbie Cheng<sup>2</sup>, Christine Chaisson<sup>2</sup>,
  Leah S. Forman<sup>2</sup>, Jonathan Colasanti<sup>3</sup>, Jane Liebschutz<sup>2</sup>, Christopher Shanahan<sup>2</sup>, Carly
  Bridden<sup>2</sup>, Carlos del Rio<sup>3</sup>, Jeffrey Samet<sup>2</sup>, <sup>1</sup>University of Washington Harborview,
  Seattle, WA, <sup>2</sup>Boston University School of Medicine, Boston, MA, <sup>3</sup>Emory University,
  Atlanta, GA
- Cost of an integrated treatment program for opiate addiction and HIV in Ho Chi Minh city, Vietnam

  Cecile Denis¹, Julie Becher¹, Thanh Doan², Huy Tran², Loan Nguyen², Trung Nguyen², Lisa Huang², Vincent Trias², Augustin Voisin³, Marc Auriacombe⁴, Gilles Raguin², Son Mai Thi Hoai⁵, Giang Le Truong⁵, Jean-Pierre Daulouede³, Charles O'Brien¹, David Metzger¹, ¹University of Pennsylvania, Philadelphia, PA,²Expertise France, France, ³Bizia, ⁴Université de Bordeaux, Bordeaux, France, ⁵HCMC AIDS Committee, Ho Chi Minh City, Vietnam
- The importance of self-medication with substances in people with HIV infection and substance dependence

  Margo Godersky<sup>1</sup>, Alexander Walley<sup>2</sup>, Timothy Heeren<sup>1</sup>, Michael Winter<sup>1</sup>, Meg Sullivan<sup>2</sup>, Seville Meli<sup>1</sup>, Richard Saitz<sup>1</sup>, <sup>1</sup>Boston University School of Public Health, Boston, MA, <sup>2</sup>Boston University School of Medicine, Boston, MA
- Developing youth-informed media to increase HIV testing in emergency departments Robert Freeman<sup>1</sup>, Ian Aronson<sup>2</sup>, Tonya Taylor<sup>3</sup>, Lisa Marsch<sup>4</sup>, Theodore Bania<sup>5</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>Digital Health Empowerment / NDRI, Brooklyn, NY, <sup>3</sup>State University of New York Downstate Medical Center, Brooklyn, NY, <sup>4</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>5</sup>Mount Sinai School of Medicine, New York, NY
- Improving identification of social harm among substance abusers in HIV trials K. Dugosh, Treatment Research Institute, Philadelphia, PA
- The prevalence and patterns of substance use across age cohorts in HIV+ adults within the state of Florida

  Zachary Mannes<sup>1</sup>, Huiyin Lu<sup>1</sup>, Nicole Ennis Whitehead<sup>1</sup>, Robert Cook<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- Opioid craving and HIV care cascade outcomes

  Bulat Idrisov<sup>1</sup>, Karsten Lunze<sup>1</sup>, Debbie Cheng<sup>1</sup>, Elena Blokhina<sup>2</sup>, Natalia Gnatienko<sup>1</sup>,

  Emily Quinn<sup>1</sup>, Alexander Walley<sup>1</sup>, Carly Bridden<sup>1</sup>, Kendall Bryant<sup>3</sup>, Dmitry Lioznov<sup>4</sup>,

  Evgeny Krupitsky<sup>5</sup>, Jeffrey Samet<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston,

  MA, <sup>2</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russia,

  Russian Federation, <sup>3</sup>NIAAA, Bethesda, MD, <sup>4</sup>First Pavlov State Medical University

  of St. Petersburg, St. Petersburg, Russia, <sup>5</sup>St. Petersburg Bekhterev Research

  Psychoneurological Institute, St. Peterburg, Russia, Russian Federation

- Is substance use associated with HIV cascade outcomes in Latin America?
  Raquel De Boni<sup>1</sup>, Meridith Blevins<sup>2</sup>, Bryan E. Shepherd<sup>2</sup>, Beatriz Grinsztejn<sup>3</sup>, Carina Cesar<sup>4</sup>, Claudia Cortes<sup>5</sup>, Denis Padgett<sup>6</sup>, Eduardo Gotuzzo<sup>7</sup>, Pablo F. Belaunzarán-Zamudio<sup>8</sup>, Peter F. Rebeiro<sup>2</sup>, Stephany N. Duda<sup>2</sup>, Catherine C. McGowan<sup>2</sup>, <sup>1</sup>Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, Brazil, <sup>2</sup>Vanderbilt University Medical Center, Nashville, TN, <sup>3</sup>INI Evandro Chagas, Fiocruz, Brazil, <sup>4</sup>Fundacion Huesped, Buenos Aires, Argentina, <sup>5</sup>University of Chile School of Medicine, Santiago, Chile, <sup>6</sup>Caja Costarricense de Seguro Social, San José, Costa Rica, <sup>7</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>8</sup>National Institute of Health Sciences and Nutrition "Salvador Zubirán, Tlalpan, Mexico
- Impact of multi-session SBIRT within primary care for people living with HIV/AIDS David Metzger<sup>1</sup>, Sumedha Chhatre<sup>1</sup>, Carolyn Carpenedo<sup>2</sup>, Karen Dugosh<sup>2</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Treatment Research Institute, Philadelphia, PA
- Associations between past month stimulant use and HIV-status in a representative sample of adults in the United States

  Emily Greene<sup>1</sup>, Pia Mauro<sup>1</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY

#### LITERATURE REVIEW

- Multi-setting community-based interventions to reduce population level harms arising from alcohol and other drug use

  Emily Stockings<sup>1</sup>, Luke Wolfenden<sup>2</sup>, Kate Bartlem<sup>3</sup>, Conor Gilligan<sup>3</sup>, Rebecca Hodder<sup>2</sup>, Melanie Kingsland<sup>2</sup>, John Wiggers<sup>2</sup>, <sup>1</sup>University of South Wales, Sydney, Australia, Australia, <sup>2</sup>Hunter New England Local Health District, Newcastle, New South Wales, <sup>3</sup>University of Newcastle, Australia, Newcastle, New South Wales
- Diagnosis and treatment of Wernicke's encephalopathy in patients with alcohol use disorder: Literature review and case series

  Anne-Sophie Wiet<sup>1</sup>, Jacques Dubernet<sup>1</sup>, Fuschia Serre<sup>1</sup>, Melina Fatseas<sup>2</sup>, Elizabeth Monthioux<sup>3</sup>, Sophie Auriacombe<sup>4</sup>, Marc Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>3</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>4</sup>Université de Bordeaux, France
- Health effects of electronic cigarettes: A systematic review of the literature
  Ginnie Ng¹, Robert Schwartz¹, Alexa Minichiello², Laurie Zawertailo³, ¹University of
  Toronto, Toronto, ON, ²Centre for Addiction and Mental Health, Toronto, ON, ³Centre for
  Addiction and Mental Health, Toronto, ON, Canada
- A mapping review of take-home naloxone for people released from correctional settings
  Meredith Horton<sup>1</sup>, Rebecca McDonald<sup>2</sup>, Traci Green<sup>3</sup>, Suzanne Nielsen<sup>4</sup>, John Strang<sup>5</sup>,
  Louisa Degenhardt<sup>6</sup>, Sarah Larney<sup>6</sup>, <sup>1</sup>New York University, New York, NY, <sup>2</sup>King's
  College, London, UK, <sup>3</sup>Boston University School of Medicine, Boston, MA, <sup>4</sup>University of
  South Wales, Sydney, Australia, 5King's College, London, UK, United Kingdom,
  <sup>6</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- Extended-release injectable naltrexone for opioid use disorder: A systematic review Brantley Jarvis<sup>1</sup>, August Holtyn<sup>1</sup>, Shrinidhi Subramaniam<sup>2</sup>, Kenneth Silverman<sup>2</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins University, Baltimore, MD
- 113 Review of public-access data from human abuse potential studies of abuse-deterrent formulations

  K. Schoedel, Altreos Research Partners Inc., Toronto, ON, Canada

- Jerisha Ellerstrand<sup>1</sup>, Janni Leung<sup>1</sup>, Alize Ferrari<sup>1</sup>, Whiteford Harvey<sup>2</sup>, Louisa Degenhardt<sup>3</sup>, <sup>1</sup>Queensland Centre for Mental Health Research, Archerfield, Queensland, Australia, <sup>2</sup>Queensland Centre for Mental Health Research, Archerfield, Queensland, <sup>3</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 115 Off-label pharmacotherapy in substance use disorders inmaculada Rivas Puy<sup>1</sup>, Merce Rodriguez Barriba<sup>2</sup>, Teresa Burguete<sup>3</sup>, Begoña Pascual Arce<sup>4</sup>, Victoria Olles<sup>3</sup>, Teresa Campillo<sup>5</sup>, Milagrosa Blanca Tamayo<sup>4</sup>, Ramon Ribera<sup>5</sup>, Gemma Hurtado Ruiz<sup>5</sup>, <sup>1</sup>IMSP Badalona, Barcelona, Spain, Spain, <sup>2</sup>Catalan Health Service, <sup>3</sup>IMSP Badalona, Barcelona, Spain, <sup>4</sup>Badalona Serveis Assistencials, <sup>5</sup>Parc de Salut Mar, Barcelona, Spain
- Contingency management and pharmacological treatment for stimulant users: A review

  Vitor Tardelli<sup>1</sup>, Thiago Fidalgo<sup>2</sup>, Dartiu Silveira<sup>2</sup>, Adam Bisaga<sup>3</sup>, <sup>1</sup>Universidade Federal de Sao Paulo, São Paulo, Brazil, Brazil, <sup>2</sup>Universidade Federal de Sao Paulo, São Paulo, Brazil, <sup>3</sup>Columbia University and NYSPI, New York, NY
- 117 Pathway from adverse childhood experiences to problematic substance use investigating emotional dysregulation
  A. Ralph, Centre for Youth Substance Abuse Research, Herston, Queensland,
  Australia
- Comparing integrated psychosocial treatment for co-occurring psychiatric and substance use disorders with addiction-focused treatment: A meta-analysis Elizabeth Saunders<sup>1</sup>, Meagan Dechen<sup>2</sup>, <sup>1</sup>The Dartmouth Institute, Lebanon, NH, <sup>2</sup>Geisel School of Medicine at Dartmouth, Hanover, NH
- Sociocultural considerations of prescription drug misuse among racial/ethnic minorities: A systematic review

  Bridgette Peteet<sup>1</sup>, Brittany Miller-Roenigk<sup>1</sup>, Caravella McCuistian<sup>1</sup>, Cami Mosley<sup>1</sup>, 
  <sup>1</sup>University of Cincinnati, Cincinnati, OH

#### **Oral Communications 11**

Outremont 11:15 - 12:15 PM

#### **DRUG ENVIE? CRAVING**

Chairs: Julie McCarthy and Hedy Kober

- 11:15 Craving predicts drug use: A quantitative meta-analysis
  Hedy Kober<sup>1</sup>, Rebecca Boswell<sup>2</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale
  University, New Haven, CT
- 11:30 Reduced interhemispheric executive control network coupling and increased craving in cocaine users

  Julie McCarthy<sup>1</sup>, Justin Shepherd<sup>1</sup>, Scott Lukas<sup>1</sup>, Amy Janes<sup>1</sup>, <sup>1</sup>McLean Hospital,
  Harvard Medical School, Belmont, MA
- 11:45 Intermittent intake of rapid cocaine injections promotes incubation of drug craving Aliou Badara Gueye<sup>1</sup>, Florence Allain<sup>1</sup>, Anne-Noël Samaha<sup>1</sup>, <sup>1</sup>Université de Montréal, Department of Pharmacology and Physiology, Outremont, QC, Canada
- 12:00 Augmenting endogenous glutamate within infralimbic cortex attenuates the incubation of cocaine-craving in rats

  Christina Shin¹, Taylor Templeton¹, Ellen Gable¹, Alvin Chiu¹, Jennifer Kim¹, Philip Vieira², Tod Kippin¹, Karen Szumlinski¹, ¹UCSF, San Francisco, CA,²California State University, Los Angeles, CA

#### **Oral Communications 12**

Mont-Royal 10:00 - 12:00 PM

#### VIVE LA (SEX) DIFFERENCE!

Chairs: Yasmin Zakiniaeiz and Teresa Franklin

- 10:00 Sex differences in subjective evaluations of reduced nicotine cigarettes
  Nicole Petersen<sup>1</sup>, Paul Faulkner<sup>1</sup>, Dara Ghahremani<sup>1</sup>, Chelsea Cox<sup>2</sup>, Edythe London<sup>1</sup>, <sup>1</sup>UCLA,
  Los Angeles, CA, <sup>2</sup>University of Illinois, Chicago, IL
- 10:15 The impact of sex on brain responses to smoking cues: Replication in a new cohort
  Teresa Franklin<sup>1</sup>, Nathan Hager<sup>1</sup>, Kanchana Jagannathan<sup>1</sup>, Kelly Dumais<sup>2</sup>, Amy Janes<sup>2</sup>,
  Michael Gawrysiak<sup>3</sup>, Heather Pater<sup>1</sup>, Joyce Wong<sup>1</sup>, H Rao<sup>1</sup>, Anna Rose Childress<sup>1</sup>, Reagan
  Wetherill<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>McLean Hospital, Harvard
  Medical School, Belmont, MA, <sup>3</sup>Delaware State University, Wilmington, DE
- 10:30 Sex differences in dorsolateral prefrontal cortex dopamine release and the relationship to tobacco smoking treatment outcomes

  Yasmin Zakiniaeiz<sup>1</sup>, Ansel Hillmer<sup>1</sup>, Laura Goetz<sup>1</sup>, Evan Morris<sup>1</sup>, David Matuskey<sup>1</sup>, Nabeel Nabulsi<sup>1</sup>, Yiyun Henry Huang<sup>1</sup>, Sherry McKee<sup>2</sup>, Kelly Cosgrove<sup>1</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale School of Medicine, New Haven, CT

- 10:45 Ovarian hormones are associated with stress reactivity and smoking in human laboratory study Mackenzie Peltier<sup>1</sup>, Terril Verplaetse<sup>2</sup>, Sherry McKee<sup>2</sup>, <sup>1</sup>Louisiana State University, Baton Rouge, LA, <sup>2</sup>Yale School of Medicine, New Haven, CT
- 11:00 The impact of sex, dose and inter-trial interval upon methamphetamine preference of Mari Purpura<sup>1</sup>, Philip Vieira<sup>2</sup>, Julia Adams<sup>1</sup>, Christina Barkas<sup>1</sup>, Sara Ghobadi<sup>1</sup>, Mark Bocz<sup>1</sup>, Serina Williams<sup>1</sup>, Tod Kippin<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>California State University, Los Angeles, CA
- Sex differences in early predictive biomarkers for cocaine seeking in adolescence and 11:15 adulthood Chloe Jordan<sup>1</sup>, Susan Andersen<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 11:30 The effects of estradiol and progesterone on heroin self-administration in ovariectomized Andrea Robinson<sup>1</sup>, Huailin Zhang<sup>1</sup>, Alexander Casimir<sup>1</sup>, Mark Smith<sup>1</sup>, <sup>1</sup>Davidson College, Davidson, NC
- Stress- and sex-dependent changes in miRNA expression and their potential impact on 11:45 opioid addiction Maria Mavrikaki<sup>1</sup>, Lorena Pantano<sup>2</sup>, David Norris<sup>1</sup>, Maximilian A Rogers-Grazado<sup>3</sup>, Sami S Amr<sup>3</sup>, Elena Chartoff<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>Harvard School of Public Health, Boston, MA, <sup>3</sup>Translational Genomics Core, Partners Healthcare Personalized Medicine, Cambridge, MA

#### **Oral Communications 13**

Verdun 10:00 - 12:00 PM

BRISER LES CHAÎNES: CRIMINAL JUSTICE

Chairs: Diane Morse and David Festinger

- 10:00 Juvenile offender's family and friends substance abuse Carl Leukefeld<sup>1</sup>, Megan Dickson<sup>1</sup>, Michel Tindall<sup>2</sup>, Matt Webster<sup>2</sup>, Carrie Oser<sup>2</sup>, Hannah Knudsen<sup>1</sup>, Katherine Marks<sup>1</sup>, Jennifer Havens<sup>3</sup>, <sup>1</sup>University of Kentucky, Lexington, KY. <sup>2</sup>Center on Drug and Alcohol Research University of Kentucky, Lexington, KY, <sup>3</sup>University of Kentucky College of Medicine, Lexington, KY
- 10:15 Drug use and mental health of caregivers of youth in the juvenile drug court: Implications for holistic family-based intervention Anna Harrison<sup>1</sup>, Marina Tolou-Shams<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA

- 10:30 FOCUS on women: Probation and Women's Initiative Supporting Health partnership targets legal and medical outcomes

  Diane Morse<sup>1</sup>, Addie Bardin<sup>1</sup>, Catherine Cerulli<sup>2</sup>, <sup>1</sup>University of Rochester School of Medicine, Rochester, NY, <sup>2</sup>University of Rochester School of Medicine and University of Rochester Susan B. Anthony Center, Rochester, NY
- 10:45 Among women in drug court, marginally housed and marijuana only users at more risk for adversity

  Catherine Woodstock Striley<sup>1</sup>, Jasmine Mack<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida,

  Gainesville, FL
- 11:00 Patient perceptions of extended-release naltrexone, methadone, and re-entry following release from a large NYC jail

  Mara Flannery<sup>1</sup>, Ryan McDonald<sup>2</sup>, Melissa Velasquez<sup>2</sup>, Joshua Lee<sup>2</sup>, <sup>1</sup>NYU Langone Medical Center, New York, NY, <sup>2</sup>New York University School of Medicine, New York, NY
- 11:15 Delivering medication-assisted treatment in drug courts: A statewide evaluation David Festinger<sup>1</sup>, Karen Dugosh<sup>2</sup>, David Gastfriend<sup>2</sup>, Brook Singletary<sup>2</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Treatment Research Institute, Philadelphia, PA
- 11:30 Results of a double blind placebo-controlled randomized trial of extended-release naltrexone among HIV+ inmates with opioid dependence

  Sandra Springer<sup>1</sup>, Russell Barbour<sup>2</sup>, Marwan Azar<sup>1</sup>, Maua Herme<sup>1</sup>, Tiara Winn<sup>3</sup>, Frederick Alice<sup>1</sup>, Angela Di Paola<sup>3</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale School of Public Health, New Haven, CT, <sup>3</sup>Yale School of Medicine-AIDS Program, New Haven, CT
- 11:45 Access to opioid-agonist therapy among incarcerated people with opioid-use disorder in Vancouver, Canada

  Nikki Bozinoff<sup>1</sup>, Kora DeBeck<sup>2</sup>, M-J Milloy<sup>2</sup>, Ekaterina Nosova<sup>2</sup>, Thomas Kerr<sup>3</sup>, Evan Wood<sup>4</sup>, Kanna Hayashi<sup>2</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada, <sup>2</sup>British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC, <sup>3</sup>University of British Columbia, Vancouver, BC, <sup>4</sup>University of British Columbia, Vancouver, BC, Canada

### **Symposium VII**

Westmount 10:00 - 12:00 PM

PAIN AND ADDICTION: OPIOIDS AND BEYOND

Chairs: Martin Cheatle and Peggy Compton

Bidirectional relations between pain, nicotine withdrawal, and tobacco smoking 10:00 J. Ditre, Syracuse University, Department of Psychology, Syracuse, NY 10:25 The relationship between alcohol use and chronic pain among people living with HIV J. Merlin, University of Alabama, Birmingham, AL 10:50 Phenotypic and genotypic characteristics of opioid use disorder in patients with chronic pain M. Cheatle, Perelman School of Medicine, University of Pennsylvania, Philadelphia, 11:15 Determining the efficacy of a psychosocial pain management intervention in men and women receiving substance use disorder treatment M. Ilgen, University of Michigan, Ann Arbor, MI DISCUSSANT: Pain and addiction: Future research directions 11:40

### **Symposium VIII**

Outremont 10:00 - 11:00 PM

UNDERSTANDING ALCOHOL AND NICOTINE CO-USE: RAT, NON-HUMAN PRIMATE, AND HUMAN LABORATORY FINDINGS

P. Compton, Georgetown University, Washington, DC

Chairs: Elise Weerts and David Drobes

- 10:00 Co-use of alcohol and nicotine: Impact on responses to naltrexone and varenicline
   A. Le, CAMH, Toronto, ON, Canada
   10:20 Concurrent self-administration of alcohol and nicotine: Effects of abstinence and changing drug concentrations
   E. Weerts, Johns Hopkins University School of Medicine, Baltimore, MD
- 10:40 Alcohol and nicotine interactions: Cue reactivity and pharmacological effects on druguse motivation
   D. Drobes, Moffitt Cancer Center, Tampa, FL

#### CPDD Outreach Event – Moisson Montréal

Lobby

11:30 - 1:30 PM

**Meet in Lobby** 

(Advanced registration requested. Contact Colleen Hanlon or Jessica Weafer)

#### Media Forum

Outremont 12:15 - 2:15 PM

#### WHAT'S HOT? PIVOTAL RESEARCH IN CPDD 2017

Chairs: Margaret Chisolm and Bertha Madras

Introduction to working with the media

B. Madras, McLean Hospital, Belmont, MA

Using verbal and visual story-telling to effectively communicate your research to the public

M. Chisolm, Johns Hopkins School of Medicine, Baltimore, MD

Introduction to each speaker

M. Chisolm, Johns Hopkins School of Medicine, Baltimore, MD

#### **Town Hall**

Westmount 12:15 - 2:15 PM

# HOPES VS. REALITY: CHALLENGES IN DEVELOPMENT OF A PRODUCT FOR THE TREATMENT OF SUBSTANCE USE DISORDERS

Chairs: Marco Pravetoni and Beatriz Rocha

Regulatory strategy for registration - Starting with the end in mind B.

Rocha, Covance, Princeton, NJ

Operational hurdles in clinical trials: Medication nonadherence and professional subjects

D. McCann, NIH, NIDA, Bethesda, MD

Market access and reimbursement strategy

J. Haddox, Purdue Pharma L.P., Stamford, Connecticut

Development of vaccines for substance use disorders

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

Industry, government, and academia as a collaborative environment for development of a product for the treatment of substance use disorders A. Coop, University of Maryland School of Pharmacy, Baltimore, MD

#### **Oral Communications 14**

Mont-Royal 2:30 - 4:30 PM

#### **GÉNÉTIQUE POTPOURRI**

- Chairs: Andrew Smith and Mary Jeanne Kreek 2:30 Effects of NAC Homer2 manipulation on methamphetamine reward in B6 mice Chelsea Brown<sup>1</sup>, Elissa Fultz<sup>1</sup>, Tod Kippin<sup>1</sup>, Karen Szumlinski<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA 2:45 Chronic (10-day) immobilization stress has no effect on quantitative AVP and AVPR1B mRNA levels in the male or female Sprague-Dawley rat hypothalamus Konrad Ben<sup>1</sup>, Yan Zhou<sup>1</sup>, Matthew Randesi<sup>1</sup>, Sanoara Mazid<sup>2</sup>, Shannon O'Dell<sup>2</sup>, Bruce McEwen<sup>1</sup>, Teresa Milner<sup>2</sup>, Mary Jeanne Kreek<sup>1</sup>, <sup>1</sup>The Rockefeller University, New York, NY, <sup>2</sup>Weill Cornell Medicine, New York, NY Pharmacogenetic impact of the serotonin 2C receptor (5-HT2CR) Cys23Ser single 3:00 nucleotide polymorphism on receptor functional capacity Michelle Land<sup>1</sup>, Ivana Gaziova<sup>1</sup>, Kathryn Cunningham<sup>1</sup>, F. Gerard Moeller<sup>2</sup>, Lisa Elferink<sup>1</sup>, Noelle Anastasio<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX, Virginia Commonwealth University, Richmond, VA Distinct subtypes of genetically defined serotonin neurons differentially 3:15 modulate cocaine reward in mice Britahny Baskin<sup>1</sup>, Susan Dymecki<sup>2</sup>, Kathleen Kantak<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Harvard Medical School, Boston, MA 3:30 An androgen receptor polymorphism (cag repeats) and risk-taking in veterans Marc Rosen<sup>1</sup>, Anne Black<sup>2</sup>, Janitza Montalvo-Ortiz<sup>2</sup>, Ifat Levy<sup>2</sup>, Thomas McMahon<sup>2</sup>, <sup>1</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>2</sup>Yale University, New Haven, CT 3:45 Genome-wide association study of therapeutic opioid dosing identifies a novel locus upstream of OPRM1 Andrew Smith<sup>1</sup>, Kevin Jensen<sup>1</sup>, Jin Li<sup>2</sup>, Yaira Nunez<sup>1</sup>, Lindsay Farrer<sup>3</sup>, Hakon Hakonarson<sup>2</sup>, Scott Cook-Sather<sup>2</sup>, Henry Kranzler<sup>2</sup>, Joel Gelernter<sup>1</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, <sup>3</sup>Boston University School of Medicine, Boston, MA A comprehensive laboratory model of adolescent impulsivity and alcohol use
- 4:00 Matthew Gullo<sup>1</sup>, Natalie Loxton<sup>2</sup>, Therese Price<sup>2</sup>, Jo Voisey<sup>1</sup>, Ross Young<sup>1</sup>, Jason Connor<sup>1</sup>, <sup>1</sup>University of Queensland, Brisbane, Austria, <sup>2</sup>Griffith University, Brisbane, Australia
- 4:15 Adverse neighborhoods and genetic risk Cristina Bares<sup>1</sup>, Karen Chartier<sup>2</sup>, Katherine Karriker-Jaffe<sup>3</sup>, Fazil Aliev<sup>2</sup>, Brian Mustanski<sup>4</sup>, Danielle Dick<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Virginia Commonwealth University, Richmond, VA, <sup>3</sup>Alcohol Research Group, Emeryville, CA, <sup>4</sup>Northwestern University Feinberg School of Medicine, Chicago, IL

### **Oral Communications 15**

Verdun 2:30 - 4:30 PM

#### DEUX HEURES OF PAIN

Chairs: Luke Legakis and R. Kathryn McHugh

2:30	Chemotherapy effects on motivated behaviors in male and female rats Luke Legakis <sup>1</sup> , S. Stevens Negus <sup>1</sup> , <sup>1</sup> Virginia Commonwealth University, Richmond, VA
2:45	Modification of the antinociceptive effect of opiates by lorcaserin Kumiko Lippold <sup>1</sup> , William Dewey <sup>2</sup> , <sup>1</sup> Virginia Commonwealth University, Pharmacology and Toxicology, Richmond, VA, <sup>2</sup> Virginia Commonwealth University, Richmond, VA
3:00	The reinforcing and subjective effects of opioids in opioid users with and without chronic pain  Gabriela Madera <sup>1</sup> , Jermaine Jones <sup>2</sup> , Jeanne Manubay <sup>1</sup> , Shanthi Mogali <sup>3</sup> , Sandra Comer <sup>3</sup> , <sup>1</sup> Columbia University, New York, NY, <sup>2</sup> Columbia University College of Physicians and Surgeons, New York, NY, <sup>3</sup> Columbia University and NYSPI, New York, NY
3:15	Discounting of delayed pain-related and monetary outcomes in chronic pain patients David Andrew Tompkins <sup>1</sup> , Andrew Huhn <sup>1</sup> , Michael Smith <sup>1</sup> , Eric Strain <sup>1</sup> , Matthew Johnson <sup>2</sup> , <sup>1</sup> Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup> Johns Hopkins School of Medicine, Baltimore, MD
3:30	Predictors of long-term opioid use in active duty military: Psychotropics, procedures, pain  Jennifer Sharpe Potter <sup>1</sup> , Mary Jo Pugh <sup>2</sup> , Maj Joseph K. Maddry <sup>3</sup> , Col David H. Carnahan <sup>4</sup> , Vikhyat Bebarta <sup>3</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 at San Antonio, South Texas Veterans Health Care System, <sup>3</sup> San Antonio Military Medical Center, University of Colorado, Fort Sam, Houston, <sup>4</sup> Defense Health Agency, University of Colorado, Boulder, CO
3:45	Study of gender differences in pain in relation to sleep deprivation Mary Stoermann <sup>1</sup> , Douglas Glenn <sup>1</sup> , Kelly Barth <sup>1</sup> , Balliet Wendy <sup>1</sup> , <sup>1</sup> Medical University of South Carolina, Charleston, SC
4:00	Longitudinal associations of pain and craving with opioid use R. Kathryn McHugh <sup>1</sup> , Linda Valeri <sup>1</sup> , Margaret Griffin <sup>1</sup> , Roger Weiss <sup>1</sup> , <sup>1</sup> McLean Hospital, Belmont, MA
4:15	Pain among individuals with HCV and substance use disorders: Impact of direct- acting antiviral treatment Joseph Goulet <sup>1</sup> , Jeanette Tetrault <sup>2</sup> , Amy Justice <sup>2</sup> , William Becker <sup>2</sup> , <sup>1</sup> Veterans Affairs, West Haven, CT, <sup>2</sup> Yale University, New Haven, CT

### Symposium IX

Outremont 2:30 - 4:30 PM

LEGAL BUT NOT SO SAFE: PREVALENCE, EFFECTS, STRATEGIES FOR PRENATAL ALCOHOL, MARIJUANA AND TOBACCO USE

Chairs: Yukiko Washio and Philip May

- 2:30 Effects of tobacco use during pregnancy and treatment strategies C. Oncken, UConn Health, Farmington, CT
- 2:55 Prenatal cannabis exposure and child neurodevelopment: A tolerated matter H. El Marroun, Erasmus MC Sophia Children's Hospital, Rotterdam, Zuid-Holland, Netherlands
- 3:20 The prevalence and characteristics of fetal alcohol spectrum disorders in the general populations of three different regions of the United States: Findings from the NIAAA-funded collaboration on FASD prevalence
  - P. May, University of North Carolina, Nutrition Research Institute, Kannapolis, NC
- 3:45 Maternal risk and protective factors for fetal alcohol spectrum disorders: US and worldwide
  C. Chambers, UCSan Diego, La Jolla, CA
- 4:10 DISCUSSANT: Clinical implications and policy responses to substance use in pregnancy what can we learn from each other (US and Australian comparisons)?

  A. Dunlop, Hunter New England Local Health District, Newcastle, New South Wales, Australia

#### Symposium X

Westmount 2:30 - 4:30 PM

# HOW FAST AND HOW OFTEN? THE TEMPORAL PATTERN OF DRUG USE IS DECISIVE IN ADDICTION

Chairs: Anne-Noël Samaha and Terry Robinson

- E. Calipari, Icahn School of Medicine at Mount Sinai, New York, NY 4:10 *DISCUSSANT: Pharmacokinetics and addiction*
- T. Robinson, University of Michigan, Ann Arbor, MI

#### **Primm-Singleton Awardees Reception**

Salon Ville-Marie 5:00 - 6:30 PM

#### Workshop IX

Verdun 7:00 -9:00 PM

# WRITING WORKSHOP FOR EMERGING INVESTIGATORS: PROFITING FROM PEER REVIEW

Chairs: James Sorensen and Eric Strain

Responding to criticism: Perspective of a junior investigator

D. Ramo, UCSF, San Francisco, CA

After manuscript feedback arrives: How to respond to journal reviews E. Strain, Johns Hopkins University School of Medicine, Baltimore, MD

Tools for publishing – An interactive review

A. Freda, Elsevier Health and Medical Sciences (Publisher of DAD), Amsterdam, Netherlands

Using reviews to improve science: Issues for underrepresented scientists

C. Masson, UCSF, San Francisco, CA

#### Workshop X

Westmount 7:00 - 9:00 PM

# EPIDEMIOLOGY AND PUBLIC HEALTH RESEARCH METHODS

Chairs: James Anthony and Howard Chilcoat

Introduction to multiphase optimization strategy for behavioral intervention research (Introductory session: 7:15-8:00; Continuation session: 8:05-8:50)

L. Collins, The Pennsylvania State University, University Park, PA

What Hill functions can teach us in analysis of complex survey sample data. (2 introductory sessions: 7:15-8:00; Then repeated: 8:05-8:50)

O. Vselvolozhskaya, College of Public Health, Lexington, KY

Epidemiology's mutoscope and apc regressions: Introduction and beyond (2 introductory sessions: 7:15-8:00; Then repeated: 8:05-8:50)

H. Cheng, Michigan State University, Lansing, MI

### Workshop XI

Mont-Royal 7:00 - 9:00 PM

#### ADVANCES IN SUBSTANCE USE DISORDER TREATMENTS FOR RACIAL/ETHNIC MINORITIES: WHERE DO WE GO FROM HERE?

Chairs: Kathy Burlew and LaTrice Montgomery

Racial and ethnic differences in treatment outcomes among adults with stimulant use disorders after a dosed exercise intervention

K. Sanchez, University of Texas, Arlington, TX

Racial and ethnic differences in history of sexual and physical abuse in relation to addiction severity

J. Korte, Medical University of South Carolina, Charleston, SC

Racial/ethnic subgroup differences in outcomes and acceptability of an Internetdelivered intervention for substance use disorders

L. Montgomery, University of Cincinnati College of Medicine, Cincinnati, OH Internet-based substance use disorder treatment for AI/AN: A systematic process of adaptation

Traci Rieckmann<sup>1</sup>, Aimee Campbell<sup>2</sup>, <sup>1</sup>Oregon Health and Science University, Hillsboro, OR, <sup>2</sup>Columbia University and NYSPI, New York, NY

#### **Workshop XII**

Outremont 7:00 - 8:00 PM

#### NIDA MEDICATIONS DEVELOPMENT WORKSHOP: ADDRESSING BAD BEHAVIOR IN CLINICAL TRIALS

Chairs: David McCann and Tanya Ramey

Deception by research participants

E. Devine, Boston University School of Medicine, Boston, MA

Combating "professional subjects" with research subject registries

K. Weingard, Verified Clinical Trials, Garden City, NY

Aiview and other new medication adherence monitoring technologies

A. Hanina, AiCure, New York, NY

### **Workshop XIII**

**Outremont 8:15 - 9:15 PM** 

NEW NIH GUIDELINES FOR REPRODUCIBILITY, RIGOR AND TRANSPARENCY: ETHICAL AND PRACTICAL CONUNDRUMS

Chair: Michael Kuhar

Ethical guidelines in reproducibility in research M. Kuhar, Emory University, Atlanta, GA Why NIH strengthened its guidelines on rigor and reproducibility S. Weiss, NIDA, Bethesda, MD

Please be advised that no photographing of presentations or data is permitted. Badges must be worn at all times and are required for admission into all events and sessions.

#### **Poster Session III**

(Breakfast)

Fontaine 8:00 - 10:00 AM

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

Set up time begins Tuesday, 1:00 PM Must be removed by Wednesday, 12:00 noon

#### **IMAGING**

- Neural correlates of inhibitory control in abstinent vs. satiated smokers

  Philip Spechler<sup>1</sup>, Bader Chaarani<sup>1</sup>, Alexandra Ivanciu<sup>1</sup>, Stephen Higgins<sup>1</sup>, Hugh
  Garavan<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT
- Neural activation during inhibition to smoking cues associated with smoking abstinence

  Jodi Gilman<sup>1</sup>, Milena Radoman<sup>1</sup>, Nour Azzouz<sup>1</sup>, Nina Levar<sup>1</sup>, Gladys Pachas<sup>1</sup>,

  Maurizio Fava<sup>1</sup>, Anne Eden Evins<sup>1</sup>, <sup>1</sup>Massachusetts General Hospital-Psychiatry,
  Boston, MA
- A dynamic causal modeling study of the working memory system in marijuana users Liangsuo Ma<sup>1</sup>, Joel Steinberg<sup>2</sup>, James Bjork<sup>2</sup>, Lori Keyser-Marcus<sup>2</sup>, Jasmin Vassileva<sup>2</sup>, Sergi Ferré<sup>3</sup>, F. Gerard Moeller<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Virginia Commonwealth University-Psychiatry, Richmond, VA, <sup>3</sup>NIDA Intramural Research Program, Baltimore, MD
- An fMRI study to examine recognition memory for cocaine picture stimuli in cocaine smokers

  Suchismita Ray<sup>1</sup>, Marsha Bates<sup>1</sup>, Margaret Haney<sup>2</sup>, Aradhana Srinagesh<sup>1</sup>, Ashley Aya<sup>1</sup>, <sup>1</sup>Rutgers University, New Brunswick, NJ, <sup>2</sup>Columbia University Medical Center, New York, NY

#### 5 **WITHDRAWN**

Evaluating interrelationships between trajectories of choice behavior and ICAderived brain network activation by game trials ordered according to self-benefit relative to other-harm in adolescents with substance use disorder and controls Susan Mikulich-Gilbertson<sup>1</sup>, Manish Dalwani<sup>1</sup>, Gary Grunwald<sup>2</sup>, Gary Zerbe<sup>2</sup>, Brandie Wagner<sup>2</sup>, Joseph Sakai<sup>1</sup>, <sup>1</sup>University of Colorado School of Medicine, Aurora, CO, <sup>2</sup>University of Colorado School of Public Health, Aurora, CO

#### SEX/GENDER DIFFERENCES

- 7 Sex differences and the role of estrous cyclicity in cocaine and remifentanil demand in rats
  - Ryan Lacy<sup>1</sup>, Bridget Austin<sup>1</sup>, Justin Strickland<sup>2</sup>, <sup>1</sup>Franklin and Marshall College, Lancaster, PA, <sup>2</sup>University of Kentucky, Lexington, KY
- 8 Ovarian hormonal status influences 5-HT1B receptor agonist effects on cocaine selfadministration in rats
  - Samantha Scott<sup>1</sup>, Raul Garcia<sup>1</sup>, Alyssa Bralich<sup>1</sup>, Jennifer Hesterman<sup>1</sup>, Austin Stone<sup>1</sup>, Janet Neisewander<sup>1</sup>, <sup>1</sup>Arizona State University, Tempe, AZ

- 9 Brain functional response to the presentation of cocaine-associated cues on rate of cerebral metabolism measured with FDG PET

  Taylor Stowe<sup>1</sup>, Paul Czoty<sup>1</sup>, Mack Miller<sup>1</sup>, Joseph Noto<sup>1</sup>, Sue Nader<sup>1</sup>, Michael Nader<sup>1</sup>,
- Sex differences in novelty- and cocaine-induced behaviors in Lewis and Fischer 344 rats

  Odochi Ohia-Nwoko<sup>1</sup>, Colin Haile<sup>1</sup>, Therese Kosten<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX
- 11 Sex and HIV serostatus effects on verbal memory for individuals with cocaine dependence in early vs. sustained remission

  Eileen Martin<sup>1</sup>, Jasmin Vassileva<sup>2</sup>, Leah Rubin<sup>3</sup>, Pauline Maki<sup>3</sup>, Michael Keutmann<sup>3</sup>, Raul Gonzalez<sup>4</sup>, <sup>1</sup>Rush University Medical Center, Chicago, IL, <sup>2</sup>Virginia Commonwealth University-Psychiatry, Richmond, VA, <sup>3</sup>University of Illinois, Chicago, IL, <sup>4</sup>Flordia International University, Miami, FL
- Gender differences in cannabis abstinence among adults in treatment for cannabis use disorder

  Dustin Lee<sup>1</sup>, Nicolas Schlienz<sup>2</sup>, Alan Budney<sup>3</sup>, Michael Smith<sup>2</sup>, David Andrew Tompkins<sup>2</sup>, Aidan Hampson<sup>4</sup>, Ryan Vandrey<sup>5</sup>, <sup>1</sup>Johns Hopkins Medicine, Lexington, KY, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>4</sup>NIDA, Bethesda, MD, <sup>5</sup>Behavioral Pharmacology Research Unit, Baltimore, MD
- Sex-dependent effects of cannabis on physiological response and subjective drug effects in young adults

  Devika Govindarajah<sup>1</sup>, Robert Mann<sup>1</sup>, Bernard LeFoll<sup>2</sup>, Gina Stoduto<sup>1</sup>, Christine Wickens<sup>1</sup>, Marilyn Huestis<sup>3</sup>, Bruna Brands<sup>4</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, <sup>2</sup>University of Toronto, Toronto, ON, <sup>3</sup>NIDA, Bethesda, MD, <sup>4</sup>Health Canada, Toronto, ON
- 14 Gender moderates chronic nicotine effects on cognition in young adults
  Megan Kangiser<sup>1</sup>, Kyle Jennette<sup>1</sup>, Alicia Thomas<sup>1</sup>, Krista Lisdahl<sup>1</sup>, <sup>1</sup>University of
  Wisconsin-Milwaukee, Milwaukee, WI
- Gender differences in tobacco use disorder phenotypes among smokers in the largest metropolitan area of South America

  Joao Mauricio Castaldelli-Maia<sup>1</sup>, Silvia Martins<sup>2</sup>, Erica Siu<sup>1</sup>, Camila Silveira<sup>1</sup>, Arthur Andrade<sup>1</sup>, Laura Andrade<sup>1</sup>, <sup>1</sup>University of Sao Paulo Medical School, Sao Paulo SP, Brazil, <sup>2</sup>Columbia University, New York, NY
- Gender differences in smoking and use of nicotine and tobacco products among cardiac patients

  Irene Pericot-Valverde<sup>1</sup>, Diann Gaalema<sup>2</sup>, Rebecca Elliott<sup>1</sup>, Philip Ades<sup>3</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Vermont UHC Campus, Burlington, VT, <sup>3</sup>University of Vermont Medical Center, Burlington, VT
- 17 Sex differences in heroin use: United States, 2002-2014
  David Barondess<sup>1</sup>, Samantha J. Bauer<sup>1</sup>, Hsueh-Han Yeh<sup>1</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI
- A national study: Gender, drug dependence and recent drug use
  Carol Boyd<sup>1</sup>, James Cranford<sup>1</sup>, Sean McCabe<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor,
  MI

- Social influence on recent illicit drug use among army reserve couples
  Erin Anderson Goodell<sup>1</sup>, D. Lynn Homish<sup>2</sup>, Gregory Homish<sup>2</sup>, <sup>1</sup>Johns Hopkins
  Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>State University of New York at
  Buffalo, Buffalo, NY
- 20 **WITHDRAWN**
- Sex disparities in substance abuse research: Evaluating 23 years of structural neuroimaging studies

  Dorothy Yamamoto<sup>1</sup>, Kimberly E. Lind<sup>1</sup>, Eric J. Gutierrez<sup>1</sup>, Michael F. Regner<sup>1</sup>, Sherry McKee<sup>2</sup>, Jody Tanabe<sup>1</sup>, <sup>1</sup>University of Colorado, Boulder, CO, <sup>2</sup>Yale School of

#### MARIJUANA/CANNABINOIDS I

- 22 Effects of GPR55 activation on neural stem cell proliferation, differentiation, and immune responses to chronic inflammation

  Jeremy Hill<sup>1</sup>, Viviana Zuluaga-Ramirez<sup>1</sup>, Malika Winfield<sup>1</sup>, Sachin Gajghate<sup>1</sup>, Yuri
  Persidsky<sup>1</sup>, <sup>1</sup>Lewis Katz School of Medicine at Temple University, Philadelphia, PA
- Pharmacological interrogation of hypothermia induced by vapor inhalation of THC in rats

  Michael Taffe<sup>1</sup>, Sophia A. Vandewater<sup>1</sup>, Kevin Creehan<sup>1</sup>, Jacques Nguyen<sup>1</sup>, Mehrak Javadi-Paydar<sup>1</sup>, <sup>1</sup>Scripps Research Institute, La Jolla, CA
- A CB1 antagonist reverses analgesia induced by a combination of the cannabinoid WIN55212-2 plus morphine in the mouse formalin test
  Xiaohong Chen¹, Martin Adler², A. Cowan¹, Ellen Geller³, J.J. Meissler¹, S. Inan¹,
  Scott Rawls⁴, Ronald Tallarida⁴, M.N. Watson¹, Toby Eisenstein¹, ¹Center for
  Substance Abuse Research, Lewis Katz School of Medicine of Temple University,
  Philadelphia, PA, ²Lewis Katz School of Medicine at Temple University,
  Philadelphia, PA, ³Temple University School of Medicine, Philadelphia, PA, ⁴Temple
  University, Philadelphia, PA
- Effect of JWH-018 on prepulse inhibition of startle response
   B. Ginsburg, University of Texas Health Science Ctr at San Antonio, San Antonio, TX
- Tolerance and cross-tolerance to the discriminative-stimulus effects of CB1 agonists Jack Bergman<sup>1</sup>, Nathaniel Gillis<sup>2</sup>, Spyros Nikas<sup>3</sup>, Alexandros Makriyannis<sup>4</sup>, Carol Paronis<sup>5</sup>, <sup>1</sup>ADARC McLean Hospital, Belmont, MA, <sup>2</sup>McLean Hospital, 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
- 27 Cannabinoid-like effects of five synthetic compounds
  Michael Gatch<sup>1</sup>, Michael Forster<sup>1</sup>, <sup>1</sup>UNT Health Science Center, Fort Worth, TX
- Increases in locomotor activity in mice following cannabinoid antagonists and during spontaneous cannabinoid withdrawal
  Carol Paronis¹, Lisa Wooldridge¹, Spyros Nikas², Kiran Vemuri², Alexandros Makriyannis³, Jack Bergman⁴, ¹McLean Hospital, Harvard Medical School, Belmont, MA, ²CDD/Northeastern University, Boston, MA, ³Northeastern University, Boston, MA, ⁴ADARC McLean Hospital, Belmont, MA
- Delta-9-tetrahydrocannabinol potentiates hyperlocomotion induced by nicotine in rats

  Mehrak Javadi-Paydar<sup>1</sup>, Jacques Nguyen<sup>1</sup>, Sophia A. Vandewater<sup>1</sup>, Maury Cole<sup>1</sup>,

  Michael Taffe<sup>1</sup>, <sup>1</sup>Scripps Research Institute, La Jolla, CA

- 30 A rodent model of nicotine and delta-9-tetrahydrocannabinol co-abuse

  Julie Marusich<sup>1</sup>, Tim Lefever<sup>1</sup>, Jenny Wiley<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle
  Park, NC
- 231 Effects of cannabis dose and method of inhalation on subjective, cognitive, and physiological effects measures
  Nicolas Schlienz<sup>1</sup>, Dustin Lee<sup>2</sup>, Natalie Lembeck<sup>1</sup>, Edward Cone<sup>1</sup>, John Mitchell<sup>3</sup>, Ron Flegel<sup>4</sup>, George Bigelow<sup>1</sup>, Ryan Vandrey<sup>5</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins Medicine, Lexington, KY, <sup>3</sup>Duke University School of Medicine, Durham, NC, <sup>4</sup>SAMHSA, Rockville, MD, <sup>5</sup>Behavioral Pharmacology Research Unit, Baltimore, MD
- Impaired contrast sensitivity at low spatial frequency in cannabis users with early onset

  Laurence Lalanne<sup>1</sup>, Vincent Laprevote<sup>2</sup>, Anne Giersch<sup>3</sup>, <sup>1</sup>University Hospital of Strasbourg, Strasbourg, France, <sup>2</sup>CHRU de Nancy, Paris, France, <sup>3</sup>INSERM, Marseille, France
- 33 Eye-tracking-based measures of inhibitory control and attentional bias in marijuana SUD and control subjects

  Jin Yoon<sup>1</sup>, Ilana Haliwa<sup>1</sup>, Jessica Vincent<sup>1</sup>, Robert Suchting<sup>1</sup>, Joy Schmitz<sup>1</sup>, Scott Lane<sup>2</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>University of Texas Medical Branch, Galveston, TX
- The effect of approach bias modification on cue-reactivity in individuals with cannabis use disorder
- Brian Sherman<sup>1</sup>, Nathaniel Baker<sup>1</sup>, Aimee McRae-Clark<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC
  - Neural and behavioral correlates of attentional bias and cue reactivity among adults with cannabis use disorders
  - Lesia M. Ruglass<sup>1</sup>, Alina Shevorykin<sup>2</sup>, Naomi Dambreville<sup>1</sup>, Ayman Baig<sup>3</sup>, Robert Melara<sup>3</sup>, <sup>1</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>2</sup>Pace University, Westchester County, NY, <sup>3</sup>The City College of New York, New York City, NY
- Evaluation of potentially abuse-related events in phase III clinical trials of cannabidiol (Epidiolex®) using the MADDERS® Prospective System

  Ryan Lanier¹, Imrana Kazam¹, Harrison Elder¹, Roi Treister¹, Maitreyee Mohanty¹,

  Reni Kunkel², Tilden Etges², Nathaniel Katz¹, ¹Analgesic Solutions, Natick, MA,²GW

  Pharmaceuticals PLC, Cambridge, UK
- Evaluation of potentially abuse-related events in phase III clinical trials of a delta-9 tetrahydrocannabinol and cannabidiol (Sativex®) oromucosal spray

  Harrison Elder<sup>1</sup>, Ryan Lanier<sup>1</sup>, Imrana Kazam<sup>1</sup>, Roi Treister<sup>1</sup>, Maitreyee Mohanty<sup>1</sup>,

  Matthew Hersch<sup>2</sup>, Tilden Etges<sup>2</sup>, Nathaniel Katz<sup>1</sup>, <sup>1</sup>Analgesic Solutions, Natick,

  MA, <sup>2</sup>GW Pharmaceuticals PLC, Cambridge, UK
- Acute and residual effects of cannabis on simulated driving performance of young adults

  Bruna Brands<sup>1</sup>, Robert Mann<sup>2</sup>, Bernard Le Foll<sup>2</sup>, Gina Stoduto<sup>2</sup>, Christine Wickens<sup>2</sup>, Marilyn Huestis<sup>3</sup>, <sup>1</sup>Health Canada, Toronto, ON, <sup>2</sup>Centre for Addiction and Mental Health, Toronto, ON, <sup>3</sup>NIDA, Bethesda, MD

- Rejection sensitivity and anger during social exclusion in young adult marijuana users

  Naomi Dambreville<sup>1</sup>, Lesia M. Ruglass<sup>1</sup>, Grinband Jack<sup>2</sup>, Michael Costa<sup>1</sup>, Eric A. Fertuck<sup>1</sup>, <sup>1</sup>CUNY Graduate School of Public Health and Health Policy, New York,
- NY, <sup>2</sup>Columbia University Medical Center, New York, NY

  Patterns of cannabis use, related problems, and readiness to change among young adult college students

Matthew Enkema<sup>1</sup>, Mary Larimer<sup>1</sup>, Kevin Hallgren<sup>1</sup>, Kristen Lindgren<sup>1</sup>, Sarah Bowen<sup>2</sup>, <sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>Pacific University, Forest Grove, OR

- Has college put students at higher risk for marijuana initiation in recent years?

  Richard Miech<sup>1</sup>, Megan Patrick<sup>2</sup>, Patrick O'Malley<sup>2</sup>, Lloyd Johnston<sup>2</sup>, <sup>1</sup>University of Michigan, Institute for Social Research, Ann Arbor, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI
- 42 Urban, suburban and rural differences in patterns of alcohol, cigarette and marijuana initiation by age among US youth

  Shivani Khan<sup>1</sup>, Bin Yu<sup>1</sup>, Sadaf A Milani<sup>2</sup>, Linda Cottler<sup>1</sup>, Catherine Woodstock

  Striley<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Department of Epidemiology, Gainesville, FL
- U.S. adult illicit cannabis use, cannabis use disorder, and medical marijuana laws:
   1991-2012
   Deborah Hasin<sup>1</sup>, Aaron Sarvet<sup>1</sup>, Magdalena Cerda<sup>2</sup>, Katherine Keyes<sup>3</sup>, Sandro Galea<sup>4</sup>,
   Melanie Wall<sup>5</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>University of California,
   Davis, Davis, CA, <sup>3</sup>Columbia University Mailman School of Public Health, Newark,
   NJ, <sup>4</sup>Boston University School of Public Health, Boston, MA, <sup>5</sup>Columbia University
   and NYSPI, New York, NY
- Marijuana and tobacco cigarettes: Estimating their behavioral economic relationship using purchasing tasks

  Erica Peters<sup>1</sup>, Zachary Rosenberry<sup>1</sup>, Gillian Schauer<sup>2</sup>, Kevin O'Grady<sup>3</sup>, Patrick Johnson<sup>4</sup>, <sup>1</sup>Battelle Memorial Institute, Baltimore, MD, <sup>2</sup>University of Washington, Seattle, WA, <sup>3</sup>University of Maryland-Psychology, College Park, MD, <sup>4</sup>California State University, Los Angeles, CA
- Cannabis use disorders among cigarette smokers in the United States, 2002-2014: Implications for the future of tobacco control
  Renee Goodwin<sup>1</sup>, Lauren Pacek<sup>2</sup>, Michael Zvolensky<sup>3</sup>, Melanie Wall<sup>4</sup>, Deborah Hasin<sup>5</sup>, <sup>1</sup>CUNY School of Medicine, New York, NY, <sup>2</sup>Duke University School of Medicine, Durham, NC, <sup>3</sup>University of Houston, Houston, TX, <sup>4</sup>Columbia University and NYSPI, New York, NY, <sup>5</sup>Columbia University, New York, NY
- Simultaneous vs. sequential approaches to target tobacco use during treatment of cannabis use disorder

  Alan Budney<sup>1</sup>, Dustin Lee<sup>2</sup>, Denise Walker<sup>3</sup>, Mary Brunette<sup>1</sup>, John Hughes<sup>4</sup>, Samantha Auty<sup>1</sup>, Jean-Francoise Etter<sup>5</sup>, Catherine Stanger<sup>6</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>2</sup>Johns Hopkins Medicine, Lexington, KY, <sup>3</sup>University of Washington, Seattle, WA, <sup>4</sup>University of Vermont, Burlington, VT, <sup>5</sup>University of Geneva, Geneva, Switzerland, <sup>6</sup>Dartmouth College, Hanover, NH

- Is cannabis use associated with risk of relapse to cigarette smoking? Potential implications of cannabis use on trends in cigarette smoking in the US Andrea Weinberger<sup>1</sup>, Jonathan Platt<sup>2</sup>, Jan Copeland<sup>3</sup>, Renee Goodwin<sup>4</sup>, <sup>1</sup>Yeshiva
- 48 Marijuana use is associated with poorer smoking cessation treatment outcomes in young adults

  Danielle Ramo<sup>1</sup>, Mark Rubinstein<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA

#### **NICOTINE II**

- Simulating demand for cigarettes among economically disadvantaged mothers of young children: A low-risk method for studying vulnerable populations

  Diana Keith<sup>1</sup>, Derek Reed<sup>2</sup>, Ryan Redner<sup>3</sup>, Allison Kurti<sup>1</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Kansas, Lawrence, KS, <sup>3</sup>Southern Illinois University, Carbondale, IL
- Evaluating reduced-nicotine standards on the addiction potential of cigarettes in vulnerable populations

  Stephen Higgins<sup>1</sup>, Sarah Heil<sup>1</sup>, Stacey Sigmon<sup>1</sup>, Jennifer Tidey<sup>2</sup>, Diann Gaalema<sup>3</sup>, John Hughes<sup>1</sup>, Maxine Stitzer<sup>4</sup>, Hanna Durand<sup>1</sup>, Janice Bunn<sup>1</sup>, Jeff Priest<sup>1</sup>, Christopher Arger<sup>1</sup>, Mollie Patrick<sup>5</sup>, Cecilia Bergeria<sup>1</sup>, Danielle Davis<sup>1</sup>, Joanna Streck<sup>6</sup>, Derek Reed<sup>7</sup>, Joan Skelly<sup>1</sup>, Lauren Tursi<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>Brown University School of Medicne, Providence, RI, <sup>3</sup>University of Vermont UHC Campus, Burlington, VT, <sup>4</sup>Johns Hopkins Bayview Medical Center, Baltimore, MD, <sup>5</sup>Brown University, South Burlington, VT, <sup>6</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>7</sup>University of Kansas, Lawrence, KS
- Carla Rash<sup>1</sup>, Darla Kendzor<sup>2</sup>, Aaron Waters<sup>3</sup>, Michael Businelle<sup>2</sup>, <sup>1</sup>UConn Health, Farmington, CT, <sup>2</sup>Oregon Health and Science University, Hillsboro, OR, <sup>3</sup>Louisiana State University, Shreveport, LA
- 52 Heavy smoking among U.S. soldiers returning from combat
  Alexa Lopez<sup>1</sup>, Robin Toblin<sup>2</sup>, Lyndon Riviere<sup>2</sup>, James Lee<sup>2</sup>, Amy Adler<sup>2</sup>, <sup>1</sup>University of
  Vermont, Burlington, VT, <sup>2</sup>Walter Reed Army Institute of Research, Sandy Spring, MD
- High prevalence of menthol cigarette smoking among individuals in addiction treatment Denise Williams<sup>1</sup>, Noah Gubner<sup>1</sup>, Barbara Tajima<sup>2</sup>, Joseph Guydish<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>UCSF, San Francisco, CA
- Treating tobacco dependence in addictions settings: Substance use co-morbidity and other predictors of cessation

  Laurie Zawertailo<sup>1</sup>, Carolyn Peters<sup>1</sup>, Peter Selby<sup>1</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, Canada
- Use topography and dependence in loose and portioned smokeless tobacco users

  Lynn Hull<sup>1</sup>, Chad Reissig<sup>1</sup>, Patricia Braschayko<sup>2</sup>, Jennifer Potts<sup>2</sup>, Meredith Thanner<sup>2</sup>,

  Wallace Pickworth<sup>3</sup>, <sup>1</sup>FDA Center for Tobacco Products, Sandy Spring, MD, <sup>2</sup>Battelle

  Public Health Center for Tobacco Research, Columbus, OH, <sup>3</sup>Battelle Memorial Institute,

  Baltimore, MD

OH

- Emotional responses to smokeless tobacco warning labels: Are graphics more powerful than text?

  Amanda Quisenberry<sup>1</sup>, Abigail Shoben<sup>1</sup>, Sarah Cooper<sup>1</sup>, Amy Ferketich<sup>1</sup>, Micah Berman<sup>1</sup>, Ellen Peters<sup>1</sup>, Mary Ellen Wewers<sup>1</sup>, Elizabeth Klein<sup>1</sup>, Ohio State University, Columbus,
- Socioeconomic status and adolescent e-cigarette use: The mediating role of e-cigarette advertisement exposure

  Patricia Simon<sup>1</sup>, Deepa Camenga<sup>1</sup>, Krysten Bold<sup>1</sup>, Grace Kong<sup>1</sup>, Meghan Morean<sup>2</sup>, Dana Cavallo<sup>1</sup>, Suchitra Krishnan-Sarin<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Oberlin College, Oberlin, OH
- 58 Examining menthol and nicotine effects in youth using e-cigarettes
  Suchitra Krishnan-Sarin<sup>1</sup>, Grace Kong<sup>1</sup>, Stephanie O'Malley<sup>1</sup>, Barry Green<sup>2</sup>, Eugenia
  Buta<sup>2</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT
- E-cigarettes use in a country with high prevalence of tobacco smoking: A population-based study

  Yi-Lung Chen¹, Shang-Chi Wu², Wen-Ing Tsay³, Yen-Tyng Chen¹, Po-Chang Hsiao¹, Ya-Hui Yu¹, Te-Tien Ting¹, Chuan-Yu Chen², Yu-Kang Tu¹, Jiun-Hau Huang¹, Hao-Jan Yang⁴, Chung-Yi Li⁵, Carol Strong⁵, Cheng-Fang Yen⁶, Chia-Feng Yen⁷, Jui Hsu³, Wei-J Chen¹, ¹National Taiwan University, Taipei City, Taiwan, ²National Taiwan University, Epidemiology and Preventive Medicine, Taipei City, Taiwan, ³Taiwan Food and Drug Administration, Taipei, Taiwan, ⁴Chung Shan Medical University, Taiwan, Taichung City, Taiwan, ⁵National Cheng Kung University, East District, Taiwan, ⁶Kaohsiung Medical University, Taiwan, Kaohsiung, Taiwan, ¹Tzu Chi University, Taiwan, Hualien City, Taiwan
- Use of and attitudes towards e-cigarettes and conventional cigarettes in a tobacco-using cardiac population
   Diann Gaalema<sup>1</sup>, Janice Bunn<sup>2</sup>, Philip Ades<sup>3</sup>, Stephen Higgins<sup>2</sup>, <sup>1</sup>University of Vermont UHC Campus, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT, <sup>3</sup>University of Vermont Medical Center, Burlington, VT
- Perceived effects of electronic cigarette ingredients
  Arit Harvanko<sup>1</sup>, Andrea McCubbin<sup>2</sup>, Kristin Ashford<sup>2</sup>, Thomas Kelly<sup>3</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky College of Nursing, Lexington, KY, <sup>3</sup>University of Kentucky College of Medicine, Lexington, KY
- 62 E-cigarette expectancy measure development
  Paul Harrell<sup>1</sup>, Gwen Quinn<sup>2</sup>, Laurel Brockenberry<sup>1</sup>, Thomas Brandon<sup>2</sup>, <sup>1</sup>Eastern Virginia
  Medical School, Norfolk, VA, <sup>2</sup>Moffitt Cancer Center, Tampa, FL
- Daily vs. weekly electronic cigarette users in drug treatment: A comparison of tobacco use, device type, and flavor characteristics

  Noah Gubner<sup>1</sup>, Anna Pagano<sup>2</sup>, Barbara Tajima<sup>3</sup>, Joseph Guydish<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>Prevention Research Center, Oakland, CA, <sup>3</sup>UCSF, San Francisco, CA
- Does early onset of e-cigarette use predict cigarette smoking and other drug use among adolescents in the United States?

  Sean McCabe<sup>1</sup>, Brady West<sup>1</sup>, Vita McCabe<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>St. Joseph Mercy Hospital, Ann Arbor, MI

#### **ADOLESCENT**

- Reward-related frontostriatal activity and smoking behavior among adolescents in treatment for smoking cessation

  Kathleen Garrison<sup>1</sup>, Sarah Yip<sup>2</sup>, Iris Balodis<sup>3</sup>, Kathleen Carroll<sup>1</sup>, Marc Potenza<sup>1</sup>, Suchitra Krishnan-Sarin<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT, <sup>3</sup>McMaster University, Hamilton, ON
- Brain pathways from parenting to adolescent substance use: Gender differences
  Tara Chaplin<sup>1</sup>, Jennifer Poon<sup>2</sup>, James Thompson<sup>2</sup>, Rajita Sinha<sup>3</sup>, Emily
  Ansell<sup>4</sup>, <sup>1</sup>George Mason University, Vienna, VA, <sup>2</sup>George Mason University, Fairfax,
  VA, <sup>3</sup>Yale School of Medicine, New Haven, CT, <sup>4</sup>Syracuse University, Syracuse, NY
- Parental substance use, adolescent physical activity, and cannabis use disorder in young adulthood

  Maureen Reynolds<sup>1</sup>, Ralph Tarter<sup>1</sup>, Levent Kirisci<sup>1</sup>, Michael Vanyukov<sup>1</sup>, <sup>1</sup>University of Pittsburgh, Pittsburgh, PA
- Material-specific sex differences in relationships between cannabis use and episodic memory among adolescents

  Jacqueline Duperrouzel<sup>1</sup>, Ileana Pacheco-Colon<sup>1</sup>, Catalina Quintero-Lopez<sup>1</sup>, Samuel Hawes<sup>1</sup>, Raul Gonzalez<sup>1</sup>, <sup>1</sup>Florida International University, Miami, FL
- 69 ADHD symptoms and marijuana exposure predict sustained attention accuracy Alexander Wallace<sup>1</sup>, Natasha E Wright<sup>1</sup>, Erika R. Gilbart<sup>1</sup>, Krista Lisdahl<sup>1</sup>, <sup>1</sup>University of Wisconsin-Milwaukee, Milwaukee, WI
- 70 Mutoscope estimates for adolescent drug treatment in the United States, 2002-2014 Chris Thompson<sup>1</sup>, Hui Cheng<sup>1</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI
- 71 Screening youth in the Ukraine for cigarette and marijuana use: Prevalence and correlates

  Tetiana Nickelsen<sup>1</sup>, Oleksii Krugliachenko<sup>1</sup>, Robert Zucker<sup>1</sup>, Victor Burlaka<sup>2</sup>,
  Maureen Walton<sup>3</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Mississippi, Mississippi, MS, <sup>3</sup>University of Michigan-Addiction Research Center, Ann Arbor, MI
- Associations between adolescent energy drink use and bullying victimization and other problem behaviors

  Kathryn Polak<sup>1</sup>, Dace Svikis<sup>1</sup>, Pamela Dillon<sup>1</sup>, David Pomm<sup>1</sup>, Enkelejda Ngjelina<sup>1</sup>, J. Randy Koch<sup>1</sup>, Willis Miller<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA
- 73 Teen substance use initiation: The role of self-efficacy and knowledge
  Genevieve Yang<sup>1</sup>, Tassos Kyriakides<sup>2</sup>, David Fiellin<sup>1</sup>, Lynn Fiellin<sup>1</sup>, <sup>1</sup>Yale School of
  Medicine, New Haven, CT, <sup>2</sup>Yale School of Public Health, New Haven, CT
- Past 15-year trends in lifetime cocaine use among US high school students
  Kristin Schneider<sup>1</sup>, Noa Krawczyk<sup>1</sup>, Ziming Xuan<sup>2</sup>, Renee Johnson<sup>1</sup>, <sup>1</sup>Johns Hopkins
  Bloomberg School of Public Health, Department of Mental Health, Baltimore,
  MD, <sup>2</sup>Boston University School of Public Health, Boston, MA
- Substance use and academic outcomes among high school seniors: Examining the influence of academic engagement

  Brittany Bugbee<sup>1</sup>, Ken Beck<sup>2</sup>, Craig Fryer<sup>2</sup>, Amelia Arria<sup>1</sup>, <sup>1</sup>University of Maryland School of Public Health, College Park, MD, <sup>2</sup>University of Maryland, College Park, MD

- 76 Risk estimates of cannabis use onset among US adolescents with conduct problems C. Lopez-Quintero, Florida International University, Miami, FL
- What brain regions are engaged by decisions with varying levels of other-harm vs. self-benefit typically developing adolescents and those with substance and conduct problems?

  Joseph Sakai<sup>1</sup>, Manish Dalwani<sup>1</sup>, Shannon McWilliams<sup>1</sup>, Kristen Raymond<sup>2</sup>, Susan Mikulich-Gilbertson<sup>1</sup>, <sup>1</sup>University of Colorado School of Medicine, Aurora, CO, <sup>2</sup>University of Colorado, Denver, CO
- Default mode network activity: Association with externalizing behavior problems with and without limited prosocial emotion
  Brian Walsh<sup>1</sup>, Joseph Sakai<sup>2</sup>, Manish Dalwani<sup>2</sup>, <sup>1</sup>University of Colorado, Aurora,
- Diminished alternative reinforcement as a mechanism linking adolescent conduct problems and substance use
  Rubin Khoddam<sup>1</sup>, Junhan Cho<sup>1</sup>, Adam Leventhal<sup>1</sup>, <sup>1</sup>University of Southern California, Los Angeles, CA
- Longitudinal associations between anxiety sensitivity and substance use in adolescents: Mediation by depressive affect

  Casey Guillot<sup>1</sup>, Raina Pang<sup>2</sup>, Steve Sussman<sup>2</sup>, Adam Leventhal<sup>2</sup>, <sup>1</sup>University of North Texas, Denton, TX, <sup>2</sup>University of Southern California, Los Angeles, CA
- Developing decision rules for adolescent substance use treatment settings:

  Perspectives from four online stakeholder engagement panels

  Beth Ann Griffin<sup>1</sup>, Sean Grant<sup>1</sup>, Sarah Hunter<sup>1</sup>, Pedersen Eric<sup>1</sup>, <sup>1</sup>RAND Corporation,

  Arlington, VA
- Reliability and validaty of the GAIN-SS to detect problem drinking and problem gambling with Spanish adolescents

  Sergio Fernandez-Artamendi<sup>1</sup>, Víctor Martínez-Loredo<sup>2</sup>, Irene Pericot-Valverde<sup>3</sup>, Jose Ramón Fernández-Hermida<sup>4</sup>, <sup>1</sup>Universidad Loyola Andalucía-Department of Psychology, Andalucia, Spain, <sup>2</sup>University of Oviedo, Addictive Behaviors Group, Oviedo, Spain, <sup>3</sup>University of Vermont, Burlington, VT, <sup>4</sup>University of Oviedo, Oviedo, Spain
- A survey of potential internet gaming disorder extended to screen use in a community sample

  Jean-Marc Alexandre<sup>1</sup>, Christophe Rassis<sup>2</sup>, Fuschia Serre<sup>1</sup>, Melina Fatseas<sup>3</sup>, Marc Auriacombe<sup>1</sup>, <sup>1</sup>Université de Bordeaux, Bordeaux, France, <sup>2</sup>Centre Hospitalier Charles Perrens, Bordeaux, France, <sup>3</sup>Centre Hospitalier Charles Perrens, Bordeaux, France

#### **OVERDOSE**

- Comparison of overdose risk factors between intravenous and intranasal nontreatment-seeking heroin users

  Mudassir Mumtaz<sup>1</sup>, Jermaine Jones<sup>2</sup>, Sandra Comer<sup>3</sup>, <sup>1</sup>Sophie Davis School of Biomedical Education, Rockaway Beach, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY
- Violence and overdose among female users of harm reduction services

  Janna Ataiants<sup>1</sup>, Stephen Lankenau<sup>2</sup>, <sup>1</sup>Drexel University, Philadelphia, PA, <sup>2</sup>Drexel
  University Dornsife School of Public Health, Philadelphia, PA

- What actually causes a stimulant overdose death? Comparison of clinical causes of death among opioid, cocaine, and methamphetamine overdose deaths

  Phillip Coffin<sup>1</sup>, Dharsan Chandrakumar<sup>2</sup>, Caitlin Turner<sup>1</sup>, Glenn-Milo Santos, <sup>1</sup>San Francisco Department of Public Health, San Francisco, CA, <sup>2</sup>Brown University School of Medicine, Providence, RI, <sup>3</sup>UCSF, San Francisco, CA
- Naloxone training for opioid users: Adherence to protocol and survival rates
  Jeanne Manubay<sup>1</sup>, Benjamin Foote<sup>1</sup>, Jermaine Jones<sup>2</sup>, Aimee Campbell<sup>1</sup>, Sandra
  Comer<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University
  College of Physicians and Surgeons, New York, NY
- UMass opioid overdose project: Review of clinical characteristics and healthcare services received in the year prior to death
  Gerardo Gonzalez<sup>1</sup>, Christian Rose, BS<sup>2</sup>, Abtin Shahanaghi, BS<sup>2</sup>, Mauricio Romero-Gonzalez<sup>1</sup>, Jorge Yarzebski<sup>2</sup>, Michael Andre<sup>3</sup>, Gregory J. DiGirolamo<sup>1</sup>, Alan Brown<sup>2</sup>, <sup>1</sup>University of Massachusetts Medical School, Addiction Psychiatry, Worcester, MA, <sup>2</sup>University of Massachusetts Medical School, Worcester, MA, College of the Holy Cross, Worcester, MA
- Mortality after nonfatal opioid overdose: Medication for opioid use disorder is associated with lower risk

  Marc Larochelle<sup>1</sup>, Dana Bernson<sup>2</sup>, Thomas Land<sup>2</sup>, Thomas Stopka<sup>3</sup>, Alexander Walley<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Massachusetts Department of Public Health, Boston, MA, <sup>3</sup>Tufts University School of Medicine, Boston, MA
- Characteristics of nonfatal opioid-related overdoses in Massachusetts among emerging adults
  Sarah Bagley<sup>1</sup>, Dana Bernson<sup>2</sup>, Marc Larochelle<sup>1</sup>, Scott Hadland<sup>1</sup>, Thomas Land<sup>2</sup>, Alexander Walley<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Massachusetts Department of Public Health, Boston, MA
- 91 Emergency department patients' knowledge gaps and perceived needs after non-fatal opioid overdose

  Kathryn Hawk<sup>1</sup>, Grau Lauretta<sup>2</sup>, Marek Chawarski<sup>3</sup>, David Fiellin<sup>4</sup>, Patrick O'Connor<sup>5</sup>,

  Gail D'Onofrio<sup>4</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Yale School of Public Health,

  New Haven, CT, <sup>3</sup>Yale University-Psychiatry, New Haven, CT, <sup>4</sup>Yale School of

  Medicine, New Haven, CT, <sup>5</sup>Yale University-Internal Medicine, New Haven, CT
- 92 Understanding opioid overdoses in New Hampshire: A national drug early warning system rapid epidemiological study
  Andrea Meier<sup>1</sup>, Sarah Moore<sup>2</sup>, Elizabeth Saunders<sup>3</sup>, Bethany McLeman<sup>2</sup>, Samantha Auty<sup>2</sup>, Stephen Metcalf<sup>2</sup>, Lisa Marsch<sup>2</sup>, <sup>1</sup>Dartmouth College, Hanover, NH, <sup>2</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>3</sup>The Dartmouth Institute, Lebanon, NH
- 93 Heroin overdoses reach epidemic proportion in Thailand C. Areesantichai, Chulalongkorn University, Bangkok, Bangkok, Thailand

#### **POLICY**

94 State-level alcohol policies and trajectories of heavy episodic drinking from 10th grade into young adulthood

Brian Fairman<sup>1</sup>, Bruce Simons-Morton<sup>1</sup>, Denise Haynie<sup>1</sup>, Liu Danping<sup>1</sup>, Ralph Hingson<sup>2</sup>, Stephen Gilman<sup>1</sup>, <sup>1</sup>National Institute of Child Health and Human Development, Bethesda, MD, <sup>2</sup>NIAAA, Bethesda, MD

- Assessing pathways between the legal environment, substance use and sexual risk among migrant and non-migrant workers in Kazakhstan

  Phillip Marotta<sup>1</sup>, Nabila El-Bassel<sup>1</sup>, Elwin Wu<sup>1</sup>, Daniel Feaster<sup>2</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL
- 96 Staff and clients smoking together in drug abuse treatment: A target policy change Joseph Guydish<sup>1</sup>, Deborah Yip<sup>1</sup>, Barbara Tajima<sup>2</sup>, Thao Le<sup>1</sup>, Denise Williams<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>UCSF, San Francisco, CA
- Impacts of minimum age of tobacco sales laws on youth smoking in Canada, 2000-2014

  Russell Callaghan<sup>1</sup>, Jodi Gatley<sup>2</sup>, Marcos Sanches<sup>3</sup>, Claire Benny<sup>2</sup>, <sup>1</sup>Northern Medical Program, Prince George, BC, Canada, <sup>2</sup>University of Northern British Columbia, Prince George, BC, <sup>3</sup>Centre for Addiction and Mental Health, Toronto, ON
- Aversiveness enhances memory of cigarette warning messages
  An-Li Wang<sup>1</sup>, Zhenhao Shi<sup>1</sup>, Victoria Fairchild<sup>1</sup>, Catherine Aronowitz<sup>1</sup>, Daniel
  Langleben<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA
- Impact of medical marijuana laws on state-level marijuana use by age and gender, 2004-2013
  Christine Mauro<sup>1</sup>, Paul Newswanger<sup>1</sup>, Julian Santaella-Tenorio<sup>1</sup>, Pia Mauro<sup>1</sup>, Hannah Carliner<sup>2</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Mailman School of Public Health, New York, NY
- Medical marijuana laws and state substance use disorder treatment by age, 2004-2013

  Pia Mauro<sup>1</sup>, Julian Santaella-Tenorio<sup>1</sup>, Christine Mauro<sup>1</sup>, Niki Nourmohammadi<sup>1</sup>, Arthur Robin Williams<sup>2</sup>, Silvia Martins<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Division on Substance Use Disorders, New York, NY

#### 101 **WITHDRAWN**

- Self-medication of mood and anxiety disorders with marijuana: Higher in states with medical marijuana laws

  Aaron Sarvet<sup>1</sup>, Melanie Wall<sup>2</sup>, Katherine Keyes<sup>3</sup>, Mark Olfson<sup>2</sup>, Magdalena Cerda<sup>4</sup>, Deborah Hasin<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>4</sup>University of California, Davis, Davis, CA
- Home cultivation and dispensary provisions of cannabis laws and use of cannabis edibles

  Jacob Borodovsky<sup>1</sup>, Alan Budney<sup>1</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth,
  Hanover, NH
- Appalachian women's use of substance abuse treatment: Examining the behavioral model for vulnerable populations

  Grant Victor<sup>1</sup>, Athena Kheibari<sup>1</sup>, Michele Staton<sup>2</sup>, Carrie Oser<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky College of Medicine, Lexington, KY
- 105 Changes in demographic characteristics and drug use among non-medical prescription opioid users, 2005-2014
  Kathi Harp<sup>1</sup>, D. Keith Branham<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY

- The influence of prior authorization policies on opioid medication abuse and overdose among members of a large medicaid program

  Gerald Cochran<sup>1</sup>, Adam Gordon<sup>2</sup>, Walid Gellad<sup>1</sup>, Chung-Chou H Chang<sup>1</sup>, Jenny Lo-Ciganic<sup>3</sup>, Carroline Lobo<sup>1</sup>, Evan Cole<sup>1</sup>, Winfred Frazier<sup>1</sup>, Ping Zheng<sup>1</sup>, David Kelley<sup>4</sup>, Julie Donohue<sup>1</sup>, <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>Center for Health Equity Research and Promotion, Pittsburgh, PA, <sup>3</sup>University of Arkansas for Medical Sciences, Little Rock, AR, <sup>4</sup>Pennsylvania Department of Human Services, Harrisburg, PA
- Implementation of methadone therapy for opioid use disorder in Russia a modeled cost-effectiveness analysis
  Sean Murphy<sup>1</sup>, Donald Shepard<sup>2</sup>, Tyler Morrill<sup>2</sup>, Mayada Saadoun<sup>2</sup>, Bulat Idrisov<sup>3</sup>, <sup>1</sup>Weill Cornell Medicine, New York, NY, <sup>2</sup>Brandeis University, Waltham, MA, <sup>3</sup>Boston University School of Medicine, Boston, MA
- High-value policy interventions in California's publicly funded treatment of opioid use disorder: A cost-effectiveness analysis

  Emanuel Krebs<sup>1</sup>, Benjamin Enns<sup>1</sup>, Jeong Min<sup>1</sup>, Richard Rawson<sup>2</sup>, Yih-Ing Hser<sup>2</sup>,
  Bohdan Nosyk<sup>1</sup>, <sup>1</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC, <sup>2</sup>UCLA-ISAP, Los Angeles, CA
- Paying clinicians for program-level performance early results from an RCT Sharon Reif<sup>1</sup>, Maureen Stewart<sup>2</sup>, Margot Davis<sup>2</sup>, Torres Maria<sup>2</sup>, AnMarie Nguyen<sup>2</sup>, Dominic Hodgkin<sup>1</sup>, Constance Horgan<sup>1</sup>, <sup>1</sup>Brandeis University, Heller School for Social Policy and Management, Waltham, MA, <sup>2</sup>Brandeis University, Waltham, MA

#### THEORETICAL COMMENTARY

- Drug abuse research and scientific integrity in the 21st century B. Kleykamp, Pinney Associates, Bethesda, MD
- 111 A virtual self-administration laboratory
  Scott Shilling<sup>1</sup>, Hanna Wetzel<sup>1</sup>, Andrew Norman<sup>2</sup>, <sup>1</sup>University of Cincinnati,
  Cincinnati, OH, <sup>2</sup>University of Cincinnati College of Medicine, Cincinnati, OH
- A streamlined approach to the acquisition and analysis of data from drug selfadministration sessions

  Hanna Wetzel<sup>1</sup>, Andrew Norman<sup>2</sup>, <sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University of Cincinnati College of Medicine, Cincinnati, OH
- Standards for assessing the activity of anabolic steroids
  James Tolliver<sup>1</sup>, E. Gregory Hawkins<sup>1</sup>, Michael Klein<sup>2</sup>, <sup>1</sup>U.S. Food and Drug
- Triaging which new psychoactive substances should be prioritized for further study E. Gregory Hawkins<sup>1</sup>, Silvia Calderon<sup>1</sup>, Michael Klein<sup>2</sup>, <sup>1</sup>U.S. Food and Drug Administration, Silver Spring, MD, <sup>2</sup>Food and Drug Administration, Chevy Chase, MD
- A comparison between a second generation AD product and an approved AD product L. Chen, U.S. Food and Drug Administration, Silver Spring, MD

- Pharmacovigilance in clinical trials of substance use disorder treatments with marketed drugs

  Radhika Kondapaka<sup>1</sup>, Ashraf El Fiky<sup>1</sup>, Dikla Blumberg<sup>1</sup>, Robert Lindblad<sup>1</sup>, <sup>1</sup>The Emmes Corporation, Rockville, MD
- Illness narratives of female substance users from an Indian urban slum: A clinical and social perspective on presentation and rehabilitation
  Shalini Singh<sup>1</sup>, Sonali Jhanjee<sup>1</sup>, Nimmy Chandran<sup>1</sup>, Deepak Yadav<sup>1</sup>, Rakesh Lal<sup>1</sup>, <sup>1</sup>All India Institute of Medical Sciences, New Delhi, India
- Abuse liability assessment of new tobacco products: Application of human abuse potential study methodology and special considerations

  Megan Shram<sup>1</sup>, Naama Levy-Cooperman<sup>1</sup>, <sup>1</sup>Altreos Research Partners Inc., Toronto, ON, Canada
- Applicability of the socioecological model on e-cigarette trends
  Anastasiya Ferrell<sup>1</sup>, Linda Haddad<sup>1</sup>, <sup>1</sup>University of Florida College of Nursing,
  Gainesville, FL

Please be advised that no photographing of presentations or data is permitted. Badges must be worn at all times and are required for admission into all events and sessions.

#### **Oral Communications 16**

Outremont 10:00 - 12:00 PM

#### STRESS IS STRESS (EVEN IN FRENCH)

Chairs: Shane Perrine and Eric Woodcock

- 10:00 Effects of single prolonged stress on ethanol drinking and striatal function and neurochemistry in animals Shane Perrine<sup>1</sup>, Alana Conti<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI Predator-odor stress enhances alcohol self-administration in female rats 10:15 Colin Haile<sup>1</sup>, Steven Nieto<sup>1</sup>, Therese Kosten<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX 10:30 Effects of early life stress on vulnerability to cocaine self-administration in male and female rhesus macaques Alison Wakeford<sup>1</sup>, Sara Bramlett<sup>2</sup>, Mar Sanchez<sup>1</sup>, Leonard Howell<sup>2</sup>, <sup>1</sup>Yerkes National Primate Research Center, Atlanta, GA, <sup>2</sup>Emory University, Atlanta, GA Psychosocial stress-induced cocaine seeking in rats is associated with distinct coping 10:45 strategies exhibited during prior social defeat stress Daniel Manvich<sup>1</sup>, Saumya Karne<sup>1</sup>, Taylor Stowe<sup>1</sup>, David Weinshenker<sup>1</sup>, <sup>1</sup>Emory University, Atlanta, GA 11:00 Sources of stress and their correlates among adults who use drugs Kayla Tormohlen<sup>1</sup>, Karin Tobin<sup>1</sup>, Carl Latkin<sup>1</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 11:15 Effects of pharmacological stress-induction among non-treatment-seeking cigarette smokers Eric Woodcock<sup>1</sup>, Jeffrey Stanley<sup>1</sup>, Vaibhav Diwadkar<sup>1</sup>, Dalal Khatib<sup>1</sup>, Mark Greenwald<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI 11:30 Reregulation of cortisol levels in opioid-dependent patients during long-term residential treatment Dean Stankoski<sup>1</sup>, Andrew Huhn<sup>2</sup>, E. Bixler<sup>3</sup>, Roger Meyer<sup>4</sup>, E Deneke<sup>5</sup>, S. Bunce<sup>3</sup>, <sup>1</sup>Penn State University College of Medicine, Hershey, PA, <sup>2</sup>Johns Hopkins
- 11:45 Intransal oxytocin increases stress reactivity in recreational cannabis-using women Stephanie Reed<sup>1</sup>, Margaret Haney<sup>2</sup>, Jeanne Manubay<sup>1</sup>, Melissa Mahoney<sup>1</sup>, Bianca Camagna<sup>1</sup>, Suzette Evans<sup>3</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Medical Center, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY

Treatment Center, Wernersville, PA

University School of Medicine, Baltimore, MD, <sup>3</sup>Penn State College of Medicine, Hershey, PA, <sup>4</sup>Penn State College of Medicine, Psychiatry, Washington, DC, <sup>5</sup>Caron

#### **Oral Communications 17**

Mont-Royal 10:00 - 12:00 PM

#### #TECHNOLOGIE

Chairs: Dace Svikis and Frances Kay-Lambkin

- 10:00 Contingency management technology for routine use in treatment and pilot risk prediction findings

  Eric Gastfriend<sup>1</sup>, David Gastfriend<sup>2</sup>, Paul Earley<sup>3</sup>, <sup>1</sup>DynamiCare Health, Boston,
  MA, <sup>2</sup>Treatment Research Institute, Philadelphia, PA, <sup>3</sup>Principal, Earley Consultancy.
  LLC
- 10:15 A comparison of computer and therapist-delivered SBIRT for alcohol/drugs in an urban primary care setting

  Dace Svikis¹, Steven Ondersma², Pamela Dillon¹, Michael Weaver³, ¹Virginia

  Commonwealth University, Richmond, VA, ²Wayne State University-Psychiatry and Behavioral Neurosciences, Detroit, MI, ³University of Texas Health Science Center, Houston, TX
- 10:30 Persuasive antismoking interventions via Facebook, email-listserv, and MTURK Sunny Jung Kim<sup>1</sup>, Jesse Dallery<sup>2</sup>, Mary Brunette<sup>1</sup>, Lisa Marsch<sup>1</sup>, Jeff T. Hancock<sup>3</sup>, John A. Naslund<sup>4</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>2</sup>University of Florida, Gainesville, FL, <sup>3</sup>Stanford University, Stanford, CA, <sup>4</sup>Dartmouth College, Hanover, NH
- 10:45 *Content analysis: Tobacco status project Facebook smoking cessation RCT* Karma McKelvey<sup>1</sup>, Danielle Ramo<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA
- 11:00 Using artificial intelligence to predict substance use risk with social media data
  Benjamin Crosier<sup>1</sup>, Timothy DeLise<sup>1</sup>, Andrej Ficnar<sup>2</sup>, Bruno Korbar<sup>1</sup>, Cara Van Uden<sup>1</sup>,
  Saeed Hassanpour<sup>1</sup>, <sup>1</sup>Dartmouth College, Hanover, NH, <sup>2</sup>University of Oxford, Oxford,
  UK
- 11:15 A randomised controlled trial of online and social networking interventions in youth with alcohol use disorders and comorbid depression (the iTreAD Study)
  Frances Kay-Lambkin<sup>1</sup>, Sally Hunt<sup>2</sup>, Amanda Baker<sup>1</sup>, Maree Teesson<sup>2</sup>, Kathleen Brady<sup>3</sup>, Mark Deady<sup>2</sup>, Jenny Geddes<sup>1</sup>, <sup>1</sup>University of Newcastle, New Castle, New South Wales, <sup>2</sup>University of New South Wales, Sydney, New South Wales, <sup>3</sup>Medical University of South Carolina, Charleston, SC
- 11:30 The development of game-based incentives to increase utilization of an automated, computer-based treatment for methadone-maintained patients

  Frank Buono<sup>1</sup>, Daniel Lloyd<sup>1</sup>, Ryan Sullivan<sup>2</sup>, Destiny Printz<sup>1</sup>, Natalia Zenoni<sup>2</sup>, Brent Moore<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>APT Foundation, Inc, New Haven, CT
- 11:45 *Mobile Intervention Kit for PWID outreach*Ian Aronson<sup>1</sup>, Alexander Bennett<sup>2</sup>, Lisa Marsch<sup>3</sup>, Theodore Bania<sup>4</sup>, <sup>1</sup>Digital Health
  Empowerment / NDRI, Brooklyn, NY, <sup>2</sup>National Development and Research Institute,
  Inc., New York, NY, <sup>3</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>4</sup>Mount
  Sinai School of Medicine, New York, NY

#### **Oral Communications 18**

Verdun 10:00 - 12:00 PM

#### MICE, RATS AND MONKEYS, OH MU

Chairs: Francesco Leri and Matthew Banks

- 10:00 ELK1 is a key regulator of synaptic plasticity and heroin addiction
  Noël Warren<sup>1</sup>, Stephanie Sillivan<sup>1</sup>, Yasmin Hurd<sup>2</sup>, <sup>1</sup>Icahn School of Medicine at Mount
  Sinai, New York, NY, <sup>2</sup>Mount Sinai School of Medicine, New York, NY
- 10:15 Inhibition of gap junctions impair the development of opioid tolerance
  Maciej Gonek<sup>1</sup>, William Dewey<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA
- 10:30 Effects of steady-state methadone exposure on hedonic reactivity and related gene expression in laboratory rats
  Francesco Leri<sup>1</sup>, Stephen Daniels<sup>1</sup>, Mick Pratt<sup>1</sup>, <sup>1</sup>University of Guelph, Guelph, ON
- 10:45 Antinociceptive interactions between mu-opioid receptor agonists and NMDA antagonists in rhesus monkeys

  Jeremy Cornelissen<sup>1</sup>, Floyd Steele<sup>1</sup>, Katherine Nicholson<sup>1</sup>, Kenner Rice<sup>2</sup>, Matthew Banks<sup>3</sup>, <sup>1</sup>Medical College of Virginia, Richmond, Virginia, <sup>2</sup>NIH, NIDA, Rockville, MD, <sup>3</sup>Virginia Commonwealth University, Richmond, VA
- 11:00 Regulation of dopaminergic and serotoninergic neurons in response to coadministration of nalbuphine in morphine-dependent rats
  Rahul Raghav<sup>1</sup>, Raka Jain<sup>1</sup>, T S ROY<sup>1</sup>, Anju Dhawan<sup>1</sup>, Punit Kumar<sup>1</sup>, <sup>1</sup>All India Institute of Medical Sciences, New Delhi, India
- 11:15 Role of mu opioid receptors in mediating the effects of amphetamine on cocaine-vs.food choice in rhesus monkeys
  Megan Moerke<sup>1</sup>, Matthew Banks<sup>1</sup>, S. Stevens Negus<sup>1</sup>, <sup>1</sup>Virginia Commonwealth
  University, Richmond, VA
- 11:30 Heroin vaccine abrogates nociceptive and locomotive effects of heroin in rodents and induces cross-reactive antibodies to other abused prescription opioids

  Gary Matyas<sup>1</sup>, Rashmi Jalah<sup>2</sup>, Joshua F G Antoline<sup>3</sup>, Oscar Torres<sup>2</sup>, Arthur Jacobson<sup>4</sup>, Zoltan Beck<sup>2</sup>, Carl R Alving<sup>1</sup>, Kenner Rice<sup>5</sup>, <sup>1</sup>Walter Reed Army Institute of Research, Sandy Spring, MD, <sup>2</sup>Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, <sup>3</sup>NIDA, Bethesda, MD, <sup>4</sup>NIH, Bethesda, MD, <sup>5</sup>NIH, NIDA, Rockville, MD
- 11:45 Effects of a heroin vaccine in assays of schedule-controlled responding and drug discrimination in rhesus monkeys

  Kathryn Schwienteck<sup>1</sup>, Matthew Banks<sup>2</sup>, Kim Janda<sup>3</sup>, Paul Bremer<sup>3</sup>, <sup>1</sup>Virginia Commonwealth University, Pharmacology and Toxicology, Richmond, VA, <sup>2</sup>Virginia Commonwealth University, Richmond, VA, <sup>3</sup>Scripps Research Institute, La Jolla, CA

#### Symposium XI

Westmount 10:00 - 12:00 PM

#### CLOUDY, WITH A CHANCE OF INTOXICATION: E-VAPE MODELS OF DRUG EXPOSURE IN LABORATORY ANIMALS

Chairs: Michael Taffe and Julie Marusich

10:00	Pharmacological effects of synthetic cannabinoid vapor T. Lefever, RTI International, Research Triangle Park, NC
10:25	Towards a translationally relevant model of developmental cannabis exposure: Implications for stress coping and executive function R. McLaughlin, Washington State University, Pullman, WA
10:50	A novel e-vape system produces compulsive-like opioid intake in rats L. Vendruscolo, NIDA, Bethesda, MD
11:15	Reinforcing effects of vapor inhalation of psychostimulants in rats J. Nguyen, Scripps Research Institute, La Jolla, CA
11:40	DISCUSSANT: Leveraging alternative methods of cannabis administration research to inform science, practice, and policy M. Taffe, Scripps Research Institute, La Jolla, CA

#### **Animals in Research Forum**

Westmount 12:15 - 2:15 PM

# ADVANCING OUR KNOWLEDGE OF ADDICTION AND RELATED PSYCHIATRIC DISORDERS WITH NONHUMAN PRIMATE RESEARCH

Chairs: Marilyn Carroll and Leonard Howell

Introduction: How nonhuman primate research is essential for advancing knowledge on addiction and related psychiatric disorders

L. Howell, Emory University, Atlanta, GA

The value of primate research to gain knowledge complex cognitive behavior and addiction in humans

J. Rowlett, University of Mississippi Medical Center, Jackson, MS

Comparative nonhuman primate genomics: Implications for animal models

E. Vallender, University of Mississippi Medical Center, Jackson, MS

Studying early life stress in primates: Parallels for human models of addiction and psychiatric illness

M. Sanchez, Yerkes National Primate Research Center, Atlanta, GA

#### **Oral Communications 19**

**Outremont** 2:30 - 4:30 PM

# SPEED BUMPS: PUTTING THE BRAKES ON AMPHETAMINES

Chairs: T. Celeste Napier and Steven M. Graves

- 2:30 Effects of amphetamine maintenance on abuse-related behavioral effects of MDPV and methamphetamine in rats

  Amy Johnson<sup>1</sup>, Matthew Banks<sup>1</sup>, S. Stevens Negus<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA
- 2:45 In utero exposure to moderate doses of methamphetamine alters sensitivity to the same drug in adults
  Daniela Rüedi-Bettschen<sup>1</sup>, Maggie Neal<sup>1</sup>, Donna Platt<sup>2</sup>, <sup>1</sup>University of Mississippi Medical Center, Jackson, MS, <sup>2</sup>Division of Neurobiology and Behavior Research, Jackson, MS
- 3:00 Investigating the role of protein kinase C-beta inhibitors as potential therapeutics for amphetamine abuse

  Rachel Altshuler<sup>1</sup>, Colleen Carpenter<sup>1</sup>, Margaret Gnegy<sup>1</sup>, Emily Jutkiewicz<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI
- 3:15 A novel interference peptide disrupts reconsolidation of methamphetamine-associated memory

  Xiaojie Zhang¹, Cuizhu Dong², Mengqi Liu¹, Lidong Liu³, Yu Tian Wang³, Wei

  Hao¹, ¹Central South University, Changsha, China, ²Central South University, Psychiatry, Changsha, China, ³University of British Columbia, Brain Research Centre, Vancouver, BC
- 3:30 Methamphetamine increases mitochondrial oxidant stress in substantia nigra pars compacta dopamine neurons: Implications for Parkinson's disease

  Steven M. Graves<sup>1</sup>, Zhong Xie<sup>1</sup>, Enrico Zampese<sup>1</sup>, Kristen Stout<sup>1</sup>, Rex Tai<sup>1</sup>, Sarah Schwarzschild<sup>1</sup>, Lena Burbulla<sup>1</sup>, Dimitri Krainc<sup>1</sup>, Paul Schumacker<sup>1</sup>, D. James Surmeier<sup>1</sup>, <sup>1</sup>Northwestern University Feinberg School of Medicine, Chicago, IL
- 3:45 Brain and behavior parkinsonism-like pathology in rats with a history of self-administered methamphetamine: Exacerbation by rotenone

  Isadora D. Calma<sup>1</sup>, Amanda Persons<sup>1</sup>, Matt Kase<sup>1</sup>, T. Celeste Napier<sup>1</sup>, <sup>1</sup>Rush University Medical Center, Chicago, IL
- 4:00 Abuse-deterrent pseudoephedrine to hinder one-pot conversion to methamphetamine Carmen Stomberg<sup>1</sup>, Klaus Wening<sup>1</sup>, Sebastian Schwier<sup>1</sup>, Brandon Presley<sup>2</sup>, <sup>1</sup>The Grünenthal Group, Aachen, Germany, <sup>2</sup>NMS Labs, Willow Grove, PA
- 4:15 Brain activation during methamphetamine-paired cues in humans
  Kathryne Van Hedger<sup>1</sup>, Sarah Keedy<sup>1</sup>, Leah Mayo<sup>2</sup>, Markus Heilig<sup>2</sup>, Harriet de
  Wit<sup>1</sup>, <sup>1</sup>University of Chicago, Chicago, IL, <sup>2</sup>Linkoping University, Linköping, Sweden

#### **Oral Communications 20**

Mont-Royal 2:30 - 4:30 PM

#### WHAT'S HAUTE NOW: EMERGING DRUG USE TRENDS

Chairs: Steven Kurtz and Joseph Palamar

- 2:30 "Not for human consumption": An investigation into motives, consequences, and personality factors associated with bath salt use

  Danielle Beyer<sup>1</sup>, Tess Kilwein<sup>2</sup>, Alison Looby<sup>2</sup>, <sup>1</sup>University of North Dakota, Grand Forks, ND, <sup>2</sup>University of Wyoming, Laramie, WY
- 2:45 Systematic surveillance of illicitly manufactured fentanyl cases initiated by law enforcement
  Steven Kurtz<sup>1</sup>, Mance Buttram<sup>1</sup>, <sup>1</sup>Nova Southeastern University, Miami, FL
- 3:00 Undetected illicit fentanyl use among patients receiving opioid agonist treatment Taylor Ochalek<sup>1</sup>, Stacey Sigmon<sup>1</sup>, Maria Parker<sup>1</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT
- 3:15 Exploring the new phenomena of home-made extraction and injection of ephedra plant product in Georgia

  David Otiashvili<sup>1</sup>, Irma Kirtadze<sup>1</sup>, Dessa Bergen-Cico<sup>2</sup>, <sup>1</sup>Addiction Research Center,
  Tbilisi, GA, <sup>2</sup>Syracuse University, Department of Public Health, Syracuse, NY
- 3:30 User characteristics and effect profiles of butane hash oil: An extremely high-potency cannabis concentrate

  Gary Chan¹, Wayne Hall², Tom Freeman³, Jason Ferris², Adrian Kelly¹, Adam

  Winstock⁴, Jan Copeland⁵, ¹Centre for Youth Substance Abuse Research, Herston,

  Queensland, ²University of Queensland, Brisbane, Austria, ³University College London,
  London, UK, ⁴Global Drug Survey Ltd., London, England, ⁵University of South Wales,
  Sydney, Australia
- Nonmedical benzodiazepine use among young adult opioid users: A prescription for overdose?
   Pedro Mateu-Gelabert<sup>1</sup>, Honoria Guarino<sup>1</sup>, Lauren Jessell<sup>2</sup>, Elizabeth Goodbody<sup>1</sup>, Dongah Kim<sup>3</sup>, K. Gile<sup>4</sup>, <sup>1</sup>National Development and Research Institute, Inc., New York, NY, <sup>2</sup>New York University, New York, NY, <sup>3</sup>University of Massachusetts, Amherst, MA, <sup>4</sup>UMassAmherst, Amherst, MA
- 4:00 Trends in ecstasy use among nightclub attendees in the United States and United Kingdom, 2013-2015
   Joseph Palamar¹, Larissa Maier², Monica Barratt³, Jason Ferris⁴, Katherine Keyes⁵, Adam Winstock⁶, ¹New York University School of Medicine, New York, NY, ²University of Zurich, Zurich, Switzerland, ³National Drug and Alcohol Research Centre, Sydney, Australia, ⁴University of Queensland, Brisbane, Austria, ⁵Columbia University Mailman School of Public Health, Newark, NJ, ⁶Global Drug Survey Ltd., London, England
- 4:15 PET imaging detects dopamine transporter occupancy of new psychoactive substances: Alpha-PVP, pyrovalerone and analogs
  Bertha Madras<sup>1</sup>, Peter Meltzer<sup>2</sup>, Elijahu Livni<sup>3</sup>, Ali Bonab<sup>4</sup>, Alan Fischman<sup>4</sup>, <sup>1</sup>McLean Hospital, Belmont, MA, <sup>2</sup>Organix, Inc., Woburn, MA, <sup>3</sup>Massachusetts General Hospital, Boston, MA, <sup>4</sup>deceased MGH

#### **Oral Communications 21**

Verdun 2:30 - 4:30 PM

# WIN, LOSE OR DRAW: REWARD AND EXTINCTION LEARNING

Chairs: Justin Strickland and Marc Kaufman

- 2:30 Putamen MRS changes induced by stimulus discrimination and reversal learning in nonhuman primates
  Brian Kangas¹, Dionyssios Mintzopoulos², Timothy Gillis¹, Jack Bergman¹, Marc Kaufman², ¹ADARC McLean Hospital, Belmont, MA, ²McLean Hospital, Brain Imaging Center, Belmont, MA
- 2:45 Sign-tracking is difficult to extinguish and resistant to multiple cognitive enhancers Christopher Fitzpatrick<sup>1</sup>, Justin Creeden<sup>1</sup>, Jonathan Morrow<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI
- 3:00 Relationship between loss aversion and delay discounting in an online drug-using sample
  William Stoops<sup>1</sup>, Justin Strickland<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY
- 3:15 Loss aversion in cocaine users: Role of risk and commodity type

  Justin Strickland<sup>1</sup>, Joshua Beckmann<sup>1</sup>, Craig Rush<sup>1</sup>, William Stoops<sup>1</sup>, <sup>1</sup>University of
  Kentucky, Lexington, KY
- 3:30 Negative income shock narratives reduce valuation of extended, prosocial reinforcers in smokers

  Alexandra Mellis<sup>1</sup>, Warren Bickel<sup>1</sup>, <sup>1</sup>Virginia Tech Carilion Research Institute,
  Roanoke, VA
- 3:45 Reward/punishment learning and the subjective effects of oxycodone in recreational opioid users

  Nehal Vadhan<sup>1</sup>, Jermaine Jones<sup>2</sup>, Mogali Shanthi<sup>2</sup>, Catherine Myers<sup>3</sup>, Sandra Comer<sup>4</sup>, <sup>1</sup>Feinstein Institute for Medical Research, Great Neck, NY, <sup>2</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>3</sup>New Jersey Health Care System, Newark, NJ, <sup>4</sup>Columbia University and NYSPI, New York, NY
- 4:00 Failure of extinction in limbic regions predicts more drug use
  Paul Regier<sup>1</sup>, Kanchana Jagannathan<sup>1</sup>, Jesse Suh<sup>1</sup>, Teresa Franklin<sup>1</sup>, Daniel Langleben<sup>1</sup>,
  Stefanie Darnley<sup>1</sup>, Elliott Sturgis-Berkowitz<sup>1</sup>, Kyle Kampman<sup>1</sup>, Charles O'Brien<sup>2</sup>, Anna
  Rose Childress<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>University of
  Pennsylvania, VA Medical Center, Philadelphia, PA
- 4:15 Passion "de novo"? In cocaine patients, neutral videos that signal cocaine videos can themselves rapidly come to evoke mesolimbic activation and this new learning is strongly linked to future relapse

  Anna Rose Childress<sup>1</sup>, Kanchana Jagannathan<sup>1</sup>, Paul Regier<sup>1</sup>, Jesse Suh<sup>1</sup>, Zach Monge<sup>1</sup>, Teresa Franklin<sup>1</sup>, Reagan Wetherill<sup>1</sup>, Kimberly Young<sup>1</sup>, Stefanie Darnley<sup>1</sup>, Elliott Sturgis-Berkowitz<sup>1</sup>, Michael Gawrysiak<sup>2</sup>, Regina Szucs-Reed<sup>1</sup>, Daniel Langleben<sup>1</sup>, Kyle Kampman<sup>1</sup>, Charles O'Brien<sup>3</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Delaware State University, Wilmington, DE, <sup>3</sup>University of Pennsylvania, VA Medical Center, Philadelphia, PA

#### **Symposium XII**

Westmount 2:30 - 4:30 PM

OPIOID AND CANNABINOID INTERACTIONS: PRECLINICAL AND CLINICAL MEASURES OF PAIN, ABUSE LIABILITY AND DEPENDENCE

Chairs: Margaret Haney and Aron Lichtman

Targeting the endogenous cannabinoid system to reduce opioid use and dependence 2:30 in preclinical studies A. Lichtman, Virginia Commonwealth University, Richmond, VA 2:55 Antinociceptive effects and abuse liability of opioid/cannabinoid mixtures C. France, University of Texas Health Science Center, San Antonio, TX 3:20 Assessing the analgesic and reinforcing effects of opioid-cannabinoid combinations in the human laboratory Z. Cooper, Columbia University and NYSPI, New York, NY 3:45 Evaluation of dronabinol for the treatment of opioid withdrawal S. Walsh, University of Kentucky, Lexington, KY 4:10 DISCUSSANT: Opioid antagonism and cannabis reinforcement in the human laboratory M. Haney, Columbia University Medical Center, New York, NY

#### **Late-Breaking Research News**

Verdun 4:45 - 5:45 PM

Chair: William Stoops

- 4:45 *mGluR5* availability in emerging adults at risk for addictions: A high-resolution PET [11C]ABP688 Study

  Sylvia Cox¹, Natalia Jaworska², Maria Tippler¹, Natalie Castellanos Ryan³, France Durand¹, Dominique Allard¹, Chawki Benkelfat¹, Alain Dagher¹, Frank Vitaro³, Mara Brendgen⁴, Michel Boivin⁵, Robert Pihl¹, Richard Tremblay⁶, Jean Séguin⁴, Marco Leyton¹, ¹McGill University, Montreal, QC, ²The Royal's Institute of Mental Health Research, Ottawa, Ontario, Canada, ³Université de Montréal, Outremont, QC, ⁴Université de Montréal, Montreal, QC, ⁵Université Laval, Québec, Canada, ⁶CHU Sainte-Justine, Montreal, QC
- 4:50 Cannabidiol: Non-clinical assessment of abuse potential
  Royston Gray<sup>1</sup>, David Heal<sup>2</sup>, Colin Stott<sup>1</sup>, Stephen Wright<sup>1</sup>, <sup>1</sup>GW Pharmaceuticals
  PLC, Cambridge, UK, United Kingdom, <sup>2</sup>RenaSci Ltd, Nottingham, Nottinghamshire,
  United Kingdom
- 4:55 Altered functional connectivity in ventral attention network in young adult cannabis users

  Alicia Thomas<sup>1</sup>, Krista Lisdahl<sup>1</sup>, <sup>1</sup>University of Wisconsin-Milwaukee, Milwaukee, WI
- 5:00 Preventing the use of synthetic marijuana and new psychoactive substances: Twoyear outcomes from a cluster randomised controlled trial Katrina Champion<sup>1</sup>, Nicola Newton<sup>1</sup>, Lexine Stapinski<sup>1</sup>, Maree Teesson<sup>1</sup>, <sup>1</sup>University of New South Wales, Sydney, New South Wales

- 5:05 Striatal parkin regulates methamphetamine seeking in long-access self-administration in rats.
   Akhil Sharma<sup>1</sup>, Arman Harutyunyan<sup>2</sup>, Shane Perrine<sup>1</sup>, Anna Moszczynska<sup>2</sup>, <sup>1</sup>Wayne State University, Detroit, MI, <sup>2</sup>Eugene Applebaum College of Pharmacy and Health Science, Detroit, MI
- 5:10 *Methamphetamine exposure and withdrawal impacts gut microbiota in rats* Odochi Ohia-Nwoko<sup>1</sup>, Therese Kosten<sup>1</sup>, <sup>1</sup>University of Houston, Houston, TX
- 5:15 CXCR4 and CCR5 antagonism reduce the rewarding effects of the 'bath salt', 3,4-methylenedioxy-N-methylcathinone (MDPV)
  Chicora Oliver<sup>1</sup>, Jae Kim<sup>2</sup>, Sunil Nayak<sup>1</sup>, <sup>1</sup>Temple University, Philadelphia, PA, <sup>2</sup>McLean Hospital, Harvard Medical School, Belmont, MA
- 5:20 Paternal nicotine exposure transgenerationally alters fear learning and cholinergic function

  Munir Kutlu<sup>1</sup>, Rob Cole<sup>2</sup>, Jess Tumolo<sup>2</sup>, Vinay Parikh<sup>2</sup>, Thomas Gould<sup>3</sup>, <sup>1</sup>Penn State University, University Park, PA, <sup>2</sup>Temple University, Philadelphia, PA, <sup>3</sup>The Pennsylvania State University, University Park, PA
- 5:25 RBP-6000 Buprenorphine monthly depot demonstrates efficacy, dafety, and exposure/
  response relationship in opioid use disorder
  Susan Learned<sup>1</sup>, Barbara Haight<sup>1</sup>, Celine Laffont<sup>1</sup>, Dayong Li<sup>1</sup>, Paul Fudala<sup>1</sup>, Christian
  Heidbreder<sup>1</sup>, <sup>1</sup>Indivior Inc., Richmond, VA
- 5:30 Outpatient transition to extended-release naltrexone in opioid use disorder
  Adam Bisaga<sup>1</sup>, Paolo Mannelli<sup>2</sup>, Miao Yu<sup>3</sup>, Narinder Nangia<sup>3</sup>, Christine Graham<sup>3</sup>,
  David Andrew Tompkins<sup>4</sup>, Thomas Kosten<sup>5</sup>, Sarah Ackerman<sup>3</sup>, Bernard Silverman<sup>3</sup>,
  Maria Sullivan<sup>3</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Duke University
  School of Medicine, Durham, NC, <sup>3</sup>Alkermes, Inc., Waltham, MA, <sup>4</sup>Johns Hopkins
  University School of Medicine, Baltimore, MD, <sup>5</sup>Baylor College of Medicine,
  Houston, TX
- 75:35 Results of a double blind placebo controlled randomized trial of extended-release naltrexone among HIV+ inmates with alcohol use disorders

  Sandra Springer<sup>1</sup>, Russell Barbour<sup>2</sup>, Marwan Azar<sup>1</sup>, Frederick Alice<sup>1</sup>, Angela Di Paola<sup>3</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale School of Public Health, New Haven, CT, <sup>3</sup>Yale School of Medicine-AIDS Program, New Haven, CT
- 5:40 New general population data from the USA on maternal risk factors for fetal alcohol spectrum disorders (FASD) and the prevalence of children with FASD in the USA P. May, University of North Carolina, Nutrition Research Institute, Kannapolis, NC

**Business Meeting** (Members Only)

Salon Bonaventure 6:00 - 7:00 PM

**Dinner/Dancing** 

Montreal Ballroom 7:30 - 10:30 PM

#### **Poster Session IV**

(Breakfast)

Fontaine 7:00 - 9:00 AM

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

Set up time begins Wednesday, 1:00 PM Must be removed by Thursday, 9:30 AM

#### **SEROTONIN**

- 1 Effect of 5HT polymorphisms on response to vilazodone for cannabis cessation Lynneice Bowen<sup>1</sup>, Aimee McRae-Clark<sup>1</sup>, Nathaniel Baker<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC
- Buspirone attenuates naloxone-precipitated withdrawal behaviors in morphine-dependent rats
  Catherine Davis-Takacs<sup>1</sup>, Kelly Dunn<sup>2</sup>, Yuqing Cao<sup>3</sup>, Elise Weerts<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>Sandy Spring Friends High School, Sandy Spring, MD
- 3 Beta-Arrestin2 involvement in the serotonin 5-HT2C receptor signalosome Claudia Soto<sup>1</sup>, Kathryn Cunningham<sup>1</sup>, Noelle Anastasio<sup>1</sup>, Scott Gilbertson<sup>2</sup>, Robert Fox<sup>1</sup>, Huang-Chi Du<sup>2</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX, <sup>2</sup>University of Houston, Houston, TX
- The 5-HT2A receptor in the medial prefrontal cortex controls incubation of cocaine cue reactivity

  Erica Holliday<sup>1</sup>, Joanna Miszkiel<sup>1</sup>, Dennis Sholler<sup>1</sup>, Sonja Stutz<sup>1</sup>, Robert Fox<sup>1</sup>, Noelle Anastasio<sup>1</sup>, Kathryn Cunningham<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch, Galveston, TX
- 5 LSD discrimination in male and female Sprague-Dawley rats Keli Herr<sup>1</sup>, Lisa Baker<sup>1</sup>, <sup>1</sup>Western Michigan University, Kalamazoo, MI

#### CLUB DRUGS/NEW PSYCHOACTIVE SUBSTANCES

- 6 Serotonergic street drugs, inactive "fillers" or potential recreational compounds? Michael Gatch<sup>1</sup>, Sean Dolan<sup>2</sup>, Michael Forster<sup>1</sup>, <sup>1</sup>UNT Health Science Center, Fort Worth, TX, <sup>2</sup>University of North Texas, Denton, TX
- Potent rewarding and reinforcing properties of the amphetamine-type stimulant 3fluoromethamphetamine in rodents
  Seong Shoon Yoon<sup>1</sup>, Mee Jung Choi<sup>2</sup>, <sup>1</sup>Korea Institute of Toxicology, Korea, Korea,
  Republic of, <sup>2</sup>Korea Institute of Toxicology, Republic of Korea
- Stereoselectivity in abuse-related neurochemical and behavioral effects of novel synthetic amphetamine isomers

  Farhana Sakloth<sup>1</sup>, Umberto Battisti<sup>1</sup>, Alan Harris<sup>1</sup>, Ramsey Sitta<sup>1</sup>, Jose Eltit<sup>1</sup>, Richard Glennon<sup>1</sup>, S. Stevens Negus<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA

- 9 Synthetic cannabinoid augments methamphetamine-induced conditioned place preference in C57BL/6J mice

  Jaesuk Yun<sup>1</sup>, Sunmi Gu<sup>1</sup>, Hyungsoo Kim<sup>1</sup>, Younghoon Kim<sup>1</sup>, Kyoung Moon Han<sup>1</sup>, Hey Jin Cha<sup>1</sup>, Hye-kyung Park<sup>1</sup>, Ji Soon Shin<sup>1</sup>, <sup>1</sup>National Institute of Food and Drug Safety Evaluation, Cheongju-si, China
- Effects of low dose mixtures of MDPV and cocaine on locomotor activity and brain monoamine content in Sprague-Dawley rats

  Robert Kohler<sup>1</sup>, Shane Perrine<sup>2</sup>, Lisa Baker<sup>1</sup>, <sup>1</sup>Western Michigan University, Kalamazoo, MI, <sup>2</sup>Wayne State University, Detroit, MI
- "Ecstasy" to addiction: Discriminative stimulus and reinforcing effects of synthetic cathinone analogs of MDMA

  Sean Dolan<sup>1</sup>, Michael Gatch<sup>2</sup>, <sup>1</sup>University of North Texas, Denton, TX, <sup>2</sup>UNT Health Science Center, Fort Worth, TX
- Broad range of drugs detected in pooled urine at an electronic dance music event Gantt Galloway<sup>1</sup>, Reshmi Pal<sup>1</sup>, Roy Gerona<sup>2</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>San Francisco VA Medical Center, San Francisco, CA
- Community ketamine users in Taiwan
  Sheng-Chang Wang<sup>1</sup>, Yu-Cheng Zhao<sup>1</sup>, Chieh-Liang Huang<sup>2</sup>, Hsiao-Hui
  Tsou<sup>1</sup>, <sup>1</sup>National Health Research Institutes, Zhunan, Taiwan, <sup>2</sup>China Medical
  University, Taichung, China
- Developing psilocybin as a potential pharmacotherapy: Identifying optimal dosing parameters

  Albert Garcia-Romeu<sup>1</sup>, Frederick Barrett<sup>2</sup>, Matthew Johnson<sup>2</sup>, Roland Griffiths<sup>2</sup>, <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins School of Medicine, Baltimore, MD
- Comparative psychopharmacology of psilocybin and dextromethorphan
  Theresa Carbonaro<sup>1</sup>, Frederick Barrett<sup>2</sup>, Matthew Johnson<sup>2</sup>, Roland
  Griffiths<sup>2</sup>, <sup>1</sup>University of North Texas Health Science Center, Watauga, TX, <sup>2</sup>Johns
  Hopkins School of Medicine, Baltimore, MD
- Psilocybin mushroom occasioned experiences: Impact on attitudes about death and dying
   Darrick May<sup>1</sup>, Mary Sweeney<sup>2</sup>, Roland Griffiths<sup>3</sup>, Matthew Johnson<sup>3</sup>, Ethan Hurwitz<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>3</sup>Johns Hopkins School of Medicine, Baltimore, MD

#### **STRESS**

- Expression of FKBP5 is elevated following chronic cocaine administration
  Krista Connelly<sup>1</sup>, Ellen Unterwald<sup>2</sup>, <sup>1</sup>Lewis Katz School of Medicine at Temple
  University, Philadelphia, PA, <sup>2</sup>Temple University School of Medicine, Philadelphia,
  PA
- Glucocorticoid-endocannabinoid interactions in the prelimbic cortex mediate stresspotentiated reinstatement of cocaine seeking

  Jayme McReynolds<sup>1</sup>, Elizabeth Doncheck<sup>1</sup>, Todd Stollenwerk<sup>2</sup>, Xiaojie Liu<sup>2</sup>, Paul
  Gottshall<sup>1</sup>, Qing-song Liu<sup>2</sup>, Cecilia Hillard<sup>2</sup>, John Mantsch<sup>1</sup>, <sup>1</sup>Marquette University,
  Milwaukee, WI, <sup>2</sup>Medical College of Wisconsin, Milwaukee, WI

- Exacerbated craving in the presence of stress and drug cues in drug-dependent patients

  Kenzie Preston<sup>1</sup>, William Kowalczyk<sup>2</sup>, Karran Phillips<sup>3</sup>, Vahabzadeh Massoud<sup>1</sup>, Jia-Ling Lin<sup>1</sup>, Mustapha Mezghanni<sup>1</sup>, David Epstein<sup>1</sup>, <sup>1</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>2</sup>NIH, Bethesda, MD, <sup>3</sup>NIDA, Bethesda, MD
- Salivary cortisol levels and early inpatient discharge in Brazilian crack-cocaine users
   Karina Ligabue<sup>1</sup>, Felix Kessler<sup>1</sup>, Juliana Scherer<sup>1</sup>, Flavio Pechansky<sup>1</sup>, Felipe Ornell<sup>1</sup>, Vanessa Assuncao<sup>1</sup>, Andrei Valerio<sup>1</sup>, Marcelo Rocha<sup>1</sup>, Milena Stivelmam<sup>1</sup>, Lisia von Diemen<sup>1</sup>, <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
- 21 *Markers for hypnotic abuse liability: Cortisol in insomnia?*Timothy Roehrs<sup>1</sup>, Thomas Roth<sup>1</sup>, <sup>1</sup>Henry Ford Health System, Detroit, MI
- 22 Perceived stress among methadone maintenance treatment patients a cross-sectional study
  Einat Peles<sup>1</sup>, Elad Malik<sup>2</sup>, Shaul Schreiber<sup>2</sup>, Anat Sason<sup>2</sup>, Miriam Adelson<sup>2</sup>, <sup>1</sup>Tel Aviv University, Reut, Israel, Israel, <sup>2</sup>Adelson Clinic, Tel Aviv Medical Center, Tel Aviv, Israel
- Methamphetamine users exhibit fronto-insular inflexibility during a cue reactivity paradigm involving an interoceptive stressor

  Jennifer Stewart<sup>1</sup>, April May<sup>2</sup>, Susan Tapert<sup>3</sup>, Martin Paulus<sup>4</sup>, <sup>1</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>2</sup>UCSan Diego-Psychiatry, San Diego, CA, <sup>3</sup>VA San Diego Healthcare System, San Diego, CA, <sup>4</sup>Laureate Institute for Brain Research; UCSD Psychiatry, Tulsa, OK
- 24 Sex differences in daily life stress and craving in drug-dependent patients
  Landhing Moran<sup>1</sup>, David Epstein<sup>1</sup>, William Kowalczyk<sup>2</sup>, Karran Phillips<sup>3</sup>,
  Vahabzadeh Massoud<sup>1</sup>, Mustapha Mezghanni<sup>1</sup>, Kenzie Preston<sup>1</sup>, <sup>1</sup>NIDA Intramural
  Research Program, Baltimore, MD, <sup>2</sup>NIH, Bethesda, MD, <sup>3</sup>NIDA, Bethesda, MD
- 25 Perceived stress and depression in substance use disorder treatment Shelly Greenfield<sup>1</sup>, R. Kathryn McHugh<sup>1</sup>, Dawn Sugarman<sup>1</sup>, Meghan Reilly<sup>1</sup>, Garrett Fitzmaurice<sup>1</sup>, <sup>1</sup>McLean Hospital, Belmont, MA

#### **TECHNOLOGY**

- Correlates of trust in online health information among patients in opioid treatment Carmen Masson<sup>1</sup>, Ida Chen<sup>1</sup>, James Sorensen<sup>2</sup>, Isabel Allen<sup>1</sup>, Evan Kletter<sup>3</sup>, Mandana Khalili<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>UCSF at Zuckerberg San Francisco General Hospital, San Francisco, CA, <sup>3</sup>Baymark, San Francisco, CA
- Development of a mHealth tool to enhance linkage and retention to office-based opioid treatment and HIV-HCV care among inpatient detoxification program patients Babak Tofighi<sup>1</sup>, Joshua Lee<sup>1</sup>, Mara Flannery<sup>2</sup>, Edward Nunes<sup>3</sup>, Scott Sherman<sup>4</sup>, Amalia Pinguello<sup>5</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>NYU Langone Medical Center, New York, NY, <sup>3</sup>Columbia University and NYSPI, New York, NY, <sup>4</sup>New York University Medical Center, New York, NY, <sup>5</sup>Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul

- 28 Text messaging reduces methamphetamine use and HIV risk behaviors among MSM Cathy Reback<sup>1</sup>, Jesse Fletcher<sup>2</sup>, <sup>1</sup>Friends Research Institute, Los Angeles, CA, <sup>2</sup>Friends Research Institute, Baltimore, MD
- Mobile phone and Internet use among people who inject drugs in Fresno, California Catherine Paquette<sup>1</sup>, Jennifer Syvertsen<sup>2</sup>, Robin Pollini<sup>3</sup>, <sup>1</sup>Pacific Institute for Research and Evaluation, Washington, DC, <sup>2</sup>Ohio State University, Columbus, OH, <sup>3</sup>West Virginia University-Injury Control Research Center, Morgantown, WV
- 30 Public perceptions of fentanyl on Twitter
  Lamisha Muquit<sup>1</sup>, Nancy Haug<sup>2</sup>, Steven Linder<sup>3</sup>, <sup>1</sup>Palo Alto University, Union City,
  CA, <sup>2</sup>Palo Alto University, Los Altos, CA, <sup>3</sup>VA Palo Alto Health Care System, San
  Francisco, CA
- 31 Using Twitter to monitor negative effects of cannabis and synthetic cannabinoid products
  Francois Lamy<sup>1</sup>, Raminta Daniulaityte<sup>1</sup>, Amit Sheth<sup>1</sup>, Ramzi W. Nahhas<sup>1</sup>, Alan G. Smith<sup>1</sup>, Silvia Martins<sup>2</sup>, Robert Carlson<sup>1</sup>, <sup>1</sup>Wright State University, Fairborn, OH, <sup>2</sup>Columbia University Mailman School of Public Health, Newark, NJ
- A Web-based self-help intervention with and without chat counseling to reduce cannabis use in problematic cannabis users: Three-arm randomized controlled trial M. Schaub, Research Institute for Public Health and Addicition, Zurich, Switzerland
- Clinician attitudes, perceived social norms, and intentions to implement Webdelivered interventions

  Traci Rieckmann<sup>1</sup>, Aimee Campbell<sup>2</sup>, <sup>1</sup>Oregon Health and Science University, Hillsboro, OR, <sup>2</sup>Columbia University and NYSPI, New York, NY
- Clinician attitudes, social norms, and intention to use internet-delivered addiction treatment

  Aimee Campbell<sup>1</sup>, Traci Rieckmann<sup>2</sup>, Sheila Markwardt<sup>2</sup>, Edward Nunes<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Oregon Health and Science University, Hillsboro, OR
- Feasibility of the veterans' recovery line as ancillary care for substance abuse treatment

  Destiny Printz<sup>1</sup>, David Pilkey<sup>1</sup>, Marc Rosen<sup>1</sup>, Alicia Heapy<sup>1</sup>, Frank Buono<sup>2</sup>, Brent A. Moore<sup>1</sup>, <sup>1</sup>VA Connecticut Healthcare System, West Haven, CT, <sup>2</sup>Yale School of Medicine, New Haven, CT
- Substance use following brief motivational interviewing intervention among women in a reproductive healthcare clinic

  Ariadna Forray<sup>1</sup>, Steve Martino<sup>1</sup>, Kathryn Gilstad-Hayden<sup>1</sup>, Steven Ondersma<sup>2</sup>, Todd Olmstead<sup>3</sup>, Trace Kershaw<sup>4</sup>, Kimberly Yonkers<sup>1</sup>, <sup>1</sup>Yale University-Psychiatry, New Haven, CT, <sup>2</sup>Wayne State University-Psychiatry and Behavioral Neurosciences, Detroit, MI, <sup>3</sup>University of Texas at Austin, Lyndon B. Johnson School of Public Affairs, <sup>4</sup>Yale School of Public Health, New Haven, CT
- Acceptability of the therapeutic education system in dually diagnosed inpatients
  Alexis Hammond<sup>1</sup>, Denis Antoine<sup>1</sup>, Maxine Stitzer<sup>2</sup>, Eric Strain<sup>1</sup>, <sup>1</sup>Johns Hopkins
  University School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins Bayview Medical
  Center, Baltimore, MD

Cognitive functioning and treatment outcomes in a trial of internet-delivered drug and alcohol treatment

Matis Shulman<sup>1</sup>, Aimee Campbell<sup>1</sup>, Edward Nunes<sup>1</sup>, Mei-Chen Hu<sup>2</sup>, Martina Pavlicova<sup>3</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University Medical Center, Department of Psychiatry, New York, NY, <sup>3</sup>Columbia University Mailman School of Public Health, Newark, NJ

#### **DETECTION**

- 39 Evaluation of two screening devices for cocaine detection in oral fluid
  Juliana Scherer<sup>1</sup>, Tais Fiorentin<sup>2</sup>, Tanara Sousa<sup>1</sup>, Renata Limberger<sup>2</sup>, Flavio
  Pechansky<sup>1</sup>, <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio
  Grande do Sul, Porto Alegre, Brazil, <sup>2</sup>Postgraduate Program in Pharmaceutical
  Sciences, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
- Drug use among Brazilian drivers with oral fluid screening devices as part of traffic checkpoints

  Tanara Sousa<sup>1</sup>, Juliana Scherer<sup>1</sup>, Roberta B. Silvestrin<sup>1</sup>, Vinicius S. Roglio<sup>1</sup>, Giovana Brolese<sup>1</sup>, Graciela G. Pasa<sup>1</sup>, Jaqueline B. Schuch<sup>1</sup>, Tais Fiorentin<sup>2</sup>, Renata Limberger<sup>2</sup>, Flavio Pechansky<sup>1</sup>, <sup>1</sup>Center for Drug and Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, <sup>2</sup>Postgraduate Program in Pharmaceutical Sciences, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
- Detection of ethylglucuronide and ethylsulfate in urine after acute administration of different doses of alcohol

  Francina Fonseca<sup>1</sup>, Julián Andrés Mateus<sup>2</sup>, Clara Pérez Mañà<sup>1</sup>, Esther Papasseit<sup>3</sup>, Adriana Farré<sup>1</sup>, Esther Menoyo<sup>2</sup>, Marta Pérez<sup>2</sup>, Soraya Martín<sup>2</sup>, Mitona Pujadas<sup>2</sup>, Rafael de la Torre<sup>4</sup>, Marta Torrens<sup>1</sup>, Magí Farré<sup>3</sup>, <sup>1</sup>Institut de Neuropsiquiatria i Addiccions, Barcelona, Spain, <sup>2</sup>Autonomous University of Barcelona, Catalonia, Spain, <sup>3</sup>Hospital Universitari Germans Trias i Pujol, School of Medicine, Barcelona, Spain, <sup>4</sup>d'Investigacio Medica, Barcelona, Spain, Spain
- Sex differences in concordance of cannabis self-report and bioassays

  Emmalee Bandstra<sup>1</sup>, Veronica Accornero<sup>1</sup>, Alexandra Fernandez<sup>1</sup>, Denise Vidot<sup>2</sup>,

  Elana Mansoor<sup>1</sup>, Lihua Xue<sup>1</sup>, James Anthony<sup>3</sup>, <sup>1</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>2</sup>University of Miami, Miami, FL, <sup>3</sup>Michigan State University, Lansing, MI

#### SEXUAL RISK AND DRUG USE

- Talking about drugs and sexual risk in HIV primary care: A qualitative exploration of provider practices and patient perceptions

  Laurel Weaver<sup>1</sup>, Aimee Campbell<sup>2</sup>, Susan Tross<sup>3</sup>, Don Des Jarlais<sup>1</sup>, Margaret Wolff<sup>1</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Columbia University, New York, NY
- Developmental patterns of adolescent marijuana and alcohol use and their joint association with sexual risk behavior and outcomes in young adulthood

  Kerry Green<sup>1</sup>, Rashelle Musci<sup>2</sup>, Pamela Matson<sup>3</sup>, Renee Johnson<sup>2</sup>, Beth Reboussin<sup>4</sup>, Nicholas Ialongo<sup>5</sup>, <sup>1</sup>University of Maryland, College Park, MD, <sup>2</sup>Johns Hopkins

  Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>3</sup>Johns Hopkins University, Baltimore, MD, <sup>4</sup>Wake Forest School of Medicine, Winston-Salem, NC, <sup>5</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

- Development of a mobile game app to reduce high-risk sexual behavior in adolescents under the influence of drugs and/or alcohol
  Aileen Gariepy<sup>1</sup>, Kimberly Hieftje<sup>1</sup>, Tyra Pendergass<sup>1</sup>, Erica Miller<sup>1</sup>, Lynn Fiellin<sup>1</sup>, <sup>1</sup>Yale University, New Haven, CT
- Using a "Positive Deviance" framework to discover adaptive risk reduction behaviors among substance-using HIV negative Black men who have sex with men Allison Ober<sup>1</sup>, Derek Dangerfield II<sup>2</sup>, Steve Shoptaw<sup>3</sup>, Gery Ryan<sup>1</sup>, Brian Stucky<sup>1</sup>, Samuel Friedman<sup>4</sup>, <sup>1</sup>RAND Corporation, Arlington, VA, <sup>2</sup>University of Southern California, Los Angeles, CA, <sup>3</sup>UCLA, Los Angeles, CA, <sup>4</sup>National Development and Research Institute, Inc., New York, NY
- Partner-level substance use associated with increased sexual risk behaviors among men who have sex with men in San Francisco, CA

  Robert Brown<sup>1</sup>, Caitlin Turner<sup>2</sup>, Jaclyn Hern<sup>2</sup>, Glenn-Milo Santos<sup>3</sup>, <sup>1</sup>University of California Berkeley, Berkeley, CA, <sup>2</sup>San Francisco Department of Public Health, San Francisco, CA, <sup>3</sup>UCSF, San Francisco, CA
- Substance use facilitates sexual interactions and increases HIV risk in Black South African MSM

  Justin Knox<sup>1</sup>, Kate Collier<sup>1</sup>, Amanda Mtshengu<sup>2</sup>, Matthew Lee<sup>1</sup>, Tim Lane<sup>3</sup>, Vasu Reddy<sup>4</sup>, Deborah Hasin<sup>1</sup>, Theo Sandfort<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Human Sciences Research Council, Pretoria, South Africa, <sup>3</sup>UCSF, San Francisco, CA, <sup>4</sup>University of Pretoria, Gauteng, South Africa
- Substance use and sexual expectancies among gay and bisexual men
  Thomas Whitfield<sup>1</sup>, Brett M Millar<sup>2</sup>, Christian Grov<sup>2</sup>, Jeffrey Parsons<sup>3</sup>, <sup>1</sup>Center for
  HIV Educational Studies and Training, New York, NY, <sup>2</sup>CUNY Graduate School of
  Public Health and Health Policy, New York, NY, <sup>3</sup>Hunter College, CUNY, New
  York, NY
- The prevalence and impact of sexual violence among Latino men in federally qualified health centers with a history of risky drug use

  Amelia Goodfellow<sup>1</sup>, Curtis Bone<sup>2</sup>, Mani Vahidi<sup>1</sup>, Melvin Rico<sup>3</sup>, Lillian Gelberg<sup>3</sup>, <sup>1</sup>UCLA, Los Angeles, CA, <sup>2</sup>Yale School of Medicine, New Haven, CT, <sup>3</sup>UCLA Family Medicine, Los Angeles, CA

#### **CRIMINAL JUSTICE**

- Social support and motivation to change among drug-involved juvenile offenders Megan Dickson<sup>1</sup>, Carl Leukefeld<sup>1</sup>, Hannah Knudsen<sup>1</sup>, Matt Webster<sup>2</sup>, Katherine Marks<sup>1</sup>, Carrie Oser<sup>1</sup>, Michele Staton<sup>3</sup>, Jennifer Havens<sup>3</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>Center on Drug and Alcohol Research University of Kentucky, Lexington, KY, <sup>3</sup>University of Kentucky College of Medicine, Lexington, KY
- Childhood parental incarceration and adulthood drug use, sexually transmitted infection, and arrest risk among Blacks and Hispanics in the US: Assessment of moderation by mentorship

  Maria Khan<sup>1</sup>, Joy Scheidell<sup>1</sup>, Danielle Ompad<sup>2</sup>, Kelly Quinn<sup>1</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>New York University, New York, NY
- Correlates of hepatitis c seropositivity among high-risk rural women: Opportunities for treatment and services in the criminal justice system

  Michele Staton<sup>1</sup>, Justin Strickland<sup>2</sup>, Jennifer Havens<sup>1</sup>, Matt Webster<sup>2</sup>, <sup>1</sup>University of Kentucky College of Medicine, Lexington, KY, <sup>2</sup>University of Kentucky, Lexington, KY

- Women in drug court: Differences between sex traders and non-sex traders and longitudinal substance use outcomes

  Abenaa Jones<sup>1</sup>, Denise Vidot<sup>2</sup>, Catherine Woodstock Striley<sup>3</sup>, Linda Cottler<sup>3</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>2</sup>University of Miami, Miami, FL, <sup>3</sup>University of Florida, Gainesville, FL
- Accumulated criminal justice system involvement and mental health outcomes among women who use illicit drugs: Latent class analysis

  Jennifer Lorvick<sup>1</sup>, Barrot Lambdin<sup>1</sup>, Megan Comfort<sup>1</sup>, Alex Kral<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC
- High rates of incarceration due to drug trafficking in the last decade in Brazil
  Felipe Ornell<sup>1</sup>, Juliana Scherer<sup>1</sup>, Karina Ligabue<sup>1</sup>, Joana Correa de Magalhães
  Narvaez<sup>1</sup>, Carla Dalbosco<sup>1</sup>, Rafaela Ornell<sup>1</sup>, Renata Maria Dotta<sup>2</sup>, Lisieux Borba
  Telles<sup>1</sup>, Flavio Pechansky<sup>1</sup>, Lisia von Diemen<sup>1</sup>, Felix Kessler<sup>1</sup>, <sup>1</sup>Center for Drug and
  Alcohol Research, Federal University of Rio Grande do Sul, Porto Alegre, Brazil,
  <sup>2</sup>Fundação Escola Superior do Ministério Público, Porto Alegre, Brazil
- 77 Risks for nonmedical use of prescription opiates among incarcerated African-American men

  Carlos Mahaffey<sup>1</sup>, Danelle Stevens-Watkins<sup>1</sup>, Paris Wheeler<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY
- 58 Standardized mortality ratio and rate ratio of hospitalization among illicit drug offenders identified from integrated national databases from 2009 to 2013 in Taiwan Shang-Chi Wu<sup>1</sup>, Chia-Mei Kuo<sup>1</sup>, Kevin Chien-Chang Wu<sup>1</sup>, Tzu-Pin Lu<sup>1</sup>, Wei-J Chen<sup>2</sup>, <sup>1</sup>National Taiwan University, Epidemiology and Preventive Medicine, Taipei City, Taiwan, <sup>2</sup>National Taiwan University, Taipei City, Taiwan
- 59 Costs of crime associated with stimulant use disorders
  Benjamin Enns<sup>1</sup>, Emanuel Krebs<sup>1</sup>, Kora DeBeck<sup>1</sup>, Lindsey Richardson<sup>1</sup>, Kanna
  Hayashi<sup>1</sup>, Bohdan Nosyk<sup>1</sup>, <sup>1</sup>BC Centre for Excellence in HIV/AIDS, Vancouver, BC

#### MARIJUANA/CANNABINOIDS II

- Daily patterns of substance use and violence among a high-risk urban sample
  Aaron Dora-Laskey<sup>1</sup>, Patrick Carter<sup>1</sup>, James Cranford<sup>1</sup>, Anne Buu<sup>1</sup>, Maureen Walton<sup>2</sup>,
  Marc Zimmerman<sup>1</sup>, Rebecca Cunningham<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor,
  MI, <sup>2</sup>University of Michigan-Addiction Research Center, Ann Arbor, MI
- Association between cannabis use and lifetime coronary disease
  Hannah Crooke<sup>1</sup>, Linda Cottler<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, <sup>1</sup>University of Florida,
  Gainesville, FL
- Associations of marijuana quantity and frequency with marijuana motives among emerging adults

  Brooke Arterberry<sup>1</sup>, Alan Davis<sup>2</sup>, Maureen Walton<sup>3</sup>, Rebecca Cunningham<sup>1</sup>, Frederic Blow<sup>3</sup>, Erin Bonar<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>Bowling Green State University, Ann Arbor, MI, <sup>3</sup>University of Michigan-Addiction Research Center, Ann Arbor, MI

- The impact of the urban neighborhood environment on longitudinal transitions in marijuana use during emerging adulthood

  Beth Reboussin<sup>1</sup>, Nicholas Ialongo<sup>2</sup>, Kerry Green<sup>3</sup>, Debra Furr-Holden<sup>4</sup>, Renee Johnson<sup>5</sup>, Adam Milam<sup>6</sup>, <sup>1</sup>Wake Forest School of Medicine, Winston-Salem, NC, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, <sup>3</sup>University of Maryland, College Park, MD, <sup>4</sup>Michigan State University, Lansing, MI, <sup>5</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>6</sup>Johns Hopkins University, Baltimore, MD
- Abstinence and reductions in cannabis use are associated with improvements in quality of life among treatment-seeking individuals with cannabis use disorder Christina Brezing<sup>1</sup>, C. Jean Choi<sup>1</sup>, Martina Pavlicova<sup>2</sup>, Daniel Brooks<sup>3</sup>, Amy Mahony<sup>3</sup>, John Mariani<sup>3</sup>, Frances Levin<sup>1</sup>, <sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>3</sup>NYSPI, New York, NY
- Repetitive transcranial magnetic stimulation can be safely and feasibly applied to the dorsolateral prefrontal cortex of non-treatment-seeking heavy cannabis users

  G. Sahlem, Medical University of South Carolina, Charleston, SC
- Trends and factors related to coping-related motives for cannabis use among a large sample of adult cannabis users

  Ashley Knapp<sup>1</sup>, Catherine Stanger<sup>2</sup>, Jacob Borodovsky<sup>1</sup>, Alan Budney<sup>1</sup>, <sup>1</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>2</sup>Dartmouth College, Hanover, NH
- Alcohol control policies and youth past 30-day marijuana and heavy marijuana use in 45 states, 1991-2011

  Sherri-Chanelle Brighthaupt<sup>1</sup>, Renee Johnson<sup>2</sup>, Julie Johnson<sup>3</sup>, <sup>1</sup>Johns Hopkins University, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- Documentation of marijuana use in the electronic health records of community health center patients

  Steffani Bailey<sup>1</sup>, John Muench<sup>1</sup>, Allison O'Neill<sup>2</sup>, Lynn Kunkel<sup>1</sup>, Stuart Cowburn<sup>2</sup>,

  Kim Hoffman<sup>1</sup>, Javier Ponce Terashima<sup>3</sup>, Dennis McCarty<sup>1</sup>, <sup>1</sup>Oregon Health and

  Science University, Hillsboro, OR, <sup>2</sup>OCHIN, Inc., Portland, OR, <sup>3</sup>International Center for Advanced Research and Applied Science, Lima, Peru
- 69 Hospitalizations due to cannabis-related disorders in Canada
  Sarah Wallingford<sup>1</sup>, Amy Porath<sup>2</sup>, Matthew Young<sup>1</sup>, <sup>1</sup>Canadian Centre on Substance
  Abuse, Ottawa, ON, <sup>2</sup>Canadian Centre on Substance Abuse, Ottawa, ON, Canada
- 70 Mortality from cardiovascular disease and diabetes among cannabis users
  Omayma Alshaarawy<sup>1</sup>, James Anthony<sup>1</sup>, <sup>1</sup>Michigan State University, Lansing, MI
- Examining the relationship between exposure to marijuana advertising and recent marijuana use

  Sean LeNoue<sup>1</sup>, Joseph Sakai<sup>1</sup>, Christian Thurstone<sup>2</sup>, Susan Young<sup>2</sup>, Shannon McWilliams<sup>1</sup>, Tamara Wall<sup>3</sup>, Christian Hopfer<sup>1</sup>, <sup>1</sup>University of Colorado School of Medicine, Aurora, CO, <sup>2</sup>University of Colorado School of Medicine, Department of Psychiatry, Aurora, CO, <sup>3</sup>UCSan Diego, La Jolla, CA

- Survey of Australians' knowledge, perception and use of cannabis for medicinal urposes

  Jan Copeland<sup>1</sup>, Peter Gates<sup>1</sup>, Stephanie Todd<sup>1</sup>, <sup>1</sup>University of South Wales, Sydney, Australia
- Medicinal versus recreational cannabis use among returning veterans
  Jane Metrik<sup>1</sup>, Shayna Bassett<sup>2</sup>, Elizabeth Aston<sup>3</sup>, Kristina Jackson<sup>3</sup>, Brian
  Borsari<sup>4</sup>, <sup>1</sup>Warren Alpert Medical School, Providence, RI, <sup>2</sup>University of Rhode
  Island, Department of Psychology, Kingston, RI, <sup>3</sup>Center for Alcohol and Addiction
  Studies, Brown University School of Public Health, Providence, RI, <sup>4</sup>San Francisco
  VA Medical Center, San Francisco, CA
- Cross-validation of the CUDIT-R among a sample of veteran medicinal cannabis users: Evidence of poor model fit
  Mallory Loflin<sup>1</sup>, Kimberly Babson<sup>1</sup>, Kendall Browne<sup>2</sup>, Marcel Bonn-Miller<sup>1</sup>, <sup>1</sup>VA
  Palo Alto Health Care System, San Francisco, CA, <sup>2</sup>VA Puget Sound Healthcare System, Seattle, WA
- Latent factor structure of a behavioral economic marijuana demand curve Elizabeth Aston<sup>1</sup>, Samantha Farris<sup>2</sup>, James MacKillop<sup>3</sup>, Jane Metrik<sup>2</sup>, <sup>1</sup>Center for Alcohol and Addiction Studies, Brown University School of Public Health, Providence, RI, <sup>2</sup>Warren Alpert Medical School, Providence, RI, <sup>3</sup>McMaster University, Peter Boris Centre for Addictions Research, Hamilton, ON
- Budtender perspectives on shared decision-making in medical cannabis dispensaries Nicholas Peiper<sup>1</sup>, Angelica Meinhofer<sup>1</sup>, Scott Novak<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC
- Exploring the relationship between medical marijuana laws and educational attainment.

  Andrew Plunk<sup>1</sup>, Paul Harrell<sup>1</sup>, <sup>1</sup>Eastern Virginia Medical School, Norfolk, VA

#### **DRUGS AND MEMORY**

- 78 The association of learning strategy and delayed recall in adolescents and young adult marijuana users and controls

  Kyle Jennette<sup>1</sup>, Erika R. Gilbart<sup>1</sup>, Krista Lisdahl<sup>1</sup>, <sup>1</sup>University of Wisconsin-Milwaukee, Milwaukee, WI
- 79 Does physical activity influence the association between cannabis use and memory? Ileana Pacheco-Colon<sup>1</sup>, Samuel Hawes<sup>1</sup>, Jacqueline Duperrouzel<sup>1</sup>, Raul Gonzalez<sup>1</sup>, <sup>1</sup>Florida International University, Miami, FL
- Acute effects of cannabis on verbal memory in young adults: Relationship to tobacco use

  Justin Matheson<sup>1</sup>, Robert Mann<sup>1</sup>, Bernard Le Foll<sup>1</sup>, Gina Stoduto<sup>1</sup>, Christine Wickens<sup>1</sup>, Marilyn Huestis<sup>2</sup>, Bruna Brands<sup>3</sup>, <sup>1</sup>Centre for Addiction and Mental Health, Toronto, ON, <sup>2</sup>NIDA, Bethesda, MD, <sup>3</sup>Health Canada, Toronto, ON
- Testing a novel prospective memory training program in substance users

  Meredith Berry<sup>1</sup>, Mary Sweeney<sup>1</sup>, Matthew Johnson<sup>2</sup>, <sup>1</sup>Johns Hopkins University

  School of Medicine, Baltimore, MD, <sup>2</sup>Johns Hopkins School of Medicine, Baltimore,

  MD

Cognitive rehabilitation for individuals with opioid use disorder: A randomized controlled trial

Mehmet Sofuoglu<sup>1</sup>, Alireza Noroozi<sup>2</sup>, Reza Daneshmand<sup>3</sup>, Ahmadreza Samiei<sup>4</sup>, Tara Rezapour<sup>5</sup>, Javad Hatami<sup>5</sup>, Ali Farhoudian<sup>3</sup>, Hamed Ekhtiari<sup>6</sup>, <sup>1</sup>Yale University, New Haven, CT, <sup>2</sup>Tehran University of Medical Sciences, Tehran, Iran, <sup>3</sup>University of Social Welfare and Rehabilitation Sciences, Tehran, Iran, <sup>4</sup>Arak University of Medical Sciences, Arak, Iran, <sup>5</sup>Institute for Cognitive Science Studies, Tehran, Iran, <sup>6</sup>Institute for Cognitive Science Studies, Tehran, Tehran

#### PRESCRIPTION MISUSE

- Non-medical prescription opioid use and age at first use: Examination of gender differences in youth

  Vicki Osborne<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- Trajectories of nonmedical prescription drug use: Assessing the impact of early exposure to prescription drugs

  Philip Veliz<sup>1</sup>, John Schulenberg<sup>1</sup>, Sean McCabe<sup>1</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI
- 85 Prevalence of non-medical use of prescription drugs in the United States in 2016 Kevin Patrick May<sup>1</sup>, Colleen Haynes<sup>1</sup>, Karilynn Rockhill<sup>1</sup>, Zachary Margolin<sup>1</sup>, Richard Dart<sup>1</sup>, Jody Green<sup>1</sup>, <sup>1</sup>Rocky Mountain Poison and Drug Center, Denver, CO
- Prevalence of illicit drug use: Survey of non-medical use of prescription drugs program compared to NSDUH

  Karilynn Rockhill<sup>1</sup>, Colleen Haynes<sup>1</sup>, Kevin Patrick May<sup>1</sup>, Zachary Margolin<sup>1</sup>,

  Richard Dart<sup>1</sup>, Jody Green<sup>1</sup>, <sup>1</sup>Rocky Mountain Poison and Drug Center, Denver, CO
- 87 Motivations for prescription opioid use by diversion pattern
  Amy Elliott<sup>1</sup>, Jasmine Mack<sup>1</sup>, Kelly Gurka<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, Linda
  Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- Increased incoming diversion among users of both non-medical prescription opioids and sedatives compared to individual users

  Sadaf A Milani<sup>1</sup>, Mirsada Serdarevic<sup>2</sup>, Vicki Osborne<sup>2</sup>, Linda Cottler<sup>2</sup>, Catherine Woodstock Striley<sup>2</sup>, <sup>1</sup>University of Florida, Department of Epidemiology, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL
- Illicit gabapentin (GBP) use among nonmedical prescription opioid users: Findings from the national opioid misuse, abuse, and diversion study (NOMAD)

  Scott Novak<sup>1</sup>, Erica Peters<sup>2</sup>, Nick Peiper<sup>1</sup>, Mark Edlund<sup>1</sup>, <sup>1</sup>RTI International, Research Triangle Park, NC, <sup>2</sup>Battelle Memorial Institute, Baltimore, MD
- Mandatory use of a prescription drug monitoring program and impact on opioid dispensing

  Erin Winstanley<sup>1</sup>, Yifan Zhang<sup>1</sup>, Rebecca Mashni<sup>2</sup>, Sydney Schnee<sup>2</sup>, Jonathan Penm<sup>2</sup>, Jill Boone<sup>2</sup>, Cameron McNamee<sup>3</sup>, Neil MacKinnon<sup>2</sup>, <sup>1</sup>West Virginia University, Morgantown, WV, <sup>2</sup>University of Cincinnati, Cincinnati, OH, <sup>3</sup>State of Ohio Board of Pharmacy, Columbus, OH

- The impact of a potentially tamper-resistant controlled-release formulation of oxycodone: Key findings from the national opioid medications abuse deterrence (NOMAD) study
  Briony Larance1, Robert Ali2, Michael Farrell3, Amy Peacock3, Raimondo Bruno4,
  Nichola Lintzeris5, Timothy Dobbins3, Louisa Degenhardt6, 1University of South Wales,
  Sydney, Australia, 2WHO Collaborating Centre for the Treatment of Drug and Alcohol
  Problems, Adelaide, South Australia, Australia, 3National Drug and AlcoholResearch
  Centre, Sydney, Australia, <sup>4</sup>University of Tasmania, Sydney, New South Wales, Australia,
  <sup>5</sup>Drug and Alcohol Services, South Eastern Sydney Local Health District, Sydney,
  Australia, <sup>6</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 92 Impact of Florida PDMP introduction, pill mill legislation and oxycontin reformulation on tablets dispensed in Florida and California
  Paul Coplan<sup>1</sup>, Angela DeVeaugh-Geiss<sup>1</sup>, V. anna Gyarmathy<sup>1</sup>, Venkatesh Harikrishnan<sup>1</sup>, <sup>1</sup>Purdue Pharma L.P., Stamford, CT
- 93 HCV in social networks of young adults who misuse prescription opioids and heroin Alia Al-Tayyib<sup>1</sup>, Stephen Muth<sup>2</sup>, Eric Rice<sup>3</sup>, Paula Riggs<sup>4</sup>, <sup>1</sup>Denver Public Health, Denver, CO, <sup>2</sup>Quintus-ential Solutions, Colorado Springs, CO, <sup>3</sup>University of Southern California, Los Angeles, CA, <sup>4</sup>University of Colorado School of Medicine, Aurora, CO
- Medical consequences of the use of prescription opiates and other medications in intentional self-harm
   Kenneth Conner<sup>1</sup>, Timothy Wiegand<sup>1</sup>, Rachel Gorodetsky<sup>1</sup>, Rachel Schult<sup>1</sup>, Kimberly Kaukeinen<sup>1</sup>, Peter Crane<sup>1</sup>, <sup>1</sup>University of Rochester Medical Center, Rochester, NY
- "That fentanyl dope is way worse": Characterizing fentanyl outbreaks in the Dayton, Ohio, area
   Raminta Daniulaityte<sup>1</sup>, Francois Lamy<sup>1</sup>, Matthew Juhascik<sup>2</sup>, Ioana Sizemore<sup>1</sup>, Mussa Zatreh<sup>1</sup>, Kraig Strayer<sup>1</sup>, Robert Carlson<sup>1</sup>, <sup>1</sup>Wright State University, Fairborn, OH, <sup>2</sup>Montgomery Co. Coroner's Office, Montgomery, PA
- The association between neighborhood deprivation and past month prescription opioid use
  Hui Hu<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida,
  Gainesville, FL
- 97 Risk of amphetamine use disorder and mortality among incident users of prescribed stimulant medications in the Veterans Administration

  Arthur Westover<sup>1</sup>, Bryon Adinoff<sup>1</sup>, Ethan Halm<sup>1</sup>, Paul Nakonezny<sup>1</sup>, <sup>1</sup>University of Texas Southwestern Medical Center, Dallas, TX
- The association between different patterns of non-medical use of stimulants and motivations for use
  Yiyang Liu<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- 99 Prescription medication misuse and hazardous drinking among national guard soldiers

  Lynn Massey<sup>1</sup>, Maureen Walton<sup>2</sup>, Richard McCormick<sup>3</sup>, Marcia Valenstein<sup>1</sup>, Kristen Barry<sup>1</sup>, Heather Walters<sup>1</sup>, Amy Bohnert<sup>1</sup>, Mark Ilgen<sup>1</sup>, James Cranford<sup>1</sup>, Frederic Blow<sup>2</sup>, <sup>1</sup>University of Michigan, Ann Arbor, MI, <sup>2</sup>University of Michigan-Addiction Research Center, Ann Arbor, MI, <sup>3</sup>Case Western Reserve University, Cleveland, OH

- 100 Attitudes toward pharmacotherapies among current prescription opioid users
  Andrew Huhn<sup>1</sup>, David Andrew Tompkins<sup>1</sup>, Kelly Dunn<sup>1</sup>, <sup>1</sup>Johns Hopkins University
  School of Medicine, Baltimore, MD
- Association between mutual-help groups and abstinence among prescription opioid dependent patients, with and without agonist treatment, during 42-month post-treatment follow-up

  Roger Weiss<sup>1</sup>, Margaret Griffin<sup>1</sup>, R. Kathryn McHugh<sup>1</sup>, Sterling Karakula<sup>1</sup>, <sup>1</sup>McLean Hospital, Belmont, MA
- The psychiatric medication discontinuation/reduction (PMDR) study: Initial findings Lauren Jessell<sup>1</sup>, Laysha Ostrow<sup>2</sup>, David Cohen<sup>3</sup>, Manton Hurd, <sup>1</sup>New York University, New York, NY, <sup>2</sup>Live and Learn, Morro Bay, CA, <sup>3</sup>UCLA, Los Angeles, CA

#### **PAIN**

- 103 Peripheral pro-inflammatory cytokines participate in chronic morphine-induced hyperalgesia in mice
  Shiroh Kishioka<sup>1</sup>, Fumihiro Saika<sup>1</sup>, Norikazu Kiguchi<sup>1</sup>, Shinsuke Matsuzaki<sup>1</sup>,

  <sup>1</sup>Wakayama Medical University, Wakayama, Japan
- Tolerance and cross-tolerance to the antinociceptive effects of oxycodone and the imidazoline I2 receptor agonist phenyzoline in adult male rats

  Jun-Xu Li<sup>1</sup>, David Thorn<sup>1</sup>, Yanan Zhang<sup>2</sup>, <sup>1</sup>State University of New York at Buffalo, Buffalo, NY, <sup>2</sup>RTI International, Research Triangle Park, NC
- Chronic pain, trauma, and psychosocial functioning among patients entering methadone maintenance treatment

  Declan Barry<sup>1</sup>, Mark Beitel<sup>2</sup>, Lynn Madden<sup>3</sup>, Reed Bobroff<sup>4</sup>, Scott Farnum<sup>3</sup>, Kathryn Eggert<sup>3</sup>, Robert Freeman<sup>3</sup>, Ehab Hussein<sup>3</sup>, <sup>1</sup>Yale 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>Yale University, New Haven, CT
- Opioid use for chronic pain among patients with HIV

  Jonathan Colasanti<sup>1</sup>, Marlene C. Lira<sup>2</sup>, Debbie Cheng<sup>2</sup>, Leah S. Forman<sup>2</sup>, Meg
  Sullivan<sup>2</sup>, Christin Root<sup>1</sup>, Catherine Abrams<sup>1</sup>, Melissa Podolsky<sup>2</sup>, Wendy S.

  Armstrong<sup>1</sup>, Jeffrey Samet<sup>2</sup>, Carlos del Rio<sup>1</sup>, <sup>1</sup>Emory University, Atlanta, GA,

  <sup>2</sup>Boston University School of Medicine, Boston, MA
- Patient concerns and help-seeking for problems with opioid medications for chronic non- cancer pain
  Gabrielle Campbell<sup>1</sup>, Briony Larance<sup>1</sup>, Suzanne Nielsen<sup>1</sup>, Teleri Moore<sup>1</sup>, Courtney O'Donnell<sup>1</sup>, Louisa Degenhardt<sup>2</sup>, <sup>1</sup>University of South Wales, Sydney, Australia, <sup>2</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- The between and within-person moderation of associations between negative affect and cravings by experiences of pain among patients with opiate use disorder H.H. Cleveland<sup>1</sup>, M Cleveland<sup>2</sup>, Dean Stankoski<sup>3</sup>, E Deneke<sup>4</sup>, E. Bixler<sup>5</sup>, Roger Meyer<sup>6</sup>, S. Bunce<sup>5</sup>, <sup>1</sup>Penn State University, University Park, PA, <sup>2</sup>Washington State University, Pullman, WA, <sup>3</sup>Penn State University College of Medicine, Hershey, PA, <sup>4</sup>Caron Treatment Center, Wernersville, PA, <sup>5</sup>Penn State College of Medicine, Hershey, PA, <sup>6</sup>Penn State College of Medicine, Psychiatry, Washington, DC

- Evaluating LTP-like rTMS as a tool to reduce pain and craving in individuals with non-medical prescription opiate use

  Logan Dowdle<sup>1</sup>, Sarah Hamilton<sup>1</sup>, Jeffrey Borckardt<sup>1</sup>, Sudie Back<sup>1</sup>, Colleen Hanlon<sup>1</sup>,

  <sup>1</sup>Medical University of South Carolina, Charleston, SC
- 110 Prophylactic sleep improvement reduces post-surgery pain and opiate use Timothy Roehrs<sup>1</sup>, Thomas Roth<sup>1</sup>, <sup>1</sup>Henry Ford Health System, Detroit, MI
- Do cannabinoids have the potential to be opioid-sparing in chronic pain treatment? A systematic review and meta-analyses

  Suzanne Nielsen¹, Pamela Sabioni², Jose Trigo², Mark Ware³, Brigid Betz-Stablein¹,

  Bridin Murnion⁴, Kok Eng Khor⁵, Nichola Lintzeris⁶, Michael Farrell³, Smith

  Andrew², Bernard Le Foll², ¹University of South Wales, Sydney, Australia, ²Centre

  for Addiction and Mental Health, Toronto, ON, ³McGill University, Montreal,

  Quebec, Canada, ⁴University of Sydney, Sydney, Australia, ⁵Prince of Wales

  Hospital, New Territores, Hong Kong, ⁶Drug and Alcohol Services, South Eastern

  Sydney Local Health District, Sydney,

  Australia, ¬National Drug and Alcohol Research Centre, Sydney, Australia
- Tobacco use and debilitating pain: Understanding sex and gender differences in a primary care cohort with a history of risky drug use

  Curtis Bone<sup>1</sup>, Lori Bastian<sup>2</sup>, Amelia Goodfellow<sup>3</sup>, William Becker<sup>2</sup>, Lillian Gelberg<sup>4</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT, <sup>2</sup>Yale University, New Haven, CT, <sup>3</sup>UCLA, Los Angeles, CA, <sup>4</sup>UCLA Family Medicine, Los Angeles, CA

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#### **Oral Communications 22**

Westmount 9:00 - 10:00 AM

**DEFENSE DE FUMER: NICOTINE** 

Chairs: Lance McMahon and Sean Luo

- 9:00 Examining the capacity of nAChR antagonists to block the effects of nicotine in nicotine-tolerant C57BL/6J mice

  Fernando de Moura<sup>1</sup>, Lance McMahon<sup>2</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>University of Texas Health Science Center, San Antonio, TX
- 9:15 Positron emission tomography imaging of nicotine-induced dopamine release in squirrel monkeys using [18F]Fallypride

  Jennifer Naylor<sup>1</sup>, Amy Goodwin<sup>2</sup>, Katelin Matazel<sup>1</sup>, Takato Hiranita<sup>1</sup>, Merle
  Paule<sup>1</sup>, <sup>1</sup>U.S. Food and Drug Administration, Silver Spring, MD, <sup>2</sup>U.S. Food and
  Drug Administration National Center for Toxicological Research, Jefferson, AR
- 9:30 A course of methylphenidate may improve smoking cessation outcome in patients with more severe ADHD: Results from follow-up data from a multi-site randomized controlled trial

  Sean Luo<sup>1</sup>, Edward Nunes<sup>2</sup>, Lirio Covey<sup>1</sup>, Mei-Chen Hu<sup>1</sup>, Theresa Winhusen<sup>3</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>University of Cincinnati, Cincinnati, OH
- 9:45 The effectiveness of a peer-led tobacco cessation intervention among poor and underserved using community-based participatory research
  Payam Sheikhattari<sup>1</sup>, Jummai Apata<sup>1</sup>, Jane Buccheri<sup>2</sup>, Mary Gunning<sup>3</sup>, Fernando Wagner<sup>1</sup>, Kevon-Mark Jackman<sup>1</sup>, <sup>1</sup>Morgan State University, Baltimore, MD, <sup>2</sup>CEASE Community Action Board, <sup>3</sup>Catholic Charities Head Start of Baltimore City, Baltimore, MD

### **Oral Communications 23**

Outremont 9:00 - 10:00 AM

#### LA CHIMIE: DRUG DEVELOPMENT STRATEGIES

Chair: Andrew Coop

- 9:00 *UMB 426: A pyranomorphinan with a profile of mu agonism/delta antagonism* Andrew Coop<sup>1</sup>, Mohammad Ansari<sup>1</sup>, Jason Healy<sup>2</sup>, Rae Matsumoto<sup>3</sup>, <sup>1</sup>University of Maryland School of Pharmacy, Baltimore, MD, <sup>2</sup>West Virginia University, Morgantown, WV, <sup>3</sup>Touro University California, Vallejo, CA
- 9:15 In vitro and in vivo characterization of N-butyl-N-phenylethyl-N-3-hydroxyphenylethyl- amine as an "extremely" G-protein signaling biased kappa opioid receptor agonist Amelia Dunn<sup>1</sup>, Alexandra Dunn<sup>1</sup>, Brian Reed<sup>1</sup>, Eduardo Butelman<sup>1</sup>, Mary Jeanne Kreek<sup>1</sup>, <sup>1</sup>The Rockefeller University, New York, NY

- 9:30 Chemical studies towards understanding functional selectivity at peripheral kappa receptors

  Stephanie Johnson<sup>1</sup>, Joshua Zamora<sup>2</sup>, Rachel Crowley<sup>1</sup>, Teresa Chavera<sup>2</sup>, William Clarke<sup>2</sup>, Kelly Berg<sup>2</sup>, Thomas Prisinzano<sup>3</sup>, <sup>1</sup>University of Kansas, Lawrence, KS, <sup>2</sup>University of Texas Health Science Center, Houston, TX, <sup>3</sup>University of Kansas School of Pharmacy, Lawrence, KS
- 9:45 Predicting opioid binding affinity using molecular docking
  Christopher Ellis<sup>1</sup>, Marlene Kim<sup>1</sup>, Naomi Kruhlak<sup>1</sup>, E. Gregory Hawkins<sup>1</sup>, Lidiya
  Stavitskaya<sup>1</sup>, <sup>1</sup>U.S. Food and Drug Administration, Silver Spring, MD

#### **Oral Communications 24**

Mont-Royal 9:00 - 10:00 AM

#### BETTER THAN BLOBS: NEURAL CONNECTIVITY

Chairs: Kelly Dumais and Colleen Hanlon

- 9:00 Sex differences in behavioral and neural responses to reduced-nicotine cigarettes
  Paul Faulkner<sup>1</sup>, Dara Ghahremani<sup>1</sup>, Nicole Petersen<sup>1</sup>, Edythe London<sup>1</sup>, <sup>1</sup>UCLA,
  Los Angeles, CA
- 9:15 Sex differences in default mode network suppression during exposure to smoking cues in nicotine-dependent individuals

  Kelly Dumais<sup>1</sup>, Reagan Wetherill<sup>2</sup>, Teresa Franklin<sup>2</sup>, Amy Janes<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>University of Pennsylvania, Philadelphia, PA
- 9:30 TMS targeting ventromedial prefrontal cortex modulates craving and salience circuitry in cocaine users

  Tonisha Kearney-Ramos<sup>1</sup>, Logan Dowdle<sup>1</sup>, Mark George<sup>1</sup>, Colleen Hanlon<sup>1</sup>,

  <sup>1</sup>Medical University of South Carolina, Charleston, SC
- 9:45 Cortico-limbic-striatal functional connectivity and behavior are impacted by dietary environment and exposure to social stressors in female rhesus macaques Jodi Godfrey<sup>1</sup>, Melanie Pincus<sup>1</sup>, Eric Feczko<sup>2</sup>, Eric Earl<sup>2</sup>, Damien Fair<sup>2</sup>, Vasiliki Michopoulos<sup>1</sup>, Mark Wilson<sup>1</sup>, Mar Sanchez<sup>1</sup>, <sup>1</sup>Yerkes National Primate Research Center, Atlanta, GA, <sup>2</sup>Oregon Health and Science University, Hillsboro, OR

#### **Oral Communications 25**

Verdun 9:00 - 10:00 AM

# TREATMENT POUTINE-STYLE: COMBINATION TREATMENTS

Chair: Gregory Collins

- 9:00 Effects of the nicotinic agonist varenicline, the novel nicotinic antagonist r-bPiDI, and the dopamine transporter inhibitor r-modafinil on co-use of alcohol and nicotine in female P rats

  Sarah Maggio¹, Meredith Saunders², Thomas Baxter², Kimberly Nixon³, Mark Prendergast², Gaungrong Zheng⁴, Peter Crooks⁴, Rachel Slack⁵, Amy Newman⁵, Jon Thorson⁶, Linda Dwoskin¹, Michael Bardo¹, ¹University of Kentucky, Lexington, KY, ²University of Kentucky, Department of Psychology, Lexington, KY, ³University of Kentucky, Department of Pharmaceutical Sciences, Lexington, KY, ⁴University of Arkansas for Medical Sciences, Little Rock, AR, ⁵NIDA Intramural Research Program, Baltimore, MD, ⁶Department of Pharmaceutical Sciences, University of Kentucky, Lexington, KY
- 9:15 Effects of lorcaserin and buspirone, administered alone and in combination, on cocaine self-administration in rhesus monkeys

  Gregory Collins<sup>1</sup>, Charles France<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, San Antonio, TX
- 9:30 Effect of varenicline alone and in combination with nabilone on cannabis withdrawal and relapse in tobacco-smoking cannabis users

  Evan Herrmann<sup>1</sup>, Ziva Cooper<sup>2</sup>, Gillinder Bedi<sup>3</sup>, Divya Ramesh<sup>4</sup>, Rebecca Balter<sup>1</sup>, Stephanie Reed<sup>3</sup>, Sandra Comer<sup>2</sup>, Richard Foltin<sup>1</sup>, Margaret Haney<sup>1</sup>, <sup>1</sup>Columbia University Medical Center, 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 Connecticut, Storrs, CT
- 9:45 Bupropion-naltrexone combinations as a pharmacotherapy for cocaine-use disorder Craig Rush<sup>1</sup>, B. Levi Bolin<sup>1</sup>, Abner Rayapati<sup>1</sup>, Hays Lon<sup>1</sup>, Joshua Lile<sup>1</sup>, William Stoops<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY

### **Oral Communications 26**

Outremont 10:15 AM - 12:15 PM

#### WHO'S USING WHAT NOW: OPIOID EPIDEMIOLOGY

Chairs: Alexander Walley and Silvia Martins

- 10:15 Changes in lifetime heroin use and heroin use disorder: United States 2001-2002 to 2012-2013

  Silvia Martins<sup>1</sup>, Aaron Sarvet<sup>1</sup>, Julian Santaella-Tenorio<sup>1</sup>, Tulshi Saha<sup>2</sup>, Bridget Grant<sup>2</sup>, Deborah Hasin<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>NIAAA Intramural Research Program, Bethesda, MD
- 10:30 The impact of opioid poisonings on hospital use in Canada

  Vera Grywacheski<sup>1</sup>, Sarah Wallingford<sup>2</sup>, Aqsa Malik<sup>2</sup>, Sheril Perry<sup>1</sup>, Krista

  Louie<sup>1</sup>, Matthew Young<sup>2</sup>, <sup>1</sup>Canadian Institute for Health Information, Montreal,

  Quebec, <sup>2</sup>Canadian Centre on Substance Abuse, Ottawa, ON
- 10:45 Excess mortality in children born to opioid-involved parents: A national register study in Taiwan

  Chuan-Yu Chen<sup>1</sup>, Shao-You Fang<sup>2</sup>, Nicole Huang<sup>3</sup>, Su-Hui Chang<sup>2</sup>, <sup>1</sup>National
  Taiwan University, Taipei, Taiwan, <sup>2</sup>Children and Family Research Center, National
  Taiwan University, Taipei, Taiwan, <sup>3</sup>National Taiwan University, Epidemiology and
  Preventive Medicine, Taipei City, Taiwan
- 11:00 Emergency department visits, along with medical doctor visits, greatly increase odds of prescription opioid use

  Mirsada Serdarevic<sup>1</sup>, Sadaf A Milani<sup>2</sup>, Henry Young<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, Linda Cottler<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Department of Epidemiology, Gainesville, FL
- 11:15 Long-term opioid prescribing after inpatient surgery
  Karsten Bartels<sup>1</sup>, Shannon McWilliams<sup>2</sup>, Angela Moss<sup>3</sup>, Ingrid Binswanger<sup>4</sup>,
  Christian Hopfer<sup>2</sup>, Susan Mikulich-Gilbertson<sup>2</sup>, <sup>1</sup>University of Colorado, Boulder,
  CO,<sup>2</sup>University of Colorado School of Medicine, Aurora, CO, <sup>3</sup>University of
  Colorado, Denver, CO, <sup>4</sup>Kaiser Permanente, Oakland, CA
- Overdoses on prescribed opioids in Massachusetts, 2013-14
  Alexander Walley<sup>1</sup>, Dana Bernson<sup>2</sup>, Marc Larochelle<sup>1</sup>, Traci Green<sup>1</sup>, Leonard Young<sup>2</sup>, Thomas Land<sup>2</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA, <sup>2</sup>Massachusetts Department of Public Health, Boston, MA
- "Hooked on" prescription opioids prior to heroin use among people who inject drugs in Fresno, California
  Robin Pollini<sup>1</sup>, Catherine Paquette<sup>2</sup>, Jennifer Syvertsen<sup>3</sup>, <sup>1</sup>West Virginia University-Injury Control Research Center, Morgantown, WV, <sup>2</sup>Pacific Institute for Research and Evaluation, Washington, DC, <sup>3</sup>Ohio State University, Columbus, OH
- 12:00 Fentanyl in methadone-maintained treatment clients
  Cynthia Arfken<sup>1</sup>, Jessica Suchanek<sup>1</sup>, Gary Rhodes<sup>1</sup>, Joseph Urbiel<sup>1</sup>, Mark
  Greenwald<sup>1</sup>, <sup>1</sup>Wayne State University, Detroit, MI

#### **Oral Communications 27**

Mont-Royal 10:15 AM - 12:15 PM

# MOVERS AND SHAKERS: PHARMACOKINETIC OUTCOMES

Chairs: Philip Vieira and Sharon Walsh

- 10:15 Individual differences in drug pharmacokinetics using a novel biosensor technology in awake behaving animals
  Philip Vieira<sup>1</sup>, Christina Shin<sup>2</sup>, Tod Kippin<sup>2</sup>, Netz Arroyo-Curras<sup>3</sup>, Kevin Plaxco<sup>3</sup>, <sup>1</sup>California State University, Los Angeles, CA, <sup>2</sup>UCSF, San Francisco, CA, <sup>3</sup>UCSB, Santa Barbara, CA
- 10:30 Therapeutic potential of highly efficient long-acting cocaine hydrolases Fang Zheng<sup>1</sup>, Chang-Guo Zhan<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY
- Influence of pregnancy on the nicotine metabolite ratio: Changes during antepartum and postpartum

  Christopher Arger<sup>1</sup>, Taraneh Taghavi<sup>2</sup>, Sarah Heil<sup>1</sup>, Joan Skelly<sup>1</sup>, Rachel Tyndale<sup>2</sup>, Stephen Higgins<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University of Toronto, Toronto, ON
- 11:00 Does electronic cigarette propylene glycol and vegetable glycerin ratio influence nicotine delivery, subjective effects, and puff topography?

  Thomas Eissenberg<sup>1</sup>, Tory Spindle<sup>1</sup>, Hannah Mayberry<sup>2</sup>, Nareg Karaoghlanian<sup>3</sup>, Alan Shihadeh<sup>3</sup>, Marzena Hiler<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond,
  VA, <sup>2</sup>Center for the Study of Tobacco Products, Virginia Commonwealth
- Buprenorphine weekly depot provides rapid and sustained hydromorphone blockade in individuals with opioid use disorder: A phase II study

  Sharon Walsh<sup>1</sup>, Sandra Comer<sup>2</sup>, Brad Vince<sup>3</sup>, Naama Levy-Cooperman<sup>4</sup>, Michelle Lofwall<sup>5</sup>, Jermaine Jones<sup>6</sup>, Debra Kelsh, Paul Nuzzo<sup>1</sup>, Marion Coe<sup>1</sup>, Behshad Sheldon<sup>7</sup>, Fredrik Tiberg<sup>8</sup>, Sonnie Kim<sup>7</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Vince and Associates, Malvern, PA, <sup>4</sup>Altreos Research Partners Inc., Toronto, ON, Canada, <sup>5</sup>University of Kentucky College of Medicine, Lexington, KY, <sup>6</sup>Columbia University College of Physicians and Surgeons, New York, NY, <sup>7</sup>Braeburn Pharmaceuticals, Princeton, NJ, <sup>8</sup>Camurus, Lund, Sweden

University, Richmond, VA, <sup>3</sup>American University of Beirut, Beirut, Lebanon

11:30 CAM2038 (q1w): Pharmacokinetics and pharmacokinetic/pharmacodynamic evaluation of opioid blockade in humans

Marion Coe<sup>1</sup>, Paul Nuzzo<sup>1</sup>, Naama Levy-Cooperman<sup>2</sup>, Sandra Comer<sup>3</sup>, Fredrik Tiberg<sup>4</sup>, Sonnie Kim<sup>5</sup>, Sharon Walsh<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>Altreos Research Partners Inc., Toronto, ON, Canada, <sup>3</sup>Columbia University and NYSPI, New York, NY, <sup>4</sup>Camurus, Lund, Sweden, <sup>5</sup>Braeburn Pharmaceuticals, Princeton, NJ

- Concentrated naloxone nasal spray for opioid overdose reversal: A pharmacokinetic study in healthy volunteers

  Rebecca McDonald¹, Ulrike Lorch², Jo Woodward³, Björn Bosse³, Helen Johnson³, Gill Mundin³, Kevin Smith³, John Strang⁴, ¹King's College, London, UK, ²Richmond Pharmacology Ltd, London, UK, ³Mundipharma Research Ltd., Cambridge, UK, ⁴King's College, London, UK, United Kingdom
- 12:00 Scenarios that affect alcohol pharmacokinetics: Exercise and last call Elizabeth Ryan<sup>1</sup>, Scott Lukas<sup>1</sup>, Jane McNeil<sup>2</sup>, Justin Shepherd<sup>1</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont, MA, <sup>2</sup>McLean Hospital, Belmont, MA

#### **Oral Communications 28**

Verdun 10:15 AM - 12:15 PM

#### CAN'T WAIT FOR A SESSION ON IMPULSIVITY!!!

Chairs: Dennis Sholler and Eduardo Butelman

- 10:15 Reducing impulsivity for food and cocaine with progesterone and atomoxetine in maleand female rats

  John Smethells<sup>1</sup>, Natashia Swalve<sup>1</sup>, Rebecca Younk<sup>1</sup>, Marilyn Carroll<sup>1</sup>,

  <sup>1</sup>University of Minnesota, Minneapolis, MN
- 10:30 A new model of cortical 5-HT2A receptor dysfunction in rats

  Dennis Sholler<sup>1</sup>, Noelle Anastasio<sup>1</sup>, Robert Fox<sup>1</sup>, Erica Holliday<sup>1</sup>, Amanda

  Price<sup>1</sup>, Kathryn Cunningham<sup>1</sup>, <sup>1</sup>University of Texas Medical Branch,

  Galveston, TX
- 10:45 Varieties of impulsivity in opiate and stimulant users

  Jasmin Vassileva<sup>1</sup>, Kiril Bozgunov<sup>2</sup>, Elena Psederska<sup>2</sup>, Dimitar Nedelchev<sup>2</sup>,

  Victoria Dobrojalieva<sup>2</sup>, Georgi Vasilev<sup>2</sup>, <sup>1</sup>Virginia Commonwealth UniversityPsychiatry, Richmond, VA, <sup>2</sup>Bulgarian Addictions Institute
- Relationship between trait impulsivity and maximum lifetime exposure to specific drugs: A dimensional analysis

  Eduardo Butelman<sup>1</sup>, Rebecca Fry<sup>1</sup>, Rachel Kimani<sup>1</sup>, Joel Correa da Rosa<sup>1</sup>, Mary Jeanne Kreek<sup>1</sup>, <sup>1</sup>The Rockefeller University, New York, NY
- 11:15 Regional cerebral blood flow in buprenorphine-maintained opioid addicts:
  Associations with cognition, impulsivity, and substance use
  Dieter Meyerhoff<sup>1</sup>, Donna Murray<sup>1</sup>, Thomas Schmidt<sup>1</sup>, Troy Murray<sup>2</sup>,
  Timothy C Durazzo<sup>3</sup>, Joseph Guydish<sup>4</sup>, <sup>1</sup>San Francisco VA Medical Center,
  San Francisco, CA, <sup>2</sup>The Center for Imaging of Neurodegenerative Diseases,
  San Francisco, CA, <sup>3</sup>Stanford University, Stanford, CA, <sup>4</sup>UCSF, San
  Francisco, CA
- Causal pathways between impulsiveness, crack cocaine use consequences and attention- deficit/hyperactivity disorder

  Mayra Pachado¹, Alice Willhelm¹, Luciano S. P. Guimarães¹, Flavio Pechansky², Felix Kessler², Rosa M. M. de Almeida², ¹Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, ²Center for Drug and Alcohol Research of, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

- Marijuana expectancies and impulsivity: Acquired preparedness in marijuana users
  Rachel Luba<sup>1</sup>, Melissa Slavin<sup>1</sup>, Stacey Farmer<sup>1</sup>, Mitch Earleywine<sup>1</sup>, <sup>1</sup>State University of
  New York at Albany, Albany, NY
- Cognitive-behavioral mediators and moderators of the relationship between impulsivity traits and adolescent alcohol use: Identifying unique targets for prevention

  Kiri Patton<sup>1</sup>, Matthew Gullo<sup>1</sup>, Jason Connor<sup>1</sup>, Gary Chan<sup>2</sup>, Adrian Kelly<sup>2</sup>, John Toumbourou<sup>3</sup>, Richard F Catalano<sup>4</sup>, <sup>1</sup>University of Queensland, Brisbane, Austria, <sup>2</sup>Centre for Youth Substance Abuse Research, Herston, Queensland, <sup>3</sup>Deakin University, School of Psychology, Burwood, Australia, <sup>4</sup>Social Development Research Group, University of Washington, Seattle, WA

### **Symposium XIII**

Westmount 10:15 AM - 12:15 PM

IS TWO BETTER THAN ONE? ENDOCANNABINOID INVOLVEMENT IN STRESS, REWARD AND MOTIVATION: IMPLICATIONS FOR UNDERSTANDING AND TREATING SUBSTANCE USE DISORDER

Chairs: John Mantsch and Cecilia Hillard

10:15 Endocannabinoid signaling and stress C. Hillard, Medical College of Wisconsin, Milwaukee, WI Causal control of negative reinforcement by dopamine release and its modulation 10:40 by endogenous cannabinoids J. Cheer, University of Maryland School of Medicine, Baltimore, MD 11:05 Setting the stage for relapse: CB1 cannabinoid receptors mediate stress and sex hormone regulation of drug seeking J. Mantsch, Marquette University, Milwaukee, WI 11:30 Brain CB2 receptor: A potential new target for treatment of cocaine addiction Z. Xi, NIDA, Bethesda, MD 11:55 DISCUSSANT: Endocannabinoids and substance use disorder: Clinical implications, treatment opportunities and future research directions S. Patel, Vanderbilt University Medical Center, Nashville, TN

### **BRUNCH WITH CHAMPIONS**

(Pre-Registrants Only)

Salon Ville-Marie 12:15 - 1:15 PM

## **Oral Communications 29**

Fontaine H 1:15 - 3:15 PM

# INTOXICATING CONNAISSANCE: ALCOHOL RESEARCH

Chairs: Jessica Weafer and Elise Weerts

- 1:15 Maternal alcohol consumption during 1st trimester and child internalizing and externalizing problems: A sibling control study

  Ingunn Olea Lund<sup>1</sup>, Espen Moen Eilertsen<sup>1</sup>, Line C. Gjerde<sup>1</sup>, Eivind Ystrøm<sup>1</sup>, <sup>1</sup>The Norwegian Institute of Public Health, Oslo, Norge
- 1:30 Alcohol expectancy in early adolescence with problematic drinking in young adulthood Wan-Ting Chen<sup>1</sup>, Kuan-Chia Lin<sup>1</sup>, Fang-Yi Tseng<sup>1</sup>, Wei-J Chen<sup>2</sup>, Chuan-Yu Chen<sup>3</sup>, <sup>1</sup>National Yang-Ming University, Taipei, Taiwan, <sup>2</sup>National Taiwan University, Taipei City, Taiwan, <sup>3</sup>National Taiwan University, Taipei, Taiwan
- 1:45 Restrictive media parenting predicts alcohol-related attitudes and drinking onset in youth

  Joy Gabrielli<sup>1</sup>, Mike Stoolmiller<sup>2</sup>, Zoe Brennan<sup>3</sup>, James Sargent<sup>3</sup>, <sup>1</sup>Geisel School of Medicine/Norris Cotton Cancer Center, Enfield, NH, <sup>2</sup>Michigan State University, Lansing, MI, <sup>3</sup>Department of Biomedical Data Science at Dartmouth, Hanover, NH
- 2:00 Alcohol abuse, polydrug use, impulsivity and sensation among adolescents: Two year's follow-up Víctor Martínez-Loredo¹, Sergio Fernandez-Artamendi², Aris Grande-Gonsende³, Ángel García-Pérez³, Irene Pericot-Valverde⁴, Jose Ramón Fernández-Hermida³, ¹University of Oviedo, Addictive Behaviors Group, Oviedo, Spain, ²Universidad Loyola Andalucía-Department of Psychology, Andalucia, Spain, ³University of Oviedo, Oviedo, Spain, ⁴University of Vermont, Burlington, VT
- 2:15 Risk and protective factors for sexual risk behaviors in college students: Marijuana use, binge drinking, HIV risk knowledge and coping style

  Angela Heads<sup>1</sup>, Joseph Dickson<sup>2</sup>, Joy Schmitz<sup>1</sup>, Aisha Asby<sup>3</sup>, <sup>1</sup>University of Texas Health Science Center, Houston, TX, <sup>2</sup>Prairie View A and M University, Prairie View, TX, <sup>3</sup>Asby Consulting, Sacramento, CA
- 2:30 Sex differences in brain activation during response inhibition in heavy drinkers Jessica Weafer<sup>1</sup>, Harriet de Wit<sup>1</sup>, <sup>1</sup>University of Chicago, Chicago, IL
- 2:45 Effect of nicotine use on prospective memory performance and associated intrinsic functional brain connectivity in binge drinkers

  Jonathan Ipser<sup>1</sup>, Dan Stein<sup>1</sup>, Hetta Gouse<sup>1</sup>, Carla Freeman<sup>1</sup>, John Joska<sup>1</sup>, <sup>1</sup>University of Cape Town, Western Cape, South Africa
- 3:00 Changing alcohol related beliefs: Implications for successful treatment of alcohol use disorder Jason Coates<sup>1</sup>, Matthew Gullo<sup>2</sup>, Gerald Feeney<sup>3</sup>, Ross Young<sup>2</sup>, Jason Connor<sup>2</sup>, <sup>1</sup>Centre for Youth Substance Abuse Research, Herston, Queensland, Australia, <sup>2</sup>University of Queensland, Brisbane, Austria, <sup>3</sup>Princess Alexandra Hospital, Queensland, Australia

### **Oral Communications 30**

Fontaine E 1:15 - 3:15 PM

# LES LIAISONS DANGEREUSES: PSYCHIATRIC COMORBIDITY

Chairs: Jibran Khokhar and Suzette Glasner-Edwards

- 1:15 Impaired brain reward circuitry may underlie alcohol drinking in a rat model of schizophrenia and co-occurring alcohol use disorder

  Jibran Khokhar<sup>1</sup>, Alan Green<sup>1</sup>, Hanbing Lu<sup>2</sup>, Elliot Stein<sup>2</sup>, <sup>1</sup>Dartmouth College, Hanover, NH, <sup>2</sup>NIDA Intramural Research Program, Baltimore, MD
- 1:30 Anxiety- and depression- like behaviors in rats selectively bred for intravenous cocaine self-administration

  Ken Grasing<sup>1</sup>, Michael Grasing<sup>1</sup>, Jessica Idowu<sup>1</sup>, Haiyang Xu<sup>2</sup>, <sup>1</sup>Kansas City VA Medical Center, Kansas City, MO, <sup>2</sup>Florida State University, Tallahassee, FL
- 1:45 Cigarette smoking and cognitive function in Chinese male inpatients with schizophrenia: A comparison of heavy and light smokers

  Huiqiong Deng<sup>1</sup>, Jair Soares<sup>1</sup>, Xiang Yang Zhang<sup>1</sup>, <sup>1</sup>University of Texas Health Science Center, McGovern Medical School, Houston, TX
- 2:00 The efficacy of valproate in cocaine-bipolar comorbidity: Results from a randomized placebo-controlled preliminary study

  Ihsan Salloum<sup>1</sup>, Olga Maria Villar-Loubet<sup>1</sup>, Feng Miao<sup>2</sup>, Jack Cornelius<sup>3</sup>, <sup>1</sup>University of Miami, Miami, FL, <sup>2</sup>University of Miami Miller School of Medicine, Miami, FL, <sup>3</sup>University of Pittsburgh Medical Center, Pittsburgh, PA
- 2:15 Improving comorbid substance use and posttraumatic stress disorder treatments through methodological innovation: Combined symptom trajectories following treatment Teresa Lopez-Castro<sup>1</sup>, Nicholas Allan<sup>2</sup>, Santiago Papini<sup>3</sup>, Sudie Back<sup>4</sup>, Therese Killeen<sup>4</sup>, Daniel Gros<sup>4</sup>, Emma Barrett<sup>4</sup>, Lesia M. Ruglass<sup>5</sup>, Denise Hien<sup>6</sup>, <sup>1</sup>The City College of New York, NY, <sup>2</sup>Oregon Health and Science University, Hillsboro, OR, <sup>3</sup>University of Texas at Austin, Austin, TX, <sup>4</sup>Medical University of South Carolina, Charleston, SC, <sup>5</sup>CUNY Graduate School of Public Health and Health Policy, New York, NY, <sup>6</sup>Adelphi University, Garden City, NY
- 2:30 Preliminary outcomes of a computerized CBT/MET intervention targeting depression and cannabis use in a psychiatric care setting

  Suzette Glasner-Edwards<sup>1</sup>, Frances Kay-Lambkin<sup>2</sup>, Alan Budney<sup>3</sup>, Helene Chokron Garneau<sup>4</sup>, Alexandra Venegas<sup>1</sup>, Anne Lee<sup>1</sup>, <sup>1</sup>Integrated Substance Abuse Programs (UCLA), Los Angeles, CA, <sup>2</sup>University of Newcastle, New Castle, New South Wales, <sup>3</sup>Geisel School of Medicine at Dartmouth, Hanover, NH, <sup>4</sup>UCLA, Los Angeles, CA
- Suicide attempts and substance use disorders among veterans seeking specialty pain services
   Lisham Ashrafioun<sup>1</sup>, Cathleen Kane<sup>1</sup>, Todd Bishop<sup>1</sup>, Peter Britton<sup>1</sup>, Wilfred Pigeon<sup>1</sup>, <sup>1</sup>VA VISN 2 Center of Excellence for Suicide Prevention, Canandaigua, NY

3:00 Mental disorders and persistent alcohol/tobacco use among adolescents in São Paulo, Brazil: A follow-up study

Mariel Mendez<sup>1</sup>, Silvia Martins<sup>2</sup>, Thiago Fidalgo<sup>3</sup>, Marcos Ribeiro<sup>3</sup>, Sheila C. Caetano<sup>3</sup>, Zila M. Sanchez<sup>3</sup>, <sup>1</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>2</sup>Columbia University, New York, NY, <sup>3</sup>Universidade Federal de Sao Paulo, São Paulo, Brazil

### **Symposium XIV**

Fontaine F 1:15 - 3:15 PM

EVALUATING THE THERAPEUTIC POTENTIAL OF MEDICAL CANNABIS AND PHYTOCANNABINOIDS FROM PRECLINICAL ANIMAL MODELS TO THE PHARMACOEPIDEMIOLOGY OF MEDICAL CANNABIS USE

Chairs: Ziva Cooper and Igor Grant

- 1:15 Investigating variables that alter the analgesic effects and abuse liability of cannabis and cannabinoids under controlled conditions in the human laboratory

  Z. Cooper, Columbia University and NYSPI, New York, NY
- 1:40 Evaluation of lesser known phytocannabinoids in preclinical animal models of drug abuse and pain
  - A. Lichtman, Virginia Commonwealth University, Richmond, VA
- 2:05 Going green: Exploring the impact of medical marijuana S. Gruber, McLean Hospital, Harvard Medical School, Belmont, MA
- 2:30 Long-term studies of medical cannabis use: Real world evidence M. Ware, McGill University, Montreal, Quebec, Canada
- 2:55 DISCUSSANT: The scientific basis for the therapeutic effects of medical cannabis: What we know and future considerations for research?I. Grant, UCSan Diego, La Jolla, CA

### **Symposium XV**

Fontaine G 1:15 - 3:15 PM

# APPLICATIONS OF CHOICE PROCEDURES TO DRUG ABUSE RESEARCH

Chairs: S. Stevens Negus and Richard Lamb

1:15 Modeling treatment by conceptualizing addiction as a behavioral allocation disorder R. Lamb, University of Texas Health Science Center, San Antonio, TX 1:40 The influence of social rank, sex and drug history on cocaine-food choice in monkeys M. Nader, Wake Forest School of Medicine, Winston-Salem, NC 2:05 Sex differences in the choice between cocaine and food reinforcers A. Perry, University of Texas at El Paso, El Paso, TX 2:30 *The influence of alternative reinforcers and d-amphetamine maintenance on* intravenous cocaine choice in parallel studies in humans and rhesus monkeys J. Lile, University of Kentucky, Lexington, KY 2:55 DISCUSSANT: Common themes and future directions in research with drug choice procedures

S. Negus, Virginia Commonwealth University, Richmond, VA

#### **Oral Communications 31**

Fontaine G 3:30 - 5:30 PM

#### IS IT A BEAUTIFUL DAY IN THE QUARTIER? ENVIRONMENTAL INFLUENCES ON DRUG USE

Chairs: Natacha De Genna and Adam Milam

- 3:30 All you need is love: Rearing environment predicts opioid self-administration and oxytocin expression

  Rebecca Hofford<sup>1</sup>, Dolores Vazquez-Sanroman<sup>1</sup>, Michael Bardo<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY
- 3:45 Environmental enrichment restores oxidative balance in animals exposed to toluene:
  Comparison with melatonin
  Nayeli Paez-Martinez<sup>1</sup>, Yepci Yee-Rios<sup>1</sup>, Sergio Montes<sup>1</sup>, <sup>1</sup>Instituto Politécnico Nacional,
  Mexico City, Mexico
- 4:00 The effects of environmental enrichment during abstinence from cocaine on RNA expression within the nucleus accumbens

  Gregory Powell<sup>1</sup>, Madeleine St. Peter<sup>1</sup>, Trisha Chaudhury<sup>1</sup>, Daniela Alcazar<sup>1</sup>, Thomas Benson<sup>1</sup>, Ryan Bastle<sup>1</sup>, Nora Perrone-Bizzozero<sup>2</sup>, Janet Neisewander<sup>1</sup>, <sup>1</sup>Arizona State University, Tempe, AZ, <sup>2</sup>University of New Mexico, Albuquerque, New Mexico

- 4:15 Impact of environmental enrichment on context dependency of cocaine-cue extinction learning for relapse prevention

  Jamie Gauthier<sup>1</sup>, Kyle Mabry<sup>1</sup>, Kathleen Kantak<sup>1</sup>, <sup>1</sup>Boston University School of Medicine, Boston, MA
- 4:30 Childhood's pro-alcohol environment and sensation seeking in relation to drinking problems in early adolescence and young adulthood
  Nadia Wang<sup>1</sup>, Po-Hsiu Kuo<sup>1</sup>, Wei-J Chen<sup>2</sup>, Chuan-Yu Chen<sup>1</sup>, <sup>1</sup>National Taiwan
  University, Epidemiology and Preventive Medicine, Taipei City, Taiwan, <sup>2</sup>National Taiwan University, Taipei City, Taiwan
- 4:45 Brain dopamine response and modulatory effect of environmental context to morphine in healthy men
   Primavera Spagnolo¹, Alane kimes², Melanie Scwhandt³, Karran Phillips⁴, Nancy Diazgranados³, Ehsan Shokri Kojori³, Kenzie Preston⁵, Dardo Tomasi³, Peter Herscovitch⁶, Markus Heilig⁷, Vijay Ramchandani³, ¹NIH, NIAAA, Bethesda, MD, ²NIH, NIDA, Bethesda, MD, ³NIAAA, Bethesda, MD, ⁴NIDA, Bethesda, MD, ⁵NIDA Intramural Research Program, Baltimore, MD, ⁶NIH, PET, CC, Bethesda, MD, ¬Linkoping University, Linköping, Sweden
- 5:00 The impact of environmental disorder on stress, craving, and mood
  William Kowalczyk<sup>1</sup>, Matthew Matthew<sup>2</sup>, Karran Phillips<sup>3</sup>, Debra Furr-Holden<sup>4</sup>, Adam
  Milam<sup>5</sup>, Vahabzadeh Massoud<sup>2</sup>, Mustapha Mezghanni<sup>2</sup>, Jia-Ling Lin<sup>2</sup>, David Epstein<sup>2</sup>,
  Kenzie Preston<sup>2</sup>, <sup>1</sup>NIH, Bethesda, MD, <sup>2</sup>NIDA Intramural Research Program, Baltimore,
  MD, <sup>3</sup>NIDA, Bethesda, MD, <sup>4</sup>Michigan State University, Lansing, MI, <sup>5</sup>Johns Hopkins
  University, Baltimore, MD
- 5:15 Neighborhood factors in co-use of cigarettes and cannabis among young adults
  Natacha De Genna<sup>1</sup>, Dara Mendez<sup>2</sup>, Lidush Goldschmidt<sup>3</sup>, Nancy Day<sup>1</sup>, Marie
  Cornelius<sup>1</sup>, <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>University of Pittsburgh Graduate
  School of Public Health, Pittsburgh, PA, <sup>3</sup>University of Pittsburgh Medical Center,
  Pittsburgh, PA

#### **Oral Communications 32**

Fontaine H 3:30 - 5:30 PM

#### THE YOUNG AND THE RESTLESS: ADOLESCENTS

Chairs: Kristin Maple and Kenzie Preston

- 3:30 Associations between cannabis use, gender, and frontolimbic white matter integrity in adolescents and emerging adults

  Kristin Maple<sup>1</sup>, Alicia Thomas<sup>1</sup>, Krista Lisdahl<sup>1</sup>, <sup>1</sup>University of Wisconsin-Milwaukee, Milwaukee, WI
- 3:45 Trends in cannabis treatment admissions in adolescents/young adults: Analysis of Teds-D 1992-2012

  Lindsay Standeven<sup>1</sup>, Mishka Terplan<sup>2</sup>, Margaret Chisolm<sup>3</sup>, <sup>1</sup>Johns Hopkins Hospital,
  Baltimore, MD, <sup>2</sup>Virginia Commonwealth University, Richmond, VA, <sup>3</sup>Johns Hopkins
  School of Medicine, Baltimore, MD

- 4:00 Sex and age differences in risk factors of marijuana involvement during adolescence Lian-Yu Chen<sup>1</sup>, Silvia Martins<sup>2</sup>, Eric Strain<sup>3</sup>, Ramin Mojtabai<sup>4</sup>, Carla Storr<sup>5</sup>, <sup>1</sup>Taipei City Hospital, Taipei, Taiwan, <sup>2</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>3</sup>Johns Hopkins University School of Medicine, Baltimore, MD, <sup>4</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>5</sup>University of Maryland School of Nursing, Baltimore, MD
- 4:15 Using timeline methodology to visualize qualitative treatment trajectories of youth enrolled in an RCT of extended-release naltrexone

  Shannon Mitchell<sup>1</sup>, Laura Monico<sup>1</sup>, Elizabeth Lertch<sup>1</sup>, Robert Schwartz<sup>1</sup>, Jan Gryczynski<sup>1</sup>, Kevin O'Grady<sup>2</sup>, Marc Fishman<sup>3</sup>, <sup>1</sup>Friends Research Institute, Baltimore, MD, <sup>2</sup>University of Maryland-Psychology, College Park, MD, <sup>3</sup>Mountain Manor Treatment Center, Emmitsburg, MD
- 4:30 Time trend analysis of gender differences in the prevalence of deviant behavior, risk preference and marijuana use among adolescents from 2002 to 2014

  Shadiya Moss<sup>1</sup>, Silvia Martins<sup>1</sup>, Katherine Keyes<sup>2</sup>, <sup>1</sup>Columbia University, New York, NY, <sup>2</sup>Columbia University Mailman School of Public Health, Newark, NJ
- 4:45 A pilot randomized controlled trial of a technology-based substance use intervention for youth exiting foster care

  Jordan Braciszewski<sup>1</sup>, Golfo Tzilos<sup>2</sup>, Roland Moore<sup>3</sup>, Robert Stout<sup>3</sup>, <sup>1</sup>Henry Ford Health System, Detroit, MI, <sup>2</sup>University of Michigan, Ann Arbor, MI, <sup>3</sup>Pacific Institute for Research and Evaluation, Washington, DC
- 5:00 Short-term effects of a smartphone application plus BMI in reducing substance use and sexual risk among homeless young adults: Results from a randomized controlled trial Ronald Thompson<sup>1</sup>, Deborah Hasin<sup>1</sup>, <sup>1</sup>Columbia University, New York, NY
- 5:15 Physician screening and advice on adolescent substance use according to sexual orientation

  Jeremy Luk<sup>1</sup>, Stephen Gilman<sup>1</sup>, Denise Haynie<sup>1</sup>, Bruce Simons-Morton<sup>1</sup>, <sup>1</sup>National Institute of Child Health and Human Development, Bethesda, MD

#### **Oral Communications 33**

Fontaine E 3:30 - 5:30 PM

# DESIGNED FOR SUCCESS: IMPROVING CLINICAL TRIALS

Chairs: Margaret Wolff and Karen Hartwell

- 3:30 Smart capsules are a promising tool to improve medication adherence in clinical trials K. Hartwell, Medical University of South Carolina, Charleston, SC
- 3:45 Reconsidering the removal of the legal problems criterion from DSM-V: Legal problems and substance use disorder severity in a nationally representative sample Kelly Moore<sup>1</sup>, Sherry McKee<sup>1</sup>, <sup>1</sup>Yale School of Medicine, New Haven, CT
- 4:00 Application of randomized response technique to the nationwide general population survey on drugs in the Republic of Georgia
  Irma Kirtadze<sup>1</sup>, David Otiashvili<sup>1</sup>, Mzia Tabatadze<sup>1</sup>, Irina Vardanashvili<sup>2</sup>, Lela Sturua<sup>3</sup>, Tomas Zabransky<sup>4</sup>, James Anthony<sup>5</sup>, <sup>1</sup>Addiction Research Center, Tbilisi, GA, <sup>2</sup>Ilia State University, Tbilisi, GA, <sup>3</sup>National Center of Disease Control and Public Health, Tbilisi, GA, <sup>4</sup>Real Escuela Superior de Arte Dramático, Madrid, Spain, <sup>5</sup>Michigan State University, Lansing, MI
- 4:15 Substance use disorder symptoms and HIV medication adherence
  Margaret Wolff<sup>1</sup>, Aimee Campbell<sup>2</sup>, Susan Tross<sup>3</sup>, Laurel Weaver<sup>1</sup>, Don Des
  Jarlais<sup>1</sup>, <sup>1</sup>Icahn School of Medicine at Mount Sinai, New York, NY, <sup>2</sup>Columbia
  University and NYSPI, New York, NY, <sup>3</sup>Columbia University, New York, NY
- 4:30 Adherence across FDA-approved medications for alcohol use disorders in a VA population

  James Walker<sup>1</sup>, Jeffrey Korte<sup>1</sup>, Aimee McRae-Clark<sup>1</sup>, Karen Hartwell<sup>1</sup>, <sup>1</sup>Medical University of South Carolina, Charleston, SC
- 4:45 Study characteristics account for the majority of variance in clinical trials of medications for alcohol use disorders: A meta-analysis

  Elias Klemperer<sup>1</sup>, John Hughes<sup>2</sup>, <sup>1</sup>Vermont Center on Behavior and Health, Burlington, VT, <sup>2</sup>University of Vermont, Burlington, VT
- Development, feasibility, and implementation of the misuse, abuse, and diversion drug event reporting system (MADDERS®) for classifying misuse and abuse-related events in clinical trials
   Roi Treister¹, Ryan Lanier¹, Imrana Kazam¹, Nathalie Erpelding¹, Harrison Elder¹, Maitreyee Mohanty¹, Dolapo Lawal¹, Judith Jones², Nathaniel Katz¹, ¹Analgesic Solutions, Natick, MA, ²The Degge Group, Ltd.
- 5:15 Retention and drug use among treatment-resistant patients transferred to a 'Second Chance' methadone maintenance treatment program

  Emytis Tavakoli¹, Emily Deal², Gary Rhodes³, Edward Mischel³, Carl Christensen³,
  Alireza Amirsadri³, Mark Greenwald³, ¹Wayne State University, Alborz University of Medical Sciences, Montreal, Quebec, Canada, ²Kalamazoo College, Kalamazoo,
  MI, ³Wayne State University, Detroit, MI

# **Symposium XVI**

Fontaine F 3:30 - 5:30 PM

# SYNTHETIC CANNABINOIDS: THINKING OUTSIDE OF THE POT

Chairs: Jenny Wiley and Brian Thomas

3:30	The epidemiology of synthetic cannabinoids: It's frustrating and confusing J. Maxwell, University of Texas at Austin, Salisbury, NC
3:55	Synthetic cannabinoids and spice – A real-life chemical exposure potpourri B. Thomas, RTI International, Research Triangle Park, NC
4:20	Role of biotransformation in the pharmacological and toxicological effects of synthetic cannabinoids  B. Fantegrossi, University of Arkansas for Medical Sciences, Little Rock, AR
4:45	Journey to the dark side and back: From super agonists to antagonists J. Wiley, RTI International, Research Triangle Park, NC
5:10	DISCUSSANT: Translational implications: A "street-level" view J. Trecki, Drug Enforcement Administration (DEA), Springfield, VA

### **SWEEPSTAKES DRAWING**

Fontaine F 5:35 - 6:00 PM

YOU MUST BE SEATED IN ONE OF THE SESSIONS STARTING AT 1:15 PM IN ORDER TO HAVE YOUR BADGE COLLECTED

HAVE A SAFE TRIP HOME! SEE YOU IN SAN DIEGO, CALIFORNIA JUNE 9 – 14, 2018

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#### Sunday, June 18

I. What is the Role of Sleep in Substance Use? Evidence from Studies of Cannabis, Alcohol, and Opioid Use

Chairs: Patrick Finan and Brant Hasler

Sleep disturbance is pervasive in society. Between 10% and 30% of the population experience a range of symptoms of insomnia, defined as difficulty initiating or maintaining sleep with accompanying daytime impairments. Recently, there has been a surge in research investigating sleep among individuals with substance use disorders (SUDs), revealing that sleep disturbance is more prevalent and severe among those with SUDs compared to the general public. This symposium addresses the current state of the science on sleep in SUDs by evaluating sleep and circadian disturbance through multiple assessment modalities [self-report, salivary melatonin, and electroencephalography (EEG)] and in the context of varying degrees of substance use. Topics covered will include the theoretical view that sleep disturbance increases risk for SUDs by altering affective tone via alterations to mesolimbic reward system neurocircuitry; the role of circadian rhythms in altering reward system function in adolescents and young adults with regular alcohol use; ambulatory sleep EEG data from treatment-seeking cannabis users; and sleep and circadian differences, gathered across multiple assessment modalities, in cannabis and alcohol users. Novel, unpublished data will be presented throughout the symposium.

II. Translational Approaches to Uncovering the Mechanisms Underlying Neonatal Abstinence Syndrome

Chairs: Lisa Brents and Jessica Coker

Neonatal abstinence syndrome (NAS) is a constellation of withdrawal symptoms that most often occurs in newborns chronically exposed to opioids during the prenatal period. Opioid-induced NAS is characterized by inconsolable high-pitched crying, tremor, feeding problems (vomiting, diarrhea, poor sucking and breathing coordination), heightened pain sensitivity, and sleep disturbances. In step with the ongoing opioid abuse epidemic, the incidence of NAS has risen almost 5-fold since 2000, from 120 to 580 per 100,000 children born in U.S. hospitals. As such, important clinical research focusing on NAS epidemiology, NAS assessment and symptom scoring, and clinical care for the mother-child dyad has increased; however, basic research that delves into the mechanisms of NAS risk and development has not been as greatly stimulated. Such research, which can be conducted in both humans and rodent models, is needed for the development of new pharmacological and non-pharmacological preventions and treatments for NAS. Research to be presented in this symposium focuses on NAS mechanisms; specific topics will include opioid pharmacokinetics and pharmacogenetics in human mother-child dyads and rodent models of prenatal opioid exposure and neonatal opioid withdrawal. The overall goal of the symposium is to synergize the development of new NAS preventions and therapies by focusing the attention of a diverse audience of addiction researchers on the untapped potential of applying basic science research to NAS.

#### Sunday, June 18

III. Dark Minds: Neural and Biobehavioral Substrates of Negative Affect Regulation

in Addiction

Chairs: Sarah Yip and Lora Cope

Emotion regulation, the ability to dynamically influence the experience and expression of one's emotions, is a central adaptive process that is altered in addiction and plays a key role in the acquisition, maintenance, and outcome of substance use disorders. However, the neurobiological substrates of emotion regulation among individuals with addictions remain poorly characterized. This symposium will showcase novel human neuroimaging and laboratory work in order to explore negative affective and control-related aspects of emotion regulation as: (i) a vulnerability factor for addiction; (ii) a predictor of future substance use; and (iii) a target for treatment development. Speakers will present neuroimaging evidence for altered processing of negative affect among adolescents with illicit substance use and among young adults with a non-drug addiction (Internet gaming disorder), as well as on the prognostic significance of brain activations to negative affective stimuli in relation to later cannabis- and alcohol-use in youth. In addition, data from laboratory studies will be presented to demonstrate that cognitive regulation of emotion is impaired during early withdrawal from cocaine, and is an effective predictor of relapse outside the laboratory that may be improved by adrenergic agents.

#### Monday, June 19

IV. Brain Recovery in Addiction: From Biomarkers to Functional Outcomes Chairs: Rajita Sinha and Carlos Blanco

Chronic drug abuse results in structural and functional brain changes that map onto cognitive, social and emotional adaptive processes that significantly impact development, course and severity of addictive disorders. At the same time, with effective treatments and abstinence, addicted patients recover, and yet, little is known about brain recovery and its impact on clinical and functional outcomes. Speakers in this symposium will present new neuroimaging findings combined with clinical relapse and recovery outcomes to begin to shed light on brain processes that prevent relapse and are significant in regaining cognitive, emotional and adaptive functioning during addiction recovery. Talks will demonstrate that 1) neural substrates that process aversive states undergo significant changes as a function of recovery from acute substance use disorder. consistent with the notion that prolonged substance use is associated with an allostatic state; 2) brain structural, fMRI and event-related potential results in cocaine-addicted individuals showing recovery of the neural correlates underlying advantageous decision making and other executive functions, drug-seeking and cue-induced craving; 3) former cigarette and cocaine users have structural and functional brain changes associated with improved cognitive control in abstinence; 4) brain structural and fMRI of stress, trauma and drug cue responses can prospectively predict relapse and recovery from substance use disorders. The discussion will include potential biomarkers of addiction relapse and recovery that can inform novel treatment development efforts in addiction from a precision medicine perspective.

#### Monday, June 19

V. Informing Tobacco Product Regulatory Policies through Addiction-Related Research Chairs: Jennifer Naylor and Lynn Hall

The Tobacco Control Act granted the Food and Drug Administration's (FDA) Center for Tobacco Products (CTP) the authority to regulate the manufacture, marketing, and distribution of tobacco products to reduce the harm from tobacco use and protect the public health. CTP relies on tobacco regulatory science research to inform its regulatory activities in several priority areas, including reducing the addictiveness of tobacco products. The overall goal of this symposium is to bring the addiction community up to date about how current addiction research is being used to inform FDA's regulatory authority. Speakers will present an overview and data related to multiple research areas currently informing tobacco regulatory science, including rodent, nonhuman primate, and human subjects. Specifically, the proposed research areas include investigations of the reinforcing effects of tobacco product constituents, preclinical models aimed at describing and validating biological markers of nicotine dependence, the role of flavor additives in the potential abuse liability of tobacco products, and the usefulness of behavioral economics and behavioral marketplace models to describe and predict tobacco use behavior. The discussant will highlight parameters that characterize tobacco regulatory science, and stimulate discussion of how future addiction-related studies may inform the FDA's regulation of tobacco products.

VI. Sex as a Biological Variable: Research Findings from NIH Office of Research on Women's Health and NIDA Center Grants – Ahead of Its Time or Long Overdue? Chairs: Cora Lee Wetherington and Sherry McKee

The first three speakers in this symposium are recipients of P50 center grants co-funded by the NIH Office of Research on Women's Health (ORWH) and NIDA under ORWH's Specialized Centers of Research (SCOR) on Sex Differences program which supports established scientists conducting research at 11 centers across the country that each integrate basic, clinical, and translational research approaches with a primary sex/gender focus. The ORWH/NIDA SCORs, now in at least their fifth year, each take a sex/gender-based translational perspective with a view toward therapeutic approaches, both pharmacologic and behavioral. Research findings will be presented from animal and human projects focusing on probing the noradrenergic system and its interactions with cholinergic and dopamine systems in stress-induced smoking relapse; the impact of oxytocin and noradrenergic system manipulations in cocaine and nicotine dependence; and medications to reduce cocaine, nicotine and marijuana use and relapse via reducing impulsivity. A fourth speaker will elaborate on the recent NIH Sex as a Biological Variable (SABV) policy with recent research findings that inform implementation of that policy in drug addiction research. Finally, the discussant will tie together and synthesize the presentations from an historical, translational and moving-forward perspective, leaving time for panel and audience dialogue. The underlying goal of the symposium is to emphasize the scientific and translational benefit, indeed necessity, of incorporating SABV across the full continuum of drug abuse research in order to achieve the goals of the Precision Medicine Initiative for both men and women.

## Tuesday, June 20

VII. Pain and Addiction: Opioids and Beyond

Chairs: Martin D. Cheatle and Peggy Compton

The prevalence of chronic pain continues to rise in the United States causing individual suffering and contributing to morbidity, mortality and disability and burgeoning economic and societal costs. Approximately 30% of adult Americans suffer from chronic pain and the estimated annual cost of chronic pain in the United States is between \$560 to over \$600 billion including the cost of healthcare and lost productivity. Individuals suffering from chronic pain tend to present with multiple medical and psychiatric co-morbidities including opioid misuse/abuse. The national attention on the "opioid epidemic" has stimulated a great deal of scholarly activity on identifying risk factors and mitigation strategies to curtail the soaring rate of prescription opioid misuse, abuse and opioid-related fatalities. While prescription opioid misuse and abuse has become a public health crisis, other substances of abuse are also common in patients with pain and can be equally as devastating to an individual's quality of life. The specific aim of this symposium is to provide an overview of the current state of the field of pain and addiction including the highlydebated issues surrounding prescription opioids but going beyond opioids to address other substances of abuse. This multidisciplinary panel will provide data from original research on a spectrum of substances of abuse in the pain population including: nicotine; alcohol, opioids and cannabis and a novel pain treatment program for individuals completing substance abuse treatment.

VIII. Understanding Alcohol and Nicotine Co-Use: Rat, Nonhuman Primate, and

Human Laboratory Findings

Chairs: Elise Weerts and David Drobes

Alcohol and nicotine are often co-abused, and individuals with concurrent alcohol and tobacco use disorder have the poorest treatment outcomes. Basic research can increase our understanding of the environmental and biobehavioral mechanisms underlying alcohol and nicotine use and co-addiction, and facilitate the development of better treatments. This symposium will provide a translational view of alcohol and nicotine interactions on drug-taking behaviors and cue reactivity in rodents, non-human primates and humans. The first speaker will present his preclinical rodent model of co-administration of alcohol and nicotine. As both drugs have been shown to affect endogenous opioid as well as nicotinic acetylcholinergic activity, his studies examined data on how co-administration impacts the effects of naltrexone and varenicline on alcohol and nicotine self-administration. A second talk will present a preclinical non-human primate model of concurrent alcohol and nicotine self-administration, with research that addresses current questions on how to treat alcoholic smokers; Another talk will describe a series of human laboratory studies examining the effects of salient alcohol and nicotine cues, as well as drug priming effects, on motivation to use both substances and discuss a common theme that involves the role of individual differences in drug intake and/or dependence as moderators of cue and drug effects.

#### Tuesday, June 20

IX. Legal but Not So Safe: Prevalence, Effects, Strategies for Prenatal Alcohol,

Marijuana, and Tobacco Use

Chairs: Yukiko Washio and Philip May

Drinking alcohol and smoking cigarettes during pregnancy are the leading modifiable risk factors for pregnancy-related morbidity, mortality, and adverse outcomes in children. Fetal alcohol spectrum disorders (FASD) as a result of prenatal alcohol exposure are currently known as the leading cause of mental retardation in the U.S. and far more prevalent among children than was previously thought. Cigarette smoking is associated with a number of adverse maternal and child health problems and more information is needed regarding the impact of alternative tobacco products on health outcomes. Recent evidence has shown that prenatal exposure to cannabis and THC can cause many serious, adverse effects on birth outcomes. Although most women are able to abstain from drug use in the prenatal period, these three substances remain the most commonly co-used substances during pregnancy, with alcohol being used by women of all social strata especially during the first two trimesters. While marijuana is becoming more available legally, potentially impacting public perception of the harm of using marijuana, public health education on the neonatal consequences of drinking alcohol and smoking has contributed to an increase in maternal under-reporting of these substances. The specific aims of the proposed session are to (1) present the most recent evidence on the prevalence and effects of maternal alcohol, tobacco, and marijuana use on birth and child outcomes with the most recent evidence with regard to FASD; and (2) present clinical and public health strategies that can potentially reduce maternal drinking, tobacco, and marijuana use.

X. How Fast and How Often? The Temporal Pattern of Drug Use Is Decisive in Addiction Chairs: Anne-Noël Samaha and Terry Robinson

Core features of cocaine use in addicts are intermittency, between and within bouts of use, and the use of routes that lead to rapid drug onset. However, how often and how fast drug levels rise are generally ignored in animal models of addiction. This symposium will show that these temporal factors are critical in addiction and ignoring them can lead to false conclusions. There is increasing data on the patterns of voluntary drug taking in laboratory rodents, but virtually none in humans. The work presented includes studies on the frequency and dosage of heroin and cocaine taking in outpatients of an addiction clinic. The findings will be linked to results from animal studies and drug reward theories. Intermittency of use is not captured by traditional selfadministration procedures in animals. An Intermittent-Access self-administration procedure promotes addiction-like behaviors, including escalation of intake, high motivation for cocaine and robust reinstatement of drug seeking. Intermittent and rapid spikes in brain cocaine levels each promote addiction. Intermittent-Access self-administration leads to less cocaine intake than continuous access, but promotes greater motivation for the drug. Furthermore, within Intermittent-Access sessions, rapid cocaine injections evoke more motivation for the drug than slower injections. It will be shown that the temporal pattern of cocaine use is critical in determining neurochemical adaptations. These studies highlight the importance of using animal models of addiction that consider the temporal kinetics of drug use.

## Wednesday, June 21

XI. Cloudy, with a Chance of Intoxication: E-vape Models of Drug Exposure in

Laboratory Animal Models

Chairs: Michael Taffe and Julie Marusich

Humans ingest a wide variety of psychotropic drugs via inhalation and this route of administration has been associated with increased liability for uncontrolled use and addiction. Inhalation techniques include combustion of dried plant matter (tobacco, cannabis), vaporization of crystalized drug (cocaine, methamphetamine) and, increasingly, via vapor produced with ecigarette devices. Despite this fact, laboratory animal models of drug inhalation have been rare compared with other routes of administration. Recent adaptation of vapor inhalation techniques based on e-cigarette type technology has facilitated study of drug inhalation in rodent models. Participants in this symposium will overview 1) the behavioral effects of inhalation of synthetic cannabinoids in mice; 2) the self-administration, and behavioral effects, of vaporized sufentanil; 3) the affective and cognitive effects of inhalation of crude cannabis extracts in rats; 4) the selfadministration of vaporized methamphetamine and substituted-cathinone stimulants in rats. The symposium will therefore address a range of behavioral and physiological endpoints relevant to many aspects of substance use and demonstrate the efficacy of inhalation approaches for multiple drugs. The Discussant will summarize the data presented within the context of this emerging field of drug abuse research, describe related progress from the field at large and lead an audience discussion of the advantages, disadvantages and future application of these approaches.

XII. Opioid and Cannabinoid Interactions: Preclinical and Clinical Measures of

Pain, Abuse Liability and Dependence Chairs: Margaret Haney and Aron Lichtman

The current opioid abuse and overdose crisis coincides with increased societal acceptance of cannabis for medical use. Given the bidirectional, modulatory relationship between the opioid and cannabinoid systems, a symposium highlighting recent preclinical and clinical evidence of the interaction between these two drug classes on endpoints related to pain, abuse liability and dependence is timely and significant. Talks will cover cannabinoid receptor agonists and endocannabinoid catabolic enzyme inhibitors, both which increase the antinociceptive potency of opioids in mouse models of acute and chronic pain, and ameliorate symptoms of opioid withdrawal; combining opioid receptor agonists and cannabinoid receptor agonists to achieve antinociceptive effects at doses that are much smaller than the effective doses of each administered alone in non-human primates; human laboratory data showing that smoked cannabis enhances the analgesic effects of sub-therapeutic effects of opioids; evaluating the efficacy of dronabinol (synthetic THC), to suppress opioid withdrawal signs in adults with physical dependence on opioids; and the effects of an opioid receptor antagonist on the reinforcing effects of smoked cannabis. Overall, this translational symposium is expected to be of significant interest to both the CPDD and ICRS memberships and to generate an engaged scientific discussion.

## Thursday, June 22

XIII. Endocannabinoid Involvement in Stress, Reward and Motivation: Implications for Understanding and Treating Substance Use Disorder

Chairs: John Mantsch and Cecilia Hillard

Endocannabinoids are endogenous lipid signaling molecules that are functionally related to delta-9-tetrahydrocannabinol (the primary active constituent in cannabis) and exert their effects via Gprotein coupled CB1 and CB2 receptors. Brain endocannabinoid signaling modulates synaptic activity in regions implicated in reward, affect and motivation and is stress-responsive. The anatomy, regulation and functional consequences of endocannabinoid signaling suggest that it contributes to illicit drug use and addiction. Accordingly, preclinical animal studies have implicated endocannabinoids and their actions at both CB1 and CB2 receptors in drug-taking and drug-seeking behavior, as well as other addiction-related phenotypes, while genetic polymorphisms in the endocannabinoid system have been associated with substance use disorder in clinical populations. This symposium will first describe findings supporting critical roles for endocannabinoid signaling in stress-related responses and in the regulation of positive and negative reinforcement through modulation of the dopamine system. Evidence implicating endocannabinoid signaling via both CB1 and CB2 receptors in the regulation of drug-seeking and drug-taking behavior in experimental animal models will be presented. Discussion topics will include opportunities and challenges for developing medications targeting the endocannabinoid signaling, potential implications for cannabis users, and gaps in our understanding of the endocannabinoid system as it relates to findings presented in the symposium.

XIV. Evaluating the Therapeutic Potential of Medical Cannabis and Phytocannabinoids from Preclinical Animal Models to the Pharmacoepidemiology of Medical Cannabis Use

Chairs: Ziva Cooper and Igor Grant

While half of the U.S. has enacted laws to legalize the use of medical cannabis, controlled studies investigating its potential therapeutic effects remain sparse. The overarching aim of this symposium is to present findings from preclinical laboratory animal studies to large populationbased studies that speak directly to the potential therapeutic effects of specific phytocannabinoids and cannabis, while also addressing adverse effects including abuse liability and cognitive performance. The panel will include 1) preclinical studies investigating the effects of phytocannabinoids hypothesized to have therapeutic effects including cannabidiol alone and in combination with delta-9-tetrahydrocannabinol in animal models of neuropathic pain, learning and memory, and physical dependence, 2) controlled human laboratory studies investigating variables that contribute to the analgesic effects of cannabis and cannabinoids including route of administration and sex-dependent effects, 3) data from the MIND (Marijuana Investigations for Neuroscientific Discovery) Program that assesses clinical endpoints, cognitive performance, as well as multimodal neuroimaging findings in patients using medical cannabis and 4) the pharmacoepidemiology of medical cannabis use, including data from a Canadian-based national multicenter study looking at the safety of medical cannabis use among patients suffering from chronic pain (COMPASS) and the Quebec Cannabis Registry to highlight the impact that cannabis use may have on clinical outcomes.

#### Thursday, June 22

XV. Applications of Choice Procedures to Drug Abuse Research Chairs: Steve Negus and Richard Lamb

Drugs of abuse are stimuli that can reinforce behavior. Determinants of drug reinforcement are often studied preclinically with self-administration procedures in which no other behavior is programmed for reinforcement; however, natural environments contain many non-drug stimuli that can function as reinforcers, and individuals allocate their behavior (or "choose") between activities maintained by drug and non-drug stimuli. Moreover, addiction is defined in part by maladaptive allocation of behavior to drug choice, and treatment seeks both to reduce drug choice and to promote behavioral re-allocation to more adaptive choice of non-drug alternatives. The determinants of drug choice can be studied with laboratory choice procedures, in which drug and non-drug alternatives are available under concurrent schedules of reinforcement, and principal dependent variables include measures of both response allocation and response rate. symposium will feature talks that illustrate use of drug choice procedures to investigate behavioral, environmental, biological and pharmacological determinants of drug choice in rats, monkeys, and humans. Talks will describe an ethanol-vs.-food choice procedure in rats to model recovery from, and relapse to, ethanol self-administration; social rank as an environmental determinant of cocaine-vs.-food choice in group-housed cynomolgus monkeys; the role of sex as a biological determinant of cocaine-vs.-food choice in rats; and development of parallel cocaine choice procedures in rhesus monkeys and humans for translational research on mechanisms of cocaine reinforcement. The discussant will highlight shared themes and future research opportunities.

XVI. Synthetic Cannabinoids: Thinking Outside of the Pot Chairs: Jenny Wiley and Brian Thomas

Originally developed as research tools, synthetic cannabinoids contributed to significant scientific advances in the cannabinoid field before they were diverted for recreational use beginning in the early 2000s. Since then, the number of compounds with diverse chemical structures that have appeared on the streets has proliferated and the consequences in damaged and lost lives have multiplied. This symposium will focus on recent research on synthetic cannabinoids. The symposium will be introduced with a presentation of the latest epidemiological findings on synthetic cannabinoid use, including an overview of demographics of use and specific compounds being used. These compounds do not reach or travel through the body unchanged; rather, they undergo potential degradative and thermolytic processes prior to entry and metabolic processes after smoking. These processes may change the actual chemicals to which individuals are exposed and may alter their subsequent effects on behavior. Findings on the thermolytic and metabolic fate of synthetic cannabinoids will be followed by a presentation on the in vivo pharmacological consequences of synthetic cannabinoids and their metabolites. In addition, novel structural templates for synthetic cannabinoids will be presented, along with data on their diverse functional activities, ranging from super agonists to antagonists. The discussant will provide a street-level view of how use of these compounds is affecting individual lives and communities. Findings presented in the symposium and their translational implications are expected to serve as the basis for a lively audience discussion with the speaker panel.

#### Sunday, June 18

I. Big data: Ethical considerations in human subjects research Chairs: Jonathan Stoltman and H. Westley Clark

This workshop is aimed at benefiting both junior and senior investigators in the audience through exposure to and discussion of potential ethical challenges when operating in this burgeoning area of research. The talks will be bookended by an introduction and robust discussion period moderated by an expert senior discussant. To appeal to a wide array of audience members, the panel includes human researchers ranging from junior to senior status with diverse interests within the substance abuse field. The workshop design includes brief description of Big Data in an addiction research context (e.g. CTNs and hospitals), the opportunities mining these repositories (i.e. electronic medical records, discussion boards, and mobile data) can offer, and the ethical considerations when using these sources. The workshop is designed to cover ethical considerations when using Big Data in a comprehensive manner, covering historical context, current controversies, the Common Rule, and human subject's protection. Additionally, our expert discussant is prepared to comment on the legal perspective of ethics in Big Data projects as well as facilitate discussion on these important topics.

Using behavioral and implementation sciences to achieve an AIDS-free generation among people who use drugs
 Chairs: Wendee Wechsberg and Don Des Jarlais

Since the beginning of the HIV/AIDS epidemic, people who use psychoactive drugs have been at increased risk for HIV infection and transmission from risky injection drug practices and risky sexual behaviors. As the epidemic has evolved, people who use opiates, stimulants, and marijuana have faced increasing disparities related to the continuum of care. Moreover, drug addiction can interfere with HIV treatment outcomes, directly through biological processes and indirectly through difficulties with HIV disease management. With the goal of an AIDS-free generation, funding priorities now emphasize biomedical approaches and implementation of evidence-based interventions. Biobehavioral research remains critical to ensure that all individuals—including the most difficult to reach—can derive the maximum benefit from new biomedical treatments to reduce HIV transmission, improve HIV-related clinical outcomes, and effectively manage HIVassociated comorbidities such as cognitive disorders and co-infections. Emphasis on implementation research pushes this evidence-based science to adoption and sustainability in real world settings. This workshop will highlight recent interdisciplinary research advances, examine the associations of prevalent use of psychoactive drugs among persons living with HIV on neurobehavioral processes and gene expression, and the implementation of biobehavioral prevention approaches for groups at high risk for HIV/AIDS in usual care. Our discussant will highlight the importance of integrating biobehavioral data and advancing science through implementation research.

#### Sunday, June 18

III. Assessment of abuse potential in clinical trials in the context of the finalized FDA guidance Chairs: Jack Henningfield and Michael Klein

Although misuse and abuse of centrally (CNS) active prescription drugs is a major public health issue, there is currently no well accepted standardized way to measure, characterize, and quantify misuse, abuse, and diversion related events for drugs in Phase II or Phase III clinical trials (CTs). Laboratory assessments of abuse liability typically involve drug-experienced subjects, and may not be generalizable to patients receiving CNS-active drugs during Phase II-III CTs or as part of routine clinical care. Sponsors may collect adverse events (AEs) of interest during CTs to identify abuse-related events, however no systematic method has previously been validated and accepted for characterizing and reporting such events. Opioid analgesics receive great scrutiny in regard to the potential for abuse, misuse, and diversion; however, other psychoactive drugs, such as stimulants and sedatives would also benefit from a standardized classification system to assess abuse potential during clinical development. The lack of suitable methods led the FDA-ACTTION public-private partnership to develop consensus terms and definitions for abuserelated events, and to review and provide guidance on standards for evaluation of abuse-related events in clinical trials. This workshop will address the need for reliable, validated tools to identify abuse-related events in clinical trials and classify them using standardized terminology, allowing the quantification of these events for regulatory submissions, providing participants information on recently developed approaches. The regulatory implications, including impacts on approval, labeling, and scheduling recommendations, of prospectively assessing abuse-related events in efficacy and safety CTs will also be addressed.

# IV. Annual CPDD design and analysis workshop Chairs: Sterling McPherson and Susan Mikulich-Gilbertson

In this third Annual CPDD Design and Analysis Workshop, the primary goal is to expose attendees to a variety of design and analysis issues and state-of-the art methods relevant to substance use research. Our specific aims are to present overviews with real-world examples on the following topics: 1) how to use count models to evaluate the impact of population level events (e.g., marijuana legalization, prescription opioid reformulation) in quasi-natural experiments 2) a primer on health utilities and quality-adjusted life years (QALYs) as relates to substance use research; 3) an overview of pharmacokinetics and pharmacodynamics and how to estimate drug exposure and understand drug and metabolite values; 4) how to use existing data to estimate population level pharmacokinetics and pharmacodynamics; followed by a discussion of 5) how to use these novel methodologies to ask and answer questions in substance use research. Each of these topics is timely and important for multiple domains of substance use research. Each will be presented in a non-technical, accessible fashion in an effort to generate discussion among presenters and audience members around how such considerations are applicable to various situations. Our intent is to empower other researchers by disseminating state-of-the-art methods as applied to real-world examples. The overall goal is to raise awareness and the level of quality in the methods that prevail throughout substance use research.

#### Monday, June 19

V. Navigating key stages of a career in addiction science Chairs: Denise Vidot and Qiana Brown

If you are a budding addictions investigator with new ideas and eager to find your niche in the world of research, but could use some guidance, then this workshop is for you. The workshop will focus on navigating three key early career stages: 1) Pre-Doctoral, 2) Post-Doctoral, and 3) Early Career/Faculty. Three of your colleagues, who have 'been there and done that' want to share their experiences with you. 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 your 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; obtaining grant-writing experience; establishing your niche and conveying its importance to potential employers; collaborating and networking; deciding whether to teach; lifework balance; finding the NIH funding mechanisms that are most appropriate for you and how to begin writing your grant; and crucial to it all – time management strategies. Each talk will have a centered theme of the value of your mentoring team as you travel the path to independent investigator.

VI. Development of adaptive treatment strategies in the management of drug dependence: Lessons learned from clinical trials currently in the field Chairs: Joy Schmitz and Charles Green

A core principle of drug addiction treatment states that no single treatment is appropriate for everyone; rather, treatments need to be adjusted based on patient characteristics and response in order to be maximally effective. Ideally, clinicians would identify a sequence of interventions that works best across different stages of treatment, from abstinence initiation to relapse prevention. Development of effective adaptive interventions calls for a shift in how we conduct randomized clinical trials (RCTs). The goal of this workshop is to highlight several real-world sequential, multiple assignment, randomized trials (SMART) currently in the field. Following brief introductory remarks on the role of adaptive experimental designs in addiction research, each speaker will describe how their trial is designed to answer questions of how and when to alter the course of treatment to improve patient outcome. By sharing insights and lessons learned from four diverse trials, the audience will gain practical knowledge in using SMARTs to address a broad range of problems related to substance use. Our discussant will review disadvantages and advantages of SMARTs relative to traditional fixed-intervention trial designs and describe future directions for adaptive intervention research.

## Monday, June 19

VII. Prescription monitoring programs – Issues and impact Chairs: Beth Sproule and Suzanne Nielsen

Prescription monitoring programs (PMP) are designed to enhance patient care and assist in the safe use of controlled prescription drugs, to help reduce the harms resulting from the use of controlled prescription drugs, and to assist in reducing the diversion of controlled prescription drugs. However, interest in PMP research has increased only in recent years. The aims of this workshop are to describe the challenges in the development and implementation of PMPs, to delineate the practice implications for health care practitioners, to demonstrate how PMP data can be used to evaluate the impact of prescribing guidelines, and to review the evidence to date of the effectiveness of PMPs. The context for PMPs as an intervention strategy to address the problem of prescription drug abuse will be discussed. Future research needs will be identified.

VIII. 23rd 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 widerange 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 22nd 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.

# Tuesday, June 20

IX. Writing workshop for emerging investigators: Profiting from peer review Chairs: James Sorenson and Eric Strain

The addiction research field needs increasingly productive investigators who create high-quality scientific reports. Peer review (feedback from colleagues) is a traditional means of improving the quality of science. The peer review process, however, can be demoralizing. Building on a previous CPDD workshop, our aim is to help emerging investigators to profit from the comments and suggestions of peers, mentors, and formal reviews of research manuscripts. Presenters include both emerging and established investigators, as well as a current editor of an addiction research journal and an editorial liaison. All presenters suggest both conceptual and practical guidelines, and they provide several useful resources. While the workshop is aimed at young investigators, both junior and senior colleagues can benefit and provide their perspective.

#### Tuesday, June 20

X. Epidemiology and public health research methods Chairs: Jim Anthony and Howard Chilcoat

This workshop series on epidemiology and public health research methods aims to provide participants with an introduction to three topics: (1) an epidemiological 'mutoscope' developed at Michigan State University, with comparison to a 'constrained regression' approach to age-period-cohort research; (2) an adaptation to four-parameter Hill functional analysis for epidemiological estimates, as an alternative to logistic regression for complex sample data, developed at University of Kentucky; and (3) the multiphase optimization strategy (MOST) developed at Pennsylvania State University to guide the evaluation of research evidence, to develop optimized behavioral interventions, and to enhance Type I and Type II translation of research. The workshop will enable participants to apply these research approaches in their own studies. At minimum, they will have a better understanding of published evidence based on these approaches.

XI. Advances in substance use disorder treatments for racial/ethnic minorities: Where do we go from here?

Chairs: Kathy Burlew and LaTrice Montgomery

A growing but compelling body of evidence suggests that interventions such as Motivational Interviewing (Montgomery et al., 2011), Cognitive Behavioral Therapy (Windsor et al., 2015) and Contingency Management (Montgomery et al., 2015) are inadequate for improving substance use disorder (SUD) outcomes for racial/ethnic minorities. One objective of the Minority Interest Group of NIDA's Drug Abuse Treatment Clinical Trials Network (CTN) is to identify effective SUD treatments for racial/ethnic minorities. Recent CTN research has identified promising directions for future treatments, such as the cultural adaptation of evidence-based treatments and the use of technology. The aim of this session is to provide recommendations from CTN research for improving SUD treatment outcomes across four racial/ethnic minority groups. Speakers will discuss the effectiveness of an exercise intervention for Hispanics; racial and ethnic differences in histories of sexual and physical abuse and implications for SUD treatment; a promising internetbased intervention for African American and Hispanic adults; adapting web-based interventions for American Indians/Alaska Natives; and a smart phone-based smoking intervention and the barriers for treatment among Asian Americans and Pacific Islanders. All speakers will address how their recent CTN research informs future directions for SUD treatment for racial/ethnic minorities.

## Tuesday, June 20

XII. NIDA medications development workshop: Addressing bad behavior in clinical trials

Chairs: David McCann and Tanya Ramey

This workshop will provide three brief presentations on topics related to research subject dishonesty/deception, including the description of important new procedures that can be implemented in clinical trials to address the problem. Specific aims are to familiarize attendees with 1) the results of survey research conducted on repeat clinical trial participants, many of whom have admitted to deceiving research investigators by withholding information (e.g., related to exclusionary medications or ongoing participation in another study), by exaggerating symptoms, or by pretending to have health problems that they do not have; 2) the availability of HIPPA-compliant clinical trial registries that can prevent the simultaneous enrollment of a subject in multiple clinical trials, or at multiple sites within a clinical trial; and 3) new medication adherence monitoring technologies, including smartphone-based remote observation with facial recognition software. Ample time will be provided for open discussion.

XIII. New NIH guidelines for reproducibility, rigor and transparency: Ethical and practical conundrums

Chairs: Michael Kuhar and Susan Weiss

A shocking finding has been that some scientific groups, including from Industry (Pharma) have been unable to replicate findings from key papers in their respective fields. This has led to a loss of public confidence in the scientific endeavor, and a major effort by the NIH and others to establish new guidelines to improve reproducibility. The guidelines for grant applications emphasize critical assessment of the scientific premise of a proposed project, and identifying strategies to improve the rigor and transparency of the work. These new guidelines are incorporated in the review of NIH grants and have also been endorsed by many journal editors; thus, they are receiving significant and well-deserved attention. The carrying out of rigorous, reproducible work with public funds is also an ethical issue. This workshop will address these topics by briefly describing the guidelines, presenting a realistic, but fictitious case, and then engaging the audience in discussion of how to best handle it. Topics to be covered include 1) evaluating the scientific premise -- assessing the quality of the scientific basis for a hypothesis, including in novel or developing areas of science; 2) ensuring rigorous methodology, with sufficient transparency for replication by other investigators; 3) investigator responsibilities for improving reproducibility, rigor, and transparency. The goal of this workshop is to help CPDD members understand these newer ethical requirements in concrete terms.

#### Acknowledgements

The following organizations and individuals have financially supported the work of the CPDD organization during the past year

Altasciences Clinical Research Gnatt Galloway

Apt Foundation Grünenthal USA, Inc.

Patrick Beardsley Margaret Haney

Behavioral Pharmacology Research Sarah H. Heil

**Unit at Johns Hopkins Medical School** 

Leonard Howell

Jack Bergman Marc J. Kaufman

George Bigelow Gundy Knos

Alan J. Budney

Dr. & Mrs. Donald Mees, Jr.

Charles O' Keeffe

Kathleen M. Carroll

John Neeld

Center for Substance Abuse Research,

Lewis Katz School of Medicine at Temple University

Wallace Pickworth
Howard D. Chilcoat

William Stoops

Theodore J. Cicero, Washington

University in St. Louis Jennifer Tidey

Timothy Condon David Tompkins

Toby K. Eisenstein Wendee Wechsberg

Loretta P. Finnegan Mark Wentland

Funding for this conference was made possible (in part) by 5 R13 DA 013192 - 13 from the National Institute on Drug Abuse

The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government

## NOTES

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