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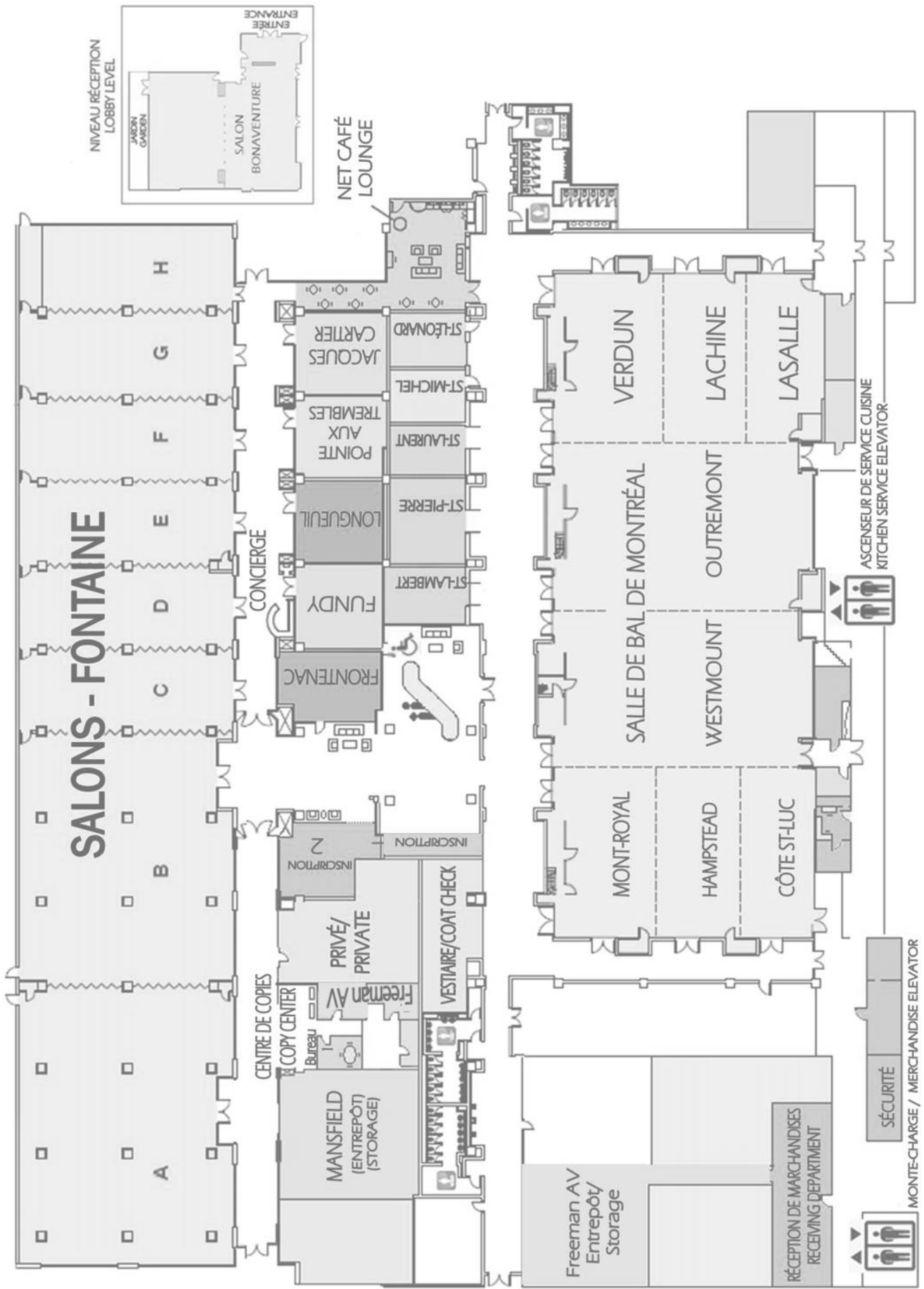
# **CPDD 79th Annual Scientific Meeting Program**

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**June 17-22, 2017**

**HÔTEL BONAVENTURE  
Montréal, Canada**





# SALONS - FONTAINE

NIVEAU RÉCEPTION / LOBBY LEVEL

NET CAFÉ LOUNGE

CONCIERGE

CENTRE DE COPIES / COPY CENTER

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INSCRIPTION

INSCRIPTION 2

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Freeman AV

VESTAIRE / COAT CHECK

Freeman AV Entrepôt / Storage

RÉCEPTION DE MARCHANDISES / RECEIVING DEPARTMENT

SÉCURITÉ

MONTE-CHARGE / MERCHANDISE ELEVATOR

ASCENSEUR DE SERVICE CUISINE / KITCHEN SERVICE ELEVATOR

VERDUN

LACHINE

LASALLE

SALLE DE BAL DE MONTRÉAL

WESTMOUNT

OUTREMONT

MONT-ROYAL

HAMPSTEAD

CÔTE ST-LUC

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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
- NIDA-Special Issues Group Meeting
- NIDA-ISAJE Workshop & NIDA International Networking Session
- NIDA International Plenary

Friday, June 16, 2017  
**Montreal Ballroom – Verdun**  
**1:45 PM – 3:45 PM**

Friday, June 16, 2017  
**Montreal Ballroom-  
Mont-Royal**  
**3:00 PM – 5:00 PM**

Friday, June 16, 2017  
**Montreal Ballroom –  
Lachine/Lasalle**  
**4:00 PM – 8:00 PM**

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**

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## Saturday, June 17, 2017

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### REGISTRATION

Bottom of  
escalator  
1:00 - 5:30 PM

### NIDA GRANT-WRITING (Pre-Registrants Only)

Fontaine A & B  
1:00 - 5:30 PM

### OPENING RECEPTION

Salon Bonaventure &  
Ville-Marie  
7:00 - 9:00 PM

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## Sunday, June 18, 2017

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### Plenary Program

Montreal Ballroom  
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
- 9:40 *Presentation of the Stephen G. Holtzman Travel Award for Preclinical Investigators to Jibrán Y. Khokhar*  
Introduction by Alan Budney
- 9:50 *Presentation of the CPDD/NIDA Media Award to Sam Quinones*  
Introduction by Meg Chisolm
- 10:05 *Presentation of the Joseph Cochin Young Investigator Award to Matthew Banks*  
Introduction by Steve Negus
- 10:15 *Presentation of the Mentorship Award to Stephen T. Higgins*  
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

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**Sunday, June 18, 2017**

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**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

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## Sunday, June 18, 2017

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- 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 Gudysh<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 Krawczyk<sup>1</sup>, Kenneth Feder<sup>2</sup>, Brendan Saloner<sup>2</sup>, <sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Department of Mental Health, Baltimore, MD, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

## 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, 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, <sup>2</sup>University of Kansas, Department of Medicinal Chemistry, Lawrence, KS, <sup>3</sup>University of Kansas School of Pharmacy, Lawrence, KS

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## Sunday, June 18, 2017

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- 5:30 *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>, Kenneth 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
- 5:45 *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

- 5:00 *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-HT<sub>2C</sub> 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
- 5:30 *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

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**Sunday, June 18, 2017**

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**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 VanVeldhuisen<sup>1</sup>, Gaurav Sharma<sup>1</sup>, Jennifer McNeely<sup>2</sup>, Robert Schwartz<sup>3</sup>, Li-Tzy Wu<sup>4</sup>, Geetha Subramaniam<sup>5</sup>, Jacqueline King<sup>1</sup>, Aimee Wahle<sup>1</sup>, <sup>1</sup>The Emmes Corporation, Rockville, MD, <sup>2</sup>New York University School of Medicine, New York, NY, <sup>3</sup>Friends Research Institute, Baltimore, MD, <sup>4</sup>Duke University School of Medicine, Durham, NC, <sup>5</sup>NIDA, 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

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**Sunday, June 18, 2017**

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**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 expectations 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

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**Sunday, June 18, 2017**

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**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.

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**Sunday, June 18, 2017**

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**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: ACTION 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 quasi-natural 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

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# Monday, June 19, 2017

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**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 Jones<sup>1</sup>, Joseph Jones<sup>1</sup>, Jason Hulen<sup>1</sup>, <sup>1</sup>United 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 Washio<sup>1</sup>, Neal Goldstein<sup>2</sup>, Amy Mackley<sup>3</sup>, Matthew Hoffman<sup>3</sup>, Robert Locke<sup>3</sup>, David Paul<sup>3</sup>, <sup>1</sup>Christiana Care Health Services/University of Delaware, Media, PA, <sup>2</sup>Christiana Care Health Services/Drexel University, Philadelphia, PA, <sup>3</sup>Christiana Care Health Services, Wilmington, DE
- 4 *Fetal assessment measured with multi-sensor abdominal array in buprenorphine-maintained women compared to controls*  
Jessica Coker<sup>1</sup>, Diana Escalona-Vargas<sup>1</sup>, Shona Ray-Griffith<sup>1</sup>, Curtis Lowery<sup>1</sup>, Hari Eswaran<sup>1</sup>, Zachary Stowe<sup>1</sup>, <sup>1</sup>University 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 Tong<sup>1</sup>, Elizabeth Wolf<sup>1</sup>, Roy Sabo<sup>1</sup>, Alex Krist<sup>1</sup>, James Pecsok<sup>1</sup>, Kassie Abbinanti<sup>2</sup>, Dace Svikis<sup>1</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>University 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

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- 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 Melbostad<sup>1</sup>, Alexis Matusiewicz<sup>2</sup>, Sarah Heil<sup>1</sup>, <sup>1</sup>University of Vermont, Burlington, VT, <sup>2</sup>University 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
- 13 *Examining patterns of tobacco product use among pregnant women*  
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 Petersen<sup>1</sup>, Catherine Mathews<sup>2</sup>, Esme Jordaan<sup>2</sup>, Charles Parry<sup>3</sup>, <sup>1</sup>South African Medical Research Council, Tygerberg, South Africa, <sup>2</sup>University of Cape Town, Western Cape, South Africa, <sup>3</sup>South African Medical Research Council, Tygerberg, South Africa

### NICOTINE I

- 18 *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
- 19 *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



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- 20 *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
- 22 *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
- 23 *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
- 24 *Neural mechanisms of impaired learning from errors in dependent smokers*  
Leonie Duehlmeier<sup>1</sup>, Bianca Levis<sup>1</sup>, Rob Hester<sup>1</sup>, <sup>1</sup>University of Melbourne, Coburg, Victoria, Australia
- 25 *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
- 26 *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
- 28 *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
- 29 *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
- 30 *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, <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
- 33 *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
- 34 *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
- 35 *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
- 36 *Cerebral blood flow changes within abstinent vs. satiated smokers*  
Bader Charani<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

- 38 *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
- 39 *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>, <sup>1</sup>Wayne State University, Detroit, MI
- 40 *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> <sup>1</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
- 42 *Reduction in cocaine use during a topiramate clinical trial among cocaine and alcohol-dependent 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
- 43 *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
- 44 *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
- 45 *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 Nicastrí<sup>2</sup>, Arthur Andrade<sup>2</sup>, <sup>1</sup>University of Sao Paulo Medical School, Sao Paulo SP, Brazil, <sup>2</sup>University of Sao Paulo Medical School, Sao Paulo SP, Brazil
- 46 *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
- 47 *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, <sup>2</sup>University of Cape Town, Western Cape, South Africa, <sup>3</sup>UCLA, Los Angeles, CA
- 48 *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
- 49 *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, <sup>3</sup>Washington State University, College of Medicine, Spokane, WA

- 50 *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

- 51 *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
- 52 *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
- 53 *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
- 54 *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
- 55 *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
- 56 *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
- 57 *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

- 58 *Comparative mammalian genetics of addiction disorders*  
E. Vallender, University of Mississippi Medical Center, Jackson, MS
- 59 *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

- 60 *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
- 61 *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
- 62 *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, <sup>2</sup>Universidade Federal de São Paulo, São Paulo, Brazil
- 63 *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>, <sup>1</sup>Universidad de Guadalajara, Guadalajara, Jalisco, Mexico, <sup>2</sup>Universidad de Guadalajara, Guadalajara, Jalisco, <sup>3</sup>Universidad de Colima, Colima, Mexico
- 64 *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
- 67 *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

- 69 *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, <sup>2</sup>RTI International, Research Triangle Park, NC, <sup>3</sup>Winston Biopharmaceutical Consulting, <sup>4</sup>Hennepin County Medical Center, Minneapolis, MN
- 70 *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
- 71 *Sleep disturbances in subjects with opioid use disorder on buprenorphine*  
Alissa Coffey<sup>1</sup>, V.B Krishnamurthy<sup>1</sup>, S Yadav<sup>1</sup>, J Singh<sup>1</sup>, L Kong<sup>1</sup>, E. F. Saunders<sup>1</sup>, A.N Vgontzas<sup>1</sup>, E. Bixler<sup>1</sup>, Roger Meyer<sup>2</sup>, <sup>1</sup>Penn State College of Medicine, Hershey, PA, <sup>2</sup>Penn 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
- 74 *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, <sup>2</sup>AIDES, France
- 75 *Relapse to opioid dependence after inpatient or outpatient treatment: Protective effect of injection naltrexone*  
Edward Nunes<sup>1</sup>, Michael Gordon<sup>2</sup>, Peter Friedmann<sup>3</sup>, Mei-Chen Hu<sup>4</sup>, Joshua Lee<sup>5</sup>, Donna Chen<sup>6</sup>, Marc Fishman<sup>7</sup>, Tamara Boney<sup>8</sup>, Donna Wilson<sup>3</sup>, Charles O'Brien<sup>8</sup>,  
<sup>1</sup>Columbia University and NYSPI, New York, NY, <sup>2</sup>Friends Research Institute, Baltimore, MD, <sup>3</sup>Baystate Health, Springfield, MA, <sup>4</sup>Columbia University Medical Center, Department of Psychiatry, New York, NY, <sup>5</sup>New York University School of Medicine, New York, NY, <sup>6</sup>University of Virginia, Charlottesville, VA, <sup>7</sup>Mountain Manor Treatment Center, Emmitsburg, MD, <sup>8</sup>University of Pennsylvania, Philadelphia, PA
- 76 *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

- 77 *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
- 78 *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
- 79 *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 MPH<sup>5</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
- 80 *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**

- 82 *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
- 83 *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
- 84 *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
- 85 *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

- 86 *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
- 87 *Gender and race/ethnic differences in the persistence of alcohol, drug, and poly-substance 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

- 88 *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
- 89 *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
- 90 *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
- 91 *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
- 92 *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



- 93 *Seriously mentally ill adults who are stably housed are more likely to complete a contingency management intervention for alcohol dependence*  
Emily Leickly<sup>1</sup>, Jordan Skalisky<sup>2</sup>, Oladunni Oluwoye<sup>1</sup>, Sterling McPherson<sup>3</sup>, Debra Srebnik<sup>4</sup>, John Roll<sup>5</sup>, Richard Ries<sup>4</sup>, Michael McDonell<sup>1</sup>, <sup>1</sup>Washington State University, Program of Excellence in Addictions Research, Spokane, WA, <sup>2</sup>Washington State University, Pullman, WA, <sup>3</sup>Washington State University, College of Medicine, Spokane, WA, <sup>4</sup>University of Washington, Seattle, WA, <sup>5</sup>Washington State University College of Nursing, Spokane, WA
- 94 *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
- 95 *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
- 96 *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
- 97 *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
- 98 *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
- 99 *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

- 100 *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
- 101 *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 medication-assisted 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 *Multisite 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, <sup>3</sup>World Health Organization, Geneva, Switzerland, <sup>4</sup>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
- 111 *Pain and affective symptoms in chronic pain patients in opioid addiction treatment 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

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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

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- 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>, <sup>2</sup>Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands, <sup>1</sup>University of Toronto, 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

Chairs: Johannes 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 Medicine, Gainesville, FL

- 11:30 *Differences in co-use of cigarettes with alcohol vs. marijuana among young adults: A daily 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
- 11:45 *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

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- 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
- 11:30 *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
- 11:45 *Naltrexone implant, compared to oral naltrexone, improves HIV treatment outcomes of opioid-addicted patients*  
Evgeny Krupitsky<sup>1</sup>, Edwin Zvartau<sup>2</sup>, Elena Blokhina<sup>2</sup>, Elena Vladimirovna Verbitskaya<sup>3</sup>, Dmitry Lioznov<sup>3</sup>, Tatyana Yaroslavtseva<sup>3</sup>, Vladimir Palatkin<sup>3</sup>, Maryia Vetrova<sup>3</sup>, Natalia Bushara<sup>3</sup>, Andrey Burakov<sup>3</sup>, Dmitry Masalov<sup>3</sup>, Olga Mamontova<sup>3</sup>, Sabrina Poole<sup>4</sup>, Robert Gross<sup>4</sup>, George Woody<sup>4</sup>, <sup>1</sup>St. Petersburg Bekhterev Research Psychoneurological Institute, St.-Peterburg, Russia, Russian Federation, <sup>2</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russia, Russian Federation, <sup>3</sup>First Pavlov State Medical University of St. Petersburg, St. Petersburg, Russia, <sup>4</sup>University 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 addiction*  
N. Volkow, NIDA, Bethesda, MD

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**Monday, June 19, 2017**

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**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 Hill*  
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

**CHAUD, CHAUD, CHAUD: NOVEL TREATMENT STRATEGIES**

Chairs: Eric Maltbie and Sandra Comer

- 2:00 *JPC-089, a 1,4-diphenethyl substituted piperidine, inhibits the neurotoxic, psychomotor 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
- 2:15 *Suvorexant, a clinically available hypocretin/orexin receptor antagonist, attenuates positive affect and drug seeking associated with psychostimulant self-administration in rats*  
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
- 2:45 *Investigating the effects of ketamine treatment on reinstatement of cocaine self-administration in rhesus monkeys*  
Eric Maltbie<sup>1</sup>, Leonard Howell<sup>1</sup>, <sup>1</sup>Emory University, Atlanta, GA
- 3:00 *Reduction of smoking urges with intranasal insulin: A randomized, crossover, placebo-controlled clinical trial*  
A. Hamidovic, University of Illinois, Chicago, IL
- 3:15 *Effects of pioglitazone, a PPAR $\gamma$  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



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- 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 Lofwall<sup>1</sup>, Edward Nunes<sup>2</sup>, Genie Bailey<sup>3</sup>, Sharon Walsh<sup>4</sup>, Stacey Sigmon<sup>5</sup>, Fredrik Tiberg<sup>6</sup>, Margareta Linden<sup>7</sup>, Behshad Sheldon<sup>8</sup>, Sonnie Kim<sup>8</sup>, <sup>1</sup>University of Kentucky College of Medicine, Lexington, KY, <sup>2</sup>Columbia University and NYSPI, New York, NY, <sup>3</sup>Warren Alpert Medical School of Brown University, Providence, RI, <sup>4</sup>University of Kentucky, Lexington, KY, <sup>5</sup>University of Vermont, Burlington, VT, <sup>6</sup>Camurus, Lund, Sweden, <sup>7</sup>Camurus, Lund, Sweden, <sup>8</sup>Braeburn 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
- 3:00 *Trauma exposure, sex and stress responding among cannabis smokers*  
Thomas Chao<sup>1</sup>, Vanja Radoncic<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

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## Monday, June 19, 2017

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- 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, <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

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- 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. Klierer. 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>. <sup>1</sup>North Carolina State University, United States; <sup>2</sup>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

- 204 *Greater impact on brain volume change in chronic ketamine users with adolescent onset*  
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- 205 *Using portable imaging to determine marijuana intoxication in humans*  
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- 206 *Acute effects of cannabis on verbal memory in young adults: Relationship to tobacco use*  
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<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*  
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- 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*  
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- 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*  
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- 300 *Impact of legal highs on HIV vertical transmission in female injection drug users in Romania*  
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- 301 *Gender differences in tramadol use and abuse in university students, Egypt*  
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- 302 *Khat use and the occurrence of psychotic symptoms: Suggestive evidence for a mediating role of traumatic experiences*  
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- 303 *Characteristic trends in prevalence of synthetic designer drugs over the Territory of the Republic of Bashkortostan*  
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- 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*  
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- 305 *Risk of hepatitis C infection among heroin and methamphetamine users*  
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- 306 *Prescription painkiller misuse and labor market: Misuse levels and differential effects*  
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- 307 *Substance abuse in Iraq: Psychiatrists' experience*  
R. Aqrawi. Ministry of Health–Kurdistan Region, Iraq
- 308 *Substance use in Jamaican 12- to 65-year-olds*  
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- 309 *National survey on crack cocaine, Brazil, 2013*  
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- 310 *Relationship between psychopathy and HIV risk behaviors among heroin and amphetamine users*  
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- 311 *Severity of dependence scale: Diagnostic cut-off for pharmaceutical opioid dependence*  
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- 312 *Patient concerns and help-seeking for problems with opioid medications for chronic noncancer pain*  
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- 313 *Association between Internet addiction and sleep quality among college students in Taiwan*  
Y-J. Chang. National Taiwan Normal University, Taiwan
- 314 *Using Twitter for monitoring marijuana use and perceptions in Chile: An online approach to get real-time national data*  
V. Cortes<sup>1</sup>, C. Ibanez<sup>2</sup>, J. Velasquez<sup>1</sup>. <sup>1</sup>Department of Industrial Engineering, University of Chile, Chile; <sup>2</sup>Department of Psychiatry and Mental Health, University of Chile, Chile
- 315 *Point prevalence and respective 95% confidence intervals for HIV and hepatitis C virus infection among crack cocaine and similar substances in Brazil (2012–2013)*  
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- 316 *Self-reported driving beliefs and practices of medical and recreational cannabis users in the United States*  
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- 317 *The global burden of disease attributable to substance use and dependence: Findings from the 2015 global burden of disease study*  
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- 318 *Prevalence of substance use and attachment dimensions among Czech adolescent girls in residential care*  
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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*  
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- 321 *Assessment of exclusive and dual cigarette and hookah smoking among a sample of pregnant women in Egypt*  
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- 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*  
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- 324 *Khat use among mothers at Harar City and its effect on mental health, stress, anxiety, and commitment to parental role*  
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*  
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- 328 *Factors associated with the history of drug use among female sex workers in India*  
C.J.K. Francis. Nestle India Limited, India
- 329 *Smokeless tobacco use and low-birth-weight children among women in a rural setting of Chennai, India*  
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- 330 *Consults to an addiction unit in a tertiary hospital*  
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- 331 *Traumatic events in childhood and drug abuse: A systematic review and meta-analysis of longitudinal studies*  
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- 332 *Iranian university students' knowledge, attitude, and behavior study on drug abuse, role of resilience, and emotional health*  
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- 333 *Drug use trends among Israeli school dropouts: Age, gender, and country-of-origin comparisons (2004–2014)*  
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*  
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- 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*  
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- 337 *Application of the randomized response technique to the nationwide general population survey on drugs in the Republic of Georgia*  
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>Iliia 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
- 338 *Prevalence of addictive behaviors: Thai national mental health survey 2013*  
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- 339 *Prevalence of heavy alcohol use among people receiving methadone after a switch to Methadose*  
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- 340 *Sex differences in alcohol-related problems among individuals living with HIV in Lagos, Nigeria*  
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- 341 *Gender roles in Mexico, what is changing and what is not: Implications for youth substance use prevention*  
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
- 343 *A comprehensive examination of the impacts of a potentially tamper-resistant oxycodone formulation in Australia*  
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
- 344 *Double whammy: Adverse childhood events and pain reflect symptomology and quality of life in women in substance abuse treatment*  
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
- 345 *Prevalence rates and associated factors of frequent micturition and HIV infection in ketamine users in Taipei*  
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
- 346 *Opioid use disorders 1990–2015: Results on sex and age differences from the global burden of disease*  
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- 347 *HIV-1 and hepatitis C virus transmission bottleneck in Chinese people who inject drugs*  
F. Li<sup>1</sup>, Y. Feng<sup>1</sup>, L. Ma<sup>1</sup>, K.J. Bar<sup>2</sup>, D.S. Metzger<sup>2</sup>, Y. Shao<sup>1</sup>. <sup>1</sup>Chinese Center for Disease Control and Prevention, China; <sup>2</sup>University of Pennsylvania, United States
- 348 *The situational analysis of marijuana use in Thailand*  
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- 349 *Gambling in Iran*  
M. Mardaneh, M. Maarefvand, Z. Zamani, Z. Morshedi. Substance Abuse and Dependence Research Center, University of Social Welfare and Rehabilitation Sciences, Iran

- 350 *Co-occurring disorders: A challenge for community-based residential care facilities for substance use in Mexico*  
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
- 351 *The impact of law enforcement on risk for injection drug use initiation assistance in North America*  
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
- 352 *Risk perception and driving under the influence of marijuana: A study among Brazilian college students*  
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
- 354 *Hepatitis C virus infection and fibrosis of the liver in former injection drug users with alcohol use disorder*  
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 Autònoma de Barcelona, Spain; <sup>2</sup>Hospital Universitari de Bellvitge, Spain; <sup>3</sup>Centre Delta, Institute for Safe Medication Practices, Spain
- 355 *Lifetime prevalence, correlates, and patterns of heroin use among youth in Ecuador*  
D. Ocana<sup>1</sup>, W.L. Kliwer<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 Commonwealth University, United States; <sup>3</sup>Department of Family Medicine and Population Health, Virginia Commonwealth University, United States
- 356 *Cannabis use disorders and associated factors among commercial drivers arrested for traffic offenses in Lagos*  
M. Ojo, A. Adegbohun, G. Morakinyo. Federal Neuropsychiatric Hospital Yaba, Nigeria
- 357 *Psychological well-being and substance abuse among adolescents in a senior secondary school in Lagos, Nigeria*  
C. Okonkwo, A. Ajayi, J. Olusegun. Federal Neuropsychiatric Hospital Yaba, Nigeria
- 358 *Emerging drugs of abuse: Current perspectives on substituted opiates, nicotine, cannabinoids, and cathinone among urban populations in Kenya*  
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
- 359 *Psychological factors and risk perception as predictors of tobacco smoking behavior among undergraduates of University of Calabar, Nigeria*  
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*  
F. Ornell<sup>1</sup>, J. Scherer<sup>1</sup>, K. Ligabue<sup>2</sup>, J. Narvaez<sup>1</sup>, C. Dalbosco<sup>1</sup>, R. Ornell<sup>1</sup>, R. Dotta<sup>3</sup>, L. Telles<sup>1</sup>, F. Pechansky<sup>2</sup>, L. von Diemen<sup>1</sup>, F. Kessler<sup>1,4</sup>. <sup>1</sup>Center for Drug and Alcohol Research, Hospital de Clinicas de Porto Alegre, Federal University of Rio Grande do Sul (UFRGS), Brazil; <sup>2</sup>Center for Drug and Alcohol Research, UFRGS, Brazil; <sup>3</sup>Fundacao Escola Superior do Ministerio Publico, Brazil; <sup>4</sup>Department of Psychiatry and Legal Medicine, UFRGS, Brazil
- 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>Department 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
- 364 *Predictors of risk of illicit drug use during pregnancy among women attending midwife obstetric units in the Cape Metropole, South Africa*  
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. Belangero<sup>3</sup>, C. Bau<sup>1</sup>, R. Grassi-Oliveira<sup>2</sup>. <sup>1</sup>Department of Genetics, Universidade Federal do Rio Grande do Sul, Brazil; <sup>2</sup>Pontifical Catholic University of Rio Grande do Sul, Brazil; <sup>3</sup>Department of Morphology and Genetics, Universidade Federal de Sao Paulo, Brazil
- 369 *Could tobacco be responsible for the apparent increased frequency of orofacial clefts in Bolivia?*  
I. Salvatierra. Arco Iris Hospital–La Paz, Bolivia; Hubert Humphrey Fellowship, Virginia Commonwealth University, United States
- 370 *Early substance use and child sexual abuse: Risk factors for adolescent entry to the sex trade in the U.S.–Mexico Border region*  
A. Servin<sup>1,2</sup>, K. Brouwer<sup>3</sup>, G. Rangel<sup>4</sup>, J. Silverman<sup>2</sup>. <sup>1</sup>University Xochicalco School of Medicine, Mexico; <sup>2</sup>Division of Global Public Health, University of California San Diego, United States; <sup>3</sup>Department of Family Medicine and Public Health, University of California San Diego, United States; <sup>4</sup>United States–Mexico Border Health Commission, United States
- 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
- 372 *Clinical characteristics of HPTN 074-screened people who inject drugs in Jakarta*  
H. Susami<sup>1</sup>, I. Octavianto<sup>1</sup>, Z. Djoerban<sup>1</sup>, S. Djauzi<sup>1</sup>, R. Sarasvita<sup>2</sup>, D. Imran<sup>1</sup>, W.C. Miller<sup>3</sup>, I. Hoffman<sup>4</sup>, S. Rose<sup>5</sup>, D.S. Metzger<sup>6</sup>. <sup>1</sup>HPTN 074 Indonesia Site–Cipto Mangunkusumo Hospital, Indonesia; <sup>2</sup>Indonesia National Narcotics Board, Indonesia; <sup>3</sup>HIV Prevention Trials Network, Ohio State University, United States; <sup>4</sup>HIV Prevention Trials Network, University of North Carolina, United States; <sup>5</sup>FHI 360, HIV Prevention Trials Network, United States; <sup>6</sup>Treatment Research Institute, University of Pennsylvania, United States
- 373 *Dual-diagnosis resource needs in Spain: A national survey of professionals*  
N. Szerman. Hospital Universitario Gregorio Marañon, Spain; Spanish Society Dual Pathology, Spain
- 374 *Prevalence and correlates of misuse of benzodiazepines in Gjilan region, Kosovo*  
Z. Tahiri, M. Qazimi. Main Family Medicine Center, Kosovo
- 375 *Substance use in Northern Thailand: Results from the 6th National Household Survey (2016)*  
K. Thaikla, A. Aramrattana, A. Nimmannit. Chiang Mai University, Thailand
- 376 *Criminal involvement of crack cocaine users in the city of Rio de Janeiro and greater metropolitan area*  
L. Toledo<sup>1</sup>, I. Cano<sup>2</sup>, L. Bastos<sup>1</sup>, N. Bertoni<sup>3</sup>, C. Coutinho<sup>1</sup>, F.I. Bastos<sup>1</sup>. <sup>1</sup>Oswaldo Cruz Foundation, Brazil; <sup>2</sup>State University of Rio de Janeiro, Brazil; <sup>3</sup>Brazilian National Cancer Institute, Brazil
- 377 *Prevalence of tobacco use in Indonesia: A preliminary analysis of cultural and structural factors*  
N. Widyaningrum, J. Yu. University at Albany, State University of New York, United States

*378 Drug situation in the countries of Central Asia: Outputs of the Central Asia Drug Action Programme*

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

**Prevention**

*400 Distribution risks involving psychological dependence among adults in primary health care systems in Kazakhstan*

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*401 HIV/AIDS, hepatitis, and sexually transmitted infections prevention among Egyptian substance users*

A. Bakhoun<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

*403 High prevalence of HIV in noninjecting drug users in Brazil*

L. Fara, J. Scherer, F. Ornell, V. Loss, J. Schuch, B.A. Ferlin, F. Kessler, F. Pechansky, L. von Diemen. Center for Drug and Alcohol Research, Hospital de Clinicas de Porto Alegre, Federal University of Rio Grande do Sul, Brazil

*404 Assessment of a behavioral intervention for HIV-positive persons who inject drugs in Ukraine*

T. Kiriazova. Ukrainian Institute on Public Health Policy, Ukraine

*405 Typology of street substance users' communities in Tehran*

M. Maarefvand, S. Shirazi, R. Peyravi, A. Farhoudian. Substance Abuse and Dependence Research Center, University of Social Welfare and Rehabilitation Sciences, Iran

*406 High-risk behaviors among Iranian female drug users inspiring Health Belief Model*

E. Merghati Khoei<sup>1</sup>, M. Jamshidimanesh<sup>2</sup>, F. Ilika<sup>2</sup>. <sup>1</sup>Tehran University of Medical Sciences, Iranian National Center for Addiction Studies, Iran; <sup>2</sup>Iran University of Medical Sciences, Iran

*407 Predictors of HIV and hepatitis C virus seroconversion in people who inject drugs in Ukraine*

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

*408 HPTN074: Spatial accessibility to antiretroviral therapy care among people who inject drugs in Jakarta*

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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*409 HIV prevalence and linkage to care among trauma-exposed substance-using women in Cape Town, South Africa*

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

*410 Antiretroviral therapy is the most essential intervention among people who inject drugs (PWID) to achieve reduction in HIV transmission through PWID to others in Burma (Myanmar)*

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

*411 The effectiveness of Choice-F on women freshman college students in reducing substance use and other risk behaviors*

V. Ryabukha. Prevention Center, "Choice," Ukraine

*412 Opportunities for and awareness of pre-exposure prophylaxis among HIV-infected Russian women and men*

J. Tsui<sup>1,2</sup>, J. Wagman<sup>3</sup>, D. Cheng<sup>4</sup>, N. Gnatienco<sup>5</sup>, E. Blokhina<sup>6</sup>, L. Forman<sup>4</sup>, A. Bazzi<sup>4</sup>, D. Lioznov<sup>6,7</sup>, J. Samet<sup>4,5</sup>. <sup>1</sup>University of Washington, United States; <sup>2</sup>Harborview Medical Center, United States; <sup>3</sup>University of California San Diego, United States; <sup>4</sup>Boston University, United States; <sup>5</sup>Boston Medical Center, United States; <sup>6</sup>First Pavlov State Medical University, Russia; <sup>7</sup>Pasteur Research Institute of Epidemiology and Microbiology, Russia

*413 Public injection and injection initiation assistance among people who inject drugs in two North American countries*

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

*414 Systematic review of interventions to reduce harm associated with substance use in women*

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**Treatment**

*500 Paradoxical drugs policy and practice: The evil to worsen the lives of the people who use drugs and their families in Nepal*

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



*501 Pilot study on smokable cocaine users receiving treatment in Argentina, Brazil, Chile, Paraguay, and Uruguay*

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*

M.F. Basir<sup>1</sup>, G.D. Selventhiranathan<sup>2</sup>, A. Khan<sup>2</sup>, B. Vicknasingam<sup>1</sup>. <sup>1</sup>Centre for Drug Research, Universiti Sains Malaysia, Malaysia; <sup>2</sup>Performance, Management and Delivery Unit, Prime Minister's Department, Malaysia

*504 United Nations Office on Drugs and Crime, World Health Organization multisite study on community management of opioid overdose including naloxone*

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

*505 Diversion of patients attending emergency departments in Northern Ireland*

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*506 More severe executive abnormalities in crack versus snorted cocaine-dependent patients: A neuropsychological study*

P. Cunha<sup>1</sup>, H. Oliveira Jr.<sup>1</sup>, P. Goncalves<sup>1</sup>, M. Ometto<sup>1</sup>, B. Santos<sup>2</sup>, A. Malbergier<sup>1</sup>, R. Amaral<sup>1</sup>, S. Nicastri<sup>1</sup>, A. Guerra De Andrade<sup>1</sup>. <sup>1</sup>Institute of Psychiatry, University of São Paulo Medical School, Brazil; <sup>2</sup>University of São Paulo School of Nursing, Brazil

*507 Results from 10 years of a smoking cessation program in Florianopolis, Brazil*

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

*508 Do males and females present similar needs and problems for drug abuse treatment? Comparative study between Brazil and the United States*

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*509 Providing PAWSitive support to methadone clients: A case study*

C. Dell<sup>1,2</sup>, D. Chalmers<sup>3</sup>. <sup>1</sup>University of Saskatchewan, Canada; <sup>2</sup>Canadian Centre on Substance Abuse, Canada; <sup>3</sup>University of Regina, Canada

- 510 *Cost of an integrated treatment program for opiate addiction and HIV in Ho Chi Minh City, Vietnam*  
C. Denis<sup>1,2</sup>, J. Becher<sup>1</sup>, T. Doan<sup>3</sup>, H. Tran<sup>3</sup>, L. Nguyen<sup>3</sup>, T. Nguyen<sup>3,4</sup>, L. Huang<sup>3</sup>, V. Trias<sup>3</sup>, M. Auriacombe<sup>2</sup>, A. Voisin<sup>5</sup>, G. Raguin<sup>3</sup>, S. Hoai<sup>6</sup>, G. Le Truong<sup>6</sup>, J-P. Daulouede<sup>3,5</sup>, C. O'Brien<sup>1</sup>, D.S. Metzger<sup>7</sup>. <sup>1</sup>University of Pennsylvania Perelman School of Medicine, United States; <sup>2</sup>CNRS USR 3413 SANPSY, University of Bordeaux, France; <sup>3</sup>Expertise France, France; <sup>4</sup>Ho Chi Minh City University of Medicine and Pharmacy, Vietnam; <sup>5</sup>Bizia Addiction Clinic, France; <sup>6</sup>Ho Chi Minh City Provincial AIDS Committee, Vietnam; <sup>7</sup>Treatment Research Institute, University of Pennsylvania, United States
- 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
- 512 *Brief behavioral educational interventions to promote methadone expansion within prisons in Ukraine*  
S. Dvoriak<sup>1,2</sup>, M. Polonsky<sup>3</sup>, F. Altice<sup>3</sup>. <sup>1</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>2</sup>Academy of Labour, Social Relations and Tourism, Department of Social Work, Ukraine; <sup>3</sup>Yale University School of Medicine, United States
- 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
- 514 *Transcranial direct current stimulation modulates connectivity between dorsolateral prefrontal cortex and insula during drug cue exposure in methamphetamine users*  
H. Ekhtiari<sup>1,2</sup>, M. Ebrahimipoor<sup>3</sup>, A. Shahbabaie<sup>1</sup>, M.A. Oghabian<sup>3</sup>. <sup>1</sup>Translational Neuroscience Program, Institute for Cognitive Science Studies, Iran; <sup>2</sup>Iranian National Center for Addiction Studies, Iran; <sup>3</sup>Neuroimaging and Analysis Group, Tehran University of Medical Sciences, Iran
- 515 *Association between depressive symptoms and smoking in individuals receiving behavioral activation*  
A. Gonzalez-Roz, S. Weidberg, V. Martinez-Loredo, A. Grande-Gosende, R. Secades-Villa. University of Oviedo, Spain
- 516 *Vulnerability and protective factors among female crack users who abandoned and concluded treatment*  
T. Guimaraes<sup>1,2</sup>, S. Halpern<sup>1</sup>, C. Dalbosco<sup>1</sup>, L. Rosa<sup>2,3</sup>, F. Pechansky<sup>1</sup>, Joana Narvaez<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>Federal University of Piaui, Brazil; <sup>3</sup>Regional Center of Reference About Drugs of Juiz de Fora, Brazil
- 517 *Atypical versus typical antipsychotics for the treatment of addiction: A systematic review and meta-analytic study*  
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
- 519 *Opioid craving and HIV care cascade outcomes*  
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
- 521 *Guidelines for establishing an effective and cost-effective alcohol and drug abuse treatment program in Kenya*  
J.M. Kenga<sup>1,2</sup>, M.N. Khaemba<sup>2</sup>, F. Kamau<sup>3</sup>. <sup>1</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>2</sup>Kenya Correctional Services, Kenya; <sup>3</sup>Drug Board–Nairobi County, Kenya
- 522 *Naltrexone implant, compared to oral naltrexone, improves HIV treatment outcomes of opiate-addicted patients*  
E. Krupitsky<sup>1</sup>, E. Zvartau<sup>2</sup>, G. Woody<sup>3</sup>, E. Blokhina<sup>2</sup>, R. Gross<sup>3</sup>. <sup>1</sup>St. Petersburg Bekhterev Research Psychoneurological Institute, Russia; <sup>2</sup>First Pavlov State Medical University, Russia; <sup>3</sup>University of Pennsylvania, United States
- 523 *Salivary cortisol levels in Brazilian crack cocaine users and early inpatient discharge*  
K. Ligabue, J. Scherer, F. Ornell, V. Assuncao, M. Rocha, A. Valerio, F. Pechansky, Felix Kessler, L. von Diemen. Center for Drug and Alcohol Research, Hospital de Clinicas de Porto Alegre, Federal University of Rio Grande do Sul, Brazil
- 524 *Ayahuasca as treatment for addictions*  
R. Lopez. Universidad Mayor de San Andres, Bolivia

525 *Concurrent drug use during opioid agonist treatment among people who inject drugs in Ukraine*  
I. Makarenko<sup>1,2</sup>, A. Mazhnaya<sup>1</sup>, R. Marcus<sup>2</sup>, S. Filippovich<sup>1</sup>, S. Dvoriak<sup>3</sup>, F. Altice<sup>2,4</sup>.

<sup>1</sup>Alliance for Public Health, Ukraine; <sup>2</sup>AIDS Program, Section of Infectious Diseases, Yale University School of Medicine, United States; <sup>3</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>4</sup>Department of Epidemiology of Microbial Diseases, Yale University School of Public Health, United States

526 *Substance use in children in Afghanistan: Gender differences at treatment entry and in response to treatment*

A.S. Momand<sup>1,2</sup>, H. Jones<sup>3,4</sup>, E. Mattfeld<sup>5</sup>, B. Morales<sup>6</sup>, K. O'Grady<sup>7</sup>. <sup>1</sup>United Nations Office on Drugs and Crime (UNODC), Afghanistan; <sup>2</sup>Hubert H. Humphrey Fellowship Program, Virginia Commonwealth University, United States; <sup>3</sup>Horizons Program, Department of Obstetrics and Gynecology, University of North Carolina at Chapel Hill, United States; <sup>4</sup>Department of Psychiatry, Johns Hopkins University, United States; <sup>5</sup>UNODC, Austria; <sup>6</sup>Bureau of International Narcotics and Law Enforcement Affairs, U.S. Department of State, United States; <sup>7</sup>Department of Psychology, University of Maryland, College Park, United States

527 *Providing methadone treatment in primary care reduces stigma among patients and providers in Ukraine*

O. Morozova<sup>1</sup>, S. Dvoriak<sup>2</sup>, I. Pykalo<sup>2</sup>, F. Altice<sup>3</sup>. <sup>1</sup>Yale University School of Public Health, United States; <sup>2</sup>Ukrainian Institute on Public Health Policy, Ukraine; <sup>3</sup>AIDS Program, Section of Infectious Diseases, Yale University School of Medicine, United States

528 *Domestic violence and gender differences related to legal problems among crack users*

J. Narvaez, V. Roglio, L. Dutra, F. Pechansky, F. Kessler. Center for Drug and Alcohol Research, Hospital de Clinicas de Porto Alegre, Federal University of Rio Grande do Sul, Brazil

529 *Prevalence of substance use and challenges in accessing treatment among the transgender community in Pakistan*

F. Naveed, K. Mushtaq. Drug Free Pakistan Foundation, Pakistan

530 *Change over 12 months of an integrated treatment program for opiate addiction and HIV in Ho Chi Minh City, Vietnam: Highlighting the role of counseling*

T. Nguyen<sup>1</sup>, C. Denis<sup>2,3</sup>, A. Voisin<sup>4</sup>, T. Doan<sup>5</sup>, H. Tran<sup>5</sup>, L. Nguyen<sup>5</sup>, V. Trias<sup>5</sup>, L. Huang<sup>5</sup>, M. Auriacombe<sup>3</sup>, G. Raguin<sup>5</sup>, S. Hoai<sup>6</sup>, G. Le Truong<sup>6</sup>, J-P. Daulouede<sup>4,5</sup>, C. O'Brien<sup>2</sup>, D.S. Metzger<sup>2,7</sup>. <sup>1</sup>Ho Chi Minh City University of Medicine and Pharmacy, Vietnam; <sup>2</sup>University of Pennsylvania Perelman School of Medicine, United States; <sup>3</sup>CNRS USR 3413 SANPSY, University of Bordeaux, France; <sup>4</sup>Bizia Addiction Clinic, France; <sup>5</sup>Expertise France, France; <sup>6</sup>Ho Chi Minh City Provincial AIDS Committee, Vietnam; <sup>7</sup>Treatment Research Institute, United States

531 *Initial establishment of pilot drug treatment courts in Vietnam*

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. Stein<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 meta-analysis*  
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 Autònoma 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 Addiccions-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. 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

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**Monday, June 19, 2017**

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**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

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**Monday, June 19, 2017**

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**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



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# Tuesday, June 20, 2017

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## 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

- 1 *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
- 2 *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
- 3 *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
- 4 *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
- 5 *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
- 6 *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

- 7 *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
- 10 *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
- 12 *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
- 13 *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, Australia, <sup>5</sup>University of Washington, Institute for Health Metrics and Evaluation, Seattle, WA
- 14 *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
- 15 *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

- 16 *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
- 17 *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
- 18 *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
- 19 *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
- 20 *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
- 21 *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
- 22 *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
- 23 *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**

- 24 *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 Biostatistics/College of Human Medicine, East Lansing, MI
- 26 *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
- 28 *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
- 31 *Prescription and over-the counter opioids: A three country comparative analysis of pharmacists' perspectives on codeine use and misuse*  
Tara Carney<sup>1</sup>, John Wells<sup>2</sup>, Charles Parry<sup>3</sup>, Pdraig McGuinness<sup>4</sup>, Richard Harris<sup>5</sup>, Marie Claire van Hout<sup>2</sup>, <sup>1</sup>South African Medical Research Council, Tygerberg, South Africa, South Africa, <sup>2</sup>Waterford Institute of Technology, Waterford, Ireland, <sup>3</sup>South African Medical Research Council, Tygerberg, South Africa, <sup>4</sup>CARA Pharmacy, Dublin, Ireland, <sup>5</sup>Weldricks Pharmacy, UK
- 32 *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
- 36 *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

- 38 *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
- 39 *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
- 40 *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
- 41 *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
- 42 *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**

- 44 *Incremental validity of estimated marijuana grams as a predictor of marijuana-related 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
- 45 *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
- 46 *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
- 47 *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
- 50 *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
- 51 *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

- 52 *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**

- 53 *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
- 54 *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
- 55 *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
- 56 *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
- 57 *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
- 58 *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
- 59 *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
- 60 *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

- 61 *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
- 62 *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
- 63 *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
- 64 *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
- 65 *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
- 66 *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
- 67 *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
- 68 *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
- 69 *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
- 70 *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

- 73 *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 Dwiell<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
- 74 *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
- 75 *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
- 76 *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, Australia, <sup>2</sup>University of Queensland, Brisbane, Australia, <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, Australia, <sup>2</sup>University of Queensland, Brisbane, Australia, <sup>3</sup>Centre for Youth Substance Abuse Research, Herston, Queensland
- 79 *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
- 80 *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

- 81 *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 Public Health, Baltimore, MD
- 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
- 83 *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
- 84 *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
- 85 *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
- 86 *Evaluation of the factor structure of the Brazilian-Portuguese version of the Readiness to Change questionnaire 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**

- 87 *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
- 88 *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, London, UK, <sup>2</sup>Baylor College of Medicine, Houston, TX, <sup>3</sup>Queen Mary University of London, London, UK
- 89 *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

- 90 *Short circuit: Disaggregation of adrenocorticotrophic 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
- 91 *Association between cumulative marijuana use and executive function and processing speed in HIV-positive and HIV-negative men*  
Chukwuemeka Okafor<sup>1</sup>, Michael Plankey<sup>2</sup>, Xinguang Chen<sup>3</sup>, Pamela J Surkan<sup>4</sup>, Steve Shoptaw<sup>1</sup>, Eileen Martin<sup>5</sup>, Ronald Cohen<sup>6</sup>, Ned Sacktor<sup>7</sup>, Robert L Cook<sup>3</sup>, <sup>1</sup>UCLA, Los Angeles, CA, <sup>2</sup>Georgetown University Medical Center, Division of Infectious Diseases, Washington, DC, <sup>3</sup>College of Medicine, University of Florida, Gainesville, FL, <sup>4</sup>Johns Hopkins Bloomberg School of Public Health, Social and Behavioral Interventions Program, Baltimore, MD, <sup>5</sup>Rush University Medical Center, Chicago, IL, <sup>6</sup>University of Florida, Gainesville, FL, <sup>7</sup>Johns Hopkins University, Department of Neurology, Baltimore, MD
- 92 *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
- 93 *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
- 95 *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>3</sup>INSERM, Marseille, France, <sup>4</sup>CHU Strasbourg, Paris, France, <sup>5</sup>University of Pennsylvania, Philadelphia, PA
- 96 *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
- 97 *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, <sup>2</sup>University of British Columbia, Vancouver, BC, Canada, <sup>3</sup>University of British Columbia, Vancouver, BC

- 98 *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 Briden<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
- 99 *Cost of an integrated treatment program for opiate addiction and HIV in Ho Chi Minh city, Vietnam*  
Cecile Denis<sup>1</sup>, Julie Becher<sup>1</sup>, Thanh Doan<sup>2</sup>, Huy Tran<sup>2</sup>, Loan Nguyen<sup>2</sup>, Trung Nguyen<sup>2</sup>, Lisa Huang<sup>2</sup>, Vincent Trias<sup>2</sup>, Augustin Voisin<sup>3</sup>, Marc Auriacombe<sup>4</sup>, Gilles Raguin<sup>2</sup>, Son Mai Thi Hoai<sup>5</sup>, Giang Le Truong<sup>5</sup>, Jean-Pierre Daulouede<sup>3</sup>, Charles O'Brien<sup>1</sup>, David Metzger<sup>1</sup>, <sup>1</sup>University of Pennsylvania, Philadelphia, PA, <sup>2</sup>Expertise France, France, <sup>3</sup>Bizia, <sup>4</sup>Université de Bordeaux, Bordeaux, France, <sup>5</sup>HCMC AIDS Committee, Ho Chi Minh City, Vietnam
- 100 *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
- 101 *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
- 102 *Improving identification of social harm among substance abusers in HIV trials*  
K. Dugosh, Treatment Research Institute, Philadelphia, PA
- 103 *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
- 104 *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 Gnatienco<sup>1</sup>, Emily Quinn<sup>1</sup>, Alexander Walley<sup>1</sup>, Carly Briden<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

- 105 *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
- 106 *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
- 107 *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

- 108 *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
- 109 *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 Monthieux<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, Bordeaux, France
- 110 *Health effects of electronic cigarettes: A systematic review of the literature*  
Ginnie Ng<sup>1</sup>, Robert Schwartz<sup>1</sup>, Alexa Minichiello<sup>2</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
- 111 *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, <sup>5</sup>King's College, London, UK, United Kingdom, <sup>6</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 112 *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

- 114 *Global prevalence of illicit and prescription opioid misuse*  
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, <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
- 116 *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, <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
- 118 *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
- 119 *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 Shin<sup>1</sup>, Taylor Templeton<sup>1</sup>, Ellen Gable<sup>1</sup>, Alvin Chiu<sup>1</sup>, Jennifer Kim<sup>1</sup>, Philip Vieira<sup>2</sup>, Tod Kippin<sup>1</sup>, Karen Szumlinski<sup>1</sup>, <sup>1</sup>UCSF, San Francisco, CA, <sup>2</sup>California State University, Los Angeles, CA

**Oral Communications 12****Mont-Royal  
10:00 - 12:00 PM****VIVE LA (SEX) DIFFERENCE!**

Chairs: Yasmin Zakiniaieiz 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 Zakiniaieiz<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

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## Tuesday, June 20, 2017

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- 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 rats*  
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
- 11:15 *Sex differences in early predictive biomarkers for cocaine seeking in adolescence and 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 rats*  
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
- 11:45 *Stress- and sex-dependent changes in miRNA expression and their potential impact on 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

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**Tuesday, June 20, 2017**

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**Symposium VII**

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

**PAIN AND ADDICTION: OPIOIDS AND BEYOND**

Chairs: Martin Cheatle and Peggy Compton

- 10:00 *Bidirectional relations between pain, nicotine withdrawal, and tobacco smoking*  
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, PA
- 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
- 11:40 *DISCUSSANT: Pain and addiction: Future research directions*  
P. Compton, Georgetown University, Washington, DC

**Symposium VIII**

**Outremont  
10:00 - 11:00 PM**

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

Chairs: Elise Weerts and David Drobos

- 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 drug-use motivation*  
D. Drobos, Moffitt Cancer Center, Tampa, FL

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**Tuesday, June 20, 2017**

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**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

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**Tuesday, June 20, 2017**

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**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
- 3:00 *Pharmacogenetic impact of the serotonin 2C receptor (5-HT<sub>2C</sub>R) Cys23Ser single 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, <sup>2</sup>Virginia Commonwealth University, Richmond, VA
- 3:15 *Distinct subtypes of genetically defined serotonin neurons differentially modulate cocaine reward in mice*  
Britahny Baskin<sup>1</sup>, Susan Dymecki<sup>2</sup>, Kathleen Katak<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
- 4:00 *A comprehensive laboratory model of adolescent impulsivity and alcohol use*  
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, Australia, <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 Bebart<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

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**Tuesday, June 20, 2017**

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**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

- 2:30      *Patterns of heroin and cocaine taking in addicts*  
A. Badiani, University of Sussex, Falmer, England, United Kingdom
- 2:55      *The temporal pattern of cocaine self-administration is critical for incentive-  
sensitization*  
T. Robinson, University of Michigan, Ann Arbor, MI
- 3:20      *Intermittent and fast-rising cocaine spikes promote addiction*  
A. Samaha, Université de Montréal, Department of Pharmacology and Physiology,  
Outremont, QC, Canada
- 3:45      *Temporal pattern of administration dictates dopaminergic alterations induced by  
cocaine*  
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

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**Tuesday, June 20, 2017**

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**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. Vselvolozhkaya, 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 Internet-delivered 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



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**Tuesday, June 20, 2017**

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**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.

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## Wednesday, June 21, 2017

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### 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

- 1 *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
- 2 *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
- 3 *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
- 4 *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**
- 6 *Evaluating interrelationships between trajectories of choice behavior and ICA-derived 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 remifentanyl 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 self-administration 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>,
- 10 *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>Florida International University, Miami, FL
- 12 *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
- 13 *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
- 15 *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
- 16 *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
- 18 *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

- 19 *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**
- 21 *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
- 23 *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
- 24 *A CB1 antagonist reverses analgesia induced by a combination of the cannabinoid  
WIN55212-2 plus morphine in the mouse formalin test*  
Xiaohong Chen<sup>1</sup>, Martin Adler<sup>2</sup>, A. Cowan<sup>1</sup>, Ellen Geller<sup>3</sup>, J.J. Meissler<sup>1</sup>, S. Inan<sup>1</sup>,  
Scott Rawls<sup>4</sup>, Ronald Tallarida<sup>4</sup>, M.N. Watson<sup>1</sup>, Toby Eisenstein<sup>1</sup>, <sup>1</sup>Center for  
Substance Abuse Research, Lewis Katz School of Medicine of Temple University,  
Philadelphia, PA, <sup>2</sup>Lewis Katz School of Medicine at Temple University,  
Philadelphia, PA, <sup>3</sup>Temple University School of Medicine, Philadelphia, PA, <sup>4</sup>Temple  
University, Philadelphia, PA
- 25 *Effect of JWH-018 on prepulse inhibition of startle response*  
B. Ginsburg, University of Texas Health Science Ctr at San Antonio, San Antonio, TX
- 26 *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
- 28 *Increases in locomotor activity in mice following cannabinoid antagonists and during  
spontaneous cannabinoid withdrawal*  
Carol Paronis<sup>1</sup>, Lisa Wooldridge<sup>1</sup>, Spyros Nikas<sup>2</sup>, Kiran Vemuri<sup>2</sup>, Alexandros  
Makriyannis<sup>3</sup>, Jack Bergman<sup>4</sup>, <sup>1</sup>McLean Hospital, Harvard Medical School, Belmont,  
MA, <sup>2</sup>CDD/Northeastern University, Boston, MA, <sup>3</sup>Northeastern University, Boston,  
MA, <sup>4</sup>ADARC - McLean Hospital, Belmont, MA
- 29 *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
- 31 *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
- 32 *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
- 34 *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
- 35 *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
- 36 *Evaluation of potentially abuse-related events in phase III clinical trials of cannabidiol (Epidiolex®) using the MADDERS® Prospective System*  
Ryan Lanier<sup>1</sup>, Imrana Kazam<sup>1</sup>, Harrison Elder<sup>1</sup>, Roi Treister<sup>1</sup>, Maitreyee Mohanty<sup>1</sup>, Reni Kunkel<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
- 37 *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
- 38 *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

- 39 *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
- 40 *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
- 41 *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
- 43 *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
- 44 *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
- 45 *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
- 46 *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

47 *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

49 *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

50 *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 Medicine, 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

51 *Characteristics of homeless adults who successfully quit smoking*  
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

53 *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

54 *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

55 *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

- 56 *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>, <sup>1</sup>Ohio State University, Columbus, OH
- 57 *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
- 59 *E-cigarettes use in a country with high prevalence of tobacco smoking: A population-based study*  
Yi-Lung Chen<sup>1</sup>, Shang-Chi Wu<sup>2</sup>, Wen-Ing Tsay<sup>3</sup>, Yen-Tyng Chen<sup>1</sup>, Po-Chang Hsiao<sup>1</sup>, Ya-Hui Yu<sup>1</sup>, Te-Tien Ting<sup>1</sup>, Chuan-Yu Chen<sup>2</sup>, Yu-Kang Tu<sup>1</sup>, Jiun-Hau Huang<sup>1</sup>, Hao-Jan Yang<sup>4</sup>, Chung-Yi Li<sup>5</sup>, Carol Strong<sup>5</sup>, Cheng-Fang Yen<sup>6</sup>, Chia-Feng Yen<sup>7</sup>, Jui Hsu<sup>3</sup>, Wei-J Chen<sup>1</sup>, <sup>1</sup>National Taiwan University, Taipei City, Taiwan, <sup>2</sup>National Taiwan University, Epidemiology and Preventive Medicine, Taipei City, Taiwan, <sup>3</sup>Taiwan Food and Drug Administration, Taipei, Taiwan, <sup>4</sup>Chung Shan Medical University, Taiwan, Taichung City, Taiwan, <sup>5</sup>National Cheng Kung University, East District, Taiwan, <sup>6</sup>Kaohsiung Medical University, Taiwan, Kaohsiung, Taiwan, <sup>7</sup>Tzu Chi University, Taiwan, Hualien City, Taiwan
- 60 *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
- 61 *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
- 63 *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
- 64 *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

- 65 *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
- 66 *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
- 67 *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
- 68 *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. Gilbert<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
- 72 *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
- 74 *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
- 75 *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
- 77 *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
- 78 *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,
- 79 *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
- 80 *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
- 81 *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
- 82 *Reliability and validity 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, Andalucía, 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
- 83 *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

- 84 *Comparison of overdose risk factors between intravenous and intranasal non-treatment-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
- 85 *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

- 86 *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
- 87 *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
- 88 *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, <sup>3</sup>College of the Holy Cross, Worcester, MA
- 89 *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
- 90 *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 Laretta<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

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## Wednesday, June 21, 2017

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- 95 *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
- 97 *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
- 98 *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
- 99 *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
- 100 *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**
- 102 *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
- 103 *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
- 104 *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

- 106 *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
- 107 *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
- 108 *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
- 109 *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**

- 110 *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
- 112 *A streamlined approach to the acquisition and analysis of data from drug self-administration 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
- 113 *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
- 114 *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
- 115 *A comparison between a second generation AD product and an approved AD product*  
L. Chen, U.S. Food and Drug Administration, Silver Spring, MD

- 116      *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
- 117      *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
- 118      *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
- 119      *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.

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**Wednesday, June 21, 2017**

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**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
- 10:15 *Predator-odor stress enhances alcohol self-administration in female rats*  
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
- 10:45 *Psychosocial stress-induced cocaine seeking in rats is associated with distinct coping 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 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 Treatment Center, Wernersville, PA
- 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

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# Wednesday, June 21, 2017

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## 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 Svikis<sup>1</sup>, Steven Ondersma<sup>2</sup>, Pamela Dillon<sup>1</sup>, Michael Weaver<sup>3</sup>, <sup>1</sup>Virginia Commonwealth University, Richmond, VA, <sup>2</sup>Wayne State University-Psychiatry and Behavioral Neurosciences, Detroit, MI, <sup>3</sup>University 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 Sullivan<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 serotonergic neurons in response to co-administration 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 Zhang<sup>1</sup>, Cuizhu Dong<sup>2</sup>, Mengqi Liu<sup>1</sup>, Lidong Liu<sup>3</sup>, Yu Tian Wang<sup>3</sup>, Wei Hao<sup>1</sup>, <sup>1</sup>Central South University, Changsha, China, <sup>2</sup>Central South University, Psychiatry, Changsha, China, <sup>3</sup>University 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 Grüenthal 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>Linköping University, Linköping, Sweden

**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 Chan<sup>1</sup>, Wayne Hall<sup>2</sup>, Tom Freeman<sup>3</sup>, Jason Ferris<sup>2</sup>, Adrian Kelly<sup>1</sup>, Adam Winstock<sup>4</sup>, Jan Copeland<sup>5</sup>, <sup>1</sup>Centre for Youth Substance Abuse Research, Herston, Queensland, <sup>2</sup>University of Queensland, Brisbane, Australia, <sup>3</sup>University College London, London, UK, <sup>4</sup>Global Drug Survey Ltd., London, England, <sup>5</sup>University of South Wales, Sydney, Australia
- 3:45 *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 Palamar<sup>1</sup>, Larissa Maier<sup>2</sup>, Monica Barratt<sup>3</sup>, Jason Ferris<sup>4</sup>, Katherine Keyes<sup>5</sup>, Adam Winstock<sup>6</sup>, <sup>1</sup>New York University School of Medicine, New York, NY, <sup>2</sup>University of Zurich, Zurich, Switzerland, <sup>3</sup>National Drug and Alcohol Research Centre, Sydney, Australia, <sup>4</sup>University of Queensland, Brisbane, Australia, <sup>5</sup>Columbia University Mailman School of Public Health, Newark, NJ, <sup>6</sup>Global 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>, Elijah 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

**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 Kangas<sup>1</sup>, Dionyssios Mintzopoulos<sup>2</sup>, Timothy Gillis<sup>1</sup>, Jack Bergman<sup>1</sup>, Marc Kaufman<sup>2</sup>, <sup>1</sup>ADARC - McLean Hospital, Belmont, MA, <sup>2</sup>McLean 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

- 2:30 *Targeting the endogenous cannabinoid system to reduce opioid use and dependence 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 Cox<sup>1</sup>, Natalia Jaworska<sup>2</sup>, Maria Tippler<sup>1</sup>, Natalie Castellanos Ryan<sup>3</sup>, France Durand<sup>1</sup>, Dominique Allard<sup>1</sup>, Chawki Benkelfat<sup>1</sup>, Alain Dagher<sup>1</sup>, Frank Vitaro<sup>3</sup>, Mara Brendgen<sup>4</sup>, Michel Boivin<sup>5</sup>, Robert Pihl<sup>1</sup>, Richard Tremblay<sup>6</sup>, Jean Séguin<sup>4</sup>, Marco Leyton<sup>1</sup>, <sup>1</sup>McGill University, Montreal, QC, <sup>2</sup>The Royal's Institute of Mental Health Research, Ottawa, Ontario, Canada, <sup>3</sup>Université de Montréal, Outremont, QC, <sup>4</sup>Université de Montréal, Montreal, QC, <sup>5</sup>Université Laval, Québec, Canada, <sup>6</sup>CHU 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: Two-year 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

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## Wednesday, June 21, 2017

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- 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, safety, 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
- 5:35 *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
- 2 *Bupirone 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-HT<sub>2C</sub> 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
- 4 *The 5-HT<sub>2A</sub> 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
- 7 *Potent rewarding and reinforcing properties of the amphetamine-type stimulant 3-fluoromethamphetamine 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
- 8 *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
- 10 *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
- 11 *“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
- 12 *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
- 13 *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
- 14 *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
- 15 *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
- 16 *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

- 17 *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
- 18 *Glucocorticoid-endocannabinoid interactions in the prelimbic cortex mediate stress-potentiated 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

- 19 *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
- 20 *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
- 23 *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

- 26 *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
- 27 *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
- 29 *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
- 32 *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 Addiction, Zurich, Switzerland
- 33 *Clinician attitudes, perceived social norms, and intentions to implement Web-delivered 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
- 34 *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
- 35 *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
- 36 *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
- 37 *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

- 38 *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
- 40 *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
- 41 *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 Mañá<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
- 42 *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

- 43 *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
- 44 *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

- 45 *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
- 46 *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
- 47 *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
- 48 *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
- 49 *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
- 50 *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**

- 51 *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
- 52 *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
- 53 *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

- 54 *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
- 55 *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
- 56 *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
- 57 *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

- 60 *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
- 61 *Association between cannabis use and lifetime coronary disease*  
Hannah Croke<sup>1</sup>, Linda Cottler<sup>1</sup>, Catherine Woodstock Striley<sup>1</sup>, <sup>1</sup>University of Florida, Gainesville, FL
- 62 *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

- 63 *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
- 64 *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
- 65 *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
- 66 *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
- 67 *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
- 68 *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
- 71 *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

- 72 *Survey of Australians' knowledge, perception and use of cannabis for medicinal purposes*  
Jan Copeland<sup>1</sup>, Peter Gates<sup>1</sup>, Stephanie Todd<sup>1</sup>, <sup>1</sup>University of South Wales, Sydney, Australia
- 73 *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
- 74 *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
- 75 *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
- 76 *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
- 77 *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. Gilbert<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
- 80 *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
- 81 *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



- 82 *Cognitive rehabilitation for individuals with opioid use disorder: A randomized controlled trial*  
Mehmet Sofuoğlu<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

- 83 *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
- 84 *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
- 86 *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
- 88 *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
- 89 *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
- 90 *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

- 91 *The impact of a potentially tamper-resistant controlled-release formulation of oxycodone: Key findings from the national opioid medications abuse deterrence (NOMAD) study*  
Briony Larance<sup>1</sup>, Robert Ali<sup>2</sup>, Michael Farrell<sup>3</sup>, Amy Peacock<sup>3</sup>, Raimondo Bruno<sup>4</sup>, Nichola Lintzeris<sup>5</sup>, Timothy Dobbins<sup>3</sup>, Louisa Degenhardt<sup>6</sup>, <sup>1</sup>University of South Wales, Sydney, Australia, <sup>2</sup>WHO Collaborating Centre for the Treatment of Drug and Alcohol Problems, Adelaide, South Australia, Australia, <sup>3</sup>National Drug and Alcohol Research 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 DeVeugh-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>Quintessential 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
- 94 *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
- 95 *"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
- 96 *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
- 98 *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
- 101 *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
- 102 *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>, <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
- 104 *Tolerance and cross-tolerance to the antinociceptive effects of oxycodone and the imidazoline I2 receptor agonist phenzoline 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
- 105 *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
- 106 *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
- 107 *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
- 108 *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

- 109 *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
- 111 *Do cannabinoids have the potential to be opioid-sparing in chronic pain treatment? A systematic review and meta-analyses*  
Suzanne Nielsen<sup>1</sup>, Pamela Sabioni<sup>2</sup>, Jose Trigo<sup>2</sup>, Mark Ware<sup>3</sup>, Brigid Betz-Stablein<sup>1</sup>,  
Bridin Murnion<sup>4</sup>, Kok Eng Khor<sup>5</sup>, Nichola Lintzeris<sup>6</sup>, Michael Farrell<sup>7</sup>, Smith  
Andrew<sup>2</sup>, Bernard Le Foll<sup>2</sup>, <sup>1</sup>University of South Wales, Sydney, Australia, <sup>2</sup>Centre  
for Addiction and Mental Health, Toronto, ON, <sup>3</sup>McGill University, Montreal,  
Quebec, Canada, <sup>4</sup>University of Sydney, Sydney, Australia, <sup>5</sup>Prince of Wales  
Hospital, New Territories, Hong Kong, <sup>6</sup>Drug and Alcohol Services, South Eastern  
Sydney Local Health District, Sydney,  
Australia, <sup>7</sup>National Drug and Alcohol Research Centre, Sydney, Australia
- 112 *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

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.

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**Thursday, June 22, 2017**

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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 Apta<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

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## Thursday, June 22, 2017

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- 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 Maggio<sup>1</sup>, Meredith Saunders<sup>2</sup>, Thomas Baxter<sup>2</sup>, Kimberly Nixon<sup>3</sup>, Mark Prendergast<sup>2</sup>, Gaungrong Zheng<sup>4</sup>, Peter Crooks<sup>4</sup>, Rachel Slack<sup>5</sup>, Amy Newman<sup>5</sup>, Jon Thorson<sup>6</sup>, Linda Dwoskin<sup>1</sup>, Michael Bardo<sup>1</sup>, <sup>1</sup>University of Kentucky, Lexington, KY, <sup>2</sup>University of Kentucky, Department of Psychology, Lexington, KY, <sup>3</sup>University of Kentucky, Department of Pharmaceutical Sciences, Lexington, KY, <sup>4</sup>University of Arkansas for Medical Sciences, Little Rock, AR, <sup>5</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>6</sup>Department of Pharmaceutical Sciences, University of Kentucky, Lexington, KY
- 9:15      *Effects of lorcaserin and bupirone, 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

**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*  
Mirzada 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
- 11:30 *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
- 11:45 *"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
- 10:45 *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 University, Richmond, VA, <sup>3</sup>American University of Beirut, Beirut, Lebanon
- 11:15 *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
- 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

- 11:45 *Concentrated naloxone nasal spray for opioid overdose reversal: A pharmacokinetic study in healthy volunteers*  
Rebecca McDonald<sup>1</sup>, Ulrike Lorch<sup>2</sup>, Jo Woodward<sup>3</sup>, Björn Bosse<sup>3</sup>, Helen Johnson<sup>3</sup>, Gill Mundin<sup>3</sup>, Kevin Smith<sup>3</sup>, John Strang<sup>4</sup>, <sup>1</sup>King's College, London, UK, <sup>2</sup>Richmond Pharmacology Ltd, London, UK, <sup>3</sup>Mundipharma Research Ltd., Cambridge, UK, <sup>4</sup>King'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 male and 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-HT<sub>2A</sub> 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 University-Psychiatry, Richmond, VA, <sup>2</sup>Bulgarian Addictions Institute
- 11:00 *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 Gyudish<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
- 11:30 *Causal pathways between impulsiveness, crack cocaine use consequences and attention-deficit/hyperactivity disorder*  
Mayra Pachado<sup>1</sup>, Alice Willhelm<sup>1</sup>, Luciano S. P. Guimarães<sup>1</sup>, Flavio Pechansky<sup>2</sup>, Felix Kessler<sup>2</sup>, Rosa M. M. de Almeida<sup>2</sup>, <sup>1</sup>Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, <sup>2</sup>Center for Drug and Alcohol Research of, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

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**Thursday, June 22, 2017**

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- 11:45 *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
- 12:00 *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
- 10:40 *Causal control of negative reinforcement by dopamine release and its modulation  
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**

**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*  
V́ctor Mart́nez-Loredo<sup>1</sup>, Sergio Fernandez-Artamendi<sup>2</sup>, Aris Grande-Gonsende<sup>3</sup>, ́ngel Garća-Ṕrez<sup>3</sup>, Irene Pericot-Valverde<sup>4</sup>, Jose Ram3n Fern3ndez-Hermida<sup>3</sup>, <sup>1</sup>University of Oviedo, Addictive Behaviors Group, Oviedo, Spain, <sup>2</sup>Universidad Loyola Andaluća-Department of Psychology, Andalucia, Spain, <sup>3</sup>University of Oviedo, Oviedo, Spain, <sup>4</sup>University 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, Australia, <sup>3</sup>Princess Alexandra Hospital, Queensland, Australia

**LES LIAISONS DANGEREUSES: PSYCHIATRIC  
COMORBIDITY**

Chairs: Jibrán 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*  
Jibrán 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
- 2:45 *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 PHARMACOEPIDEMOLOGY 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 Spagnolo<sup>1</sup>, Alane kimes<sup>2</sup>, Melanie Scwhandt<sup>3</sup>, Karran Phillips<sup>4</sup>, Nancy Diazgranados<sup>3</sup>, Ehsan Shokri Kojori<sup>3</sup>, Kenzie Preston<sup>5</sup>, Dardo Tomasi<sup>3</sup>, Peter Herscovitch<sup>6</sup>, Markus Heilig<sup>7</sup>, Vijay Ramchandani<sup>3</sup>, <sup>1</sup>NIH, NIAAA, Bethesda, MD, <sup>2</sup>NIH, NIDA, Bethesda, MD, <sup>3</sup>NIAAA, Bethesda, MD, <sup>4</sup>NIDA, Bethesda, MD, <sup>5</sup>NIDA Intramural Research Program, Baltimore, MD, <sup>6</sup>NIH, PET, CC, Bethesda, MD, <sup>7</sup>Linköping 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 Otiaashvili<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
- 5:00 *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 Treister<sup>1</sup>, Ryan Lanier<sup>1</sup>, Imrana Kazam<sup>1</sup>, Nathalie Erpelding<sup>1</sup>, Harrison Elder<sup>1</sup>, Maitreyee Mohanty<sup>1</sup>, Dolapo Lawal<sup>1</sup>, Judith Jones<sup>2</sup>, Nathaniel Katz<sup>1</sup>, <sup>1</sup>Analgesic Solutions, Natick, MA, <sup>2</sup>The Degge Group, Ltd.
- 5:15 *Retention and drug use among treatment-resistant patients transferred to a 'Second Chance' methadone maintenance treatment program*  
Emytis Tavakoli<sup>1</sup>, Emily Deal<sup>2</sup>, Gary Rhodes<sup>3</sup>, Edward Mischel<sup>3</sup>, Carl Christensen<sup>3</sup>, Alireza Amirsadri<sup>3</sup>, Mark Greenwald<sup>3</sup>, <sup>1</sup>Wayne State University, Alborz University of Medical Sciences, Montreal, Quebec, Canada, <sup>2</sup>Kalamazoo College, Kalamazoo, MI, <sup>3</sup>Wayne State University, Detroit, MI

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**Thursday, June 22, 2017**

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**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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# SYMPOSIA

**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.

# SYMPOSIA

## 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.

# SYMPOSIA

## 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.



# SYMPOSIA

**Tuesday, June 20**

*VII. Pain and Addiction: Opioids and Beyond*

Chairs: Martin D. Cheatile 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 highly-debated 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 Drobos

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.

# SYMPOSIA

**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 self-administration 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.

# SYMPOSIA

**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 e-cigarette 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 self-administration 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.

# SYMPOSIA

**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 G-protein 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 population-based 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.

# SYMPOSIA

**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. This 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.

# WORKSHOPS

**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.

*II. 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 HIV-associated 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.

# WORKSHOPS

**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-ACTION public-private partnership to develop consensus terms and definitions for abuse-related 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.

# WORKSHOPS

## 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; life-work 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.



## WORKSHOPS

### 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 wide-range of drugs and across many different treatment populations. It is also being used to promote change in behaviors impacting the course of other chronic diseases (e.g., obesity, diabetes). At the 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.

# WORKSHOPS

## 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 internet-based 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.

# WORKSHOPS

**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.

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## NOTES

## NOTES

