BOARD OF DIRECTORS

Thomas R. Kosten, MD, President               Herbert D. Kleber, MD
Kathryn A. Cunningham, PhD, Past-President    A. Thomas McLellan, PhD
Stephen T. Higgins, PhD, President-Elect      Michael A. Nader, PhD
Dorothy K. Hatsukami, PhD, Treasurer          S. Stevens Negus, PhD
James C. Anthony, PhD                         Alison Oliveto-Beaudoin, PhD
Steven R. Childers, PhD                       Linda J. Porrino, PhD
Anna Rose Childress, PhD                      Maxine L. Stitzer, PhD
William L. Dewey, PhD                         Dace S. Svikis, PhD
Toby K. Eisenstein, PhD                       Sharon Walsh, PhD
Sari Ïzenwasser, PhD

EXECUTIVE OFFICER

Martin W. Adler, PhD

SCIENTIFIC PROGRAM COMMITTEE

Sharon Walsh, PhD, Chair
Sari Ïzenwasser, PhD, Chair-Elect
Martin W. Adler, PhD, ex officio
Ellen B. Geller, MA, ex officio
Patrick Beardsley, PhD
Anna Rose Childress, PhD
Mark Greenwald, PhD
Scott Hemby, PhD
Arthur Horton, EdD
Kathleen Kantak, PhD
Gary B. Kaplan, MD
S. Michael Owens, PhD
Linda J. Porrino, PhD
Friedbert Weiss, PhD
Sandra Welch, PhD
PRE-MEETING SATELLITES

The International Study Group Investigating Drugs as Reinforcers (ISGIDAR)
Chaired by Richard Foltin

7th Annual Meeting Center for Substance Abuse Treatment (CSAT)
Science to Services and Services to Science:
The Identification and Adoption of Effective Practices for Substance Abuse Treatment
Chaired by Laura House

The 12th Annual NIDA International Forum on Building International Research on Drug Abuse:
Progress through Collaboration
Chaired by Steven Gust

Building Translational Research in Medications Development in Academia
Chaired by Paul Schnur

CPDD REGISTRATION
Quebec Convention Center (CCQ)

Saturday, June 16  1:30 PM - 5:30 PM
Sunday, June 17  8:00 AM - 12:00 PM
               2:00 PM - 5:30 PM
Monday, June 18  8:00 AM - 12:00 PM
               2:00 PM - 5:30 PM
Tuesday, June 19  8:00 AM - 1:00 PM
Wednesday, June 20  8:00 AM - 12:00 PM
               1:15 PM - 5:30 PM
Thursday, June 21  8:00 AM - 1:00 PM

OPENING RECEPTION
(Cash Bar)  7:00 – 9:00 PM
Hilton Ballroom
Sunday, June 17, 2007

CSAT Travel Award Breakfast
(By Invitation Only)

Hilton Villeray
7:00 - 8:00 AM

Plenary Session

Salle de Bal
Hilton Ballroom
8:00 - 10:30 AM

8:00 Welcoming Remarks
Thomas R. Kosten, CPDD President,
8:10 Report from the National Institute on Drug Abuse
Nora D. Volkow, Director, NIDA,
8:40 Presentation of the Distinguished Service Award to Ellen B. Geller
Introductions by Sharon Walsh and Thomas R. Kosten,
8:45 Presentation of the CPDD/NIDA Media Award to John Hoffman, Susan Froemke, and Sheila Nevins of HBO, Inc.
Introductions by Nora Volkow, Mark Kaufman, and Thomas R. Kosten,
9:00 Presentation of the Mentorship Award to Scott E. Lukas
Introduction by Igor Elman,
9:05 Presentation of the Joseph Cochin Young Investigator Award to Nancy Petry
Introduction by Maxine Stitzer,
9:10 Presentation of the Nathan B. Eddy Award to Jack H. Mendelson and Nancy K. Mello
Introductions by Kenner Rice and Louis Harris,
9:30 Nathan B. Eddy Award Lectures by Jack Mendelson and Nancy Mello

BUSINESS MEETING
(Members Only)

Hilton Porte St. Louis
10:30 - 11:30 AM

President’s Lecture

Hilton Ballroom
1:00 - 2:00 PM

HIV/AIDS IN 2007: PROGRESS AND PRIORITIES

Anthony S. Fauci, Director
National Institute of Allergy and Infectious Diseases/NIH
Symposium I
ON THE HORIZON: NEXT GENERATION ADDICTION MEDICATIONS
Chairs: Lawrence Toll and F. Ivy Carroll

2:15 Orexin/Hypocretin receptor antagonists prevent cocaine-induced plasticity in the VTA: A potential therapeutic target for psychostimulant addiction
Stephanie Borgland, University of California, San Francisco, Emeryville, CA

2:35 NOP agonists as potential medications for drug abuse
Taline Khroyan, SRI International, Menlo Park, CA

2:55 mGluR5 antagonists in drug dependence: Emphasis on cocaine and nicotine
Athina Markou, University of California, San Diego, La Jolla, CA

3:15 The kappa opioid receptor as a target for stimulant addiction: Studies with JDTic
F. Ivy Carroll, Research Triangle Institute, Research Triangle Park, NC

3:35 Modulation of cannabinoid CB1 receptor activity as a promising approach to development of medications for drug dependence
Bernard Le Foll, University of Toronto, Toronto, Canada

3:55 Discussant
Lawrence Toll, SRI International, Menlo Park, CA

Symposium II
EVIDENCE-BASED TREATMENT IN THE DEVELOPING WORLD: THE EXPANDING SCOPE OF CPDD
Chairs: George E. Woody and Gabriele Fischer

2:15 Transcultural adaptation and validation of the Addiction Severity Index 6 (ASI 6) and Risk Assessment Battery for Brazil
Flavio Pechansky, Center for Drug and Alcohol Research of the Federal University of Rio Grande do Sul, Port Alegre, Brazil

2:40 Buprenorphine treatment in Malaysia
Mahmud Mazlan, Substance Abuse Research Center, General Hospital Muar, Malaysia

3:05 Addiction treatment and HIV prevention: A public health approach
Azarakhsh Mokri, Iranian National Center for Addiction Studies, Iran

3:30 Buprenorphine, methadone and reducing HIV risk in Ukraine
Sergey Dvoryak, Ukrainian Institute of Public Health Policy, Ukraine

3:55 Discussant
Evgeny Krupitsky, Pavlov State Medical University and Leningrad Regional Center of Addictions, St. Petersburg, Russia
Oral Communications 1

CCQ 301AB
2:15 - 4:15 PM

CONTINGENCY MANAGEMENT: I'LL VOUCH FOR THAT!

Chairs: Jesse Milby and Maxine Stitzer

2:15 Abstinence incentives for methadone-maintained stimulant users: Outcome for those testing stimulant-positive versus negative at study intake
M. Stitzer, Psychiatry, Johns Hopkins University School of Medicine, Baltimore, MD

2:30 Employment-based abstinence reinforcement as a maintenance intervention for the treatment of persistent cocaine use in methadone patients
K. Silverman, W.D. Donlin, T.W. Knealing and C.J. Wong, Johns Hopkins University School of Medicine, Baltimore, MD

2:45 Workplace attendance as a predictor of cocaine abstinence in injection drug-using methadone patients exposed to employment-based abstinence reinforcement
W.D. Donlin, C.J. Wong, T.W. Knealing and K. Silverman, Psychiatry, Johns Hopkins University, Baltimore, MD

3:00 When cocaine-dependent homeless sustain abstinence, how much does their homelessness and employment improve?
J.B. Milby¹, J.E. Schumacher¹, D. Wallace², S. Kertesz¹, R.E. Vuchinich¹, S. Sieweke¹ and R. Cusimano¹, ¹Psychology, UAB, Birmingham, AL and ²RHO Federal Systems Division, Inc., Chapel Hill, NC

3:15 Are there negative side-effects of resets in an escalating voucher schedule?
B.E. Versek, E. Bresani, R.S. Gardner, C.M. Carpenedo, J. Barone, L. Jacobs, A. Padovano, B.J. Rosenwasser and K.C. Kirby, Treatment Research Institute, Philadelphia, PA

3:30 Larger cash research payments: Decreasing attrition without increasing coercion or new drug use
J.R. Croft, D.S. Festinger, D.B. Marlowe, K.L. Dugosh and E.C. James, Law and Ethics, Treatment Research Institute, Philadelphia, PA

3:45 Computerized voucher- and prize-based contingency management: Automated earnings calculation, prize drawing, tracking, and records management
K.L. Preston¹, M. Mezghanni², D.H. Epstein¹, J.L. Lin³, J. Schmittner¹ and M. Vahabzadeh³, ¹Clinical Pharmacology and Therapeutics Research Branch, and ³Biomedical Informatics Section, NIDA Intramural Research Program, ²Johns Hopkins Bayview Medical Center, Baltimore, MD

4:00 Contingency management as a strategy for recruiting participants into clinical trials
S. Shoptaw¹, E. Rotheram-Fuller¹, K. Heinzerling¹ and W. Ling², ¹Family Medicine, UCLA, and ²UCLA, Los Angeles, CA
Oral Communications 2

CLUB DRUGS: THEY’RE ALL THE RAVE!

Chairs: Shane Perrine and Elise Weerts

2:15 Determinants of MDMA self-administration
M.A. Taffe, S. Wee, N.W. Gilpin and G.F. Koob, Committee on the Neurobiology of Addictive Disorders, The Scripps Research Institute, La Jolla, CA

2:30 Self-administration of gamma-hydroxybutyrate (GHB) in baboons
E.M. Weerts, A.K. Goodwin, B.J. Kaminski, N.A. Ator and R.R. Griffiths, Psychiatry, Johns Hopkins University, Baltimore, MD

2:45 Synergistic interactions between “club drugs”: Gamma-hydroxybutyrate (GHB) and phencyclidine (PCP) enhance each other’s discriminative stimulus effects
W. Koek1,2, M. Khanal2 and C.P. France2,1,1Psychiatry, and 2Pharmacology, University of Texas Health Science Center at San Antonio, San Antonio, TX

3:00 MDMA-induced CYP2D6 autoinhibition in humans
R. De La Torre1,2, B. O’Mahony1,2, M. Farre1,3, M. Torrens4,3, R. Pardo1,3, N. Closas1, S. Abanades1,2, D. Barral1,3, E. Menoyo1 and M. Perez1, IMIM, 2Universitat Pompeu Fabra, 3Universitat Autonoma de Barcelona, and 4IAPS-Hospital del Mar, Barcelona, Spain

3:15 Psychomotor, subjective, and cognitive effects of GHB and triazolam in healthy volunteers
L.P. Carter1, R.R. Griffiths1,2 and M.Z. Mintzer1,1Psychiatry, and 2Neuroscience, Johns Hopkins University, Baltimore, MD

3:30 Neurochemical profile of MDMA determined by 1H magnetic resonance spectroscopy and the relationship to serotonergic neurotoxicity
S.A. Perrine, F. Ghoddoussi, E.M. Hyde and M.P. Galloway, Psychiatry and Behavioral Neurosciences, Wayne State University School of Medicine, Detroit, MI

3:45 Semantic memory processing in MDMA users: An fMRI study
V. Raj, E. Genca, A. Bauerneind, E. Charboneau, A. Heinecke, C. Cannistraci, M. Dietrich, S. Park and R. Cowan, Vanderbilt University, Nashville, TN

4:00 Illicit ‘ecstasy' consumption: Acute physiological and pharmacological impacts
K.M. Morefield1, M. Keane1, P.D. Felgate2, J.M. White1 and R.J. Irvine1,1University of Adelaide, and 2Forensic Science, Adelaide, SA, Australia

Symposium III

ON THE ROAD TO CHEMICAL LIGAND DEVELOPMENT FOR DRUG ABUSE RESEARCH

Chairs: Christine Colvis and David Shurtleff

4:30 Novel pharmacological tools based on distinct G protein-coupled receptor signaling mechanisms
Marc G. Caron, Duke University Medical Center, Durham, NC
Sunday, June 17, 2007

4:50  *Modulation of opioid receptor activity by heterodimerization: Screening for allostERIC enhancers*  
Lakshmi A. Devi, Mount Sinai School of Medicine, New York, NY

5:10  *Lead optimization in drug abuse research: Investigation of the salvinorin A template*  
Thomas Prisinzano, College of Pharmacy, University of Iowa, Iowa City, IA

**Symposium IV**  
CCQ 303AB  
4:30 - 5:30 PM

**OH CANADA! SUBSTANCE ABUSE RESEARCH IN YOUTH**  
FROM SEA TO SHINING SEA

Chairs: Lisa C. Vettese and Tony P. George

4:30  *Personality-matched early intervention for alcohol misuse: Applications to urban, rural, and First Nations Youth in Canada*  
Sherry Stewart, Dalhousie University, Nova Scotia, Canada

4:50  *Outcomes from a randomized control trial evaluating mindfulness and motivational interviewing approaches for youth in an outpatient addiction service*  
Lisa C. Vettese, Centre for Addiction and Mental Health, University of Toronto, Toronto, Ontario, Canada

5:10  *Discussant: Youth drug abuse research in Canada: Looking back, looking forward*  
Tony P. George, Centre for Addiction and Mental Health, University of Toronto, Toronto, Ontario, Canada

**Oral Communications 3**  
CCQ 301AB  
4:30 - 5:30 PM

**OPIOID RECEPTORS: IT’S ALL ABOUT MU**

Chairs: Craig Stevens and Gail Pereira Do Carmo

4:30  *Comparison of cloned frog and human mu opioid receptors reveals differences in affinity and selectivity*  
C.W. Stevens, C.M. Brasel and G.W. Sawyer, Pharmacology and Physiology, OSU-Center for Health Sciences, Tulsa, OK

4:45  *Comparison of the neuroendocrine effects of the endogenous μ-opioid agonist, β-endorphin, with loperamide and fentanyl, in non-human primates*  
E. Butelman, M. Mandau, V. Yuferov, B. Reed and M.J. Kreek, The Rockefeller University, New York, NY

5:00  *Effects of the novel opioid glycopeptide MMP2200 on thermal allodynia, nociception, and scheduled-controlled behavior in rhesus monkeys*  
G. Pereira Do Carmo¹, R. Polit² and S.S. Negus¹, ¹ADARC, Harvard Medical School/McLean Hospital, Belmont, MA and ²University of Arizona, Tucson, AZ

5:15  *Selective attenuation of the discriminative stimulus effects of µ opioid receptor agonists by Δ⁹-THC in rhesus monkeys*  
C.P. France¹², J. Li³, L.R. Gerak¹ and G.L. Becker¹, ¹Department of Pharmacology, and ²Department of Psychiatry, University of Texas Health Science Center at San Antonio, San Antonio, TX
Oral Communications 4

CCQ 205ABC
4:30 - 5:30 PM

METHAMPHETAMINE: UNSAFE AT ANY SPEED

Chairs: Brooks Gentry and Carl Hart

4:30  **Differential effects of abrupt methamphetamine abstinence on mood, cognition and sleep quality in recently abstinent methamphetamine abusers**

B. Gentry\(^1\), M.J. Mancino\(^1\), Z. Feldman\(^1\), J. Mendelson\(^2\) and A. Oliveto\(^1\), \(^1\)University of Arkansas for Medical Sciences, Little Rock, AR and \(^2\)University of California, San Francisco, CA

4:45  **Acute effects of intranasal methamphetamine on physiological and behavioral effects under controlled conditions**

A. Perez\(^1\), E. Gunderson\(^1\), M.G. Kirkpatrick\(^2,1\), A. Thurmond\(^1\), S.D. Comer\(^1\), R.W. Foltin\(^1\) and C.L. Hart\(^2,1\), \(^1\)Psychiatry, and \(^2\)Psychology, Columbia University, New York, NY

5:00  **Methamphetamine-related changes in behavior identified using an extended duration to monitor locomotor activity in mice**

B.K. Harvey\(^1\), K. Culbertson\(^2\) and Y. Wang\(^1\), \(^1\)Neural Protection and Regeneration Section, and \(^2\)Biomedical Informatics Section, National Institute on Drug Abuse, Baltimore, MD

5:15  **Pharmacological and behavioral determinants of stimulant-induced hyperthermia**

E.J. Jaehne, A. Salem and R.J. Irvine, Discipline of Pharmacology, University of Adelaide, Adelaide, SA, Australia

Workshop I

CCQ 206AB
8:00 - 10:00 PM

MATHEMATICAL MODELING IN BIOLOGICAL AND EPIDEMIOLOGICAL STUDIES OF DRUG ADDICTION

Chairs: Georgiy Bobashev and Boris Gutkin

Towards a comprehensive mathematical model of injecting drug use epidemiology: What we do know and we don’t

Georgiy Bobashev, RTI International, Durham, NC

Illicit drug markets as complex adaptive systems: Results from the Illicit Drug Market Simulation Project

Lee Hoffer, Washington University School of Medicine, St. Louis, MO

Decision processes and multiple neurotransmitter interactions in models of drug addiction

Boris Gutkin, Institut Pasteur, Paris, France

Transition to drug addiction: A negative reinforcement model

Serge Ahmed, University of Bordeaux, Bordeaux France
Workshop II
CCQ 205ABC
8:00 - 10:00 PM
HELPING TEENS WITH PROBLEMS OF
DRUG DEPENDENCE AND CRIME
Chair: Laura Burney Nissen

Workshop III
CCQ 301AB
8:00 - 10:00 PM
CLINICAL SUPERVISION IN SUBSTANCE ABUSE
TREATMENT: A NEGLECTED ART
Chairs: Anne Helene Skinstad and Thomas Vaughn

Workforce development survey conducted with clinical supervisors in the Prairielands ATTCs
Anne Helene Skinstad, Prairielands ATTC, The University of Iowa, Iowa City, IA

Clinical supervision from a national survey of outpatient clinics in the U.S.
Thomas Vaughn, University of Iowa, Iowa City, IA

Workforce development survey conducted with clinical supervisors in the Mountain West ATTCs
Nancy A. Roget, Mountain West ATTC, University of Nevada, Reno, NV

New guidelines for clinical supervision in substance abuse treatment settings
Steven Gallon, Northwest Frontier ATTC, Oregon Health and Science University, Salem, OR

Workshop IV
CCQ 303AB
8:00 - 10:00 PM
WHAT'S NEW AT NIDA AND NIH: ELECTRONIC
SUBMISSION OF APPLICATIONS AND MORE
Chairs: Teri Levitin and Mark Swieter

Workshop V
Hilton Porte Kent
8:00 - 10:00 PM
NIDA WORKSHOP AND POSTER SESSION ON
INTERNATIONAL RESEARCH AND COLLABORATION
Chair: Steven Gust

BADGES MUST BE WORN IN ALL SCIENTIFIC SESSIONS
POSTER SESSION I (Breakfast)

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

Set-up time begins Sunday 11:30 AM
Must be removed by Monday 12:30 PM

STRESS

1 Early postnatal stress, as modeled by maternal separation, alters morphine-induced conditioned place preference in male offspring, but not in females
   C.C. Michaels and S.G. Holtzman, Pharmacology, Emory University, Atlanta, GA

2 Chronic unpredictable stress alters cocaine conditioned place preference in CB1 cannabinoid receptor knockout mice
   L.L. Miller\textsuperscript{1}, S.O. Franklin\textsuperscript{2}, A.C. Howlett\textsuperscript{2}, S.J. Ward\textsuperscript{1}, F. Henry\textsuperscript{1}, B.D. Fischer\textsuperscript{1} and L.A. Dykstra\textsuperscript{1}, \textsuperscript{1}University of North Carolina, Chapel Hill, and \textsuperscript{2}J.L. Chambers Biomed/Biotech Research Institute, North Carolina Central University, Durham, NC

3 Rats with extended access to cocaine exhibit increased stress reactivity, and enhanced sensitivity to the anxiolytic actions of LY379268, during abstinence
   H. Aujla, R. Martin-Fardon and F. Weiss, Molecular and Integrative Neurosciences Department, The Scripps Research Institute, La Jolla, CA

4 Effects of the vasopressin V1b antagonist SSR149415 on cocaine self-administration
   R. Picetti and M.J. Kreek, The Rockefeller University, New York, NY

5 Lower heart rate variability may be associated with greater cocaine craving during stress
   S. LaRowe\textsuperscript{1,2}, A. Waldrop\textsuperscript{1}, A. McRae\textsuperscript{1} and K. Brady\textsuperscript{1}, \textsuperscript{1}Psychiatry, Medical University of South Carolina, and \textsuperscript{2}Mental Health Service, Ralph H. Johnson VAMC, Charleston, SC

6 Enhanced behavioral and bodily responses to stress and drug cue exposure in abstinent cocaine patients: Association with cocaine relapse outcomes
   K.L. Bergquist, H.C. Fox, K.I. Hong and R. Sinha, Psychiatry, Yale University, New Haven, CT

7 Gender differences in HPA responses to stress and drug cues in cocaine patients compared with social drinking controls
   K. Hong\textsuperscript{1}, H. Fox\textsuperscript{1}, M.J. Kreek\textsuperscript{2} and R. Sinha\textsuperscript{1}, \textsuperscript{1}Psychiatry, Yale University, New Haven, CT and \textsuperscript{2}The Laboratory on the Biology of Addictive Diseases, Rockefeller University, New York, NY

8 Emotional and behavioral differences in stress and drug-cue response in cocaine-dependent, alcohol-dependent and co-dependent individuals compared with controls
   H. Fox, K.I. Hong and R. Sinha, Psychiatry, Yale University, New Haven, CT

9 Is there a relationship between stress reactivity and response to amphetamine in cigarette smokers?
   A. Hamidovic, H. de Wit, E. Childs and A. King, Psychiatry, The University of Chicago, Chicago, IL
10 Stress reactivity in response to pharmacologic and psychological laboratory stress tasks: Impact of gender and smoking status
   M.E. Saladin\textsuperscript{1}, S.E. Back\textsuperscript{1}, M.L. Verduin\textsuperscript{1}, A.E. Waldrop\textsuperscript{1}, S.D. Yeatts\textsuperscript{1}, J. Allen\textsuperscript{2}, M.J. Kreek\textsuperscript{2} and K.T. Brady\textsuperscript{1}, \textsuperscript{1}Medical University of South Carolina, Charleston, SC and \textsuperscript{2}Rockefeller University, New York, NY

11 Gender differences in stress-induced cortisol reactivity in smokers
   E.L. Harrison, C.M. Mazure, R. Sinha, P. Allen, S. Coppola, N. Estevez and S. McKee, Psychiatry, Yale University School of Medicine, New Haven, CT

12 Effects of acute psychological stress upon allopregnanolone
   E. Childs and H. de Wit, University of Chicago, Chicago, IL

13 Factor associated with anxiety levels following the Lebanon war among methadone maintenance treatment patients in two clinics in Israel
   E. Lawental\textsuperscript{1}, E. Peles\textsuperscript{2}, S. Schreiber\textsuperscript{2}, M. Adelson\textsuperscript{2} and M. Schori\textsuperscript{3}, \textsuperscript{1}Haifa Drug Abuse Treatment Center and Tel Hai Academic College, Haifa, \textsuperscript{2}Adelson Clinic for Drug Abuse Treatment and Research, Tel-Aviv, and \textsuperscript{3}University of Haifa, Haifa, Israel

14 Stress-induced changes in hypothalamic-pituitary-adrenal responses among drug-dependent African-Americans currently receiving residential treatment
   S.B. Daughters\textsuperscript{1}, M.N. Sargeant\textsuperscript{1}, R.M. Schuster\textsuperscript{1}, R. Sinha\textsuperscript{2} and C.W. Lejuez\textsuperscript{1}, \textsuperscript{1}University of Maryland, College Park, MD and \textsuperscript{2}Psychiatry, Yale University School of Medicine, New Haven, CT

15 Stimulant use pattern is associated with subjective psychological stress among rural users
   T.F. Garrity\textsuperscript{1}, C.G. Leukefeld\textsuperscript{1}, J.M. Webster\textsuperscript{1} and B.M. Booth\textsuperscript{2}, \textsuperscript{1}Behavioral Science, University of Kentucky College of Medicine, Lexington, KY and \textsuperscript{2}Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR

16 Stress imagery exposure in cocaine-dependent participants elicits subtle increases in desire and anxiety
   L.G. Harrison, R. De La Garza, V. Boss-Edwards, M.R. Costello and T.F. Newton, David Geffen School of Medicine at UCLA, Los Angeles, CA

17 Women’s EMG and SCL response to a stressor during early recovery
   C.M. Coyne, Psychosocial and Community Health, University of Washington, Seattle, WA

ANIMAL BEHAVIOR: REINFORCEMENT

18 Self-administration of membrane-impermeable anabolic-androgenic steroids (AAS) in Syrian hamsters
   S.M. Sato and R.I. Wood, Cell and Neurobiology, University of Southern California, Los Angeles, CA

19 Transition from moderate to excessive food intake: An example of “escalation” using non-drug reinforcers
   J.E. Goeders, A.C. Murnane, L.L. Howell and W.E. Fantegrossi, Division of Neuroscience, Yerkes National Primate Research Center, Atlanta, GA

20 Operant history affects the ability of quinpirole to maintain responding in the rat
   G.T. Collins and J.H. Woods, Department of Pharmacology, University of Michigan Medical School, Ann Arbor, MI

21 Gender differences in parameter-dependent tolerance to the effects of cocaine in a modified interval schedule of reinforcement
   M.T. Weaver and M.N. Branch, Psychology, University of Florida, Gainesville, FL
22 Genetic selection for enhanced cocaine reinforcement in rats decreases food reinforcement
K.W. Grasing, S. He and Y. Yang, Substance Abuse Research Laboratory, Department of Veterans Affairs Medical Center, Kansas City, MO and Division of Clinical Pharmacology, Department of Medicine, University of Kansas School of Medicine, Kansas City, KS

23 Effect of the cannabinoid CB1 receptor antagonist SR141716A and CB1 receptor knockout on cue-induced reinstatement of Ensure® and corn-oil-seeking in mice
S. Ward, E.A. Walker and L.A. Dykstra, Department of Pharmaceutical Sciences, Temple University, Philadelphia, PA and Department of Psychology, University of North Carolina at Chapel Hill, Chapel Hill, NC

24 Attenuation of methamphetamine-seeking behavior by a cannabinoid CB1 receptor antagonist via the activation of nicotinic transmission in the prefrontal cortex
T. Hiranita, Y. Nawata, K. Anggadiredja and T. Yamamoto, Nagasaki International University, Sasebo, and Kyushu University, Fukuoka, Japan and Bandung Institute of Technology, Bandung, Indonesia

25 The involvement of the cannabinoid system in drug-seeking behavior and cognitive impairment after MDMA withdrawal
Y. Nawata, T. Hiranita, K. Kitaichi and T. Yamamoto, Faculty of Pharmaceutical Sciences, Nagasaki International University, Sasebo, and Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan

DRUG INTERACTIONS

26 The effects of nicotine on ethanol-induced conditioned taste aversions
J.A. Rinker, G.D. Busse and A.L. Riley, Psychology, American University, Washington, DC

27 Effects of nicotine receptor agonist injected into the diagonal band on rat intravenous cocaine self-administration
J.E. Smith, M.D. Coller, S. McIntosh, C.L. Kennedy and C. Co, Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC

28 Self-administration of drug mixtures: Combining two dopamine uptake blockers
W.L. Woolverton, T. Vasterling and F.I. Carroll, Psychiatry, University of Mississippi Medical Center, Jackson, MS and Research Triangle Institute, Research Triangle Park, NC

29 The self-administration of cocaine, heroin and cocaine/heroin combinations by rats alters ionotropic glutamate receptor subunits in the prefrontal cortex and the caudate putamen
C. Co, M.D. Coller, T.J. Martin, S.E. Hemby and J.E. Smith, Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC

30 Memantine and dizocilpine may differ in acute interactions with morphine
Y. Chen, M. Evola and A.M. Young, Pharmacology and Neuroscience, and Psychology, Texas Tech University, Lubbock, TX

31 Assessment of the ability of topiramate to affect morphine-induced conditioned place preference
S. Pournaghash-Tehrani, Psychology, Tehran University, Tehran, Iran

32 High-dose methadone maintenance reverses cocaine sensitization in rats
F. Leri, Y. Zhou, B. Carmichael, E. Cummins and M.J. Kreek, Psychology, University of Guelph, Guelph, ON, Canada and Laboratory on the Biology of Addictive Diseases, Rockefeller University, New York, NY

33 Supra-additive reinforcing effects of cocaine-diphenhydramine combinations in monkeys
Z. Wang and W.L. Woolverton, Psychiatry, University of MS Medical Center, Jackson, MS
34 Chronic low-dose dexamethasone prevents the acquisition of cocaine self-administration
C. Schmoutz, G.F. Guerin and N.E. Goeders, Pharmacology, Toxicology, and Neuroscience, Louisiana State University Health Sciences Center, Shreveport, Shreveport, LA

35 Disulfiram and cocaine interactions on the c-AMP-CREB pathway in nucleus accumbens
C.N. Haile, W. Huang, T.R. Kosten and T.A. Kosten, Psychiatry, Baylor College of Medicine, Houston, TX

36 SDF-1α potentiates the behavioral effects of cocaine in rats
J. Trecki1,2 and E.M. Unterwald1,2, 1Pharmacology, and 2Center for Substance Abuse Research, Temple University School of Medicine, Philadelphia, PA

37 Influence of repeated inhalation of toluene on methamphetamine-induced behavioral changes in mice
M. Funada, N. Aoo and K. Wada, Department of Drug Dependence Research, NIMH, NCNP, Kodaira, Tokyo, Japan

38 Ecstasy (MDMA), antidepressants and serotonin syndrome: Implications for intervention in general medical practice
E. Silins, J. Copeland and P. Dillon, National Drug and Alcohol Research Centre, Sydney, NSW, Australia

39 Examining the interaction between alprazolam and buprenorphine/naloxone in opioid substitution treatment patients
S. Nielsen1,2,3, N. Lintzeris1,3, N. Lee1, A. Bond3 and D. Taylor2,1, 1Turning Point Alcohol and Drug Centre, Fitzroy, and 2Pharmaceutical Biology, Monash University, Parkville, Victoria, Australia and 3Institute of Psychiatry, Kings College, London, UK

40 Benzodiazepine use among buprenorphine-maintained patients: Associated factors in a cross-sectional study, Bordeaux, France
E. Lavie1, M. Fatseas1, C. Denis1, J.P. Daouloued1,2 and M. Auriacombe1,2, 1Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen Bordeaux 2, Bordeaux, and 2Bizia Addiction Center, Bayonne, France

41 Methylphenidate-induced increases in smoking: Effects of rate-of-onset
A.R. Vansickel1,2, W. Stoops1, K. Hays1 and C. Rush1,2,3, 1Behavioral Science, 2Psychology, and 3Psychiatry, University of Kentucky, Lexington, KY

PHARMACOKINETICS AND CHEMISTRY

42 A pharmacokinetic/pharmacodynamic explanation of the progressive-ratio schedule of cocaine self-administration
V.L. Tsibulsky and A.B. Norman, Psychiatry, University of Cincinnati, Cincinnati, OH

43 Efficient absorption of cocaine contained in coca powder, a new form of cocaine for oral use in Andean regions
T. Llosa1, E. Chang Fung1 and L. Llosa2, 1Coca Medica, T.C. Anglo Americana, Lima, Peru and 2Maimonides Hospital, New York, DC

44 Neurotoxicant thioether adducts of MDMA are formed in humans
X. Perfetti1,2, M. Farre1,3, N. Pizarro1,4, B. O'Mahony1,2, S. Lau5, T. Monks4 and R. De La Torre1,2, 1IMIM, 2Pompeu Fabra, and 3Autonoma de Barcelona, Barcelona, Spain and 4Pharm. and Tox., and 5Southwest Environmental HSC, University of Arizona, Tucson, AZ
45 **Metabolism of codeine to morphine is inhibited in methadone-maintained patients**
   E.A. Gelston\(^1\), O.V. Lopatko\(^1\), A.L. Farquharson\(^1\), M. Hurley\(^2\), J.K. Coller\(^1\), A.A. Somogyi\(^1\)
   and J.M. White\(^1\), Department of Pharmacy, University of Adelaide, Adelaide, South Australia
   and 2Drug and Alcohol Services of South Australia, Adelaide, SA, Australia

46 **Creatinine normalization of urine: Better than nothing?**
   M.J. Kell, Labyrinth Institute, Smyrna, GA

47 **Abuse potential of lisdexamfetamine dimesylate (LDX) in adult stimulant abusers: Secondary endpoints on drug-ratings questionnaires**
   D. Jasinski\(^1\) and S. Krishnan\(^2\), Department of Medicine, Johns Hopkins University, Baltimore, MD
   and 2New River Pharmaceuticals Inc., Blacksburg, VA

48 **CM156, a novel substituted piperazine, attenuates the behavioral effects of cocaine in mice**
   R.R. Matsumoto\(^1\), L.L. Wilson\(^1\), C. Mesangeau\(^1\), J. Diers\(^1\), J. Shaikh\(^1\), J.H. Poupaert\(^2\)
   and C.R. McCurdy\(^1\), University of Mississippi, University, MS and 2Universite Catholique de Louvain, Brussels, Belgium

49 **Are there two tropane binding sites in close proximity on the dopamine transporter?**
   P.C. Meltzer\(^1\), A. Janowsky\(^2\) and O. Kryatova\(^1\), Organix Inc., Woburn, MA
   and 2Oregon Health and Sciences University, VA Medical Center, Portland, OR

50 **The biogenic amine transporter properties of selected Shulgin tryptamines**
   B. Blough\(^1\), T. Landavazo\(^1\), J.S. Partilla\(^2\), K.M. Page\(^1\) and R.B. Rothman\(^2\), Research Triangle Institute
   Research Triangle Park, NC and 2NIDA, NIH, Baltimore, MD

51 **A new asymmetric synthesis of 4-aryl-trans-3,4-dimethylpiperidine opioid antagonists: Towards short-acting kappa opioid antagonists**
   S. Husbands\(^1\), D.P. Furkert\(^1\), J.R. Traynor\(^2\) and L. Purington\(^2\), Department of Pharmacy and
   Pharmacology, University of Bath, Bath, UK and 2Department of Pharmacology, University of Michigan, Ann Arbor, MI

52 **Mu opioid agonists and P-glycoprotein efflux transporters**
   M.M. Matthews, N.D. Eddington, A.D. MacKerell and A. Coop, School of Pharmacy,
   University of Maryland, Baltimore, MD

53 **Synthesis and testing of neuroactive steroids as allosteric modulators of GABA\(_A\) receptors**
   S.P. Runyon\(^1\), H.A. Navarro\(^1\), S. Schenk\(^2\), M. Rogawski\(^1\) and C.E. Cook\(^1\), Center for Organic
   and Medicinal Chemistry, RTI International, RTP, NC, 2NINDS, NIH, Bethesda, MD
   and 3Psychology, Victoria University of Wellington, Wellington, New Zealand

**CLUB DRUGS**

54 **MDMA (ecstasy) and its enantiomers as discriminative stimuli in mice**
   B. Fantegrossi, Division of Neuroscience, Yerkes National Primate Research Center,
   Atlanta, GA

55 **The effect of club drug combinations on the discriminative stimulus effects of ketamine in rats**
   K.L. Nicholson and R.L. Balster, Pharmacology/Toxicology, Virginia Commonwealth University,
   Richmond, VA

56 **Acute effects of 3,4-methylenedioxymethamphetamine (MDMA) on mood and psychomotor performance in humans**
   C.L. Hart\(^2\), E. Gunderson\(^1\), M. Haney\(^1\), S.D. Comer\(^1\) and R.W. Foltin\(^1\), Psychiatry, and
   2Department of Psychology, Columbia University, New York, NY
57 Repeated administration of 3,4-methylenedioxymethamphetamine (MDMA) on physiological response in humans
   J. Hanner, E.W. Gunderson, R.W. Foltin and C.L. Hart, College of Physicians and Surgeons of Columbia University and the New York State Psychiatric Institute, New York, NY

58 Objective and self-reported cognition in ecstasy polydrug users: What does self-reported memory measure?
   G. Bedi and J. Redman, School of Psychology, Psychiatry and Psychological Medicine, Monash University, Melbourne, Victoria, Australia

59 Do exclusionary criteria in MDMA studies create misrepresentative samples?
   L.M. Sander, A. Milosevic, L.H. Lundahl, M.E. Tancer and C.E. Johanson, School of Medicine, Wayne State University, Detroit, MI and Loyola University, Chicago, IL

60 Perceived availability of ecstasy and its influence on self-reported consumption
   A. Ben Abdallah and L.B. Cottler, Psychiatry, Washington University School of Medicine, St. Louis, MO

61 The relationship between risk perceptions and recent ecstasy use among Taiwanese club drug users
   K. Leung and L.B. Cottler, Psychiatry, Washington University in St. Louis, St. Louis, MO

62 Characteristics of ecstasy users who have sex under the influence of ecstasy: An epidemiologic study in Taipei, Taiwan
   X. Wang, K. Leung and L. Cottler, Psychiatry, Washington University Medical School, St. Louis, MO

63 Ecstasy-dependent users engage in more sexual risk behaviors than non-dependent ecstasy users
   M.S. Fague, A. Ben Abdallah, S. Kurtz, J. Copeland and L.B. Cottler, Psychiatry, Washington University School of Medicine, St. Louis, MO, University of Delaware, Coral Gables, FL and University of New South Wales, St. Ives, NSW, Australia

64 Club drug use in out-of-treatment gay and bisexual men in NYC: Implications for secondary prevention
   D.A. Bux, J. Morgenstern, J. Severino, J.T. Parsons and M. Benibgui, Columbia University, and Hunter College and Graduate Center, City University of New York, New York, NY

65 Changes in MDMA/ecstasy use over 30 months among 402 young adult polydrug users in Ohio
   R.G. Carlson, J. Wang, P. Shi and R. Falck, Community Health, Wright State University, Dayton, OH

ADOLESCENTS

66 Withdrawn

   F. Azaiza, M. Shoham, R. Bar-Hamburger and K. Abu-Asba, Jewish Arab Center, University of Haifa, Haifa, 2 Anti-Drug Authority, Jerusalem, and Massar Institute for Strategic Planning and Consulting, Jatt, Israel

67 Youthful drug involvement in Bogotá, Colombia
   Y. Neumark and C. López-Quintero, Braun School of Public Health, Hebrew University-Hadassah, Jerusalem, Israel

68 Gender differences in the earliest stages of drug involvement in Bogotá, Colombia
   C. López-Quintero and Y. Neumark, School of Public Health, Hebrew University of Jerusalem, Jerusalem, Israel
69 Behavioral and neighborhood factors associated with having friends who use drugs among African-American youth  

70 Associations between parental and sibling substance use and elevated problem behaviors among inner city African-American youth  
S.G. Severtson, N.M. Simone, C.M. Graham, S. von Thomsen, F. Brown, N. Rashtchian, W.W. Latimer, Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

71 Relationship between parent and child risk taking propensity as indexed by the Balloon Analogue Risk-Task  
E.K. Reynolds, M.N. Sargeant, M.E. McFadden, S.A. McIntyre and C.W. Lejuez, University of Maryland, College Park, MD

72 Adolescents substance abuse risk evaluation: Development and application of a novel measurement tool  
E. Bar-On¹, R. Bar-Hamburger² and N. Galai¹, ¹Epidemiology, Ben-Gurion University, Beer-Sheva, and ²Anti Drug Authority, Jerusalem, Israel

73 How well do children’s ALEXSA self-reports forecast harmful substance use and antisocial behavior?  
T. Ridenour¹, S. Minnes², L. Singer² and S. Satayathum², ¹University of Pittsburgh, Pittsburgh, PA and ²Case Western Reserve University, Cleveland, OH

74 Likelihood of developing an alcohol or cannabis disorder during youth: Role of recent use and chronological age  
K. Winters and S. Lee, University of Minnesota and Treatment Research Institute, Minneapolis, MN

75 Tobacco and marijuana use before teenage pregnancy and 10 years later  
N.M. De Genna and M.D. Cornelius, University of Pittsburgh, Pittsburgh, PA

76 The predictors and consequences of adolescent amphetamine use: Findings from a prospective cohort study  
L. Degenhardt¹, C. Coffey², P. Moran³, J.B. Carlin⁴, G. Patton², ¹UNSW, Sydney, NSW, Australia ²Centre for Adolescent Hlth, ⁴Clinical Epidem. & Biostat. Unit, Murdoch Children's Res. Inst., Melbourne, Victoria, Australia and ³Inst. of Psychiatry, London, UK

77 Parental separation predicts early substance involvement in children of alcoholic female twins  
M. Waldron¹, A.C. Heath¹ and N.G. Martin², ¹Psychiatry, Washington University School of Medicine, St. Louis, MO and ²Queensland Institute of Medical Research, Brisbane, QLD, Australia

78 The roles of risk-taking propensity, ethnicity, and family income in predicting alcohol use in childhood  
M. Sargeant, S.B. Daughters, E. Reynolds, A. Cummings, T. Hall and C. Lejuez, University of Maryland, College Park, MD

79 Gender differences in the relationship of peer influence and beliefs to adolescent substance use in a rural state  
D. Clark, J.M. Webster, T.F. Garrity and D. Saman, University of Kentucky, Lexington, KY

80 Substance use among adolescents with non-drug-use and drug-use parents: One year follow-up  
R.R. Robles, T. Matos, J. Reyes, J. Negrón, H. Colón and J. Calderón, IRESA, Universidad Central del Caribe School of Medicine, Bayamón, Puerto Rico
81 Alcohol use among adolescents in Puerto Rico: The influence of physical and social neighborhood disorder

82 Alcohol use among subjects who drink on premises of gas stations of Porto Alegre, Brazil: Preliminary data
   F. Pechansky¹, R. DeBoni¹ and C. Leukefeld², ¹Psychiatry, CDAR, UFRGS, Porto Alegre, Brazil and ²Behavioral Sciences, CDAR University of Kentucky, Lexington, KY

83 Use of drugs among adolescents living in the streets of São Paulo city: An ethnographic contribution
   Y.G. Moura and A.R. Noto, Psicobiologia, UNIFESP, São Paulo, Brazil

84 Impact of regular marijuana use on work and school performance: An ethnographic inquiry
   J. Moravek², E. Dunlap¹, S.J. Sifaneck¹ and B.D. Johnson¹, ¹Institute for Special Populations Research, National Development and Research Institutes, Inc., New York, NY and ²Charles University, Prague, Czech Republic

85 Traditional martial arts in the treatment of drug-abusing youth
   R. Davies¹, S. Mikulich-Gilbertson¹, P.D. Riggs¹, S. Stover¹, L. Riley¹, F. Madani² and C. Thurstone¹, ¹Psychiatry, UCDHSC, Denver, and ²International Martial Arts Association, Louisville, CO

86 The utility of standardized data collection tools for achieving accountability in adolescent substance abuse treatment
   R. Ramchand and A.R. Morral, RAND, Arlington, VA

87 Dropout among African-American adolescents in substance abuse treatment
   B.E. Perron², H.J. Gotham¹ and D.W. Cho¹, ¹Missouri Institute of Mental Health, University of Missouri, St. Louis, and ²Social Work, Washington University, St. Louis, MO

88 Inconsistencies in self-reported recency of drug use by adolescents in substance abuse treatment: Implications for outcomes and performance measurement
   K.M. Harris¹, B.A. Griffin¹, D. McCaffrey² and A. Morral¹, ¹RAND, Arlington, VA and ²RAND, Pittsburgh, PA

89 Differential dose-response among adolescents receiving a brief intervention for substance use problems
   J.L. Kamon¹, M.P. McGovern², C.A. Lambert-Harris² and W.C. Turner³, ¹New England Institute of Addiction Studies, Burlington, VT, ²Dartmouth Medical School, and ³Dartmouth Hitchcock Medical Center, Lebanon, NH

90 Impact of a contingency management program in a community adolescent treatment center
   D.C. Lott¹² and S.T. Jencius¹, ¹Linden Oaks Hospital, Naperville, and ²University of Chicago, Chicago, IL

91 Treatment motivation and resistance among adolescents in substance abuse treatment: A latent class analysis
   H.J. Gotham¹, B.E. Perron² and D.W. Cho¹, ¹Missouri Institute of Mental Health, University of Missouri, and ²Social Work, Washington University, St. Louis, MO

92 The co-occurrence of adolescent behavioral health problems and access to services
   E.L. Winstanley¹ and D.M. Steinwachs², ¹Behavioral Pharmacology Research Unit, and ²Health Policy & Management, Johns Hopkins University, Baltimore, MD
93 **Suicidality and SSRI treatment in depressed, substance-abusing adolescents**
P. Riggs\(^1,2\), S.K. Mikulich-Gilbertson\(^1,2\) and S.K. Stover\(^1,2\), \(^1\)Psychiatry, and \(^2\)Division of Substance Dependence, University of Colorado at Denver Health Science Campus, Denver, CO

94 **White matter organization and substance use disorders: A preliminary study in adolescents and young adults**
D. Thatcher\(^1\), J.L. Weston\(^1\), S. Chickering\(^1\), R.A. Terwilliger\(^2\) and D.B. Clark\(^1\), \(^1\)Psychiatry, University of Pittsburgh, and \(^2\)Carnegie Mellon University, Pittsburgh, PA

**OPIOID TREATMENT I**

95 **The standing heel-rise test and injection drug use: Relations to chronic venous disorders, balance, gait, and walk time**
B.A. Pieper\(^1\), T. Templin\(^1\), T. Birk\(^1\) and R. Kirsner\(^2\), \(^1\)Wayne State University, Detroit, MI and \(^2\)University of Miami, Miami, FL

96 **Neurocognitive characterizations of Russian heroin addicts without a significant history of other drug use**
D.H. Fishbein\(^1\), E. Krupitsky\(^2\), B. Flannery\(^1\), D. Langevin\(^3\), G. Bobashev\(^1\), K. Bolla\(^4\), E. Zvartau\(^2\), \(^1\)RTI Intl, Baltimore, MD, \(^2\)St. Petersburg State Pavlov Med. U., St. Petersburg, Russian Federation \(^3\)Pacific Inst. for Research & Evaluation, Calverton, MD & \(^4\)Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

97 **Psychomotor and cognitive performance in methadone maintenance patients before vs. after daily methadone dosing**
M.Z. Mintzer, R.G. Vandrey, G.E. Bigelow, M.L. Stitzer and E.C. Strain, Johns Hopkins University, Baltimore, MD

98 **Methadone dosage and cognitive impairment in methadone-maintained patients**
V. Swingedouw\(^1\), S. Auriacombe\(^2\), E. Reviriego\(^1\), M. Fatseas\(^1\) and M. Auriacombe\(^1\), \(^1\)Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen Bordeaux 2, and \(^2\)Cognitive Neurology, University Hospital, Bordeaux, France

99 **A randomized controlled pilot trial of methylphenidate and cognitive-behavioral group therapy for cocaine dependence in heroin prescription**
K.M. Dürsteler-MacFarland\(^1\), C. Bürki\(^2\), J. Strasser\(^1\), S. Petitjean\(^1\), D. Ladewig\(^1\) and G.A. Wiesbeck\(^1\), \(^1\)Psychiatry, University, Basle, and \(^2\)Psychiatry, University, Berne, Switzerland

100 **Individual differences to naloxone vs. placebo in opioid-dependent humans responding under a naloxone discrimination procedure: Influence of sex and methadone maintenance dose**
M.P. Chopra, M. Mancino, Z. Feldman, J. McGaugh and A. Oliveto, Psychiatry and Human Behavior, University of Arkansas for Medical Sciences, Little Rock, AR

101 **Low-dose naloxone challenge for quantitative opioid dependence measurement**
S.M. Stine, M. Greenwald, M. Ebenbichler, D. Tansil and C. Schuster, Psychiatry and Behavioral Neurosciences, Wayne State University School of Medicine, Detroit, MI

102 **Buprenorphine/naloxone maintenance for opioid dependence in primary care**
E.W. Gunderson\(^1,2\), D.A. Fiellin\(^3\), A.R. Nelson\(^1\), S.K. Vosburg\(^1\) and F.R. Levin\(^1,2\), \(^1\)Columbia University, and \(^2\)NYS Psychiatric Institute, New York, NY, and \(^3\)Yale University, New Haven, CT

103 **Buprenorphine vs. naltrexone maintenance treatment for opium- or heroin-dependent individuals in Iran: Preliminary findings of a pilot randomized clinical trial**
R.S. Schottenfeld\(^1\), A. Mokri\(^2\), H. Taheri Nakhost\(^2\) and M.C. Chawarski\(^1\), \(^1\)Yale University School of Medicine, New Haven, CT and \(^2\)INCAS, Tehran, Iran
A placebo-controlled trial of naltrexone and fluoxetine for opioid addiction: Analysis of medication responders


Patient satisfaction with opioid substitution therapy: More than withdrawal

A. Elkader, B.A. Sproule, B. Brands, M. Zack and R. Callaghan, Centre for Addiction and Mental Health, and University of Toronto, Toronto, and Office of Research and Surveillance, DCSC, Health Canada, Ottawa, ON, Canada.

First Republic of Georgia randomized controlled trial (RCT) for drug abuse treatment: The process and initial results of developing a couple’s treatment for drug abuse

D. Otiashvili, H. Jones, M. Chavchanidze, I. Kirtadze and M. Tuten, Addiction Research Center, Union Alternative Georgia, Tbilisi, Georgia and Johns Hopkins University, Baltimore, MD.

Quality of life among methadone or buprenorphine maintenance treatments outpatients

P. Courty, D. Alexeï, C. Auclair, L. Gerbaud and P.M. Llorca, CMP B, CSST SATIS, and Department of Public Health, CHU G.MONTPIED, Clermont Ferrand cedex 1, France.

Change in social network injecting and drug use behaviors among injecting drug users who enter treatment


Differences in characteristics between in- and out-of-treatment heroin addicts

R. Schwartz, S. Kelly, K.E. O'Grady, J.A. Peterson, S. Gwin Mitchell and B.S. Brown, Friends Research Institute, Balto, and University of Maryland, College Park, MD, and University of North Carolina, Wilmington, NC.

Clustering of methadone patients reveals the association between their desire to use heroin, to reduce methadone dose and self-efficacy

H. Hunziker, L. Boesch and R. Stohler, Research Group on Substance Use Disorders, Psychiatric University Hospital of Zürich, Zürich, Switzerland.

Desire for heroin use without taking the “hard” way of methadone maintenance: A hierarchical factor model on the hidden dimension in patients’ attitudes to methadone

L. Boesch, H. Hunziker, R. Leisinger and R. Stohler, Research Group on Substance Use Disorders, Psychiatric University Hospital of Zürich, Zürich, Switzerland.

Attitudes toward buprenorphine and methadone among opioid-dependent individuals

B.S. Brown, S.M. Kelly, R.P. Schwartz, E.A. Sears and K.E. O’Grady, Friends Research Institute, Baltimore, MD, University of North Carolina, Wilmington, NC and University of Maryland, College Park, MD.

Self-schema with drug addict patients

A. Gauchet, P. Melin and C. Tarquinio, General Hospital, Saint Dizier, University of Psychology, Grenoble, France and University of Psychology, Metz, France.

The effect of eliminating a harm reduction component of an opioid agonist treatment program

A. Cotton, R. Guerra, B. Hartzler, N. Gignoux and D. Calsyn, VA Puget Sound HCS, Alcohol and Drug Abuse Institute, and Psychiatry and Behavioral Sciences, University of Washington, Seattle, WA.
115 Prognostic factors of opioid withdrawal following high dose buprenorphine maintenance therapy: A retrospective case-control study
B. Lebeau1, L. Cattan2 and E. Brunelle3, 1Addictologist, Paris 11, 2Addictologist, Paris 16, and 3Addictologist, Loos en Gohelle, France

116 Predictors of buprenorphine treatment outcome
C.P. Domier, M.P. Hillhouse, G. Doraimani and W. Ling, Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

117 The impact of cocaine use on outcomes in office-based buprenorphine treatment
D. Fiellin, L. Sullivan, B. Moore, P. O'Connor, M. Chawarski, D. Barry, M. Pantalon and R. Schottenfeld, Internal Medicine, Yale University School of Medicine, New Haven, CT

118 Buprenorphine stabilization: Does dose matter?
W. Ling, M.P. Hillhouse, C.P. Domier, C. Thomas, J. Jenkins, G. Doraimani, J. Annon and J. Hunter, Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

119 Retention and early treatment outcomes associated with 5- and 30-day buprenorphine detoxification
S. King1, B. Brown1, R. Schwartz1, D. Gandhi2, W. Barksdale2, E. Weintraub2, E.C. Katz1, 1Friends Research Institute, Inc., and 2Psychiatry, University of Maryland Medical School, Baltimore, MD and 3Psychology, University of North Carolina, Wilmington, NC

120 Outcomes for patients in office-based methadone maintenance
S. Petitjean, K.M. Dürsteler-MacFarland, J. Strasser, D. Ladewig and G.A. Wiesbeck, Psychiatry, University of Basel, Basel, Switzerland

GENDER, WOMEN

121 Estradiol modulation of d-amphetamine in premenopausal women: A dose-response study
S. Babalonis1,3, J.A. Lile1, C.S. Emurian1, C.A. Martin21 and T.H. Kelly1,2,3, 1Behavioral Science, 2Psychiatry, and 3Psychology, University of Kentucky, Lexington, KY

122 Changes in mood, performance, food craving and food intake across the menstrual cycle in women with premenstrual dysphoric disorder
S. Shakibaie Smith, S. Collins, F.R. Levin and S.M. Evans, Psychiatry, Division of Substance Abuse, New York State Psychiatric Institute, New York, NY

123 Polydrug use models among women in the autonomous region of Valencia, Spain
S. Tomás1, A. Vidal-Infer2, T. Samper2 and J. Perez3, 1Dirección General de Drogodependencias, Conselleria de Sanitat, Generalitat Valenciana, and 2FEPAD, Valencia, and 3Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

124 Frequency and type of adverse events associated with treating women with trauma in community substance abuse treatment programs
T. Killeen1, C. Brown2, A. Campbell3, H. Jiang3, R. Sampson1, E. Nunes3 and D. Hien3, 1Medical University of South Carolina, and 2Charleston Center, Charleston, SC, and 3Columbia University, New York, NY

125 Parenting stress, sense of competence and self-efficacy in mothers receiving outpatient drug treatment
M. Kerwin, C. Arabia and C. Williams, Psychology, Rowan University, Glassboro, NJ

126 Gender differences in depression symptoms among substance users: Relationship with depression diagnosis
P.J. Seignourel, C. Green and J. Schmitz, Psychiatry and Behavioral Sciences, University of Texas - Houston, Houston, TX
Gender differences in the effects of alcohol on emotional regulation in social drinkers
T. Udo$^{1,2}$, M.E. Bates$^1$, E. Vaschillo$^1$, B. Vaschillo$^1$, S. Ray$^1$ and E.Y. Mun$^1$, $^1$Center of Alcohol Studies, Rutgers, State University of New Jersey, and $^2$School of Public Health, University of Medicine and Dentistry of New Jersey, Piscataway, NJ

Gender differences in alcohol use among university students in Lebanon: The role of religion and religiosity
L.A. Ghandour$^{1,2}$, E.G. Karam$^2$ and W.E. Maalouf$^{1,2}$, $^1$Johns Hopkins School of Public Health, Baltimore, MD and $^2$Institute for Development, Research, Advocacy and Applied Care, Beirut, Lebanon

Stability in religious coping among methadone maintenance treatment patients, and gender differences
I. Cohen $^1$, E. Peles $^1$, Y. Benyamini $^2$ and M. Adelson $^1$, $^1$Adelson Clinic for Drug Abuse Treatment and Research, Tel Aviv Medical Center, and $^2$Tel Aviv University, Tel Aviv, Israel

Gender differences among opiate users in a 25-year longitudinal follow-up study
C. Grella, Integrated Substance Abuse Programs, UCLA, Los Angeles, CA

Gender differences among in- and out-of-treatment opioid-dependent individuals
S.M. Kelly $^1$, R.P. Schwartz $^1$, K.E. O'Grady $^2$, J.A. Peterson $^1$, S. Gwin-Mitchell $^1$ and B.S. Brown $^{1,3}$, $^1$Friends Research Institute, Baltimore, and $^2$University of Maryland, College Park, MD and $^3$University of North Carolina, Wilmington, NC

Alternative approaches to controlling drug use: An examination of gender differences
M.A. Davey-Rothwell, C.A. Latkin and K.E. Tobin, Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

Gender differences in motivation to abstain from methamphetamine use
C.S. Culbertson, M.R. Costello, C.A. Kenny, D. Tziortzis, E. O'Laco, R. De La Garza and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at University of California, Los Angeles, CA

Gender differences in self-reported reasons for cocaine use
T.M. Wright, P. Mardikian, S. LaRowe, K. Cochran and R. Malcolm, Psychiatry, MUSC, Charleston, SC

On the rocks: Barriers to treatment-seeking among African-American women who are chronic crack users

Effect of gender, age, and race on buprenorphine treatment outcome
D.A. Gorelick $^1$, I.D. Montoya $^2$, J.R. Schroeder $^1$, C. Contoreggi $^1$, R.E. Johnson $^{3,4}$, P.J. Fudala $^4$ and K.L. Preston $^1$, $^1$NIDA/NIH, IRP, and $^2$Johns Hopkins Univ., Baltimore, $^3$NIDA/NIH, Rockville, MD, and $^4$Reckitt Benckiser Pharmaceuticals, Inc., Richmond, VA

Differential risks and expectations: A comparison of male and female cocaine-dependent outpatients entering treatment
K.M. Lester $^1$, L.M. Najavits $^1$ and R.D. Weiss $^2$, $^1$National Center for PTSD, Women's Health Sciences Division, VA Boston Healthcare System, Boston, MA and $^2$Alcohol and Drug Abuse Treatment Program, McLean Hospital, Belmont, MA

Gender differences in a cocaine vaccine trial of TA-CD/08
T. Gardner$^{1,2}$, B. Martell$^3$, J. Poling$^{4,5}$, E. Mitchell$^{4,5}$ and T. Kosten$^{1,2}$, $^1$Baylor College of Med., and $^2$Michael E. DeBakey VA Medical Center, Houston, TX, $^3$Med. and $^4$Psychiatry, Yale University Sch. of Med., New Haven, and $^5$West Haven VAMC, West Haven, CT
139 Gender differences in sleep and sleep-dependent learning in abstinent cocaine users
   P.T. Morgan, P. Paliwal, R.T. Malison and R. Sinha, Psychiatry, Yale University, New Haven, CT

140 Factor analysis of the Allen Barriers to Treatment Instrument with a clinical sample of female outpatient substance abusers
   J. Lindsay, University of Texas Health Science Center at Houston, Houston, TX

141 The role of locus-of-control in female crack/cocaine users
   S. Bradford, A. Ben Abdallah, C. Callahan and L. Cottler, School of Medicine, Washington University in St. Louis, Saint Louis, MO

HIV/HCV, IMMUNE FUNCTION

142 NK cell activity and infections in non-parenteral heroin dependence: A pilot study from India
   M. Vaswani and N.G. Desai, National Drug Dependence Treatment Centre, All India Institute of Medical Sciences, New Delhi, India

143 Effect of withdrawal from opioids on immune function in addicts
   T.K. Eisenstein, J.J. Meissler, J. Shack, J. Moore, N. Thingalaya, J. Breslow and R. Spiga, Center for Substance Abuse Research, Temple University School of Medicine, Philadelphia, PA

144 Modeling the synergistic relationship between cocaine and HIV in the huPBL-NOD-SCID/IL-2gamma-null mouse
   G.C. Baldwin, S.M. Kiertscher, K.M. Whittaker, D.P. Tashkin and M.D. Roth, Medicine, David Geffen School of Medicine at UCLA, Los Angeles, CA

145 Depression and QoL in direct observed therapy as compared with self-administration of PegIFN-α2a in chronic hepatitis C patients on methadone maintenance

146 Predictors of bacterial infections among hepatitis-C-negative injection drug users in Rhode Island
   K.T. Phillips1,2 and M.D. Stein1,2, Brown University Medical School, and 2Rhode Island Hospital, Providence, RI

147 Prevalence and correlates of previous hepatitis B vaccination and infection among young drug users in New York City
   S. Amesty1,2, D. Ompad3, S. Galea3, C. Fuller4, Y. Wu2, B. Koblin5, D. Vlahov4, 1Columbia U., 2NY Academy of Med., NY, NY, 3U. Michigan School of Public Health, Ann Arbor, MI 4Columbia U. Mailman School of Public Health, and 5Infectious Disease Prevention, NY Blood Center, NY, NY

148 Effects of a motivational intervention to reduce alcohol use among injecting drug users at risk of HCV

149 Knowledge about hepatitis C among clients and staff in methadone clinics in Israel
   R. Cohen-Moreno and Y. Neumark, School of Public Health, Hebrew University-Hadassah, Jerusalem, Israel
150 Effectiveness of an HCV drug treatment program staff training in changing attitudes toward HCV patients
S.M. Strauss¹, C. Munoz-Plaza¹, J. Astone-Twerell¹, D. Des Jarlais², M. Gwadz¹, H. Hagan¹, A. Osborne¹ and A. Rosenblum¹, ¹NDRI, and ²Beth Israel Medical Center, New York, NY

151 Disparities in health services for addiction-related infections in substance abuse treatment programs

152 HIV risk behavior among patients with co-occurring bipolar and substance use disorders: Associations with mania and drug abuse
C.S. Meade, F.S. Graff, M.L. Griffin and R.D. Weiss, Psychiatry, McLean Hospital/Harvard Medical School, Belmont, MA

153 Severity of substance use, treatment involvement and HIV risk behavior among adult substance users in treatment
Y.F. Chan, M.L. Dennis, R. Funk and C. Scott, Lighthouse Institute, Chestnut Health Systems, Bloomington, IL

154 Behavioral drug and HIV risk reduction counseling with abstinence-contingent take-home buprenorphine: A pilot randomized clinical trial
M.C. Chawarski¹, M. Mazlan² and R.S. Schottenfeld¹, ¹Yale University School of Medicine, New Haven, CT and ²SAC, Muar, Malaysia

155 Study on drug use, sex behaviors, use of condoms and HIV risk among IDUs in Teku
M.B. Chhetri, Planning, CIAA, Kathmandu, Nepal

156 Sex on drugs among high-risk groups

157 Drug use, sexual risks and STIs among a sample of MSM in Los Angeles
S. Larkins, S. Shoptaw, J. Wang, P. Gorbach and C. Hucks-Ortiz, Family Medicine, University of California, Los Angeles, Los Angeles, CA

158 Drug-using women who inaccurately perceive sex risk are more likely to improve sex risk behaviors at 4 months
E.C. Garvin, A. Ben Abdallah and L.B. Cottler, Epidemiology and Prevention Research Group, Washington University School of Medicine, St. Louis, MO

159 HIV/AIDS risk perception, sexual partnerships and condom use among African-American substance users
L.J. Floyd, A. Lawson and W. Latimer, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD

160 Gender differences in perceived vulnerability to HIV infection
M.M. Mitchell, S.G. Severtson, B.E. Mancha, C.M. Graham, W.W. Latimer, Mental Health, Johns Hopkins University, Baltimore, MD

161 The feasibility of delivering a brief HIV risk reduction intervention targeting HIV-infected IDUs in a community-based setting
M. Copenhaver¹, R. Bruce², I.C. Lee³ and F. Altice², ¹University of Connecticut, Storrs, and ²Yale AIDS Program, New Haven, CT and ³National Chengchi University, Taipei, Taiwan
162 Interim methadone maintenance reduces HIV-risk behaviors
M. Wilson1, R.P. Schwartz1, K.O. O'Grady2, D. Highfield1 and J.H. Jaffe1,2, 1Friends Research Institute, Baltimore, 2University of Maryland College Park, College Park and 3University of Maryland School of Medicine, Baltimore, MD

163 Results from a controlled trial of a motivational intervention for improving treatment enrollment among needle-exchange participants
V.L. King, M. Kidorf, J. Peirce and R. Brooner, Psychiatry, Johns Hopkins School of Medicine, Baltimore, MD

164 Gender differences in sex risks among Ukraine injection drug users
R.E. Booth, J.T. Brewster, W. Lehman, S. Dvoryak and L. Sinitsyna, Psychiatry, University of Colorado School of Medicine, Denver, CO

165 Correlates of unsafe injecting among Russian injecting drug users
V. Gyarmathy1,2, N. Li3, C.A. Latkin1, K.E. Tobin1, A.P. Kozlov3, H.D. Chilcoat4 and I.F. Hoffman5, 1Johns Hopkins Bloomberg Sch. of Public Health, Baltimore, MD, 2NDRI, Inc., NY, NY 3Biomedical Ctr., St. Petersburg, Russian Fed., 4GlaxoSmithKline, RTI, and 5U. of North Carolina at Chapel Hill, Chapel Hill, NC

167 “The rush”: Narratives of crystal methamphetamine use among HIV+ gay, bisexual, and MSM injectors
R.L. de Guzman1,4, S. Eyre2 and G. Galloway3, 1Anthropology, Graduate Center, CUNY, New York, NY, 2University of California, and 3St. Luke's Hospital, San Francisco, CA and 4BST Predoctoral Fellow Program, NDRI/MHRA, New York, NY

168 WHO collaborative study on substitution therapy of opioid dependence and HIV/AIDS
R. Ali1, A. Buavirat2, S. Chiamwongpaet2, S. Dvoryak3, B. Habrat4, S. Jie7, R. Mardiati5, A. Mokri6, J. Moskalewicz4, D. Newcombe1, V. Poznyak8, A. Uchtenhagen9, D.S. Utami5 and C. Zhao7, 1Australia, 2Thailand, 3Ukraine, 4Poland, 5Indonesia, 6Iran, 7China

B. Garner, M. Godley, S. Godley, R. Funk and M. Dennis, Chestnut Health Systems, Bloomington, IL

170 Characteristics of syringe sharing among young injection drug users: Results from a study of ketamine injectors
S.E. Lankenau1,2, B. Sanders1,2, J. Jackson-Bloom2 and D. Hathazi2, 1University of Southern California, and 2Division of Research on Children, Youth, and Families, Children Hospital Los Angeles, Los Angeles, CA

171 HIV risk reduction among substance-abusing homeless youth
N. Slesnick and M. Kang, Ohio State University, Columbus, OH

172 Temporal trends in HIV suggest higher prevalence in non-injection vs. injection drug users in Harlem and the Bronx, 2001-2006
D.C. Ompad1, S. Galea1,2, C.M. Fuller1,3, C.A. Chan4 and D. Vlahov1,3, 1NY Academy of Medicine, 2University of Michigan, Ann Arbor, MI and 3Columbia University New York, NY
Symposium V

COGNITIVE AND EMOTIONAL PROCESSING BIASES IN ADDICTION: COGNITIVE, BEHAVIORAL, AND PSYCHOPHARMACOLOGICAL MECHANISMS

Chairs: Matt Field and Theodora Duka

10:00 General introduction and symposium overview
Matt Field, University of Liverpool, Liverpool, UK

10:10 The role of attention in human goal-directed drug-seeking behavior
Lee Hogarth, University of Sussex, Falmer, Brighton, UK

10:30 Reciprocal relationships between cognitive biases, craving, and inhibitory control
Matt Field, University of Liverpool, Liverpool, UK

10:50 Brain mechanisms underlying cognitive biases and craving in substance abuse
Ingmar Franken, Erasmus University Rotterdam, The Netherlands

11:10 Pharmacological challenge studies of attentional processes in addictive behaviors
Marcus Munafo, University of Bristol, Bristol, UK

11:30 Discussant: Emotional sensitivity and cognitive impairments in alcoholism
Theodora Duka, University of Sussex, Falmer, Brighton, UK

11:50 General discussion
Theodora Duka, University of Sussex, Falmer, Brighton, UK

Oral Communications 5

SOCIAL AND ENVIRONMENTAL FACTORS IN DRUG ABUSE

Chairs: Sari Izenwasser and Jennifer Newman

10:00 Cocaine discrimination in maternally separated and handled pups as adults
S.J. Kohut and A.L. Riley, Psychology, American University, Washington, DC

10:15 The effects of social and environmental enrichment on cocaine self-administration in female rats
M.A. Smith and J.C. Iordanou, Psychology, Davidson College, Davidson, NC
10:30 Social and environmental factors alter cocaine conditioned place preference in adolescent rats  
S. Izenwasser, C. Rios and D. Wade, Psychiatry and Behavioral Sciences, University of Miami Miller School Medicine, Miami, FL

10:45 Role of environmental context in the ontogeny of cocaine-induced behavioral sensitization  
C.A. Crawford, S.A. Baella, N.M. Stuebner, L.R. Halladay and S.A. McDougall, Psychology, California State University, San Bernardino, San Bernardino, CA

11:00 Further investigation into the interactions between social rank and cocaine reinforcement in male monkeys  
M.A. Nader1,2, P.W. Czoty1, R. Gould1, S. Nader1, H.D. Gage2 and J.R. Kaplan3, 1Physiology and Pharmacology, 2Radiology, and 3Pathology, Wake Forest University School of Medicine, Winston-Salem, NC

11:15 Effects of social stimuli on phencyclidine self-administration in rhesus monkeys  
J. Newman, J. Perry and M. Carroll, Psychiatry, University of Minnesota, Minneapolis, MN

11:30 Neuronal activation associated with cue reinstatement of extinguished cocaine-seeking behavior as measured by c-fos mRNA  
P.R. Kufahl1, A.R. Zavala1, A. Singh1, T. Osredkar2, J.N. Joyce2 and J.L. Neisewander1, 1Psychology, Arizona State University, Tempe, and 2Sun Health Research Institute, Sun City, AZ

11:45 Heroin purchasing is income- and price-sensitive  
J.K. Roddy1, C.L. Steinmiller2 and M.K. Greenwald2, 1University of Michigan Dearborn, Dearborn, and 2Wayne State University, Detroit, MI

Oral Communications 6

ALCOHOL RESEARCH: WHAT’S THE PROOF?

CCQ 303AB
10:00 AM - 12:00 PM

10:00 Atomoxetine treatment of adults with ADHD and comorbid alcohol abuse  
T.E. Wilens2, L.A. Adler3, M.D. Weiss4, J.L. Ramsey1, R.J. Moore1, D. Renard5 and L.R. Levine1, 1Lilly Research, Indianapolis, IN, 2Massachusetts General Hosp., Boston, MA, 3New York University School of Medicine, New York, NY, 4U. of British Columbia, Vancouver, BC, Canada and 5Lilly Research, Brussels, Belgium

10:15 Stress, coping, and well-being among family members of women with substance use and psychiatric disorders  
B.C. Moore1, D.E. Biegel2 and T.J. McMahon1, 1Psychiatry, Yale University School of Medicine, West Haven, CT and 2Case Western Reserve University, Cleveland, OH

10:30 Motivation to change alcohol use and treatment engagement in incarcerated youth  
M. Clair1,2, L. Stein1,2,3, S.M. Colby1, N.P. Barnett1, P.M. Monti1,4, C. Golembeske, Jr.1,2 and R. Lebeau3, 1Brown University, Providence, 2Rhode Island Training School, Cranston, 3University of Rhode Island, Kingston, and 4VAMC, Providence, RI

10:45 Remission from alcohol dependence and sex differences in a community sample  
N. Dasgupta1 and H.D. Chilcoat2, 1Epidemiology, University of North Carolina School of Public Health at Chapel Hill, Chapel Hill, NC and 2Worldwide Epidemiology, GlaxoSmithKline, Research Triangle Park, NC
11:00  Persons entering residential substance abuse treatment in Los Angeles: How gender, depression and alcohol disorders are related to substance abuse retention
S.B. Hunter¹, K. Watkins¹, S. Wenzel¹ and J. Gilmore², ¹RAND Health, Santa Monica, and ²Behavioral Health Services, Gardena, CA

11:15  Substance abuse problem severity among female DUI offenders as a function of rurality
M. Webster¹,², D.B. Clark², D. Saman² and J. Pimentel², ¹Behavioral Science, and ²Center on Drug and Alcohol Research, University of Kentucky, Lexington, KY

11:30  Adolescent alcohol abuse treatment: Outcomes and change mechanisms
H.B. Waldron, T.J. Ozechowski and H. Hops, CFAR, Oregon Research Institute, Eugene, OR

11:45  The safety and tolerability of combining aripiprazole and topiramate with alcohol
G.A. Kenna, D. Nielsen, S. DeCuBellis, R.M. Swift, and D.J. Rohsenow, Center for Alcohol and Addiction Studies, Brown University, Providence, RI

Oral Communications 7  CCQ 205ABC
10:00 AM - 12:00 PM

COMORBIDITY: DOUBLE TROUBLE

Chairs: Jennifer Tidey and Silvia Martins

10:00  Depression relief from smoking in smokers with schizophrenia compared to non-psychiatric heavy-smoking controls
J.W. Tidey¹,², D. Rohsenow¹,², G. Kaplan³ and R. Swift¹,², ¹Brown University, and ²Providence VAMC, Providence, RI and ³VA Boston Healthcare, Brockton, MA

10:15  Personality and psychiatric co-morbidity discriminates pathological gamblers among same sex sib-pairs
D.S. Lobo¹,², S. Martins³,², H. Tavares², J. Kennedy¹, H. Vallada² and V. Gentil², ¹CAMH, University of Toronto, Toronto, ON, Canada ²Institute of Psychiatry, University of São Paulo, São Paulo, Brazil and ³Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

10:30  Perceived unmet need for mental health care among Canadians with co-occurring substance dependence and mental illness
K.A. Urbanoski¹, B. Rush¹,² and J. Cairney¹,³, ¹Centre for Addiction and Mental Health, ²Psychiatry, and ³Public Health Sciences, University of Toronto, Toronto, ON, Canada

10:45  Socio-demographic correlates of co-occurring mental disorders and substance use problems in Canada
D.G. Bassani, B.R. Rush, K. Urbanoski and S. Castel, Psychiatry, University of Toronto, Toronto, ON, Canada

11:00  Substance use and mental health problems in returning Iraqi veterans
A. Kline¹ and M. Falca-Dodson², ¹University of Medicine and Dentistry, New Brunswick, and ²New Jersey Department of Military and Veterans Affairs, Trenton, NJ

11:15  A twin-family study of suicidality and illicit drug use in young people
Q. Fu¹,², A.C. Heath² and K.K. Bucholz², Community Health, Saint Louis University School of Public Health, Psychiatry, Washington University School of Medicine, St. Louis, MO
11:30  *Gender differences in HIV risk behavior, traumatic event exposure, and PTSD in syringe exchange enrollees*  
J. Peirce, C.K. Burke, K.J. Neufeld, K.B. Stoller, M.S. Kidorf and R.K. Brooner, Johns Hopkins University School of Medicine, Baltimore, MD

11:45  *Gender differences in conditional substance dependence by psychiatric diagnosis in the U.S. population*  
S.S. Martins¹ and D.A. Gorelick², ¹Mental Health, Johns Hopkins Bloomberg School of Public Health, and ²NIDA/NIH, Intramural Research Program, Baltimore, MD

**PUBLIC POLICY FORUM**

(Hilton Porte St. Louis  
12:15 - 1:25 PM

Chair: Martin Y. Iguchi

_A new approach to peace in the war on drugs_  
Kurt L. Schmoke, Howard University School of Law

**Report from ONDCP**

(Hilton Ballroom  
1:30 - 2:30 PM

**DRUG POLICY: PREVENTION, INTERVENTION, TREATMENT PROGRAMS**

Presented by Bertha K. Madras, Deputy Director, Demand Reduction Office of National Drug Control Policy

**Symposium VI**

(CCQ 206AB  
2:45 - 4:45 PM

**AFFECTIVE DYSFUNCTION IN SUBSTANCE ABUSE: NEUROIMAGING**

Chairs: Thomas R. Kosten and Staci Gruber

2:45  *Reduced visual and auditory brain activation during affect responses in cocaine abusers*  
Thomas R. Kosten, Baylor College of Medicine, Michael E. DeBakey VA Medical Center, Houston, TX

3:10  *Altered affective response in chronic marijuana smokers*  
Staci Gruber, McLean Hospital, Harvard Medical School, Belmont, MA

3:35  *Exploring the inverse relationship between resting perfusion in frontal limbic regions and affective symptoms in substance use disorders*  
Jesse Jong-Shik Suh, University of Pennsylvania, Treatment Research Center on Studies of Addiction, Philadelphia, PA

4:00  *Imaging alterations in affective processing of cocaine users: From chronic use to long-term abstinence*  
Colleen A. Hanlon, Wake Forest University School of Medicine, Winston-Salem, NC

4:25  *Discussant*  
Linda J. Porrino, Wake Forest University School of Medicine, Winston-Salem, NC
Oral Communications 8

BRINGING UP BABY: DEVELOPMENTAL EFFECTS OF DRUG ABUSE

Chairs: Lisa Schrott and Veronica Accornero

2:45 Abnormal brain myelination occurs following perinatal opioid exposure in the rat
S.E. Robinson¹, E.S. Sanchez², J.W. Bigbee³ and C. Sato-Bigbee², ¹Pharmacology and Toxicology, ²Biochemistry, and ³Anatomy and Neurobiology, Virginia Commonwealth University, Richmond, VA

3:00 Sex differences in motivation to self-administer cocaine during the transition from adolescence to adulthood in rats
W.J. Lynch, Psychiatry and Neurobehavioral Sciences, University of Virginia, Charlottesville, VA

3:15 Lobeline-induced sex differences in adolescent rats: Females exhibit increased sensitivity to the hypoactive effects of lobeline
S.B. Harrod, Psychology, University of South Carolina, Columbia, SC

3:30 Estimated effects of prenatal cocaine exposure on initial drug opportunity and use during early adolescence
V.H. Accornero¹, E.S. Bandstra¹, G.R. Simpson¹, M.K. Glavach¹, L. Xue¹, C.E. Morrow¹, C.B. McCoy¹ and J.C. Anthony², ¹University of Miami Miller School of Medicine, Miami, FL and ²Michigan State University School of Human Medicine, East Lansing, MI

3:45 The effects of prenatal cocaine and lead exposure on substance use risk in 11-year-old children using the ALEXSA
S. Minnes¹, L.T. Singer¹², S. Satayathum², A. Aguirre¹² and T. Ridenour³, ¹General Medical Sciences, and ²Pediatrics, Case Western Reserve University, Cleveland, OH and ³Center for Education and Drug Abuse Research, University of Pittsburgh, Pittsburgh, PA

4:00 Effects of prenatal toluene exposure on performance under a progressive-ratio reinforcement schedule
P. Cooper¹, J.H. Hannigan²¹ and S. Bowen¹², ¹Psychology and ²Obstetrics and Gynecology, Wayne State University, Detroit, MI

4:15 Adolescent ethanol-induced deficits in spatial learning and memory: Role of CB1 cannabinoid receptor
R. Sircar¹², V.K. Yaragudri¹, L. Wu¹ and B.L. Hungund¹⁴, ¹Zucker Hillside Hosp., Glen Oaks, ²Albert Einstein College of Medicine, Bronx, ³Nathan Kline Inst. for Psychiatric Research, Orangeburg, and ⁴College of Physicians & Surgeons, Columbia U., NY, NY

4:30 Role of sex and developmental history on the antinociceptive response to acute oxycodone in adult rats
L.M. Schrott, G.S. Johnson, L.M. Franklin and J.B. Tatom, Pharmacology, LSU Health Sciences Center-Shreveport, Shreveport, LA
Oral Communications 9

CLEARING THE SMOKE: ELUCIDATING NICOTINE MECHANISMS OF ACTION

Chairs: Robert Pechnick and Bernard LeFoll

2:45  Increased nicotine self-administration after prenatal exposure to nicotine in the rat
      R.N. Pechnick\textsuperscript{1,2}, H. Nobuta\textsuperscript{1}, X. Liu\textsuperscript{1}, C. Bresee\textsuperscript{1}, R. Poland\textsuperscript{1}, J. Xu\textsuperscript{1} and C. Wang\textsuperscript{1}, \textsuperscript{1}Cedars-Sinai Medical Center, and \textsuperscript{2}Brain Research Institute, Los Angeles, CA

3:00  Rimonabant, a cannabinoid CB1 receptor antagonist, reduces nicotine self-administration by squirrel monkeys: Influence of behavioral history
      B. Le Foll\textsuperscript{1,2}, C. Wertheim\textsuperscript{3} and S.R. Goldberg\textsuperscript{2}, \textsuperscript{1}Translational Addiction Research Laboratory, CAMH, Toronto, ON, Canada and \textsuperscript{2}Preclinical Pharmacology, NIH/NIDA, Baltimore, MD

3:15  Beta2 nicotinic acetylcholine receptor availability in living tobacco smokers during early and prolonged abstinence: A \textsuperscript{[123]}I 5-IA-85380 SPECT imaging study
      K. Cosgrove\textsuperscript{1,2}, I. Esterlis\textsuperscript{1,2}, S. Stiklus\textsuperscript{1,2}, T. Kloczynski\textsuperscript{1,2}, S. Krishnan-Sarin\textsuperscript{1}, S. O’Malley\textsuperscript{1}, F. Bois\textsuperscript{1,2}, G. Tamagnan\textsuperscript{3}, J. Seibyl\textsuperscript{3} and J. Staley\textsuperscript{1,2}, \textsuperscript{1}Psychiatry, Yale University, New Haven, \textsuperscript{2}VACHS, West Haven, and \textsuperscript{3}Institute for Neurodegenerative Disorders, New Haven, CT

3:30  Smoking alters cerebellar vermis glutathione
      C.M. Anderson, A. Prescott and P.F. Renshaw, Psychiatry, McLean Hospital/Harvard Medical School, Belmont, MA

3:45  Brain regional cerebral metabolic rates of glucose in response to cigarette-smoking cues are reduced in successfully compared to unsuccessfully treated heavy smokers with bupropion
      A. Weinstein\textsuperscript{1,2,3}, J. Greif\textsuperscript{2}, Z. Yemini\textsuperscript{2}, M. Greemland\textsuperscript{3}, H. Lerman\textsuperscript{3}, A. Weizman\textsuperscript{4}, R. Chisin\textsuperscript{1} and E. Even-Sapir\textsuperscript{3}, \textsuperscript{1}Hadassah Hosp., Jerusalem, \textsuperscript{2}Lung Institute, and \textsuperscript{3}Nuclear Medicine, Sourasky Med. Ctr., Tel Aviv, and \textsuperscript{4}Geha Hosp., Petach Tikvah, Israel

4:00  Molecular targets of nicotine withdrawal are differentially expressed in adolescent and adult rats
      D.M. Byers\textsuperscript{2}, L.A. Natividad\textsuperscript{1}, L.N. Irwin\textsuperscript{2} and L.E. O’Dell\textsuperscript{1}, \textsuperscript{1}Psychology, and \textsuperscript{2}Biology, University of Texas El Paso, El Paso, TX

4:15  Effects of NPY and [D-His26]-NPY on the negative affective aspects of nicotine withdrawal
      A.W. Bruijnzeel, M.S. Gold, M. Prado and D. Rylkova, Psychiatry, University of Florida, Gainesville, FL

4:30  Nicotine withdrawal-associated deficits in working memory: A role for the \beta2 nicotinic acetylcholine receptor subunit
      J.D. Raybuck\textsuperscript{1,2} and T.J. Gould\textsuperscript{1}, \textsuperscript{1}Psychology, and \textsuperscript{2}Center for Substance Abuse Research, Temple University, Philadelphia, PA
Oral Communications 10  
CCQ 303AB  
2:45 - 4:45 PM

CHRONIC DRUGS AND CHRONIC PAIN

Chairs: Sudie Back and Peggy Compton

2:45  Chronic fentanyl administration and withdrawal in aging rats: Effects on nociception, operant behavior, and physical performance  
D. Morgan\textsuperscript{1}, J. DuPree\textsuperscript{1}, C.C. Howell\textsuperscript{1} and C.S. Carter\textsuperscript{2,3}, \textsuperscript{1}Division of Addiction Medicine, University of Florida College of Medicine, \textsuperscript{2}Geriatric Research, Education, Clinical Center, and \textsuperscript{3}The University of Florida Institute on Aging, Gainesville, FL

3:00  Analgesic actions of fentanyl and hydrocodone in rats treated with extended-release naltrexone  

3:15  Hyperalgesia induced by methadone in an animal model  
J.L. Hay, R.J. Irvine and J.M. White, Pharmacology, University of Adelaide, Adelaide, SA, Australia

3:30  Chronic pain in patients with opioid dependence: Prevalence, severity, treatment, characteristics of substance abuse treatment, and pain-related disability  
M. Clark and R. Brooner, Johns Hopkins University, Baltimore, MD

3:45  Prevalence rates of chronic pain and interest in pain management among patients seeking MMT  
D.T. Barry\textsuperscript{1}, M. Beitel\textsuperscript{1}, D. Joshi\textsuperscript{2}, J. Falcioni\textsuperscript{2} and R.S. Schottenfeld\textsuperscript{1}, \textsuperscript{1}Yale University School of Medicine, and \textsuperscript{2}APT Foundation, Inc., New Haven, CT

4:00  Correlates and gender differences of chronic pain patients using prescription opiates: A pilot study  
S.E. Back\textsuperscript{1}, A.E. Waldrop\textsuperscript{1}, A.R. Smith\textsuperscript{2}, S. Reeves\textsuperscript{2}, B. Hicks\textsuperscript{1}, R. Payne\textsuperscript{1} and K.T. Brady\textsuperscript{1}, \textsuperscript{1}Psychiatry, Medical University of South Carolina, and \textsuperscript{2}Anesthesia and Perioperative Medical University of South Carolina, Charleston, SC

4:15  Chronic dextromethorphan does not improve hyperalgesia in methadone patients  
P. Compton\textsuperscript{1,2}, M. Torrington\textsuperscript{2} and W. Ling\textsuperscript{2}, \textsuperscript{1}School of Nursing, and \textsuperscript{2}Integrated Substance Abuse Programs, UCLA, Los Angeles, CA

4:30  PTSD and substance use disorders in patients with chronic pain in primary care  
J. Liebschutz\textsuperscript{1}, R. Saitz\textsuperscript{1}, T. Averbuch\textsuperscript{1}, R. Weiss\textsuperscript{2}, T. Keane\textsuperscript{1} and J.H. Samet\textsuperscript{1}, \textsuperscript{1}Boston University Schools of Medicine and Public Health, and \textsuperscript{2}Harvard Medical School, Boston, MA

Marian W. Fischman Memorial Award Lecture  
Hilton Ballroom  
5:00 - 6:00 PM

Presentation of the Marian W. Fischman Memorial Award to Dorothy K. Hatsukami, University of Minnesota Medical School

Introduction by Jack Henningfield
Pre- and Post-Docs Mixer

Hilton Villeray
6:00 - 8:00 PM

Workshop VI

CCQ 301AB
8:00 - 10:00 PM

COMPUTATIONAL MODELING OF COMPLEX SYSTEMS IN PROBLEMS OF DRUG DEPENDENCE: A NEW RESEARCH SOLUTION

Chair: Mark Froimowitz

The complexities of the physiology of drug dependence: Why we might need computational models
Jane Acri, NIDA, Bethesda, MD

Computational modeling of complex systems in problems of drug dependence: A new research solution
Tandy Herren, Computational Biology, DNA Print Pharmaceuticals, Sarasota, FL

Workshop VII

CCQ 303AB
8:00 - 10:00 PM

PHARMACOTHERAPIES FOR STIMULANTS ADDICTION

Chairs: Frank Vocci and Ahmed Elkashef

Aripiprazole, methylphenidate and placebo in the treatment of amphetamine dependence
Kimmo Kuoppasalmi, National Public Health Institute, Helsinki, Finland

Randomized controlled trial of d-amphetamine maintenance for treatment of methamphetamine dependence
Jason White, University of Adelaide, Adelaide SA, Australia

Modafinil for cocaine dependence, results from NIDA/DPMC multisite trial
Ahmed Elkashef, NIDA, Bethesda, MD

Discussant: Targets for stimulants dependence
Frank Vocci, NIDA, Bethesda, MD

BADGES MUST BE WORN IN ALL SCIENTIFIC SESSIONS
Workshop VIII

REDUCING OPIOID ANALGESIC ABUSE: MODELS FOR SUCCESSFUL COLLABORATION AMONG GOVERNMENT, INDUSTRY AND OTHER KEY STAKEHOLDERS

Chairs: Herbert Kleber and Meredith Smith

The epidemiology of prescription drug abuse in the United States: National, state and local data
Wilson Compton, NIDA, Bethesda, MD

The roles of the FDA and the pharmaceutical industry in addressing prescription drug abuse: The FDA’s perspective
Scott Gottlieb, FDA, Rockville, MD

Efforts to date by the pharmaceutical industry to address the problem of prescription drug abuse and diversion: What’s been done, what’s been successful?
John Gilbert, Hymen, Phelps, McNamara, Washington, DC

A model, community-wide initiative to assure effective pain management and decrease drug misuse and diversion through state, county and local partnerships
Donald Burt, Berkshire Healthcare System, Pittsfield, MA

Moving forward: Best practices for promoting partnerships among government, pharmaceutical industry and local community stakeholders to combat prescription drug abuse and diversion
Nathaniel Katz, Tufts Medical School, Analgesic Research, Needham, MA

Workshop IX

INDUSTRY OBJECTIVES FOR ABUSE LIABILITY TESTING

Chairs: Beatriz Rocha and S. Steven Negus

Overall challenges of abuse liability during drug development and approval of new compounds
Mark Amman, Pfizer

Worldwide regulatory environment
Beatriz Rocha, Merck

Major hurdles faced by industry in the preclinical, clinical, regulatory and risk management areas
Mary Jeanne Kallman, Eli Lilly

Challenges for approval of a new compound. Case study I: Rozarem
Gloria Harris, Takeda

Challenges for approval of a new compound. Case study II: Varencline
Hans Rollema, Pfizer

Tuesday, June 19, 2007
POSTER SESSION II (Breakfast)  
CCQ 200ABC  
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 12:30 PM

AMPHETAMINE/METHAMPHETAMINE

1 The rise in treatment admissions for methamphetamine use in Los Angeles County from 2001 through 2005  
D.A. Crevecoeur, C. Snow, B. Rutkowski and R. Rawson, Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

2 Characteristics of female methamphetamine addicts entering residential drug treatment: Program implications  
B. Crowell¹, C.F. Tirado² and R. Dorst¹, ¹Nexus Recovery Center Inc., and ²University of Texas Southwestern Medical Center, Dallas, TX

3 Methamphetamine and sex: Qualitative perspectives of women users  
A. Hamilton, Psychiatry, University of California, Los Angeles, Los Angeles, CA

4 The color of meth: Is it related to adverse health outcomes? An exploratory study in Tijuana, Mexico  
S. Strathdee¹, P. Case², R. Lozada³, A. Mantsios¹, M. Pu¹, K.C. Brouwer¹ and T.L. Patterson¹, ¹University of California San Diego, San Diego, CA, ²Fenway Health, Boston, MA and ³Pro-COMUSIDA, Tijuana, Mexico

5 Methamphetamine dependence: Assessing participants in the Methamphetamine Treatment Project 4 years after treatment  
P. Marinelli-Casey, M.P. Hillhouse, R. Gonzales, A. Ang, F. Cosmineanu, J. Hunter and R.A. Rawson, ISAP, University of California, Los Angeles, Los Angeles, CA

6 Psychiatric illness as a predictor of post-treatment methamphetamine use  
S. Glasner-Edwards, M.P. Hillhouse, P. Marinelli-Casey, R. Gonzales, A. Ang, F. Cosmineanu and R.A. Rawson, Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

7 Drug court treatment for methamphetamine dependence: Treatment response and post-treatment outcomes  
R. Gonzales¹, P. Marinelli-Casey¹, M.P. Hillhouse¹, A. Ang¹, J. Zweben², J. Cohen², P. Fulton Hora² and R.A. Rawson¹, ¹Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, and ²East Bay Community Recovery Project, Hayward, CA

8 Methamphetamine-dependent treatment participants as parents  
M.P. Hillhouse, P. Marinelli-Casey, J. Hunter, F. Cosmineanu, R. Gonzales and R.A. Rawson, Integrated Substance Abuse Programs, University of California, LA, Los Angeles, CA

9 Treatment utilization and barriers to treatment among dependent methamphetamine users: Results from a survey of dependent users and service providers  
P. Kenny, A. Pennay, A. Harney and N. Lee, Clinical Research, Turning Point Alcohol and Drug Centre, Fitzroy, Victoria, Australia
10 Comparison of self-report, urinalysis and segmental hair analysis of drugs in amphetamine users enrolled in a clinical trial
   J.J. Strandberg¹, F.C. Kugelberg², K. Alkass¹, L. Bredberg¹, R. Kronstrand², J. Franck³ and H. Druid¹, ¹Forensic Medicine, Karolinska Institutet, Stockholm, ²Forensic Genetics and Forensic Toxicology, National Board of Forensic Medicine, Linkoping, and ³Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden

11 Effects of naltrexone on the subjective response to amphetamine in amphetamine-dependent individuals
   N. Jayaram-Lindstrom and J. Franck, Neuroscience, Karolinska Institutet, Stockholm, Sweden

12 Perindopril attenuates methamphetamine-induced subjective effects, implicating angiotensin II in mediating effects of stimulants
   T.F. Newton¹, R. De La Garza¹, K. Grasing²,³, R. Donovick¹ and Z. Franco¹, ¹David Geffen School of Medicine at UCLA, Los Angeles, CA, ²Kansas City VA Medical Center, and ³University of Kansas School of Medicine, Kansas City, MO

13 Determinants of cardiovascular response to methamphetamine
   G. Fleury, R. De La Garza, J.J. Mahoney, III and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA

14 Increased heart rate and motor activity with illicit methamphetamine use in a naturalistic setting compared to controlled settings
   P.B. Yang, R. De La Garza and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA

15 Acute administration of methamphetamine does not alter cognitive function in abstinent methamphetamine-dependent individuals
   A.D. Kalechstein, B. Jackson, R. De La Garza and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA

16 Methamphetamine enhances metacognition of agency in humans
   M.G. Kirkpatrick, J.A. Metcalfe and C.L. Hart, Columbia University, New York, NY

17 Sleep disturbances and excessive daytime sleepiness in methamphetamine-dependent individuals: Implications for cognitive function
   B. Jackson, R. De La Garza and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA

18 How long does craving predict use of methamphetamine? Assessment of use one to seven weeks after the assessment of craving
   G.P. Galloway¹ and E. Singleton², ¹Addiction Pharmacology Research Laboratory, California Pacific Medical Center, San Francisco, CA and ²MayaTech Corporation, Silver Spring, MD

19 Self-perceived explanations for drug use and relapse among methamphetamine-addicted volunteers
   C.A. Kenny, S.E. Evans, R. De La Garza, K. Gunnia, A.D. Kalechstein and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA

20 Unrestricted access to methamphetamine in the past is associated with increased use of methamphetamine in the present
   M.R. Costello, R. De La Garza, C. Hurley, R.E. Fintzy, A.D. Kalechstein and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA
21 A novel rat model of methamphetamine-seeking during withdrawal
   R.G. Fox¹, K.A. Cunningham¹, S.E. Specio² and T.C. Napier², ¹Center for Addiction Research, University of Texas Medical Branch, Galveston, TX and ²Pharmacology, Rush University Medical Center, Chicago, IL

22 Bupropion attenuates methamphetamine self-administration and sucrose-seeking in adult male rats
   C.M. Reichel, J.L. Linkugel and R.A. Bevins, Psychology, University of Nebraska-Lincoln, Lincoln, NE

23 The putative dopamine D3 receptor antagonists SB-277011A, NGB2904, or BP897 attenuate methamphetamine-enhanced brain stimulation reward in rat
   E. Gardner¹, K. Spiller¹, Z. Xi¹, X. Peng¹, X. Li¹, C. Dillon¹, C. Ashby, Jr.² and C. Heidbreder³
   ¹NIDA, Baltimore, MD, ²Saint John's University, New York, NY and ³GlaxoSmithKline Pharmaceuticals, Verona, Italy

GENES

24 Histone modifications associated with the promoters of neuropeptide genes involved in the effects of drugs of abuse in the rat striatum and hypothalamus
   B. Reed, R. Picetti, V. Yuferov and M.J. Kreek, Laboratory of the Biology of Addictive Diseases, The Rockefeller University, New York, NY

25 Incubation of heroin-seeking behavior and accompanying molecular changes
   K.L. Kuntz, R.C. Twining, K.M. Patel, A.E. Baldwin, W.M. Freeman, P.S. Grigson and K.E. Vrana, Penn State University, Hershey, PA

26 Morphine effects on striatal transcriptome in mice
   M. Korostynski, M. Piechota, D. Kaminska and R. Przewlocki, Molecular Neuropharmacology, Institute of Pharmacology PAS, Krakow, Poland

27 Estimating genetic effects from ostensibly genetically uninformative data prior to collecting DNA
   R.K. Price, N.K. Risk, J.D. Grant, A. Agrawal and K.K. Bucholz, Psychiatry, Washington University School of Medicine, St. Louis, MO

28 Analysis of prodynorphin promoter polymorphisms
   M. Rouault, D. Nielsen, V. Yuferov, A. Ho and M.J. Kreek, The Rockefeller University, New York, NY

29 Human prodynorphin gene polymorphisms and cocaine dependence
   V. Yuferov, F. Ji, M. Johncilla, J. Ott and M.J. Kreek, The Rockefeller University, New York, NY

30 Preliminary study on the relationship between 5-HTR2A-102C/T, Iowa Gambling Task scores, and abstinence in cocaine users treated with citalopram and contingency management
   N. Moukaddam, F.G. Moeller, J.M. Schmitz, S. Lane, J.L. Steinberg and A. Swann, Psychiatry, University of Texas Health Science Center at Houston, Houston, TX

31 Ontogeny-dependent contribution of the nNOS gene to cocaine psychomotor sensitization
   M.A. Balda¹, K.L. Anderson² and Y. Itzhak¹, ¹Neuroscience Program, and ²Psychiatry, University of Miami, Miami, FL

32 Is the DAT 9/9 genotype protective against the development of methamphetamine dependence?
   R. De La Garza, G. Fleury, E.M. Wagreich, J.T. McCracken and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA
33 Test for association between GABRA2 and conduct/alcohol use disorders in adolescent patients and controls
J.T. Sakai1, M.C. Stallings2, T.J. Crowley1 and M.A. Ehringer2,3, 1Psychiatry, University of Colorado School of Medicine, Denver, 2Institute for Behavioral Genetics, and 3Integrative Physiology, University of Colorado, Boulder, CO

34 Protective effect against alcohol dependence of the thermolabile variant of MTHFR
A. Benyamina1, R. Saffroy2, P. Pham2, L. Karila1, B. Debuire2, A. Lemoine2 and M. Reynaud1, 1Psychiatry, and 2Biochemistry and Molecular Biology, Hôpital Paul Brousse, Villejuif, France

35 Development of a pathway-focused oligoarray for neurobiology research on drug addiction
J. Wang, D. Zhang, R. Gutala and M.D. Li, Psychiatry and Neurobehavioral Sciences, University of Virginia, Charlottesville, VA

ALCOHOL: HUMAN STUDIES

36 Application of the Relapse Risk Scale to alcoholics in Japan: Comparison with stimulant abusers

37 A Chilean validation of the alcohol use disorder identification test
G. Acuna1, R. Santis1, M. Garmendia2, M. Alvarado2 and O. Arteaga2, 1Psychiatry, Universidad Catolica, and 2Escuela Salud Publica, Universidad de Chile, Santiago, Chile

38 HIV risk behaviors among female IDUs in developing and transitional countries
C.M. Cleland1, D.C. Des Jarlais2, T.E. Perlis2 and G.V. Stimson3, 1NDRI Inc., and 2Beth Israel Medical Center, New York, NY and 3Imperial College of Science, Technology, and Medicine, London, UK

39 Male-female differences in alcohol-related attitudes: Data from purposive sample surveys of adults in Slovenia: 2001-2005
M. Radovanovic1 and Z. Cebasek-Travnik2, 1Epidemiology, Michigan State University, East Lansing, MI and 2University Psychiatric Hospital, Ljubljana, Slovenia

40 Drinking contexts, gender, and culture in Peru
M. Piazza, I. Bustamante, G. Alvarado, D. Pedersen and P. Asenjo, School of Public Health, Universidad Peruana Cayetano Heredia, Barranco, Peru

41 Latino immigrant population and alcohol use in Spain
S. Tortajada1, S. Tomas2, M. Castellano3, R. Aleixandre1, J.C. Valderrama1, P. Needle3 and J.C. Perez de los Cobos4, 1IHCD Lopez Piñero, CSIC-U. de Valencia, 2Direccion General de Drogodepen, Valencia, and 4Hosp. Sant Pau, Barcelona, Spain 3NIDA, Atlanta, GA

42 Adult transition from at-risk drinking to alcohol dependence: The relationship of family history and drinking motives
C. Beseler1, E. Aharonovich2, K. Keyes2 and D. Hasin2, 1Biostatistics, and 2College of Physicians and Surgeons, Columbia University, New York, NY

43 Risk associated with exceeding recommended daily drinking limits among adults reporting varying degrees of family history of alcoholism
M. Steinley-Bumgarner, L. Mangrum and R. Spence, Addiction Research Institute, University of Texas, Austin, TX
Higher levels of gamma glutamyl transpeptidase as indicator of alcohol use in patients diagnosed with liver disease
E.F. Furtado1,2 and L.I. Alcântara2, 1Neurology, Psychiatry and Medical Psychology, Faculty of Medicine of Ribeirão Preto and 2Postgraduate Program in Toxicology, Faculty of Pharmaceutical Sciences of Ribeirão Preto - University of São Paulo, Ribeirão Preto, Brazil

Domestic violence and dependence: A study on the association of both phenomena
A.R. Noto, E.A. Silva, L.A. Maciel and M.H. Cury, Psychobiology, UNIFESP [Federal University of São Paulo], São Paulo, Brazil

Correlates of recent alcohol use in heroin-dependent research volunteers
C.L. Steinmiller and M.K. Greenwald, Psychiatry and Behavioral Neurosciences, Wayne State University, Detroit, MI

Exploratory factor analysis suggests that the relative reinforcing efficacy of alcohol is binary
J. MacKillop1, J.G. Murphy2 and J.W. Tidey1, 1Psychiatry and Human Behavior, Brown University, Providence, RI and 2Psychology, University of Memphis, Memphis, TN

Smoking explains much, but not all, of the relationship between MAO activity and behavioral/psychological characteristics associated with alcohol dependence
D.S. Harris, Psychiatry, University of Cincinnati, Cincinnati VAMC, Cincinnati, OH

Extended-release naltrexone (XR-NTX) reduces holiday drinking in alcohol-dependent patients
M. Bohn1, M. Alexander2, S. Lapham3, Q. Dong2 and R. Forman2, 1Aurora Psychiatric Hospital, Wauwatosa, WI, 2Alkermes, Inc., Cambridge, MA and 3Behavioral Health Center SW, Albuquerque, NM

Cognitive impairment change in alcohol-dependent subjects at 3 months post-detoxification
E. Reviriego1,2, S. Auriacombe2, B. Fleury3, M. Fatseas1,3 and M. Auriacombe1,3, 1Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen, 2Cognitive Neurology and 3Addiction Medicine, University Hospital, Bordeaux, France

Social support networks for mothers with problem drinking
E. Rosof1, M. Gwadz2, N. Leonard2 and L. Rotko2, 1Medical and Health Research Association, and 2National Development and Research Institutes, Inc., New York, NY

Metabolic signature of place preference to methamphetamine (METH) in rodents
W.K. Schiffer1, V. Patel1, C. Liebling4, D. Lee1, D. Alexoff1, S.L. Dewey1 and E.L. Gardner2, 1Medical Department, Brookhaven National Laboratory, Upton, NY and 2Intramural Research Program, NIDA, Baltimore, MD

Development of an apparatus and methodology for conducting functional magnetic resonance imaging in conscious rhesus monkeys
A.C. Murnane and L.L. Howell, Neuroscience, Emory University, Atlanta, GA

Neurobiological and behavioral predictors of social rank in female monkeys
P.W. Czoty1, N.V. Riddick1, H.D. Gage2, M. Icenhower1, M.C. Bounds2, J.R. Kaplan3, A.J. Bennett1,3, P.J. Pierre1,3 and M.A. Nader1,2, 1Physiology and Pharmacology, 2Radiology, and 3Pathology-Comparative Medicine, Wake Forest University School of Medicine, Winston-Salem, NC

Dopamine effects on ventral striatal and orbitofrontal activation during a reward-conflict task in adult volunteers
I. Ivanov, S. Clerkin, K. Schulz, J. Fan, J. Halperin and J. Newcorn, Mt. Sinai School of Medicine, New York, NY
56 Withdrawn
L.M. Oswald 1, G.S. Wand 1, Y. Zhou 1, H. Kuwabara 1, A. Kumar 1, J. Brasic 1, M. Alexander 1, W. Ye 1, J. Hilton 1 and D.F. Wong 1, 1The Johns Hopkins University School of Medicine, and 2University of Maryland School of Nursing, Baltimore, MD

57 Response inhibition in cocaine-dependent individuals and controls under a Go/No-Go task with different levels of difficulty
S.D. Lane 1, F.G. Moeller 1, J.L. Steinberg 1, M. Buzby 1, P.A. Narayana 1, L.A. Kramer 1 and T.R. Kosten 2, 1University of Texas Health Science Center and 2Baylor College of Medicine, Houston, TX

58 Decreased frontal and temporal cortical thickness in cocaine dependence: Preliminary results
Y.H. Sung 1, I.K. Lyoo 1,2, C.C. Streeter 3,4,5, D.A. Ciraulo 3,4,5, O. Sarid-Segal 3,4 and P.F. Renshaw 1,5, 1McLean Hospital, Belmont, 2Boston U. School of Medicine, and 3,4,5Harvard Medical School, and 5Harvard Medical School, Boston, MA, 2Seoul National U., Seoul, South Korea

59 Resting amygdalar connectivity is impaired in cocaine patients as compared to matched controls
Y. Li, Z. Wang, T. Franklin, D. Langleben, C.P. O’Brien, J. Detre and A.R. Childress, Psychiatry, University of Pennsylvania School of Medicine, Philadelphia, PA

60 Striatal activation in a cocaine-craving paradigm using perfusion fMRI at 3T
J. Listerud 1, J.J. Wang 2, J. Detre 2, C.O. O’Brien 1 and A.R. Childress 1, 1Psychiatry, and 2Neurology, University of Pennsylvania, Philadelphia, PA

61 Altered dorsal striatum functioning in chronic cocaine users during internally and externally guided motor control

62 Emotional intelligence in abstinent cocaine patents: Difficulties understanding and managing emotions
S.M. Hyman, H. Fox, K.I. Hong and R. Sinha, Psychiatry, Yale University, New Haven, CT

63 Cocaine vs. placebo infusions yield increased BOLD fMRI response to visual stimulation in healthy brains
S.B. Lowen, L.D. Nickerson and J.M. Levin, Brain Imaging Center, McLean Hospital, Belmont, MA

64 Sleep homeostasis and restorative process in cocaine users following sleep deprivation
G.H. Trksak 1,2,5, J.E. Jensen 1,2,5, W.B. Tartarini 2, M.A. Maywalt 2, M. Brendel 2, M.J. Kaufman 3,5, P.F. Renshaw 3,5, C. Dorsey 4 and S.E. Lukas 1,2,5, 1BPRL, 2Sleep Research Program, and 3Brain Imaging Center, McLean Hosp., Belmont, 4Sleep Health Centers, Newton, and 5Harvard Medical School, Boston, MA

65 Low resting perfusion in the ventrolateral prefrontal cortex predicts increased depressive symptoms in methadone-maintained opiate patients
J.J. Suh 1, R. Ehrman 1,2, S. Busch 1, M. Holloway 1, Z. Wang 1, Y. Li 1, J.G. Hakun 1, M. Goldman 1, M. MacDougall 1,2, C.P. O’Brien 1,2, J. Detre 1, D. Langleben 1,2 and A.R. Childress 1,2, 1University of Pennsylvania, and 2VAMC, Philadelphia, PA

66 Changes in quantitative electroencephalography during a Virtual Reality Treatment Program in alcohol-dependent males
S. Lee 1, D. Han 1, S. Kim 1, S. Oh 1, P. Renshaw 2 and S. Lukas 2, 1Psychiatry, Incheon Eun Hye Hospital, Seoul, South Korea and 2BPRL/BIC, McLean Hospital, Belmont, MA
67 Task-specific interactive effects of HIV/AIDS and alcohol dependence on brain electrophysiology and behavior
L.O. Bauer, Psychiatry, University of Connecticut School of Medicine, Farmington, CT

68 FMRI of intravenous nicotine administration: A two-predictor analysis
D.P. Olson, M. Rohan, N. Goletiani, P. Renshaw, J. Mendelson and N. Mello, Brain Imaging Center and Alcohol and Drug Abuse Research Center, McLean Hospital - Harvard Medical School, Belmont, MA

69 Decreases in gray matter in select brain regions associated with cocaine dependence are unrelated to cigarette smoking
T. Franklin, J. Hakun and A.R. Childress, Psychiatry, University of Pennsylvania, Philadelphia, PA

70 Comparison of the sensitivity of three morphometric measures in polydrug abusers

NICOTINE: HUMAN STUDIES

71 Self-administration of intravenous nicotine in male and female smokers
M. Sofuoglu¹, S. Yoo¹, K. Hill¹ and M. Mooney², ¹Psychiatry, Yale University, New Haven, CT and ²Psychiatry, University of Minnesota, Minneapolis, MN

72 Subjective and hormonal effects of cigarette smoking for four and 12 minutes
J.H. Mendelson, N.V. Goletiani, M.B. Sholar, A.J. Siegel and N.K. Mello, Alcohol and Drug Abuse Research Center, McLean Hospital-Harvard Medical School, Belmont, MA

73 Effect of D-cycloserine on smoking behavior in nicotine-dependent smokers
E.J. Santa Ana, H. Corona, T. Babuscio, K. Carroll and B. Rounsaville, Psychiatry, Yale University School of Medicine/VA CT Healthcare System, West Haven, CT

74 Human abuse liability of varenicline, a nicotinic receptor partial agonist, in smokers and nonsmokers
S.L. McColl¹, E.M. Sellers¹,³, A. Burstein² and K. Reeves², ¹Administration, Ventana Clinical Research Corporation, Toronto, ON, Canada, ²Pfizer Inc., Groton, CT and ³University of Toronto, Toronto, QC, Canada

75 Influence of the duration of abstinence on the relative reinforcing effects of cigarette smoking: A new methodology
J.H. Yoon¹, S.T. Higgins¹,² and M.P. Bradstreet¹, ¹Psychiatry, and ²Psychology, University of Vermont, Burlington, VT

76 Tolerance for smoking discomfort: A new questionnaire of ability to handle nicotine withdrawal and cravings
A. Sirota¹,², D.J. Rohsenow¹,³, S.M. MacKinnon², R.A. Martin², G. Kaplan⁵, P.M. Monti²,³, A. Almeida⁴, J. Tidey¹ R. Swift¹,³, ¹VAMC, & ²Ctr for Alcohol & Addiction Studies, ³Psych. & Human Behavior, Brown U., Providence, RI, ⁴Boston U. School of Public Health, & ⁵VA Boston Health Care System, Boston, MA

77 Sex difference in smoking and abstinence on self-reports of mood, cigarette craving, and withdrawal symptoms
A. Azizian¹, J. Xu¹, J. Monterosso¹, C.P. Domier¹, A.L. Brody¹ and E.D. London¹,²,³, ¹Psychiatry and Biobehavioral Sciences, ²Molecular & Medical Pharmacology, and ³Brain Research Institute, David Geffen School of Medicine, UCLA, Los Angeles, CA

78 Barriers to quitting smoking among substance-dependent patients in treatment
R.A. Martin¹, D.J. Rohsenow²,¹ and J.J. Laurence¹, ¹Center for Alcohol and Addiction Studies, Brown University, and ²Providence Veteran's Affairs Medical Center, Providence, RI
79 **Greater nicotine use is not associated with less smoking compensation during smoking reduction**
   E.N. Peters¹, J.R. Hughes¹ and P. Callas², ¹Psychiatry, and ²Biometry, University of Vermont, Burlington, VT

80 **Breath carbon monoxide levels and urine cotinine in methadone-maintained smokers**
   K.E. Dunn, S.C. Sigmon and S.T. Higgins, University of Vermont, Burlington, VT

81 **Marijuana use and nicotine dependence among adolescent smokers: Does the first smoked substance matter?**

82 **The relationship between cannabis and nicotine use in adolescent substance use disorder treatment**
   C. Thurstone¹², P.D. Riggs², S.K. Stover² and S.K. Mikulich-Gilbertson², ¹Behavioral Health Services, Denver Health and Hospital Authority, and ²Psychiatry, University of Colorado at Denver and Health Sciences Center, Denver, CO

83 **Problem behavior profiles in subgroups of drug users**
   I.V. Bustamante¹³, S.S. Martins¹, F. Fabian²³, N. Ialongo¹ and J.C. Anthony², ¹Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, ²Michigan State University, East Lansing, MI and ³Universidad Peruana Cayetano Heredia, Lima, Peru

84 **Prevalence of Attention Deficit Hyperactivity Disorder in young smokers presenting for a smoking cessation study**
   D.W. Hiott,²¹ H.P. Upadhyaya,¹ and K.M. Gray,¹, ¹Medical University of South Carolina, and ²Palmetto Lowcountry Behavioral Hospital, Charleston, SC

85 **Safety and feasibility of atomoxetine for smoking cessation in young smokers with and without Attention Deficit Hyperactivity Disorder: A pilot study**
   H.P. Upadhyaya, W. Hiott, K. Gray, M. Carpenter, A. Simpson and G. Frattaroli, Medical University of South Carolina, Charleston, SC

86 **Effects of atomoxetine on nicotine abstinence symptoms**

87 **Impulsivity and early trajectory among adolescent tobacco smokers**

88 **Impulsivity and treatment outcome in adolescent smokers in tobacco cessation trial - Preliminary findings**

89 **Delay-discounting is related to treatment outcomes for adolescent cigarette smoking**
   P. Shroff, M. Patak, S. Melanko and B. Reynolds, Columbus Children's Research Institute and Department of Pediatrics, Ohio State University, Columbus, OH

90 **Adolescent smokers rate delay-discounting rewards as less certain than adolescent nonsmokers**
   B. Reynolds, P. Shroff, M. Patak and S. Melanko, Columbus Children's Research Institute and Department of Pediatrics, Ohio State University, Columbus, OH

91 **Cigarette smokers discount the past more than controls**
   W.K. Bickel¹, R. Yi¹, K. Gatchalian¹, R. Landes² and B. Kowal¹, ¹Psychiatry, and ²Radiology, University of Arkansas for Medical Sciences, Little Rock, AR
92 Temporal horizons in smokers
B.P. Kowal and W.K. Bickel, Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR

93 Smoking cessation treatment at community-based substance abuse rehabilitation programs: Impact on cigarette smoking

94 Knowledge, attitudes and practices regarding nicotine dependence in various service settings
B.M. Tajima1, J. Guydish1 and K. Delucchi2, 1Institute for Health Policy Studies, and 2Psychiatry, University of California, San Francisco, San Francisco, CA

95 Gender differences in cessation support by partners of health-compromised smokers
C.L. Dempsey, M.J. Rohrbaugh and V. Shoham, Psychology, University of Arizona, Tucson, AZ

96 Male-female and between-country differences in tobacco dependence diagnostic assessments: Colombia and United States
H. Cheng1, P. Jose2 and J. Anthony1, 1Michigan State University, East Lansing, MI and 2Saldarriaga Concha Foundation, Cartagena, Colombia

97 Smoking patterns and problems among male and female youth in Palestine
M.S. AlAfifi1, M. Kariri2 and S. ElSousi1, 1Substance Abuse Research Center, and 2Ministry of Health, Gaza, Israel

98 A national survey of smoking-cessation services in adolescent residential substance-abuse treatment facilities in Canada, 2006
R. Callaghan1, 3, J. Brewster2, 1, J. Tavares3, 1 and L. Taylor1, 3, 1Centre for Addiction and Mental Health, 2Ontario Tobacco Research Unit, and 3University of Toronto, Toronto, ON, Canada

99 A child’s intentions to smoke tobacco and later onset of smoking: A longitudinal study of male-female differences
Y.G. Flores-Ortega and J.C. Anthony, Epidemiology, Michigan State University, East Lansing, MI

COMORBIDITY 1

100 Discriminative stimulus effects of methylphenidate in adults with and without Attention Deficit Hyperactivity Disorder
S.H. Kollins, J.S. English, H. Ravi and A.K. Chrisman, Psychiatry, Duke University Medical Center, Durham, NC

101 Meta-analysis of associations of depression and substance use and impairment in intravenous drug users
K.R. Conner1, M. Pinquart2 and P.R. Duberstein1, 1University of Rochester Medical Center, Rochester, NY and 2Friedrich Schiller University, Jena, Germany

102 Effect of PTSD diagnosis and contingency management procedures on cocaine use in opioid-dependent cocaine abusers maintained on low- vs. high-dose LAAM
J. McGaugh, M.J. Mancino, Z. Feldman and A. Oliveto, University of Arkansas for Medical Sciences, Little Rock, AR
103 Feasibility testing of Mentorship for Substance Abuse and Trauma
K. Tracy\(^1\), A. Wolkin\(^1\), J. Brown\(^1\), E. Weissman\(^2\), M. Levinson\(^2\) and B. Rounsaville\(^3\), \(^1\)NYU School of Medicine, New York, NY, \(^2\)VISN 3 Mental Illness Research Education and Clinical Center, Bronx, NY and \(^3\)Yale University, New Haven, CT

104 Psychiatric symptom improvement in women following group substance abuse treatment: Results from the Women’s Recovery Group study
R. McHugh\(^1\), M. Lincoln\(^2\), R. Popuch\(^2\) and S.F. Greenfield\(^2\), \(^1\)Boston University, Boston, MA, \(^2\)McLean Hospital, Belmont, MA and \(^3\)Psychiatry, Harvard Medical School, Boston, MA

105 An analysis of the prevalence and persistence of psychotic behaviors in cocaine- vs. methamphetamine-dependent participants
J.J. Mahoney, III, R. De La Garza, P. Yurovsky, A.R. Dillon, A.D. Kalechstein and T.F. Newton, Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Los Angeles, CA

106 A comparison of the efficacy of aripiprazole on psychiatric and substance use outcomes in bipolar and schizophrenic patients
B.K. Tolliver, A.L. McRae, M.L. Verduin, S.J. Anderson, A. Herrin, R. Carter and K.T. Brady, Medical University of South Carolina, Charleston, SC

107 Schizophrenic patients who smoke appear to have fewer psychotic symptoms and decreased lipid peroxidation in the context of significantly elevated anti-oxidant enzyme activities
X.Y. Zhang\(^1\), Y.L. Tan\(^2\), D.F. Zhou\(^3\), C.N. Haile\(^1\), L.Y. Cao\(^2\), G.Y. Wu\(^1\), T.A. Kosten\(^1\) and T.R. Kosten\(^1\), \(^1\)Psychiatry, Baylor College of Medicine, Houston, TX and \(^2\)Psychiatry, Peking University School of Medicine, Beijing, China

108 Outcomes of mutual aid for co-occurring disorders: A controlled trial
C. Fong\(^1\), S. Magura\(^1\), A. Rosenblum\(^1\), C.L. Villano\(^1\), H. Vogel\(^1\) and T. Betzler\(^3\), \(^1\)National Development and Research Institutes, Inc., New York, \(^2\)Double Trouble in Recovery, Inc., Brooklyn, and \(^3\)Albert Einstein College of Medicine, Bronx, NY

109 Substance use, psychiatric, and service characteristics of clients with co-occurring disorders completing substance abuse treatment
L. Mangrum, Addiction Research Institute, University of Texas, Austin, TX

110 Social networks of individuals with co-occurring substance abuse and mental disorders: Preliminary findings and directions for future research
A.A. Mericle and B.E. Havassy, Psychiatry, University of California, San Francisco, San Francisco, CA

111 The interaction of co-occurring mental disorders and recovery management checkups on substance abuse treatment participation and recovery
B.R. Rush\(^1\), M. Dennis\(^2\), C. Scott\(^2\), S. Castel\(^1\) and R. Funk\(^2\), \(^1\)Centre for Addiction and Mental Health, Toronto, ON, Canada and \(^2\)Chestnut Health Systems, Bloomington, MI

112 Development of ASI psychiatric severity cut-off scores to identify co-occurring axis-I psychiatric disorders
A. Pecoraro\(^1\), J.S. Cacciola\(^1\) and A.I. Alterman\(^2\), \(^1\)Treatment Research Institute, and \(^2\)Center for Studies of Addiction, University of Pennsylvania, Philadelphia, and \(^3\)Institute for Graduate Clinical Psychology, Widener University, Chester, PA

113 Single-gender group treatment for substance use disorders improves outcomes for women with high psychiatric severity
S.F. Greenfield\(^1\), J.P. Potter\(^1\), R.E. Popuch\(^1\), M.F. Lincoln\(^1\) and R.J. Gallop\(^3\), \(^1\)Alcohol and Drug Abuse Treatment Program, McLean Hospital, Belmont, and \(^3\)Psychiatry, Harvard Medical School, Boston, MA and \(^3\)Mathematics, West Chester University, West Chester, PA
114 Characteristics of alcoholics with comorbid anxiety or depression in an ongoing, placebo-controlled trial of acamprosate
   C. Tyson and S.C. Sonne, Medical University of South Carolina, Charleston, SC

115 Oral d-amphetamine effect on alcohol craving in alcohol-dependent and co-morbid alcohol dependent/major depressive disorder participants
   X. Balducci1,2, B. Sproule1,2, N. Herrmann1,2, U. Busto1,3 and C. Naranjo1,2, 1University of Toronto, 2Sunnybrook Health Sciences Centre, and 3Centre for Addiction and Mental Health, Toronto, ON, Canada

116 Psychiatric disorders in cannabis abusers vs. cannabis-dependent subjects requesting treatment
   A. Aguerretxe-Colina2, V. Beltran1,2, C. Denis1, E. Lavie1, J.P. Daulouede2,3 and M. Auriacombe1,2, 1Addiction Psychiatry, Universite Victor Segalen Bordeaux 2, Bordeaux, and 2Bizia Addiction Center, Bayonne, France

117 Childhood trauma and health outcomes in adults with comorbid substance abuse and mental health disorders
   N.S. Wu1 and C. Grella2, 1Psychiatry, and 2Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

118 A comparison of psychosocial functioning and cognitive functioning between depressed and non-depressed patients with marijuana dependence
   B.E. Smith1, A. Fletcher1, D.J. Brooks1, J. Mariani1,2 and F.R. Levin1,2, 1Substance Abuse, New York State Psychiatric Institute, and 2Psychiatry, Columbia University, New York, NY

119 The epidemiology of ecstasy: Comparing risk factors for amphetamine and ecstasy use in the general population
   K. Keyes and D.S. Hasin, New York State Psychiatric Institute, New York, NY

120 Patterns of prescription drug misuse, illicit drug use, and mental health problems in the Miami club culture
   H.L. Surratt, J.A. Inciardi and S.P. Kurtz, University of Delaware, Coral Gables, FL

121 Symptoms of anxiety and depression in childhood precede ecstasy use
   A. Huizink, R.F. Ferdinand, J. Van der Ende and F.C. Verhulst, Child and Adolescent Psychiatry, Erasmus MC, Rotterdam, Netherlands

122 Psychopathology and personality among young polysubstance users: Specific correlates of regular tobacco use
   N. Chakroun1 and J. Swendsen2, 1LAPSCO UMR CNRS 6024, University of Clermont, Clermont-Ferrand, and 2CNRS UMR 5543, University of Bordeaux, Bordeaux, France

123 Substance abuse counselor certification: How is nicotine addiction addressed?
   K. Kurita and J. Guydish, Institute for Health Policy Studies, University of California, San Francisco, San Francisco, CA

124 Effect of depression on smoking cessation outcomes
   S.C. Sonne1, E.V. Nunes2, H. Jiang3, W. Gan2, C. Tyson1 and M.S. Reid3, 1Medical University of South Carolina, Charleston, SC, 2Columbia University/New York Psychiatric Institute, and 3New York University School of Medicine, New York, NY

125 Preliminary investigation of a behavioral group treatment for depressed smokers
   S. Levine1, M.T. Tull1, R. Brown1, C. Kahler2, D. Rosenthal1, J. Schneider1 and C.W. Lejuez1, 1University of Maryland, College Park, MD and 2Brown University, Providence, RI

126 Depressive symptoms and smoking behavior among adolescent smokers
OPIOID TREATMENT II

127 No influence of antisocial personality disorder on methadone treatment retention
G. Bart\textsuperscript{,1,2} and G. Carlson\textsuperscript{1}, Medicine, Hennepin County Medical Center, and \textsuperscript{2}Medicine, University of Minnesota, Minneapolis, MN

128 Conflict tactics of opiate-dependent men and women
A. Alvanzo and E. McCance-Katz, Virginia Commonwealth University, Richmond, VA

129 Predictors of witnessing and experiencing violence among current and former out-of-treatment cocaine and opiate abusers in Baltimore, Maryland
C.A. Latkin and W. Hua, Health Behavior and Society, Johns Hopkins School of Public Health, Baltimore, MD

130 The subculture of drug-related violence in New Orleans before and after Hurricane Katrina
E. Dunlap and B.D. Johnson, Special Populations Research, National Development and Research Institutes, New York, NY

131 Distance to needle exchange and needle sharing among injection drug users in Baltimore
A. Nandi, C. Salama, D. Celentano and W. Latimer, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

132 Increased risk among traveling young injection drug users
P. Lum, J. Ford, A. Paciorek, K. Shafer and J. Hahn, University of California at San Francisco, San Francisco, CA

133 Early injection initiation in Tijuana, Mexico: Family influences and associated harms
R.A. Pollini\textsuperscript{1}, R. Lozada\textsuperscript{2}, K.C. Brouwer\textsuperscript{1}, A. Mantis\textsuperscript{1}, C. Magis-Rodriguez\textsuperscript{3}, C.A. Latkin\textsuperscript{4} and S.A. Strathdee\textsuperscript{1}, UCSD, La Jolla, CA, Patronato Pro-COMUSIDA, Tijuana, and CENSIDA, Mexico City, Mexico and Johns Hopkins University, Baltimore, MD

134 Parental drug use, living situation, and time to injection among heroin users in Baltimore, MD
B.E. Mancha, S.G. Severtson and M.M. Mitchell, Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

135 Opioid-dependent persons in two integrated health plans
D. McCarty\textsuperscript{1}, C.A. Green\textsuperscript{2}, C. Lou\textsuperscript{3}, F. Lynch\textsuperscript{2}, J. Mertens\textsuperscript{3}, S. Parthasarathy\textsuperscript{3}, M. Polen\textsuperscript{2}, E. Shuster\textsuperscript{3} and C. Uratsu\textsuperscript{3}, Oregon Health and Science University, Portland, Kaiser Permanente Northwest, Portland, OR and Kaiser Permanente Northern California, Oakland, CA

136 Dispensing of methadone and buprenorphine by pharmacists. Cross-sectional survey, Bayonne, France
J.P. Daulouede\textsuperscript{2,1,3}, C. Maitre\textsuperscript{2,1,3}, E. Herran\textsuperscript{1,2}, V. Beltran\textsuperscript{3,1}, A. Aguerretxe-Colina\textsuperscript{2,1} and M. Auriacombe\textsuperscript{3,2}, Resapsad Health Network, and Bizia Addiction Center, Bayonne, and Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen Bordeaux 2, Bordeaux, France

PRESCRIPTION DRUG ABUSE

137 Demographic differences in sources of prescription opioids for abuse: Data from the NAVIPPRO system
J.R. Dickinson\textsuperscript{1}, J.A. Brevard\textsuperscript{1}, S.H. Budman\textsuperscript{1}, N.P. Katz\textsuperscript{1,2} and S.F. Butler\textsuperscript{1}, Inflexxion, Inc, Newton, MA and Tufts University School of Medicine, Boston, MA

138 Prescription opioid abuse in urban versus rural areas using RADARS System data
E.J. Campagna\textsuperscript{1}, E. Bailey\textsuperscript{1} and R. Dart\textsuperscript{1,2}, Rocky Mountain Poison and Drug Center, and University of Colorado Health Sciences Center, Denver, CO
139 Characterizing the nonmedical use/abuse and diversion of opioid analgesics in 2006: Findings from ethnographic field research
   J.D. Haddox, J.P. Fitzgerald, A.T. Kline and M.Y. Smith, Purdue Pharma LP, Stamford, CT

140 Age at onset of nonmedical use of prescription drugs and its association with prescription drug use disorders: Results from a national study
   S.E. McCabe, B.T. West, M. Morales, J.A. Cranford and C.J. Boyd, University of Michigan, Ann Arbor, MI

141 The association between “gateway” substances and abuse of prescription opioids in young adults
   L. Sullivan, J. Tetraut, W. Becker, R. Desai and D. Fiellin, Internal Medicine, Yale University School of Medicine, New Haven, CT

142 First exposures in prescription opioid abusers
   B. Sproule and A. Elkader, 1Centre for Addiction and Mental Health, and 2University of Toronto, Toronto, ON, Canada

143 Regular prescription drug misuse signals greater health problems among Miami club drug users
   S.P. Kurtz, J.A. Inciardi and H.L. Surratt, Center for Drug and Alcohol Studies, University of Delaware, Coral Gables, FL

144 Expectancies for prescription stimulants in recreational and medical users
   A. Looby and M. Earleywine, Psychology, University at Albany, State University of New York, Albany, NY

145 Prescription drug misuse among adolescents in treatment
   L. Lorin and S.E. Lord, Inflexxion, Newton, MA

146 Drug-use-related problems among nonmedical users of prescription stimulants: A Web-based survey of college students
   C.J. Teter and S.E. McCabe, 1Northeastern University, Boston, MA, 2McLean Hospital, Belmont, MA and 3University of Michigan, Ann Arbor, MI

147 Prescription monitoring of medical and non-medical Schedule II opioid use in Massachusetts: 1996-2005
   N.P. Katz, A. Audet, A. Bilansky, J. Eadie, M.L. Kim, P. Kreiner, L. Panas, C. Thomas and G. Carrow, 1Anesthesia, Tufts University School of Medicine, Boston, 2Brandeis University, Waltham, and 3Massachusetts Department of Public Health, Boston, MA

148 Frequency of illicit drug promotion through the Internet
   M.L. Pich, C.L. McDonald, E.C. James, N.S. Patapis, D.S. Festinger and D.B. Marlowe, 1Treatment Research Institute, Clementon, NJ and 2Univ. of Pennsylvania, Philadelphia, PA

149 Nonprescription steroids on the Internet

150 Factors affecting prescriber adoption of tamper-resistant prescription pads for medications with abuse liability
   A. Sabo and M.Y. Smith, 1Berkshire Health Systems, Pittsfield, MA and 2Purdue Pharma LP, Stamford, CT

151 Monitoring the Internet for prescription drug misuse and tampering
Internet-based survey on prescription opioid abuse
K. Fernandez\textsuperscript{1}, S. Butler\textsuperscript{1}, C.M. Benoit\textsuperscript{1}, A. Chang\textsuperscript{1}, E. Chiauzzi\textsuperscript{1} and N. Katz\textsuperscript{1,2},
\textsuperscript{1}Inflexxion, Inc., Newton, and \textsuperscript{2}Tufts University School of Medicine, Boston, MA

The diversion of generic prescription opioids
J.A. Inciardi\textsuperscript{1}, H.L. Surratt\textsuperscript{1}, S.P. Kurtz\textsuperscript{1} and T.J. Cicero\textsuperscript{2}, \textsuperscript{1}Center for Drug and Alcohol Studies, University of Delaware, Coral Gables, FL and \textsuperscript{2}School of Medicine, Washington University, St. Louis, MO

The place of adoption in the NIDA Clinical Trials Network
M.A. Jessup\textsuperscript{1}, S.T. Manser\textsuperscript{2} and J. Guydish\textsuperscript{2}, \textsuperscript{1}Department of Family Health Care Nursing and Institute for Health and Aging, School of Nursing, and \textsuperscript{2}Institute for Health Policy Studies, University of California, San Francisco, San Francisco, CA

Withdrawn

Cost analysis of clinic- and office-based treatment of opioid dependence
E. Jones, B. Moore, J. Sindelar, P. O'Connor, R. Schottenfeld and D. Fiellin, Yale University School of Medicine, New Haven, CT

Opioid use disorder in the United States: Insurance status and treatment access
S. Busch\textsuperscript{1}, W. Becker\textsuperscript{1}, D. Fiellin\textsuperscript{1}, B. Schulman\textsuperscript{2}, R. Finkelstein\textsuperscript{4}, Y. Olsen\textsuperscript{3} and J. Merrill\textsuperscript{2}, \textsuperscript{1}Yale University, New Haven, CT, \textsuperscript{2}University of Washington, Seattle, WA, \textsuperscript{3}Johns Hopkins University, Baltimore, MD and \textsuperscript{4}New York Academy of Medicine, New York, NY

Racial/ethnic disparities in methadone treatment
N.D. Berkman, W.M. Wechsberg and M. Kuo, Health, Social, and Economics Research, RTI International, Research Triangle Park, NC

Observational cohort study of methadone-maintained patients in Iran
A. Mokri\textsuperscript{1}, R.S. Schottenfeld\textsuperscript{2}, M.C. Chawarski\textsuperscript{3} and R. Ali\textsuperscript{3}, \textsuperscript{1}INCAS, Tehran, Iran, \textsuperscript{2}Yale University School of Medicine, New Haven, CT and \textsuperscript{3}WHO Centre, University of Adelaide, Adelaide, SA, Australia

Injecting buprenorphine in Malaysia: Demographic and drug use characteristics of buprenorphine injectors
M. Mazlan\textsuperscript{1}, B. Vicknasingam\textsuperscript{2}, M.C. Chawarski\textsuperscript{3} and R.S. Schottenfeld\textsuperscript{1}, \textsuperscript{1}SARC, Muar, Malaysia, \textsuperscript{2}University Sains Malaysia, Penang, Malaysia and \textsuperscript{3}Yale University School of Medicine, New Haven, CT

Buprenorphine in the VA: Results of the first three years
A.J. Gordon\textsuperscript{1}, J.A. Trafton\textsuperscript{2}, A.J. Saxon\textsuperscript{3}, V.S. Calabrese\textsuperscript{4}, A.L. Gifford\textsuperscript{5}, F. Goodman\textsuperscript{4}, L. McNicholas\textsuperscript{6} J.G. Liberto\textsuperscript{7}, \textsuperscript{1}VAPB Hlthcare, Pittsburgh, \textsuperscript{2}VAMC, Phila., \textsuperscript{3}VA Palo Alto Hlth Care, Menlo Park, \textsuperscript{4}VA Puget Sound Hlth Care, Seattle, \textsuperscript{5}VACO Pharm. Ben. Mngmt. Strat. Hlthcare Grp, Hines, IL, \textsuperscript{6}VANE Hlthcare, Bedford, MA, \textsuperscript{7}VAMD Hlth Care Syst.

Barriers to buprenorphine treatment in Massachusetts
A.Y. Walley\textsuperscript{1}, M. Botticelli\textsuperscript{2} and D.P. Alford\textsuperscript{1}, \textsuperscript{1}General Internal Medicine, Boston University School of Medicine, and \textsuperscript{2}Bureau of Substance Abuse Services, Massachusetts Department of Public Health, Boston, MA

Difficulties encountered contacting certified buprenorphine providers listed on the SAMHSA Website physician locator
G. Caraballo and C.E. Albizu-García, Graduate School of Public Health, University of Puerto Rico, San Juan, Puerto Rico
Physician compliance with methadone treatment guidelines
C. Strike1,2, W. Hillier1, E. Wenghofer1,2, W. Gnam1,3 and M. Millson3, 1Centre for Addiction and Mental Health, 2College of Physicians and Surgeons of Ontario, and 3University of Toronto, Toronto, ON, Canada

An evaluation of state priorities, guidelines and funding for infectious disease services in substance abuse treatment programs

Therapeutic mistrust and therapeutic pessimism in drug addiction research
C.B. Fisher1, M. Oransky1, M. Mahadevan1, M. Singer2, G. Mirhej2 and D. Hodge2, 1Fordham University, Bronx, NY and 2Hispanic Health Council, Hartford, CT

Drug abuse and criminality in juveniles in New Delhi: Public health issues
S. Sharma, N.G. Desai and G. Sharma, Psychiatry, IHBAS, Delhi, India

Recruitment and retention implications from the 2005-06 NFATTC Workforce Survey
J.R. Knudsen1 and S. Gallon2, 1RMC Research Corporation, and 2Oregon Health and Science University, Portland, OR

How states use workforce needs assessment data to improve addiction treatment services
A.M. Williams1, J.R. Knudsen3 and T.G. Durham1, 1The Danya Institute, Inc., Silver Spring, MD and 3RMC Research Corporation, Portland, OR

Research on psychoactive substance use in Latin America and the Caribbean: Priorities, capacities and impact
C. Gallo1, F. Fiestas1, G. Poletti1, D. Razzouk2, J. Mari2, I. Bustamante1, S. Sarabia1, S. Sagastegui1 and G. Mazzotti1, 1University Peruana Cayetano Heredia, Lima, Peru and 2University Federal de São Paulo, Sao Paulo, Brazil

Analysis of oral communications accepted to the CPDD and subsequent publication
R. Aleixandre1, J.C. Valderrama1, M. Bolaños1, F. Bueno2, S. Tortajada1, P. Needle3 and J.C. Perez de los Cobos4, 1IHCD Lopez Piñero [CSIC-Univ. de Valencia], 2Plan Muni. de Drogodepend. del Ayunta. de Valencia, Spain, 3NIDA External Consultant, Atlanta, GA and 4Hosp. Sant Pau, Barcelona, Spain

A bibliometric study of two drug addiction research specialty journals
S.W. Gust1 and E.L. Winstanley2, 1International Program, NIDA, Bethesda, and 2Behavioral Pharmacology Research Unit, Johns Hopkins School of Medicine, Baltimore, MD

Symposium VII

HOW ARE GENES AFFECTING RISK OF ALCOHOL DEPENDENCE RELEVANT TO DRUG DEPENDENCE?

Chairs: Henry Kranzler and Joel Gelernter

10:00 Serotonergic genes, gene X environment interaction, and risk of alcohol and drug dependence
Henry Kranzler, University of Connecticut School of Medicine, Farmington, CT

10:25 New findings on genes close to DRD2 and risk of alcohol, nicotine, and cocaine dependence
Joel Gelernter, Yale University School of Medicine, West Haven, CT
10:50  **GABA-A subunit genes, risk of alcohol dependence, and correlations with the subjective effects of alcohol**  
Jonathan Covault, University of Connecticut School of Medicine, Farmington, CT

11:15  **ADH genes and risk of alcohol and drug dependence**  
Xingguang Luo, Yale University School of Medicine, West Haven, CT

11:40  **Discussant**  
Charles O’Brien, University of Pennsylvania School of Medicine, Philadelphia, PA

---

**Oral Communications 11**

**CCQ 301AB**

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

**HIV/AIDS**

Chairs: Clyde McCoy and Lisa Metsch

10:00  **Clustering of high-risk sex behaviors among men and women drug users**  
C.B. McCoy¹, V. DeGruttola² and M. Comerford¹, ¹University of Miami, Miami, FL and ²Harvard University, Cambridge, MA

10:15  **Sexual-risk behavior among female crack users in São Paulo, Brazil**  
S.A. Nappo¹,², L.G. Oliveira¹,² and Z.M. Sanchez¹,², ¹Federal University of São Paulo, and ²CEBRID, São Paulo, Brazil

10:30  **Use of crack cocaine among HIV-infected persons is associated with high risk sexual activity and failure to receive outpatient HIV care**  
L. Metsch¹, C. del Rio², A. Rodriguez¹, T. Sullivan², G. Cardenas¹, L. Gooden¹, M. Pereyra¹, C. Bell², T. Brewer¹, T. Kuper¹, S. Lewis³ and R. Rothenberg², ¹U. of Miami School of Medicine, Miami, FL, ²Emory U. School of Medicine, Atlanta, GA and ³Barry U., Miami, FL

10:45  **Injection stimulant use and HIV risk in central Ukraine**  
O. Zezyulin¹, K. Dumchev¹, J. Schumacher², R. Soldyshev³, L. Moroz⁴ and P. Slobodyanyuk⁴, ¹Vinnitsya Regional Narcological Dispensary, Vinnitsya, Ukraine, ²U. of Alabama at Birmingham, Birmingham, AL and ³Vinnitsya Pirogov National Medical U., Vinnitsya, Ukraine

11:00  **Correlates of meth use among men who attend an STD clinic that primarily serves gay men**  
E.T. Rudy¹, S. Shoptaw²³, P. Kerndt¹, J. Hall¹, T. Horton⁴ and S. Tilekar⁴, ¹LA County Department of Public Health, ²Department of Family Medicine, and ³Integrated Substance Abuse Programs, UCLA, and ⁴LA Gay and Lesbian Center, Los Angeles, CA

11:15  **10 years of universal access to HIV treatment: Learning from the Brazilian experience**  
M. Malta¹, F.I. Bastos¹, S.A. Strathdee² and M. Monteiro³, ¹FIOCRUZ, Rio de Janeiro, Brazil, ²University of California, San Diego, CA and ³PAHO/WHO, Washington, DC

11:30  **Medication adherence and viral load in HIV-positive, methamphetamine-using MSM**  
J. Arnsten⁴, D.A. Bux¹, J. Morgenstern¹, J.T. Parsons³ and J. Severino¹, ¹Columbia University, New York, ²Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, and ³Hunter College and Graduate Center, City University of New York, New York, NY

11:45  **Pilot study of directly administered antiretroviral therapy as a structural intervention in methadone maintenance**  
J. Alexander¹,², N. Haug¹, Y. Song¹ and J. Sorensen¹, ¹University of California San Francisco School of Medicine, San Francisco, CA and ²Touro College of Osteopathic Medicine, Mare Island, CA
Oral Communications 12

Y GENDER XPLAINS THE DIFFERENCE

Chairs: Kathleen Brady and Andrea Stone

10:00 Gender differences in response to stress and cues in cocaine-dependent individuals
K.T. Brady, A.L. McRae, S.E. Back, A.E. Waldrop, M.E. Saladin and S.D. Yeatts, Psychiatry, Medical University of South Carolina, Charleston, SC

10:15 Changing gender trends in adolescent drug use
A.L. Stone, Psychosocial and Community Health, University of Washington, Seattle, WA

10:30 Who starts then stops cocaine use? United States, 2003
G.F. Alvarado1,2 and J.C. Anthony2,1, 1Public Health, Cayetano Heredia Peruvian University, Lima, Peru and 2Epidemiology, Michigan State University, East Lansing, MI

10:45 A gender-specific investigation of long-term drug use among an urban African-American cohort
E.E. Doherty1, K.M. Green2 and M.E. Ensminger2, 1Mental Health, and 2Health, Behavior, and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

11:00 Gender differences in methamphetamine use in youth and young adults treated for substance dependence
M.E. Roth, C. Walker and V. Slaymaker, Butler Center for Research at Hazelden, Center City, MN

11:15 Factors associated with substance abuse treatment utilization among male and female incarcerated substance users
M. Staton-Tindall1, J. Havens1, C. Oser1, M. Prendergast2 and C. Leukefeld1, 1Behavioral Science, University of Kentucky, Lexington, KY and 2Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

11:30 Role of individual, treatment, and post-treatment factors on sustained remission: Examining gender differences
V. Stanick1, A. Laudet1 and B. Sands2, 1National Development Research Institute, and 2Woodhull Medical Center, New York City, NY

11:45 Gender as a moderator in the relationship between behavioral measures of risk-taking and impulsivity in a sample of inner-city, African-American substance users
B. Baker1, C.W. Lejuez1, M. Bornovalova1, M.T. Tull1 and B. Reynolds2, 1University of Maryland, College Park, MD and 2Ohio State University, Columbus, OH

BADGES MUST BE WORN IN ALL SCIENTIFIC SESSIONS
Regulation of the serine/threonine protein kinase Akt in the nucleus accumbens following amphetamine in mice
J. Miller\textsuperscript{1,2} and E. Unterwald\textsuperscript{1,2}, \textsuperscript{1}Pharmacology, and \textsuperscript{2}Center for Substance Abuse Research, Temple University School of Medicine, Philadelphia, PA

Subregional analysis of basolateral amygdala regulation of cocaine-seeking behavior in rats: Differential effects of SKF81297 during maintenance and reinstatement conditions
Y. Mashhoon, L. Yager and K.M. Kantak, Psychology, Boston University, Boston, MA

Systemic injections of VPA leads to enhanced reinstatement of conditioned-cued reinstatement of cocaine-seeking in rats: Role of HDAC in appetitive reinforcement
T.E. Kippin and K.A. Kerstetter, Psychology and Neuroscience Research Institute, University of California, Santa Barbara, CA

Effect of footshock-stress intensity on methamphetamine reinstatement in rats
K.L. Shelton and P.M. Beardsley, Pharmacology and Toxicology, Virginia Commonwealth University, Richmond, VA

Levo-tetrahydropalmatine attenuates cocaine self-administration and cocaine-induced reinstatement in rats
J. Mantsch\textsuperscript{1}, S.J. Li\textsuperscript{3}, R. Risinger\textsuperscript{4}, E. Katz\textsuperscript{1}, S. Awad\textsuperscript{1}, D. Baker\textsuperscript{1} and Z. Yang\textsuperscript{1}, \textsuperscript{1}Biomedical Sciences, \textsuperscript{4}Psychiatry, Marquette University, and \textsuperscript{3}Biophysics, Medical College of Wisconsin, Milwaukee, WI and \textsuperscript{2}Beijing Institute of Basic Medical Sciences, Beijing, China

Long-term memory of cocaine-associated context: Disruption of reconsolidation, extinction, renewal and reinstatement
Y. Itzhak\textsuperscript{1,2}, J.B. Kelley\textsuperscript{3} and K.L. Anderson\textsuperscript{1}, \textsuperscript{1}Psychiatry, and \textsuperscript{2}Neuroscience Program, University of Miami, Miami, FL

Alpha synuclein protein levels are increased in cocaine abusers
N. Adi\textsuperscript{1}, J. Pablo\textsuperscript{1}, L. Duque\textsuperscript{1}, F.R. Ervin\textsuperscript{2} and D.C. Mash\textsuperscript{1}, \textsuperscript{1}Neurology, Miller School of Medicine, Miami, FL and \textsuperscript{2}McGill University, Montreal, ON, Canada

Central probes of cholinergic receptor systems and associated cognitive functioning in cocaine-addicted subjects
B. Adinoff\textsuperscript{1,2}, M.J. Williams\textsuperscript{1}, S.E. Best\textsuperscript{1,2}, T. Zielinski\textsuperscript{1}, T.S. Harris\textsuperscript{3}, E.R. Schreffler\textsuperscript{1} and M.D. Devous\textsuperscript{3}, \textsuperscript{1}Psychiatry, University of Texas Southwestern, \textsuperscript{2}VA North Texas Health Care System, and \textsuperscript{3}University of Texas Southwestern Medical Center, Dallas, TX
Animals in Research Forum

ADVOCATING AND EXPLAINING CONTROVERSIAL SCIENCE

Presented by Richard Bianco,
Office of Regulatory Affairs, University of Minnesota

Grant-Writing Workshop
(By Invitation Only)

Workshop X

OPIOID USE DISORDER IN ADOLESCENTS:
EPIDEMIOLOGY, PATIENT CHARACTERISTICS,
EVIDENCE-BASED TREATMENTS AND COST-EFFECTIVENESS OF BUPRENOPHINE TREATMENT

Chairs: Geetha Subramaniam and Michael Dennis

Adolescents with opioid use disorders: Prevalence, problems and patient characteristics
Geetha Subramaniam, Johns Hopkins University, Baltimore, MD

Evidence-based behavioral and pharmacological treatment of opioid-dependent adolescents
Lisa Marsch, NDRI, New York, NY

Cost-effectiveness of Bup/Nal treatment for opioid-addicted youth
Daniel Polsky, University of Pennsylvania, Philadelphia, PA

Findings from a NIDA-CTN clinical trial of Bup/Nal-facilitated rehabilitation for opioid-dependent adolescents/youth adults
George Woody, Treatment Research Institute, Philadelphia, PA

Society for Adolescent Substance Abuse Treatment Effectiveness (SASATE) business meeting
Michael L. Dennis, Chestnut Health Systems, Bloomington, IL

Workshop XI

13TH ANNUAL CONTINGENCY MANAGEMENT WORKING GROUP

Chair: Stacey Sigmon
Workshop XII

ISSUES IN MEDICATIONS DEVELOPMENT FOR RELAPSE PREVENTION

Chairs: David McCann and Ahmed Elkashef

*The importance of relapse prevention in drug addiction treatment*
Charles O’Brien, University of Pennsylvania School of Medicine, Philadelphia VA Medical Center, Philadelphia, PA

*Animal models of relapse: An overview*
Jane B. Acri, NIDA, NIH, HHS, Bethesda, MD

*Use of extinction/reinstatement rat models of relapse in medications discovery*
David McCann, NIDA, NIH, HHS, Bethesda, MD

*Human laboratory models of relapse: Approaches, pitfalls and a view of the future*
Anna Rose Childress, University of Pennsylvania, Philadelphia VA Medical Center, Philadelphia, PA

*Considerations in the design of clinical trials for assessing the efficacy of relapse prevention medications*
Ahmed Elkashef, NIDA, NIH, HHS, Bethesda, MD

Discussant
Frank Vocci, NIDA, Bethesda, MD

Workshop XIII

NIDA DRUG SUPPLY AND ANALYTICAL SERVICES PROGRAM: AN OVERVIEW

Chairs: Hari H. Singh and David Shurtleff

*An overview of the NIDA drug supply & analytical services program*
Hari H. Singh, Division of Basic Neuroscience and Behavioral Research, NIDA, Bethesda, MD

*NIDA drug supply inventory and acquisition of drugs of abuse and new chemical compounds by synthesis*
F. Ivy Carroll, Research Triangle Institute, Research Triangle Park, NC

*Acquisition, storage and distribution of drugs of abuse and other chemical compounds*
Kenneth H. Davis, Jr., Research Triangle Institute, Research Triangle Park, NC

*Quantitative analysis of drugs of abuse in biological samples*
David E. Moody, University of Utah, Salt Lake City, UT

*X-ray crystallography of chemical compounds and biological substrates*
Jeffrey R. Deschamps, Naval Research Laboratory, Department of Navy, Washington, DC

*Guidance on acquiring DEA registration for using controlled substances in research*
Christine A. Sannerud, U.S. Drug Enforcement Agency, Washington, DC
POSTER SESSION III (Breakfast)  CCQ 200ABC  
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 12:30 PM  

ALCOHOL: ANIMAL STUDIES  

1 Attenuation of stress-induced ethanol consumption in male Lewis rats by the CCK-B antagonist L-365, 260  
J.M. Mitchell\textsuperscript{1,2,3}, K.S. Chen\textsuperscript{3} and H.L. Fields\textsuperscript{1,2,3}, \textsuperscript{1}Neurology, UCSF, Emeryville, \textsuperscript{2}Wheeler Center for the Neurobiology of Addiction, UCSF, San Francisco, and \textsuperscript{3}Ernest Gallo Clinic and Research Center, UCSF, San Francisco, CA  

2 Dissociation between physiological and motivational effects of alcohol in female Fischer & Lewis rats  
P.G. Roma\textsuperscript{1}, S.A. Chen\textsuperscript{2}, C.S. Barr\textsuperscript{2} and A.L. Riley\textsuperscript{1}, \textsuperscript{1}Psychopharmacology Laboratory, Department of Psychology, American University, Washington, DC and \textsuperscript{2}Laboratory of Clinical and Translational Studies, Section on Primate Studies, NIAAA, Poolesville, MD  

3 GABA-A/alpha5 receptor mechanisms in the discriminative stimulus effects of GABA-A modulators  
D. Platt\textsuperscript{1}, M. Van Linn\textsuperscript{2}, T. Clayton\textsuperscript{2}, J. Cook\textsuperscript{2} and J. Rowlett\textsuperscript{1}, \textsuperscript{1}Harvard Medical School/NEPRC, Southborough, MA and \textsuperscript{2}University of Wisconsin, Milwaukee, WI  

4 The effect of ethanol on working memory and repeated learning in Wistar rats  
G.R. Wenger, Pharmacology & Toxicology, University of Arkansas for Medical Sciences, Little Rock, AR  

5 Ethanol and LiCl induced-suppression of schedule-induced polydipsia  
S.L. Handler, S.J. Kohut, R.L. Hertzbach and A.L. Riley, Psychology, American University, Washington, DC  

6 Addition of concurrently available food decreases the sensitivity of ethanol self-administration to disruption by fluvoxamine  
B.C. Ginsburg\textsuperscript{1} and R.J. Lamb\textsuperscript{1,2}, \textsuperscript{1}Psychiatry, and \textsuperscript{2}Pharmacology, University of Texas Health Science Center at San Antonio, San Antonio, TX  

SEDATIVE-HYPNOTICS  

7 Comparison of bretazenil and midazolam self-administration under a progressive-ratio schedule: Labor supply analysis  
J.K. Rowlett, NEPRC, Harvard Medical School, Southborough, MA  

8 Differential antagonism of the sedative and motor effects of zolpidem and alprazolam by BCCT  
A.N. Duke\textsuperscript{1,2}, D.M. Platt\textsuperscript{1}, J.M. Cook\textsuperscript{3}, M.L. Van Linn\textsuperscript{1} and J.K. Rowlett\textsuperscript{1,2}, \textsuperscript{1}HMS/New England Primate Research Center, Southborough, MA, \textsuperscript{2}Neuroscience & Behavior, University of Massachusetts, Amherst, MA and \textsuperscript{3}Chemistry, University of Wisconsin, Milwaukee, WI
9 The reinforcing effects of an acute oral dose of zolpidem in drug-naïve and drug-experienced human volunteers
   S.C. Licata, D. Penetar, S. Dunlap and S.E. Lukas, Psychiatry, McLean Hospital/Harvard Medical School, Belmont, MA

10 Non-medical use, abuse and dependence on sedatives and tranquilizers among U.S. adults: Correlation with anxiety
   R.A. Desai, W. Becker and D.A. Fiellin, Yale University School of Med., New Haven, CT

11 Effect of task difficulty on a Morris water maze reversal task in rats prenatally exposed to toluene
   J. Batis¹, S.E. Bowen¹² and J.H. Hannigan¹², ¹Psychology, Wayne State University, Detroit, MI and ²Obstetrics & Gynecology, Wayne State University, Detroit, MI

12 Repeated toluene exposure hampers behavioral performance as measured by a waiting-forward operant task
   S. Bowen and P. McDonald, Psychology, Wayne State University, Detroit, MI

HALLUCINOGENS

13 PCP-treatment-dependent differential regulation of the NMDAR is dependent on PSD-95 expression and mediated by calpain
   N.C. Anastasio, Y. Xia and K.M. Johnson, University of Texas, Galveston, Galveston, TX

14 Human trace amine associated receptor 1: A neuromodulator of hallucinogens?

15 5-Methoxydiethyltryptamine shares stimulus effects with abused hallucinogens
   M.B. Gatch, M. Rutledge, C.M. Taylor and M.J. Forster, Pharmacology & Neuroscience, University of Texas Health Science Center, Fort Worth, TX

16 Discriminative stimulus effects of DOM in rhesus monkeys: Pharmacologic selectivity and receptor mechanisms
   J. Li¹, K.C. Rice² and C.P. France¹, ¹Pharmacology, University of Texas Health Science Center, San Antonio, TX and ²Laboratory of Medicinal Chemistry, Bethesda, MD

17 Comparison of the discriminative stimulus effects of DOM, MDL100907 and ketanserin in rats: Inverse agonism?
   A. Unzeitig¹, J. Li¹, K.C. Rice² and C.P. France¹, ¹Pharmacology, University of Texas Health Science Center at San Antonio, San Antonio, TX and ²Laboratory of Medicinal Chemistry, NIDDK, Bethesda, MD

18 Characterizing emerging drugs using quantitative semantic analysis of Internet trip reports
   M.J. Baggott¹², J.R. Coyle², J.C. Lopez² and D.E. Presti³, ¹Helen Wills Neuroscience Institute, and ²Molecular and Cell Biology, UC Berkeley, Berkeley, CA ³Addiction Pharm. Res. Laboratory, California Pacific Medical Center Research Institute, San Francisco, CA

19 Reported pharmacological effects after the ingestion of research chemicals and smart drugs in a naturalistic setting
   M. Farre¹³, R. de La Torre¹², M. Pujadas¹, E. Marchei⁴, M. Pellegrini⁴, J. Fiz¹³, R. Pacifici⁴, P. Zuccaro⁴ and S. Pichini⁴, ¹Pharmacology, IMIM, ²Universitat Pompeu Fabra, ³Universitat Autonoma, Barcelona, Spain and ⁴Istituto Superiore di Sanità, Rome, Italy
PAIN/ANALGESIA

20 The effect of the chemokines MCP-1 and MIP-1beta on antinociception induced by opioid agonists in rats
X. Chen1, E.B. Geller1, T.J. Rogers1,2,3 and M.W. Adler1, 1Center for Substance Abuse Research, 2Department of Pharmacology, and 3Fels Institute for Cancer and Molecular Biology, Temple University School of Medicine, Philadelphia, PA

21 A new role for MCP-1: Mediation of kappa opioid receptor antinociceptive and hypothermic effects in mice
K. Benamar, E.B. Geller and M.W. Adler, Center for Substance Abuse Research, Temple University, Philadelphia, PA

22 Decrease in the efficiency of GABAergic neurotransmission associated with an increase in GABA transporter located on astrocytes under the neuropathic pain-like state
K. Nanjo, M. Narita, M. Narita, N. Kuzumaki, K. Niikura, K. Miyoshi, Y. Funada and T. Suzuki, Department of Toxicology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo, Japan

23 Estrous cycle effects on behavioral and physiological responses to inflammatory pain
N.J. Amador1,2, K.Y. Shivers1,2, D. Hunter1,2, G. Barr1,2, S. Jenab1,2 and V. Quinones-Jenab1,2, 1Psychology, Hunter College of CUNY, and 2Biopsychology and Behavioral Neuroscience Doctoral Subprogram, Graduate Center of CUNY, New York, NY

24 Developmental and hormonal effects on inflammatory responses to pain in female rats
K.Y. Shivers1,2, N. Amador1,2, D. Hunter1,2, S. Jenab1,2 and V. Quinones-Jenab1,2, 1Psychology, Hunter College of CUNY, New York, NY and 2Biopsychology and Behavioral Neuroscience, Graduate School and University Center, CUNY, New York, NY

25 Decrease in NMDAR-NR2B subunit levels by intrathecal shRNA blocks group I mGluR-mediated hyperalgesia
B.H. Gabra, F.L. Smith, F.K. Kessler, J.K. Ritter and W.L. Dewey, Pharmacology and Toxicology, Virginia Commonwealth University, Richmond, VA

26 Prescription opioid-abusing chronic pain patients: Clinical characteristics associated with relapse
J. Manubay1,2, S.D. Comer1,2, S.K. Vosburg1,2, J. Lee1,2, S. Stephens1,2 and M.A. Sullivan1,2, 1Psychiatry, Columbia University, and 2Substance Abuse, New York State Psychiatric Institute, New York, NY

27 Effects of sublingual buprenorphine/naloxone and oral oxycodone on pain perception in prescription opioid-abusing chronic pain patients

28 Post-surgical analgesia predicted by pre-surgical self-reported sleep
T. Roehrs1,2, M. Hyde1, M. Greenwald2 and T. Roth1,2, 1Sleep Disorders and Research Center, Henry Ford Hospital, and 2Psychiatry and Behavioral Neuroscience, Wayne State University School of Medicine, Detroit, MI

COCAINE BEHAVIOR: ANIMALS STUDIES

29 Novel approach to the analyses of conditioned place preference
A.M. Sandler dela Cruz, D.V. Herin and K.A. Cunningham, Center for Addiction Research, University of Texas Medical Branch, Galveston, TX

30 Incentive salience of cocaine is remarkably similar across the postpartum period
M. Pereira, K.M. Seip, E.I. Dziopa and J.I. Morrell, Center for Molecular and Behavioral Neuroscience, Rutgers University, Newark, NJ
31 Cocaine-induced locomotor sensitization during conditioning and locomotor rates during test may predict resultant place preference in lactating dams
K. Seip, M. Pereira, E. Dziopa and J. Morrell, Center for Molecular and Behavioral Neuroscience, Rutgers University, Newark, NJ

32 Conditioned place preference as a model for investigating social and drug rewards in adolescent rats
K.J. Thiel and J.L. Neisewander, Psychology, Arizona State University, Tempe, AZ

33 The reinstatement of cocaine-induced place aversions and preferences with priming injections of cocaine
G.D. Busse¹, F.S. Hall² and A.L. Riley¹,¹ Department of Psychology, American University, Washington, DC and ²Molecular Neurobiology Branch, NIDA, Baltimore, MD

34 Estrogen enhances conditioned place preference to cocaine
Y.M. Torres, Y. Arroyo and A.C. Segarra, Physiology, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico

35 Acute effects of progesterone and testosterone on cocaine self-administration by female nonhuman primates
N.K. Mello, J.H. Mendelson, I.M. Knudson, S.S. Negus and M. Kelly, Alcohol and Drug Abuse Research Center, McLean Hospital-Harvard Medical School, Belmont, MA

36 Progesterone pretreatment attenuates reinstatement of cocaine-seeking in freely cycling female rats
M.W. Feltenstein, A.R. Henderson and R.E. See, Neurosciences, MUSC, Charleston, SC

37 Allopregnanolone attenuates the reinstatement of cocaine-seeking behavior in female rats
J.J. Anker¹, E.B. Larson², N.A. Holtz¹, L.A. Gliddon¹ and M.E. Carroll¹,¹ Department of Psychology, University of Minnesota, Minneapolis, MN and ²Psychiatry, UT Southwestern, Dallas, TX

38 Estrous cycle effects on DARPP-32 activity after acute cocaine
J. Weiner¹, W. Sun¹,², L. Zhou³, V. Quinones-Jenab³,² and S. Jenab¹,²,¹ Psychology, Hunter College of CUNY, and ²Biopsychology and Behavioral Neuroscience Doctoral Subprogram, Graduate Center of CUNY, New York, NY

39 Sex differences in the development of cocaine-induced behavioral sensitization and tolerance
L. Zhou³, W. Sun¹, K. Weierstall⁴, A.C. Minerley⁴, S. Jenab¹,⁴ and V. Quinones-Jenab¹,³,⁴,¹ Psychology and ²Biology, Hunter College, and ³Grad. Ctr. of CUNY, ⁴Biopsychology and Behavioral Neuroscience Doctoral Subprogram, Grad. Ctr. of CUNY, New York, NY

40 Isoflurane anesthesia dampens cocaine-induced sensitization in the rat
D. Dow-Edwards, Physiology and Pharmacology, SUNY-Downstate, Brooklyn, NY

41 Incubation of cocaine-seeking behavior is enhanced and more enduring in female relative to male rats
K.A. Kerstetter, V. Aguilar, M. Jachimowicz, R. Choy, C. Kaspar and T.E. Kippin, Psychology and Neuroscience Research Institute, University of California, Santa Barbara, CA

42 Does response-contingent access to cocaine reinstate cocaine-seeking behavior in C57BL/6J mice?
P.J. Kruzich, Physiology, Medical College of Georgia, Augusta, GA

43 Selective role for basolateral amygdala in reconsolidation of cocaine-context associations that guide context-induced cocaine-seeking behavior
D.R. Ramirez, J.L. Eaddy and R.A. Fuchs, Psychology, University of North Carolina, Chapel Hill, NC
**Time-limited role of the hippocampus in regulating context-induced cocaine-seeking behavior**

A.L. Atkins, J.J. Szalay and K.M. Kantak, Psychology, Boston University, Boston, MA

**Accumbal extracellular glutamate levels during cocaine self-administration and its extinction: A time-course microdialysis study**

M. Miguëns, N. del Olmo, I. Torres, A. Higuera-Matas, C. García-Lecumberri and E. Ambrosio, Psicobiología, Universidad Nacional de Educación a Distancia, Madrid, Spain

**Role of mGluR5 in the behavioral-stimulant effects of cocaine in squirrel monkeys**

R.M. Bauzo, M. Zhou, H.L. Kimmel and L.L. Howell, Neuroscience, Emory University, Division of Neuroscience, Yerkes National Primate Research Center, and Psychiatry and Behavioral Sciences, Emory University, Atlanta, GA

**Neurotensin response to psychostimulant self-administration**

P. Frankel, A.J. Hoonakker and G.R. Hanson, Department of Pharmacology and Toxicology, University of Utah, Salt Lake City, UT

**Effects of chronic administration of the D1 receptor partial agonist SKF 83959 on eye blinking in squirrel monkeys**

R.I. Desai, C.A. Paronis, J. Connolly, N. Shaller and J. Bergman, Preclinical Pharmacology Laboratory, McLean Hospital/Harvard Medical School, Belmont, MA

**Effects of dopamine D2 agonists on injection/food choice behavior in cocaine-trained monkeys**

J. Bergman and C.A. Paronis, ADARC-MRC, Harvard Medical School/McLean Hospital, Belmont, MA

**Novel D3 receptor antagonists and partial agonists attenuate the discriminative stimulus effects of cocaine and reinstatement of cocaine-seeking in squirrel monkeys**


**Are lapses of attention a form of impulsive behavior?**

H. de Wit and J.B. Richards, Psychiatry, University of Chicago, Chicago, IL and Research Institute on Addiction, Buffalo, NY

**Measuring lapses of attention in rodents**

J.B. Richards and H. deWit, Research Institute on Addictions, University of Buffalo, Buffalo, NY and Psychiatry, University of Chicago, Chicago, IL

**Methylphenidate effects on attentional set-shifting in a rodent model of ADHD**

R.C. Harvey and K.M. Kantak, Psychology, Boston University, Boston, MA

**Multi-method assessment of impulsive behaviors**

A.E. Waldrop, K.T. Brady and C.W. Lejuez, Medical University of South Carolina, Charleston, SC and University of Maryland, College Park, MD

**Impulsivity and decision making: Relationship to treatment outcome in cocaine dependence**

M.E. Mooney, C. Green, J. Schmitz, J. Steinberg, A. Swann, S. Lane and F.G. Moeller, Psychiatry, University of Minnesota, Minneapolis, MN and Psychiatry and Behavioral Sciences, University of Texas Houston Medical School, Houston, TX
56 Delay discounting of money, cocaine, cigarettes, and health in cocaine-dependent outpatients

57 Delay discounting and sensitization to the locomotor-activating effects of d-amphetamine
J.L. Perry and M.T. Bardo, University of Kentucky, Lexington, KY

COCAINE BEHAVIOR: HUMAN STUDIES

58 A randomized, double-blind, placebo-controlled multi-center trial of baclofen for the treatment of cocaine dependence
R. Kahn, S. Shoptaw, A. Elkashef, A. Childress, K. Gonsai, S. Kilby, K. Biswas and K.G. Heinzerling, 1 UCLA, Los Angeles, CA, 2 NIDA, Bethesda, MD, 3 University of Pennsylvania and 4 Veteran Affairs, Philadelphia, PA

59 Dopamine beta-hydroxylase levels influence response to disulfiram in cocaine-dependent methadone patients
A. Oliveto, J. Poling, M. Mancino, R. Pruzinsky, K. Gonsai, J. Cubells, G. Anderson, M. Chopra, K. Carroll, T.R. Kosten and C. Cargile, 1 UAMS, Little Rock, AR, 2 Yale School of Medicine, New Haven, CT, 3 Emory University, Atlanta, GA and 4 Baylor, Houston, TX

60 Disulfiram enhances paranoia during “binge” cocaine self-administration
R. Kalayasiri, P.T. Morgan, B. Pittman, R. Gueorguieva, V. Coric, Z. Bhagwagar, J. Cubells and R.T. Malison, 1 Psychiatry, and 2 School of Epidemiology and Public Health, Yale University, New Haven, CT and 3 Emory School of Medicine, Atlanta, GA

61 The measurement of craving in cocaine pharmacotherapy trials: What do we learn from it?

62 Exposure techniques versus topiramate treatment on cocaine addiction

63 Patterns of cigarette use during treatment for cocaine dependence
P. Mardikian, S. LaRowe, S. Hedden and R. Malcolm, Psychiatry/Center for Drug and Alcohol Programs, and 2 Biostatistics, Biostatistics and Epidemiology, Medical University of South Carolina, Charleston, SC

64 Behavioral patterns of cocaine use: Treatment implications
E. Aharonovich, A. Bisaga, F. Garawi, F. Levin, J. Mariani, E. Nunes and W. Raby, 1 Psychiatry, Columbia University Medical Center, and 2 New York State Psychiatric Institute, New York, NY

65 Assessing cocaine reinforcement: A comparison of the Multiple-Choice Procedure, self-administration behavior, and subjective responses
P.A. Nuzzo, E.C. Donny, G.E. Bigelow and S.L. Walsh, 1 University of Kentucky, Lexington, KY, 2 University of Pittsburgh, Pittsburgh, PA and 3 Johns Hopkins University, Baltimore, MD

66 Effects of reinforcement magnitude on cocaine use and retention in an outpatient treatment for cocaine addicts
O. Garcia-Rodriguez, R. Secades-Villa and J.R. Fernandez-Hermida, Psychology, University of Oviedo, Oviedo, Spain
Cocaine use and depressive symptoms following participation in laboratory studies of cocaine

EEG absolute power during extended cocaine abstinence

Comparison of three set-shifting measures in cocaine-dependent males
T. Rosvall1, B. Adinoff1,2, L.M. Rilling1, C.M. Cullum1 and M.J. Williams1, 1UT Southwestern Medical Center, and 2VA North Texas Health Care System, Dallas, TX

Features of Spanish adult patients with Attention Deficit Hyperactivity Disorder who ask for cocaine use treatment
J. Perez-de-los-Cobos1, N. Siñol1, C. Puerta2, V. Cantillano1 and J. Trujols1, 1Addictive Behaviors Unit, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain and 2CAD San Blas, Instituto de Adicciones - Madrid Salud, Madrid, Spain

The outcome of treatment in a psychoactive substance-related mental disorder ward
S. Nakamoto, M. Takiguchi and A. Oda, Shimofusa Psychiatric Medical Center, Chiba-City, Japan

Cognitive performance of cocaine-dependent subjects: Effects of psychiatric symptoms on Frontal Assessment Battery
S. Nicastri1,2 and P.J. Cunha1,2, 1Alcohol and Drug Abuse Treatment Program, Hospital Israelita Albert Einstein, and 2Interdisciplinary Group of Studies on Alcohol and Drugs, University of São Paulo, São Paulo, Brazil

Neurocognitive deficits and retention to treatment in cocaine-dependent patients: A 6-month follow-up study
P.J. Cunha1,2 and S. Nicastri1,2, 1Interdisciplinary Group of Studies on Alcohol and Drugs, School of Medicine, University of São Paulo, and 2Alcohol and Drug Treatment Program, Hospital Israelita Albert Einstein, São Paulo, Brazil

Cognitive measures as predictors of treatment outcome for cocaine dependence
T. Turner1,2, M. Horner1,2, S. LaRowe1,2 and R. Malcolm1, 1Psychiatry, Medical University of South Carolina, and 2Mental Health Service, Ralph H. Johnson VAMC, Charleston, SC

Relationship between cocaine use and psychological predictors of treatment outcome depends on type of urine-testing method

Assessing mechanisms of change in cocaine/alcohol continuing care
K.G. Lynch1, J.R. McKay1, S.A. Maisto2, T.R. TenHave1 and M.S. Cary1, 1University of Pennsylvania, Philadelphia, PA and 2Syracuse University, Syracuse, NY

Treatment compliance, not severity at treatment entry, predicts 12-month abstinence among homeless

Adapting contingency management to homeless, out-of-treatment MSM substance users
J. Peck1,2, C.J. Reback1,2,3, L. Amass3, and J. Kamien3, 1Psychiatry/ISAP, UCLA, 2Friends Research Institute, and 3Van Ness Recovery House/Prevention Division, Los Angeles, CA
How hidden are hidden populations? The case of out-of-treatment cocaine users in Chile
R. Santis¹, C.G. Hidalgo², V. Hayden¹, J. Rodriguez³, L. Toro¹ and M.J. Jimenez¹,
¹Department of Psychiatry, and ²School of Psychology, Pontificia Universidad Catolica de
Chile, and ³School of Public Health, Universidad de Chile, Santiago, Chile

Development of user-driven control strategies on high risk crack-cocaine use in the city of
São Paulo, Brazil
L. Oliveira¹ and S.A. Nappo¹, ¹CEBRID and ²Federal University of São Paulo,
São Paulo, Brazil

Predicting medical care access among out-of-treatment drug-using women
C.W. Striley, L.B. Cottler, A. Ben Abdallah, Psychiatry, Washington U., St. Louis, MO

Predictors of adult victimization among high risk, cocaine-using women
K. Vaddiparti, C. Callahan, A. Ben Abdallah and L.B. Cottler, Psychiatry, Washington
University School of Medicine, St. Louis, MO

Characterization of treatment-seeking substance abusers at the UT-Houston Substance Abuse
Research Center from 1990-2006
D.V. Herin, N. Moukaddam, C. Green, S.L. Sayre and J. Grabowski, Psychiatry, University of
Texas Health Science Center at Houston, Houston, TX

Crack cocaine trajectories among a community sample of users in Dayton, Ohio
R. Falck, J. Wang and R.G. Carlson, Community Health, Wright State University School of
Medicine, Dayton, OH

Drug use patterns and drug-related disorders of cocaine users. Results from the
Epidemiological Survey on Substance Abuse in Germany
L. Kraus, R. Augustin, B. Orth and G. Bühringer, IFT Institut für Therapieforschung,
Munich, Germany

POLYDRUG TREATMENT I

Naltrexone and disulfiram are effective addiction pharmacotherapies in impaired healthcare
practitioners
University, Richmond, VA

Contracting and contingency management is an effective treatment component in impaired
health professionals
J. Knisely, P. Pade, R. Oldham and E. McCance-Katz, Virginia Commonwealth University,
Richmond, VA

Efficacy of aripiprazole in patients with substance use disorders
M.L. Verduin, A. McRae, B. Tolliver, A. Herrin, R. Carter and K. Brady, Medical University
of South Carolina, Charleston, SC

Transcutaneous electroacupuncture decreases drug use and craving in drug-dependent
individuals
D. Penetar¹, S. Dunlap¹, J. Li², J. Han², D. Lee²¹ and S.E. Lukas¹, ¹Behavioral
Psychopharmacology Research Laboratory, and ²Bio-Organic & Natural Products Laboratory,
McLean Hospital/Harvard Medical School, Belmont, MA

Transcutaneous electroacupuncture decreases cue-induced EEG physiological responses in
drug-dependent individuals
S.E. Lukas¹, S. Dunlap¹, D. Penetar¹, J. Li², J. Han² and D. Lee²¹, ¹Behavioral
Psychopharmacology Research Laboratory, and ²Bio-Organic & Natural Products Laboratory,
McLean Hospital/Harvard Medical School, Belmont, MA
91 Reinforcement density in prize-based reinforcement of simultaneous abstinence from cocaine and heroin
   J. Willner-Reid, D. Epstein, U. Ghitza, J. Schmittner and K.L. Preston, Intramural Research Program Treatment Section, NIDA, Baltimore, MD

92 Experiment to improve the validity of self-report utilizing feedback from prior assessments and on-site urine testing
   C. Scott¹, M. Dennis² and M. Foss¹, ¹Lighthouse Institute, Chicago, Chestnut Health Systems, Lighthouse Institute, Chicago, Chicago, IL and ²Chestnut Health Systems, Lighthouse Institute, Bloomington, IL

93 Comparison of Addiction Severity Index drug use self-reports and urinalysis results among dependent patients undergoing treatment
   C. Denis¹, C. Bonnet¹, E. Lavie¹, V. Beltran¹², M. Fatseas¹, J.P. Daulouede²¹ and M. Auriacombe¹², ¹Addiction Psychiatry, Universite Victor Segalen Bordeaux, Bordeaux 2, and ²Bizia Addiction Center, Bayonne, France

94 A comparison of behavioral and self-report measures of distress tolerance among urban minority drug users
   R.M. Schuster, S.B. Daughters, M.N. Sargeant, P. Proano and C.W. Lejuez, University of Maryland, College Park, MD

95 Parental substance abuse as a predictor of other forms of adverse childhood experiences in adult domestic violence survivors
   S. Griffing, R.E. Sage, M. Chu, T. Jospitre and L. Madry, Urban Resource Institute, Brooklyn, NY

96 Integrated intervention for abused women in drug treatment: Preliminary findings
   B. Walton-Moss, M.E. McCaul and J. Campbell, Johns Hopkins University, Baltimore, MD

97 Aftercare attendance partially moderated by history of physical abuse and gender
   L. Haynes¹, A. Herrin², R. Carter³, S. Back¹, K. Brady¹ and R. Hubbard³, ¹Psychiatry Behavioral Science, and ²Biostatistics, Bioinformatics, and Epidemiology, Medical University of South Carolina, Charleston, SC and ³Clinical Research Institute, Duke University, Durham, NC

98 Association of baseline characteristics and motivation to change among patients seeking treatment for substance dependence
   C. Field¹², B. Adinoff⁴⁺, J. Duncan³ and K. Washington⁵, ¹UT School of Public Health, ²UT Southwestern Medical Center, ³Allied Behavioral Healthcare, ⁴VA North Texas Health Care Center, and ⁵Collin County Community College, Dallas, TX

99 Internal vs. external motivation to enter substance abuse treatment: Is there really a distinction?

100 Reasons for seeking outpatient substance abuse treatment
    M.K. Murphy¹, R.S. Palmer² and S.A. Ball¹², ¹The APT Foundation, Inc., and ²Yale School of Medicine, New Haven, CT

101 Characteristics of patients discharged against medical advice from inpatient substance use disorder treatment
    M.E. Kolodziej¹², P. Muchowski¹, S. Hillis¹, S.F. Greenfield² and R.D. Weiss², ¹AdCare Hospital, Worcester, and ²McLean Hospital and Harvard Medical School, Belmont, MA
102 Advisor-teller money manager process measures
M.I. Rosen, M. Bailey, K. Ablondi, B.J. Rounsaville and R.A. Rosenheck, Department of Psychiatry, Yale University School of Medicine, New Haven, and VA Connecticut Healthcare System, West Haven, CT

103 Integrating employment services with drug treatment

104 Days to treatment and early retention
K. Hoffman, J. Ford, D. Choi, J. Greenawalt, P. Free Burke, E. Edmundson, S. Gallon and D. McCarty, Oregon Health & Science University, Portland, OR, University of Wisconsin, Madison, WI and Terros, Inc, Phoenix, AZ

105 Toolkits–developing a clinician resource for evidence-based practice delivery

106 Training substance abuse treatment organizations to adopt evidence-based practices: The Addiction Technology Transfer Center of New England science-to-service laboratory
S. Gumbley, B. Singletary, D. Squires, and S. Storti, Addiction Technology Transfer Center of New England, Brown University, Providence, RI

107 A non-invasive method of liver stiffness measurement with ultrasonic transient elastography. Acceptability and impact among in-treatment substance-dependent individuals
V. Beltran, A. Aguerretxe-Colina, B. Oui, J. Dubernet, J.P. Daulouede and M. Auriacombe, Bizia Addiction Center, Medicine General Hospital, Bayonne, and Addiction Psychiatry, Universite Victor Segalen Bordeaux 2, Bordeaux, France

108 Integrative care management for substance-abusing Medicaid recipients
K. Stoller, P. Fagan, M. Sylvia, M. Griswold, M. Hawkins and R. Brooner, Johns Hopkins University, and Johns Hopkins Health Care, Baltimore, MD

109 Detection of drug and alcohol emergency department presentations: Who is being missed?

PERINATAL EFFECTS OF DRUGS

110 The effect of plasma proteins on buprenorphine transfer across human placentas
R. Bowen, S. Patrikeева, T.N. Nanovskyay, G. Hankins and M.S. Ahmed, OB/GYN Maternal Fetal Medicine, University of Texas Medical Branch, Galveston, TX

111 Role of breast cancer resistant protein on transplacental transfer of methadone
T.N. Nanovskyay, S. Patrikeева, S. Hemauer, G. Hankins and M.S. Ahmed, OB/GYN Maternal Fetal Medicine, University of Texas Medical Branch, Galveston, TX

112 Effects of buprenorphine, methadone, L-acetyl methadole and their metabolites on pregnenolone formation by human placenta
O. Zharikova, S. Deshmukh, T.N. Nanovskyay, G. Hankins and M.S. Ahmed, OB/GYN Maternal Fetal Medicine, University of Texas Medical Branch, Galveston, TX
113 Cocaine impairs neocortical development by causing oxidative ER stress and down-regulation of cyclin A in neural progenitor cells

114 Dosing pre to postpartum with either buprenorphine or methadone
   H.E. Jones, R.E. Johnson, D.R. Jasinski, M. Tuten and L. Milio, 1Psychiatry, Johns Hopkins University, Baltimore, MD, 2Reckitt Benckiser Pharmaceuticals Inc, Richmond, VA, 3Medicine, and 4OB/GYN, Johns Hopkins University, Baltimore, MD

115 Methadone in pregnancy: Treatment retention and neonatal outcomes
   L. Burns, R.P. Mattick, C. Wallace and K. Lim, 1National Drug and Alcohol Research Centre, University of New South Wales, and 2Centre for Epidemiology and Research, New South Wales Health Department, Sydney, NSW, Australia

116 Substance use, psychological distress and violence among pregnant and breastfeeding Australian women
   C. Wallace, L. Burns, S. Gilmour and D. Hutchinson, 1Public Health Training & Development Branch, NSW Health Department, and 2National Drug and Alcohol Research Centre, Sydney, NSW, Australia

117 Comparison of characteristics of opioid-dependent pregnant women in rural and urban settings
   S.H. Heil, L.C. Trifiletti and H.E. Jones, 1Psychiatry, and 2Psychology, University of Vermont, Burlington, VT, and 3Psychiatry, Johns Hopkins University, Baltimore, MD

118 A description of pregnant women seeking substance use treatment in Baltimore, MD
   W.W. Latimer, S.G. Severtson, H. Jones, L. Jansson, V. Walters and M. Tuten, 1Mental Health, Johns Hopkins Bloomberg School of Public Health, and 2Center for Addiction and Pregnancy, Johns Hopkins University, Baltimore, MD

119 Correspondence between changes in cigarette smoking and caffeine use among pregnant women

120 Maternal nicotine exposure and characteristics of adolescent smoking behaviors: Preliminary findings
   E.D. Thorner, M. Jaszyna-Gasior, C.C. Collins, M.K. Leff and E.T. Moolchan, NIDA, NIH, Baltimore, MD

121 Self-report of psychopathology in a sample of pregnant smokers and pregnant quitters
   T. Linares Scott, S.H. Heil and S.T. Higgins, Psychiatry, University of Vermont, Burlington, VT

122 The association between drug use and intimate partner violence among pregnant women: The importance of the recipient-perpetrator distinction
   G.K. Tzilos, S.J. Ondersma, J.R. Beatty and S. Chase, Department of Psychiatry and Behavioral Neurosciences, Wayne State University, Detroit, MI

123 Prevalence and correlates of mood disorders among substance-dependent pregnant women in treatment
   T. Mendelson, S.G. Severtson, C.H. Salama and W.W. Latimer, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
124 Screening for comorbid mood disorder among pregnant substance-dependent patients: Characteristics of the Addiction Severity Index and Beck Depression Inventory
   M. Chisolm, M. Tuten, H. Jones and E. Strain, Johns Hopkins University School of Medicine, Baltimore, MD

125 Drug use in pregnant women with mood disorders
   M.B. Kelly, K.L. Wisner and M.D. Cornelius, Psychiatry, University of Pittsburgh, Pittsburgh, PA

126 Prenatal marijuana exposure and PTSD among adolescents
   C. Larkby, L. Goldschmidt, M.D. Cornelius and N.L. Day, Psychiatry, University of Pittsburgh Medical Center, Pittsburgh, PA

127 Maternal trauma exposure, PTSD, mental representations and caregiving behavior: Implications for the mother-toddler attachment system
   N. Schmitt, C. DeCoste and N. Suchman, Psychiatry, Yale University, New Haven, CT

128 Maternal representations, reflective functioning, and caregiving behavior: Implications for intervention development
   N. Suchman1, C. DeCoste1, N. Schmitt and L. Mayes2, Psychiatry, Yale University School of Medicine, and 2Yale Child Study Center, New Haven, CT

129 Gender differences in provider’s screening for perinatal substance use
   C.B. Oser1,2, E. Klein2, B. Ramlow2,1 and C. Leukefeld2,1, Sociology, 2Center on Drug and Alcohol Research, and 3Behavioral Science, University of Kentucky, Lexington, KY

COMORBIDITY II

130 College-aged cigarette smokers: Personality, mood, and substance use
   C.A. Martin1,2, T. Helmbrecht1, T. Dosh1, J. Cox1, G. Guenthner1 and T. Kelly2,1, Psychiatry, and 2Behavioral Science, University of Kentucky College of Medicine, Lexington, KY

131 Mental health and substance abuse problems among homeless veterans seeking residential services
   B. Sussner, D. Smelson, A. Kline, M. Losonczy and J. Kuhn, Mental Health and Behavioral Sciences, U.S. Department of Veterans Affairs, Lyons, NJ

132 Adult antisocial behavior in cocaine and cannabis dependence
   J.J. Mariani, J. Horey, A. Bisaga, E. Nunes, E. Aharonovich, W. Raby and F.R. Levin, Division on Substance Abuse, Columbia University, New York State Psychiatric Institute, New York, NY

133 Social phobia and AOD dependence in the NESARC: Prevalence, onset, and comorbidity
   A. Matzkin, M.P. McGovern and T.A. MacKenzie, Dartmouth Medical School, Hanover, NH

134 Rate of pathological gambling in methadone maintenance treatment patients—a cross-sectional study
   E. Peles, S. Schreiber, A. Sason and M. Adelson, Adelson Clinic for Drug Abuse Treatment & Research, Tel Aviv Medical Center, Tel Aviv, Israel

135 Gender differences in the comorbidity of smoking behavior and major depression
   M.M. Husky, P. Paliwal, C.M. Mazure and S.A. McKee, Psychiatry, Yale School of Medicine, New Haven, CT

136 The prevalence of depression symptoms in a population attending a tobacco treatment program in Brazil
   E.C. Moreira, Medicine, CETAD/UFBA, Salvador, Brazil
137  Integrated group therapy vs. group drug counseling for bipolar disorder and substance dependence: A replication study using front-line drug counselors
    R.D. Weiss, M.L. Griffin, W.B. Jaffee, R.E. Bender and F.S. Graff, McLean Hospital/HMS, Belmont, MA

138  A brief treatment engagement intervention for individuals with a mental health and substance abuse problem
    D.A. Smelson, A. Kline and D. Ziedonis, Psychiatry, VA-New Jersey/UMDNJ-RWJ Medical School, Lyons, NJ

139  Increasing treatment adherence in individuals with co-occurring disorders
    M.V. Pantalon, M.E. Lavery, R.S. Schottenfeld and B.J. Rounsaville, Psychiatry, Yale University School of Medicine, New Haven, CT

140  Patterns of impulsivity in normal controls and pathological gamblers with and without a history of substance use disorder: Preliminary analysis
    D.M. Ledgerwood\textsuperscript{1,2}, N.M. Petry\textsuperscript{2}, S.M. Alessi\textsuperscript{2} and N.W. Phoenix\textsuperscript{2}, \textsuperscript{1}Wayne State School of Medicine, Detroit, MI and \textsuperscript{2}University of Connecticut Health Center, Farmington, CT

141  Dually diagnosed patients in a psychiatric emergency service
    G. Stahler, J. Mennis, D. Nemiroff, T. Manik-Perlman and R. Spiga, Temple University, Philadelphia, PA

142  Longitudinal predictors of substance abuse among a cohort of adults with severe mental illness enrolled in Maryland Medicaid
    K. Dowling, P.K. Alexandre and D.M. Steinwachs, Johns Hopkins University, Baltimore, MD

TREATMENT AND TRAINING

143  Organizational structure and functioning as predictors of staff turnover and director change in outpatient substance abuse treatment
    D.K. Knight, K.M. Broome and P.M. Flynn, Institute of Behavioral Research, Texas Christian University, Fort Worth, TX

144  Education, certification and licensure among counselors and supervisors within the clinical trials network
    T. Rieckmann, B. Fuller, E. Edmundson and D. McCarty, Oregon Health & Science University, Portland, OR

145  Substance abuse counselors’ self-reported training needs vary with certification type and years of experience in the field
    L. Coston-Clark\textsuperscript{1}, A.C. Brooks\textsuperscript{1}, B. Samuels\textsuperscript{1}, D. Carise\textsuperscript{1} and R.F. Forman\textsuperscript{2}, \textsuperscript{1}Treatment Systems Research, Treatment Research Institute, Philadelphia, PA and \textsuperscript{2}Medical Affairs, Alkermes, Inc., Cambridge, MA

146  Substance abuse treatment workforce in the upper midwest
    M.A. Orwa\textsuperscript{1}, A.H. Skinstad\textsuperscript{1} and A.B. Wallis\textsuperscript{1}, \textsuperscript{1}Community and Behavioral Health, University of Iowa, College of Public Health, and \textsuperscript{2}Community and Behavioral Health, University of Iowa, Iowa City, IA

147  Improving TC resident emotional competency using a targeted training program
    W. Mandell and J. Dahl, Phoenix House Foundation, New York, NY

148  Patient commitment language improves during motivational interviewing with therapist supervision via tele-conferencing
    P.C. Amrhein\textsuperscript{1,2}, J.L. Smith\textsuperscript{1}, K.M. Carpenter\textsuperscript{1}, A.C. Brooks\textsuperscript{1}, D. Levin\textsuperscript{1}, E.A. Schreiber\textsuperscript{1}, T. Blackmer\textsuperscript{1}, L.A. Travaglini\textsuperscript{1} and E.V. Nunes\textsuperscript{1}, \textsuperscript{1}Division on Substance Abuse, NY State Psychiatric Insti., New York, NY and \textsuperscript{2}Psychology, Montclair State University, Montclair, NJ
Wednesday, June 20, 2007

149 Modeling longitudinal turnover in therapy groups with rolling admissions
A.A. Morgan-Lopez\(^1\) and W. Fals-Stewart\(^2\), \(^1\)RTI, Research Triangle Park, NC and \(^2\)University of Rochester, Rochester, NY

150 Initial findings from International Treatment Effectiveness Project
G.A. Rowan-Szal, G.W. Joe, J. Greener and D.D. Simpson, Institute of Behavioral Research, Texas Christian University, Fort Worth, TX

THEORETICAL/COMMENTARY

151 Teaching effectively online: New challenges and opportunities for addiction educators
W.L. Woods\(^1\), N. Roget\(^1\) and A.H. Skinstad\(^2\), \(^1\)University of Nevada, Reno, Reno, NV and \(^2\)University of Iowa, Iowa City, IA

152 What if we really believed addiction was a chronic illness? A shift from an acute care to a sustained care recovery management model
M.T. Flaherty, Institute for Research, Education and Training in the Addictions and Northeast Technology Transfer Center, Pittsburgh, PA

153 Listening for the voices of families: A qualitative process for systems change in Nebraska children’s mental health and substance abuse system
K.J. Speck and A.H. Skinstad, Master of Arts in Counseling, Doane College, Lincoln, NE

154 Strange bedfellows? How use reduction and harm reduction can co-exist
K. Sabet\(^2\) and B.D. Johnson\(^1\), \(^1\)Special Populations Research, National Development and Research Institutes, New York, NY and \(^2\)Oxford University, Oxford, UK

155 A framework for a population level analysis of substance-related harms on the basis of acuity and chronicity
D. Brown\(^1\) and B. Rush\(^2\), \(^1\)BC Provincial Health Services Authority, Vancouver, BC and \(^2\)Centre for Addiction and Mental Health, Toronto, ON, Canada

156 A systems approach to understanding the nonmedical use/abuse and diversion of opioid analgesics: Implications for risk management
J.P. Fitzgerald, M.Y. Smith and J.D. Haddox, Purdue Pharma L.P., Stamford, CT

157 Respondent-driven sampling: Comments on the process of coupon distribution for recruiting young noninjecting heroin users in Chicago
L. Ouellet\(^1\), D. Broz\(^1\) and E. Ward\(^2\), \(^1\)Epidemiology & Biostatistics, and \(^2\)Health Policy Administration, University of Illinois at Chicago, Chicago, IL

158 Withdrawn

159 A role for cognitive assessments as a predictor of clinical outcomes
B.N. Sullivan\(^2\), G.W. Hanson\(^2\), N.A. Roget\(^1\) and W.L. Woods\(^1\), \(^1\)Mountain West ATTC, Univ of Nevada, Reno, NV and \(^2\)Utah Addiction Center, University of Utah, Salt Lake City, UT

160 Choice implies cognitive-based individual differences in impulsivity and drug use
G.M. Heyman, BPRL/Psychiatry, McLean/Harvard Medical School, Belmont, MA

161 Towards a consensus on terminology for psychoactive pharmaceutical products abuse
B. Brands\(^1,2,3\) and J. Rehm\(^2,3\), \(^1\)Office of Research and Surveillance, DCSC, Health Canada, Ottawa, \(^2\)Centre for Addiction and Mental Health, Toronto, and \(^3\)University of Toronto, Toronto, ON, Canada

162 Motivations for use of addictive substances: Interactions with psychopathology. Proposal for an integrated descriptive model
M. Auriacombe and M. Fatseas, Addiction Psychiatry, Universite Victor Segalen Bordeaux, Bordeaux, France
163 **Criteria for residual neuropsychological impairment from drug exposure: Commentary**
   A.M. Horton, Neuropsychology Clinic, Psych Associates of Maryland, Bethesda, MD

164 **A comparison of NSDUH results and RADARS® System Poison Center Network results for the non-medical use of opioid analgesics 2003-2004**
   A.T. Kline¹, M.Y. Smith¹, J.P. Fitzgerald¹, J.D. Haddox¹ and J.E. Bailey², ¹Purdue Pharma LP, Stamford, CT and ²Rocky Mountain Poison and Drug Center, Denver Health, Denver, CO

165 **Human hallucinogen research: Guidelines for safety**
   M.W. Johnson and R.R. Griffiths, Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine, Baltimore, MD

166 **The impact of missing data on substance abuse clinical trials**
   S.L. Hedden¹,², F.R. Woolson² and R.J. Malcolm¹, ¹Psychiatry, Medical University of South Carolina, Charleston, SC and ²Biostatistics, Bioinformatics and Epidemiology, Medical University of South Carolina, Charleston, SC

167 **A model for dropout during screening phase for two cocaine clinical trials**
   R.J. Malcolm¹, S.L. Hedden¹,² and P. Mardikian¹, ¹Psychiatry, and ²Biostatistics, Bioinformatics and Epidemiology, Medical University of South Carolina, Charleston, SC

**LITERATURE REVIEWS**

168 **Epidemiology of drug abuse treatment in South Africa**
   M.N. Phaswana-Mafuya¹, K.F. Peltzer¹ and B. Johnson², ¹Social Aspects of HIV/AIDS and Health, Human Sciences Research Council, Port Elizabeth, South Africa and ²NDRI, NY, NY

169 **Epidemiology of alcohol and drug use in South Africa: A review**
   K. Peltzer¹, N. Phaswana-Mafuya² and B. Johnson³, ¹HSRC, Pretoria, and ²HSRC, Port Elizabeth, South Africa and ³NDRI, New York, NY

170 **Illicit drug markets in South Africa: A Review**
   B.D. Johnson¹, G. Mohlala², K. Peltzer² and N. Phaswana-Mafuya², ¹Special Populations Research, National Development and Research Institutes, New York, NY and ²Human Sciences Research Council, Pretoria, South Africa

171 **A review of behavioral counseling content for optimizing the use of buprenorphine for treating opioid dependence in U.S. drug-treatment CBOs**
   F. Altice³, M. Copenhaver¹ and R. Bruce², ¹University of Connecticut, Storrs, and ²Yale AIDS Program, New Haven, CT

172 **Cost-effectiveness of buprenorphine, methadone and levo-alpha-acetylmethadol for opioid dependence**
   E.O. Akerele¹², B. Kaufman², U. Lee², A. Safron², E.O. Okao¹ and N.S. Nahar¹, ¹Psychiatry, Columbia University College of Physician and Surgeons, Harlem Hospital Center, and ²Public Health, Mailman School of Public Health/Columbia University, New York, NY

173 **To what extent does gender identity, peer relationships, and parental relationships play a part in adolescent female substance use?**
   S. Renes, Olympic Educational Service District #114, Port Angeles, WA

174 **Prescription drug abuse: Looking beyond the hyperbole**

174.5

174.5
175 What do we know about substance abuse following disaster?
S.D. Nouri1 and C.S. North2, 1Division of Epidemiology, Services and Prevention Research, Bethesda, MD and 2Psychiatry, UT Southwestern Medical Center and VAMC, Dallas, TX

176 A qualitative review of serotonin syndrome, ecstasy (MDMA) and the use of other serotonergic substances: A clinically relevant hierarchy of risk
J. Copeland, E. Silins and P. Dillon, National Drug and Alcohol Research Centre Sydney, NSW, Australia

Symposium VIII

WHERE THERE’S SMOKE THERE’S FIRE:
UNDERSTANDING VULNERABILITY TO TOBACCO
AND MARIJUANA USE IN SCHIZOPHRENIA

Chair: Ivan D. Montoya and Frank Vocci

CCQ 205ABC
10:00 AM - 12:00 PM

10:00 The endocannabinoid system in schizophrenia
Daniel Piomelli, Center for Drug Discovery, University of California, Irvine, CA

10:25 Nicotinic receptor dysregulation in schizophrenia
Sherry Leonard, University of Colorado at Denver and Health Sciences Center, Aurora, CO

10:50 Effects of nicotine and cannabis on cognitive and clinical outcomes in schizophrenia
Deepak Cyril D’Souza, Yale School of Medicine, VA Connecticut Healthcare, West Haven, CT

11:15 Towards the development of pharmacotherapies for nicotine and cannabis addiction in schizophrenia
Ivan D. Montoya, NIDA, Bethesda, MD

11:40 Discussant: Up in smoke: What do the co-morbidities of nicotine and cannabis misuse tell us about schizophrenia and addiction vulnerability?
Tony P. George, University of Toronto, Center for Addiction and Mental Health, Toronto, Ontario, Canada

Symposium IX

PROGESTERONE EFFECTS ON STRESS AND COCAINE INTAKE: TRANSLATION FROM THE LABORATORY TO THE CLINIC

Chair: Rajita Sinha and Nancy Mello

CCQ 301AB
10:00 AM - 12:00 PM

10:00 Progesterone inhibits the escalation and reinstatement (relapse) of cocaine-seeking behavior
Marilyn Carroll, University of Minnesota, Minneapolis, MN

10:25 Altered progesterone levels, stress response, craving and relapse susceptibility in cocaine-dependent women
Rajita Sinha, Yale University, Connecticut Mental Health Center, New Haven, CT

10:50 The modulatory role of oral micronized progesterone on the effects of smoked cocaine in humans
Suzette M. Evans, Columbia University, New York, NY
11:15 Progesterone effects on cocaine responses and cocaine intake: Laboratory and clinical trial findings
Mehmet Sofuoglu, Yale University, West Haven, CT

11:40 Discussant
Nancy K. Mello, McLean Hospital, Alcohol and Drug Abuse Research Center, Belmont, MA

**Oral Communications 14**

**CCQ 303AB**
**10:00 AM - 12:00 PM**

**OPIOID NOVEL MECHANISMS: THINKING OUTSIDE THE BOX**

Chairs: Mark Greenwald and Jason Rogers

10:00 Dopamine D1 receptor antagonism of the prefrontal cortex attenuates heroin-seeking in a reinstatement model in rats
J. Rogers, S. Ghee, A. Carnell and R. See, Neurosciences, Medical University of South Carolina, Charleston, SC

10:15 Activation of muscarinic and nicotinic acetylcholine receptors in the nucleus accumbens core is necessary for the acquisition of drug reinforcement
G. Zernig, J.A. Crespo, K. Sturm, P. Stöckl and A. Saria, Psychiatry, Medical University Innsbruck, Innsbruck, Austria

10:30 Identification of GABA<sub>A</sub> receptor subunit alpha 3 gene and confirmation of the μ opioid receptor gene in determining genetic vulnerability to develop heroin addiction
D.A. Nielsen<sup>1</sup>, F. Ji<sup>2</sup>, V. Yuferov<sup>1</sup>, A. Ho<sup>1</sup>, A. Chen<sup>2</sup>, O. Levran<sup>1</sup>, J. Ott<sup>2</sup> and M.J. Kreek<sup>1</sup>,
<sup>1</sup>Laboratory of the Biology of Addictive Diseases, and <sup>2</sup>Laboratory of Statistical Genetics, The Rockefeller University, New York, NY

10:45 Baclofen blocks the development, expression and reinstatement of opiate conditioned place preference
G.B. Kaplan<sup>1,2</sup>, S.C. Heinrichs<sup>1</sup>, K.A. Leite-Morris<sup>2,1</sup> and W. Fan<sup>2,1</sup>, <sup>1</sup>Mental Health & Research Services, VA Boston Healthcare System, and <sup>2</sup>Psychiatry and Pharmacology, Boston University School of Medicine, Boston, MA

11:00 AMPA receptor surface expression in limbic brain regions following acute and repeated administration of morphine or methamphetamine
A.L. Mickiewicz<sup>1,2</sup> and T.C. Napier<sup>2</sup>, <sup>1</sup>Pharmacology, Loyola University Medical Center, Maywood, and <sup>2</sup>Pharmacology, Rush University Medical Center, Chicago, IL

11:15 ABCB1 genetic variants influence methadone dose requirement
K. O'Hara<sup>1</sup>, E. Peles<sup>2</sup>, S. Barra<sup>1</sup>, B. Ray<sup>1</sup>, L. Borg<sup>1</sup>, J. Ott<sup>1</sup>, M. Adelson<sup>2</sup>, M.J. Kreek<sup>1</sup> and O. Levran<sup>1</sup>, <sup>1</sup>The Rockefeller University, New York, NY and <sup>2</sup>Adelson Clinic for Drug Abuse, Treatment & Research, Sourasky Medical Center, Tel Aviv, Israel

11:30 Effects of candidate anti-relapse medications on withdrawal-associated increases in opiate reinforcement
S. Negus<sup>1</sup> and K.C. Rice<sup>2</sup>, <sup>1</sup>Alcohol & Drug Abuse Research Center, McLean Hospital-Harvard Medical School, Belmont, MA and <sup>2</sup>Laboratory of Medicinal Chemistry, NIDDK/NIH, Bethesda, MD

11:45 Opioid-seeking behavior is related to recent cocaine use and serotonin transporter promoter (5HTTLPR) genetic polymorphism
M. Greenwald<sup>1</sup> and M. Burmeister<sup>2</sup>, <sup>1</sup>Wayne State University, Detroit, MI and <sup>2</sup>University of Michigan, Ann Arbor, MI
Oral Communications 15

IMAGING: PICTURES AT AN EXCITATION/INHIBITION

Chairs: Anna Rose Childress and Marc Kaufman

10:00  BOLD fMRI studies of μ & κ opioid agonists in awake macaques: Pharmacological specificity & dose-effect relationships
   M.J. Kaufman¹, B.B. Frederick¹, M. Brimson¹, S.B. McWilliams², A. Bear², D. Meltzer¹,
   P.F. Renshaw¹ and S.S. Negus², ¹Brain Imaging Center, and ²Alcohol & Drug Abuse Research
   Center, McLean Hospital, Belmont, MA

10:15  Neural activation differences in young adults with and without a family history of alcoholism during the Iowa Gambling Task
   A. Acheson¹, J. Robinson¹, P.T. Fox¹, D.C. Glahn² and W.R. Lovallo³, ¹Research Imaging
   Center, and ²Psychiatry, University of Texas Health Science Center at San Antonio, San
   Antonio, TX and ³Behavioral Sciences Laboratories, VAMC, Oklahoma City, OK

10:30  Diffusion tensor imaging in MDMA users and controls: Association with Iowa Gambling Task Performance
   F. Moeller¹, J.L. Steinberg¹, K.M. Hasan², S.D. Lane¹, L.A. Kramer², M. Buzby¹, A.C. Swann¹
   and P.A. Narayana², ¹Psychiatry, and ²Diagnostic and Interventional Imaging, University of
   Texas Health Science Center at Houston, Houston, TX

10:45  BOLD fMRI of the effects of smoked tobacco and placebo tobacco
   K. Lindsey¹, B.B. Frederick², E.T. Ryan¹, L.D. Nickerson² and S.E. Lukas¹,
   ¹BPRL/Psychiatry, and ²Brain Imaging Center, McLean Hospital, Belmont, MA

11:00  [I-123]Iomazenil SPECT imaging of GABA-A-benzodiazepine receptor in smokers and nonsmokers
   I. Esterlis¹, K. Cosgrove¹, F. Bouis¹, T. Kloczynski¹, S. Stiklus¹, E. Perry¹, G. Tamagnan¹², J.
   Seibyl¹², S. Krishnan-Sarin¹, S. O'Malley¹, G. Mason¹ and J. Staley¹, ¹Psychiatry, Yale
   University, West Haven, and ²Institute for Neurodegenerative Disorders, New Haven, CT

11:15  Treating inhalant abuse with gamma vinyl-GABA
   S.L. Dewey, D.E. Lee, A. Gifford and W.K. Schiffer, Brookhaven National Laboratory,
   Upton, NY

11:30  Brain substrates for cue-induced cocaine craving (“GO!”) and its inhibition (“STOP!”) as revealed by machine classifier learning
   A.R. Childress, Z. Wang, Y. Li, R. Ehrman, A.V. Hole, M.R. MacDougall, T. Franklin,
   D. Langleben, J. Detre and C.P. O'Brien, Psychiatry, University of Pennsylvania School of
   Medicine, Philadelphia, PA

11:45  Neural mechanisms underlying drug-related attentional bias in active cocaine users
   R. Hester¹ and H. Garavan¹²³, ¹University of Queensland, St Lucia, QLD, Australia ²Trinity
   College Dublin, Dublin, Ireland and ³Psychiatry and Behavioral Medicine, Medical College of
   Wisconsin, Milwaukee, WI
Symposium X

IMPROVING CORRECTIONAL AND RE-ENTRY RESOURCE USE AND PLANNING THROUGH SCREENING AND ASSESSMENT: FINDINGS FROM THE CJ-DATS COLLABORATIVE

Chair: Carl Leukefeld

1:30 Screening and assessment practices in correctional organizations: The impact on re-entry and comprehensive care services
Faye Taxman, Virginia Commonwealth University, Richmond, VA

1:55 Examination of the Inmate Pre-Release Assessment (IPASS) as an Aftercare-Matching Tool
David Farabee, Integrated Substance Abuse Programs, University of California, Los Angeles, Los Angeles, CA

2:20 Using treatment progress indicators to monitor client change
Kevin Knight, Institute of Behavioral Research, Texas Christian University, Fort Worth, TX

2:45 Co-occurring Disorders Screening Instrument (CODSI) for mental disorders: A validation study
Stanley Sacks, National Development and Research Institutes, Inc., New York, NY

3:10 Discussant: The state of the art of prison-based screening and assessment
Carl Leukefeld, Center on Drug and Alcohol Research, University of Kentucky, Lexington, KY

Symposium XI

NEWLY ENGINEERED ANTIBODY AND ENZYME THERAPIES FOR TREATING DRUG ABUSE

Chairs: Michael Owens and C. Nora Chiang

1:30 Rational design of high-activity mutants of human butyrylcholinesterase for use as an anti-cocaine medication
Chang-Guo Zhan, College of Pharmacy, University of Kentucky, Lexington, KY

1:55 Cocaine esterase: A novel enzyme therapy for cocaine abuse
James Woods, University of Michigan Medical School, Ann Arbor, MI

2:20 Humanized anti-cocaine monoclonal antibody as a potential immunotherapy for cocaine abuse
Andrew B. Norman and William J. Ball, University of Cincinnati, College of Medicine, Cincinnati, OH

2:45 Making effective and safe antibody medications for treating phencyclidine and methamphetamine addiction
Michael Owens, College of Medicine, University of Arkansas for Medical Sciences, Little Rock, AR

3:10 Discussant: Generating safe and effective protein medications for the treatment of stimulant abuse
Paul Pentel, Hennipen County Medical Center, Minneapolis, MN
Oral Communications 16

GENETICS: CRACKING THE CODE

Chairs: Christian Schutz and Laurie Zawertailo

1:30 Association between polymorphisms of the dopamine D2 receptor and “COMT” genes and reward dependence in subjects with excessive Internet video game play
D. Han1, Y. Lee2, K. Yang1, E. Kim2, I. Lyoo3 and P.F. Renshaw1, 1Brain Imaging Center, Mclean Hospital, Harvard Medical School, Belmont, MA 2Chung-Ang University Medical School, and 3Seoul National University College of Medicine, Seoul, South Korea

1:45 Co-morbidity of Attention-Deficit Hyperactivity Disorder with substance use disorder: A genetic analysis
L.A. Zawertailo1, A. Otting3, J.L. Kennedy2,4 and U.E. Busto1,3, 1Clinical Neuroscience, and 2Neurogenetics, Centre for Addiction and Mental Health, 3Faculty of Pharmaceutical Sciences, and 4Faculty of Medicine, University of Toronto, Toronto, ON, Canada

2:00 Beta-arrestins 1 and 2 are associated with nicotine dependence in European-American smokers
M.D. Li1, D. Sun1, J.Z. Ma2 and T.J. Payne3, 1Psychiatry and Neurobehavioral Sci., and 2Dept. of Public Health Sci., Univ. of Virginia, Charlottesville, VA and 3ACT Center for Tobacco Treatment, Education and Research, Univ. of Mississippi Medical Center, Jackson, MS

2:15 The methylenetetrahydrofolate reductase polymorphisms c.677C>T and c.1298A>C influence smoking behavior
C.G. Schütz1, M. Moskau2, A. Semmler2, H. Köllgen1, T. Klockgether2, W. Maier1, U. Wüllner2 and M. Linnebank2, 1Psychiatry, and 2Neurology, Friedrich-Wilhelms-University, Bonn, Germany

2:30 Comorbidity between bipolar disorder and alcohol abuse disorder: A genetic analysis
B. Yasseen3,1, L.A. Zawertailo1, J.L. Kennedy2,4 and U.E. Busto1,3, 1Clinical Neuroscience, and 2Neurogenetics Research, Centre for Addiction and Mental Health, 3Pharmacology, and 4Psychiatry, University of Toronto, Toronto, ON, Canada

2:45 ABCB1 genetic variability and opiate dependence in Caucasians
O. Levran1, S. Barral1, E. Halperin2, K. O'Hara1, D. Li, J. Ott1 J. Rotrosen, P. Casadonte, S. Linzy, M. Adelson and M.J. Kreek1, 1The Rockefeller University, New York, NY and 2ISCI, Berkeley, CA

3:00 Severity of cocaine dependence, craving and early abstinence among allele carriers of DAβ hydroxylase polymorphism at 1ST week of treatment with methadone treated patients
G. Gonzalez1, M. Randall1,2, R. Desai1,2, J. Lappaleinen3 and I. Petrakis1,2, 1Yale University, New Haven and 2VA CT Healthcare System, West Haven, CT, and 3AstraZeneca, Wilmington, DE

3:15 Gene expression in human hippocampus from cocaine abusers identifies genes that regulate extracellular matrix remodeling
D.C. Mash1, J. ffrench-Mullen2, A. Buck1, Y. Qin1 and J. Pablo1, 1Neurology, Miller School of Medicine, Miami, FL and 2Genelogic, Inc, Gaithersburg, MD
**Oral Communications 17**

**Hepatitis C Virus Risk**

Chairs: Nina Ebner and Steven Batki

1:30 *Hepatitis C treatment outcomes in methadone maintenance patients: Preliminary analysis of an on-site treatment trial*


1:45 *Rate of hepatitis C treatment in opioid-dependent patients is improved by integrating hepatitis treatment and methadone maintenance*

K.A. Harris¹², J.H. Arnsten¹ and A.H. Litwin¹,¹ Division of Substance Abuse, Psychiatry & Behavioral Sciences, Albert Einstein College of Medicine, and ²Division of General Internal Medicine, Montefiore Medical Center, Bronx, NY

2:00 *Outcome of hepatitis C treatment in opioid-dependent, maintained patients*

N. Ebner, C. Aeschbach Jachmann, B. Winklbaur, A. Baewert, K. Thau and G. Fischer, Psychiatry, Medical University Vienna, Vienna, Austria

2:15 *Former intravenous-drug abusers cured of HCV disease: Are they more vulnerable to re-infection?*

L. Gourarier², A. Gauchet³ and P. Melin¹, ¹Internal Medicine, General Hospital, Saint Dizier, ²La Terrasse, Hospital Maison Blanche, Paris, and ³Psychology, University, Grenoble, France

2:30 *Patterns of opiate use and relation to HIV/HCV in central Ukraine*

K. Dumchev¹, O. Zezyulin¹, J. Schumacher², R. Soldyshev³, L. Moroz³ and P. Slobodyanyuk¹, ¹Vinnitsya Regional Narcological Dispensary, Vinnitsya, Ukraine, ²University of Alabama, Birmingham, AL and ³Vinnitsya Pirogov National Medical University, Vinnitsya, Ukraine

2:45 *Receptive needle sharing by HCV-negative young IDU depends on relationship factors but not partner HCV status*

J. Hahn, J. Evans, P. Davidson, P. Lum and K. Page-Shafer, Medicine, University of California, San Francisco, San Francisco, CA

3:00 *Hepatitis B and hepatitis C virus services offered by substance abuse treatment programs in the USA*


3:15 *Health care utilization among homeless adults who test positive for hepatitis C*

L. Gelberg¹, M. Robertson³, L. Arangua¹, R.M. Andersen³ and B.D. Leake¹, ¹David Geffen School of Medicine at UCLA, Los Angeles, ²Public Health Institute, Berkeley, and ³UCLA School of Public Health, Los Angeles, CA
Oral Communications 18

PRESCRIPTION OPIATE ABUSE: DEVIATING FROM THE SCRIPT

Chairs: Sharon Walsh and Stephen Butler

3:45  Relative abuse potential of oral oxycodone, hydrocodone and hydromorphone in non-dependent prescription opioid abusers
      S.L. Walsh¹², P.A. Nuzzo¹, M.R. Lofwall² and J.R. Holtman³, ¹Behavioral Science, ²Psychiatry, and ³Anesthesiology, University of Kentucky, Lexington, KY

4:00  Description of buprenorphine, methadone, hydrocodone and oxycodone abuse and diversion rates using RADARS® System data
      E. Bailey¹, L. Cram¹ and R. Dart¹², ¹Rocky Mountain Poison and Drug Center, Denver, CO and ²University of Colorado Health Sciences Center, Denver, CO

4:15  Effect of tablet mechanical stability on drug preference and relative street value of oxycodone controlled-release (CR) tablets in experienced oxycodone CR abusers
      J.B. Ashworth¹², W.J. Kowalczyk¹, S.L. Stephens¹, M.A. Sullivan¹ and S.D. Comer¹, ¹NYSPI, Columbia University, New York, NY and ²Grunenthal USA, Inc., Bedminster, NJ

4:30  Reinforcing effects of oral oxycodone and morphine: Comparison of drug vs. money and drug vs. drug choice procedures
      W.J. Kowalczyk, M.A. Sullivan, S.K. Vosburg and S. Comer, Psychiatry, Columbia University, New York, NY

4:45  Risk factors for 30-day and 1-year adult prescription misuse: Effect of gender
      T.S. Schepis and S. Krishnan-Sarin, CT

5:00  Prescription-opioid abuse among patients enrolling in methadone maintenance treatment
      A. Rosenblum¹, M. Parrino², S.H. Schnoll⁴, C. Fong¹, C. Maxwell², C.M. Cleland¹, J.D. Haddox³ and S. Magura¹, ¹NDRI, Inc., and ²American Assoc. for the Treatment of Opioid Dependence NY, NY, and ³Purdue Pharma LP, Stamford, CT and ⁴Pinney Association, Inc, Bethesda, MD

5:15  Relationship between rate of infusion and reinforcing strength of oxycodone in humans
      S. Comer¹, J.B. Ashworth¹², M.A. Sullivan¹, S.K. Vosburg¹, P.A. Saccone¹ and R.W. Foltin¹, ¹Psychiatry, Columbia University, New York, NY and ²Grunenthal USA, Inc., Bedminster, NJ

5:30  Integrating quantitative and qualitative data sources for surveillance of product-specific opioid abuse in real-time: The NAVIPPRO System
      S.F. Butler¹, J.A. Brevard¹, J.R. Dickinson¹, A. Licari¹, S.H. Budman¹ and N.P. Katz¹², ¹Inflexxion, Inc, Newton, MA and ²Tufts University School of Medicine, Boston, MA

BADGES MUST BE WORN AT ALL SCIENTIFIC SESSIONS
Oral Communications 19

PSYCHOMETRICS: MEASURE FOR MEASURE

Chairs: Edward Sellers and Kevin Delucchi

3:45  Next-day measures may not be reliable for the assessment of subjective effects of alprazolam in recreational users

M. Grigorova¹, K. Schoedel¹, B. Boris¹, D. Thomas² and E.M. Sellers¹, ¹Ventana Clinical Research Corporation, Toronto, ON, Canada and ²Schwarz Pharma, Monheim, Germany

4:00  Psychometric testing of a self-administered, computerized substance abuse screening instrument for youth

S. Libretto¹, Y.H. Wong¹, J. Sexton¹, S. Nemes², W.K. Lam³ and C. Williams³, ¹Danya International, Silver Spring, and ²Social Solutions International, Olney, MD and ³Research Triangle Institute International, Research Triangle Park, NC

4:15  Scale development of smoking cessation knowledge, attitudes and practices

K.L. Delucchi, B. Tajima and J. Guydish, Psychiatry, University of California, San Francisco, San Francisco, CA

4:30  Preliminary validity and reliability measures of a new instrument for measuring life history assessment among drug users

V. Cantillano¹, D. Best² and F. Keaney³⁴, ¹Pontificia Universidad Católica de Chile, Santiago, Chile, ²King’s College, ³Maudsley Hosp., South London & Maudsley NHS Trust, and ⁴Community Drug and Alcohol Teams for Greenwich District, London, UK

Symposium XII

PHENOTYPING RISK-TAKING: QUANTIFYING ADOLESCENT BEHAVIORAL DISINHIBITION FOR GENETIC AND IMAGING STUDIES OF DRUG DEPENDENCE

Chair: Thomas J. Crowley

3:45  Phenotyping adolescents’ risky and conduct-disordered behaviors

Thomas J. Crowley, University of Colorado School of Medicine, Denver, CO

4:05  Multisystem measures of adolescent risk-taking: What do personality, cognition, and imaging tell us?

Sandra Brown, University of California, San Diego, La Jolla, CA

4:25  In-vivo behavioral assessments of personality and environment for understanding adolescent risk behavior

Carl Lejuez, University of Maryland, College Park, MD
Wednesday, June 20, 2007

Oral Communications 20

PHARMACOKINETICS: DATA THAT’S ON THE LEVEL

Chairs: Rinah Yamamoto and Andrew Norman

3:45  Flutamide pretreatment alters cocaine pharmacokinetics in men
      R. Yamamoto$^{1,2}$, C.J. Teter$^3$, T.L. Barros$^1$, T. Juliano$^2$, A. Looby$^2$, M. Maywalt$^2$, J.F. McNeil$^2$, D. Olson$^4$, G. Mallya$^2$, S.E. Lukas$^2$, P.F. Renshaw$^1$ M.J. Kaufman$^1$, $^1$Brain Imaging Center, and $^2$Behavioral Psychopharmacology Research Laboratory, and $^3$Alcohol & Drug Abuse Treatment Program, McLean Hospital, Belmont, MA

4:00  A chimeric human anti-cocaine monoclonal antibody antagonizes the cocaine-induced priming of self-administration in rats

4:15  Pharmacokinetic and postnatal effects following acute methamphetamine administration in female rats during late-stage pregnancy
      S.J. White$^1$, H.P. Hendrickson$^2$ and S.M. Owens$^1$, $^1$Pharmacology and Toxicology, and $^2$Pharmaceutical Sciences, University of Arkansas for Medical Sciences, Little Rock, AR

4:30  Methamphetamine and modafinil interactions: Cardiovascular, subjective reports and pharmacokinetics
      R.T. Jones$^1$, E.G. Fernandez$^1$, J.E. Mendelson$^2$, A. Manari$^1$ and N. Chiang$^3$, $^1$UCSF, San Francisco, CA $^2$CPMC, San Francisco, CA and $^3$NIDA, Bethesda, MD

Symposium XIII

INITIATING OPIOID AGONIST THERAPY IN U.S. JAILS AND PRISONS: FEASIBILITY AND EVIDENCE FROM THREE ONGOING STUDIES

Chairs: Josiah D. Rich and Robert Schwartz

5:00  Pre- and post-release opiate agonist therapy
      Josiah D. Rich, The Miriam Hospital/Brown Medical School, Providence, RI

5:20  A randomized clinical trial of methadone treatment in pre-release prison
      Timothy Kinlock, Friends Research Institute, Baltimore, MD

5:40  Buprenorphine treatment for pre-release prisoners in San Juan
      Carmen Albizu-Garcia, University of Puerto Rico, San Juan, PR
Symposium XIV

CAFFEINE AS A GATEWAY TO ADDICTION?

Chair: Roland R. Griffiths

5:00  Links from coffea to Erythroxylum coca: A different gateway?
James C. Anthony, Michigan State University, College of Human Medicine, East Lansing, MI

5:20  Adenosine receptor heteromers: New targets for caffeine in the brain
Sergi Ferré, NIDA/NIH, Intramural Research Program, Baltimore, MD

5:40  Adopting DSM-IV dependence criteria for caffeine: DSM-V implications
Catherine Striley and Linda B. Cottler, Washington University School of Medicine, St. Louis, MO

Late-Breaking Research News

Chair: Scott E. Lukas

Dinner and Dancing

Thursday, June 21, 2007

POSTER SESSION IV (Breakfast)

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

Set-up time begins Wednesday 1:00 PM
Must be removed by Thursday 12:30 PM

OPIOIDS: ANIMAL STUDIES

1  Gender differences in MOP-r mRNA levels in Long-Evans rats
C.E. Smith¹, S.D. Schlussman¹, D. White², C. Michaels², K. Easterling², A. Ho¹,
S.G. Holtzman² and M.J. Kreek¹, ¹Laboratory of the Biology of Addictive Diseases,
Rockefeller University, New York, NY and ²Emory University, Atlanta, GA

2  μ-Opioid and chemokine receptor colocalization in the rat brain
L. Kirby and S. Heinisch, Anatomy and Cell Biology and Center for Substance Abuse
Research, Temple University School of Medicine, Philadelphia, PA
3 Naltrexone reverses JDTic blockade of human kappa opioid receptors expressed in CHO cells

4 Evidence for an important role of protein phosphatases in morphine tolerance
F.L. Smith¹, B.H. Gabra¹, A.V. Sanders¹, C.P. Bailey², G. Henderson² and W.L. Dewey¹,
¹Pharmacology & Toxicology, Virginia Commonwealth University, Richmond, VA and
²Pharmacology, University of Bristol, Bristol, United Kingdom

5 Evaluation of acute opioid dependence in three rat strains
R.W. Morgan, R.L. Balster and K.L. Nicholson, Pharmacology and Toxicology, Virginia Commonwealth University, Richmond, VA

6 The blocking mechanisms of Leu-Ile against methamphetamine and morphine dependence in mice
A. Nitta¹, X. Cen¹, M. Niwa¹, Y. Yamada¹, A. Nakajima¹, T. Nabeshima¹, K. Saito³, M. Seshima², M. Suzuki³, L. Shen⁴, S. Furukawa³ T. Nabeshima¹, ¹Nagoya U. Grad. Sch. Med., Nagoya, ²Gifu U. Grad. Sch. Med. and ³Gifu Pharm. U., Gifu, Japan, and ⁴NCI, Bethesda, MD

7 Effects of buprenorphine on fentanyl withdrawal in rats
C. Marcinkiewcz, S. Isaac, M.S. Gold and A.W. Bruijnzeel, Psychiatry, University of Florida, Gainesville, FL

8 Tumor necrosis factor-α and its inducer inhibit drug-induced dependence
T. Nabeshima¹, M. Niwa¹, Y. Yamada¹, K. Saito³, M. Seishita², Y. Noda³ and A. Nitta¹,
¹Nagoya University, Nagoya, Japan. ²Gifu University Graduate School of Medicine, Gifu, Japan and ³Meijo University, Nagoya, Japan

9 Role of CREB in morphine-dependent conditioned behavior
J. Moron Concepcion¹, S. Gullapali², L. Devi² and T. Shippenberg³, ¹Center for Addiction Research, UTMB, Galveston, TX, ²Pharmacology, Mount Sinai, New York, NY and
³Integrative Neuroscience, NIDA, Baltimore, MD

10 Retention of drug stimulus control in pigeons trained to a three-key morphine discrimination
M. Evola¹, J.D. McCorvy¹ and A.M. Young¹², ¹Pharmacology and Neuroscience, Texas Tech University Health Sciences Center, and ²Psychology, Texas Tech University, Lubbock, TX and ³Medicinal Chemistry and Molecular Pharmacology, Purdue, West Lafayette, IN

11 Effects of naltrexone and opioid agonists on responding maintained by different reinforcers in untreated and morphine-treated squirrel monkeys
C.A. Paronis, J. Bergman and J. Connolly, McLean Hospital, Harvard Medical School, Belmont, MA

12 Effects of morphine dependence on the reinforcing properties of remifentanil, cocaine, and food in rats
Z.D. Cooper¹, Y.G. Shi² and J.H. Woods¹², ¹Psychology, University of Michigan, Ann Arbor, MI and ²Pharmacology, University of Michigan, Ann Arbor, MI

13 Strain differences in (-)-U50-488H-induced conditioned taste aversions
C.M. Davis¹, K.C. Rice² and A.L. Riley¹, ¹Psychology Department, American University, Washington, DC and ²Laboratory of Medicinal Chemistry, NIDDK, Bethesda, MD
14 Temporal determinants of in vivo affinity estimates for naltrexone in rhesus monkeys
   L.R. Gerak and C.P. France, Pharmacology, University of Texas Health Science Center,
   San Antonio, TX

15 Effects of pre-exposure to morphine on later morphine-induced locomotor activity and
conditioned place preference in adult C57BL/6J mice
   Y. Zhang, E.R. Butelman, A. Ho and M.J. Kreek, The Laboratory of the Biology of the
   Addictive Diseases, The Rockefeller University, New York, NY

16 Does the heroin metabolite morphine-3-glucuronide play a role in the development of heroin
   addiction?
   V. Vindenes¹, M. Handal¹, Ripel¹, C.H. Thaulow¹, S. Skurtveit², F. Boix¹ and J. Mørland¹,
   ¹Norwegian Institute of Public Health, Division of Forensic Toxicology and Drug Abuse, and
   ²Norwegian Institute of Public Health, Division of Epidemiology, Oslo, Norway

NICOTINE: ANIMAL STUDIES

17 Involvement of the opioidergic system in nicotine-induced antinociception, but not
corticosterone, increases in mice
   S. Kishioka, T. Maeda, N. Kiguchi, A. Yamamoto and C. Yamamoto, Pharmacology,
   Wakayama Medical University, Wakayama, Japan

18 Nicotine-associated environmental stimuli increases brain reward function in rats
   M. Itasaka¹², H. Miyata³, N. Hironaka¹ and K. Nakayama³, ¹Japan Science and Technology
   Agency, Atsugi-shi, ²Graduate School of Senshu University, Kawasaki-shi, and ³Jikei
   University School of Medicine, Minato-ku, Japan

19 Effects of repeated nicotine administration on responding for electrical brain stimulation under
   a progressive-ratio schedule in rats
   A.C. Harris¹², P.R. Pentel¹² and M.G. LeSage¹², ¹Minneapolis Medical Research Foundation,
   Minneapolis, MN and ²Department of Medicine, University of Minnesota, Minneapolis, MN

20 Nicotine and cocaine self-administration using a multiple schedule of intravenous drug and
   sucrose reinforcement in rats
   D.J. Stairs, N.M. Neugebauer and M.T. Bardo, Psychology, University of Kentucky,
   Lexington, KY

21 Tissue plasminogen activator-plasmin-protease activated receptor 1 system regulates rewarding
   effect of nicotine
   T. Nagai¹², M. Ito², N. Nakamichi², H. Kamei², A. Fukakusa², T. Nabeshima¹, K. Takuma²
   and K. Yamada², ¹Neuropsychopharmacology and Hospital Pharmacy, Nagoya Graduate
   School of Medicine, Nagoya, and ²Kanazawa University, Kanazawa, Japan

22 Effects of novel tris-quaternary ammonium nicotinic antagonists on locomotor activity and
   nicotine-induced hyperlocomotion in rats
   J.T. Ross¹, Z. Zhang², P.A. Crooks², L.P. Dwoskin² and M.T. Bardo¹, ¹Psychology, University
   of Kentucky, Lexington, KY and ²College of Pharmacy, University of Kentucky,
   Lexington, KY

23 Nicotine-conditioned hyperactivity in D2-primed adolescent rats
   L. Amine, A.B. Sheppard and R.W. Brown, Psychology, East Tennessee State University,
   Johnson City, TN

24 Discriminative stimulus effects of monoamine oxidase inhibitors in nicotine-trained rats
   T. Wooters and M. Bardo, Psychology, University of Kentucky, Lexington, KY
STIMULANTS: ANIMAL STUDIES

25 **Withdrawal from repeated cocaine up-regulates PI3K activity in the PFC: Link to Homer proteins**
A.W. Ary\textsuperscript{1,2} and K.K. Szumlinski\textsuperscript{1,2}, \textsuperscript{1}Psychology, and \textsuperscript{2}Neuroscience Research Institute, University of California, Santa Barbara, Santa Barbara, CA

26 **Changes in Arc mRNA expression in rats engaged in cue-elicited cocaine-seeking behavior**
A.R. Zavala\textsuperscript{1}, T. Osredkar\textsuperscript{2}, J.N. Joyce\textsuperscript{2} and J.L. Neisewander\textsuperscript{1}, \textsuperscript{1}Psychology, Arizona State University, Tempe, AZ and \textsuperscript{2}T.H. Christopher Center for Parkinson’s Disease, Sun Health Research Institute, Sun City, AZ

27 **Effects of withdrawal from escalating-dose ‘binge’ cocaine on mRNA levels of dynorphin and orexin genes in rat amygdala and lateral hypothalamus**
Y. Zhou, M. Randesi, M. Johncilla, A. Ho and M. Kreek, Laboratory on the Biology of Addictive Diseases, The Rockefeller University, New York, NY

28 **Protein expression and subcellular localization of the serotonin (5-HT) 2C receptor (5-HT2CR) and its binding partners after repeated intermittent cocaine administration**
M.F. Lanfranco, P.K. Seitz and K.A. Cunningham, Center for Addiction Research, University of Texas Medical Branch, Galveston, TX

29 **Environmental enrichment produces a consistent behavioral phenotype indicative of decreased cAMP response element transcriptional activity in the nucleus accumbens**
T.A. Green\textsuperscript{1}, M.T. Bardo\textsuperscript{2} and E.J. Nestler\textsuperscript{1}, \textsuperscript{1}Psychiatry, UT Southwestern, Dallas, TX and \textsuperscript{2}Psychology, University of Kentucky, Lexington, KY

30 **Mu opioid receptors in the nucleus accumbens but not the ventral tegmental area are necessary for cocaine-induced conditioned reinforcement**
A.R. Soderman\textsuperscript{1,2} and E.M. Unterwald\textsuperscript{1,2}, \textsuperscript{1}Pharmacology, and \textsuperscript{2}Center for Substance Abuse Research, Temple University School of Medicine, Philadelphia, PA

31 **Hippocampal tyrosine kinase B receptors and amphetamine-induced associative learning**
F. Shen\textsuperscript{1,3}, G.E. Meredith\textsuperscript{2} and T.C. Napier\textsuperscript{3}, \textsuperscript{1}Loyola University Medical Center, Maywood, IL, \textsuperscript{2}Chicago Medical School, North Chicago, IL and \textsuperscript{3}Rush University Medical Center, Chicago, IL

32 **Implication of γ-aminobutyric acid transporter subtype-3 (GAT-3) in the development of sensitization to morphine-, methamphetamine- and cocaine-induced hyperlocomotion**
T. Suzuki, K. Kurokawa, S. Hirayama, M. Suzuki and M. Narita, Department of Toxicology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo, Japan

33 **Methylphenidate administration alters vesicular monoamine transporter-2 function in cytoplasmic and membrane-associated vesicles**
T.J. Volz, G.R. Hanson and A. Fleckenstein, Pharmacology and Toxicology, University of Utah, Salt Lake City, UT

34 **Blockade of dopamine D3 receptors by SB-277011A inhibits incubation of craving for cocaine in rat**
Z. Xi\textsuperscript{1}, X. Li\textsuperscript{1}, J. Gilbert\textsuperscript{1}, X. Peng\textsuperscript{1}, C. Ashby, Jr.\textsuperscript{2}, C. Heidbreder\textsuperscript{3} and E. Gardner\textsuperscript{1}, \textsuperscript{1}NIDA, Baltimore, MD, \textsuperscript{2}Saint John's University, New York, NY and \textsuperscript{3}GlaxoSmithKline Pharmaceuticals, Verona, Italy

35 **Serotonergic modulation of cocaine priming-induced reinstatement: Focus on 5-HT2C receptor mechanisms**
D. Ruedi-Bettschen, K. Bano, R.D. Spealman and D.M. Platt, Behavioral Biology, Harvard Medical School/NEPRC, Southborough, MA
36 **Differential effects of σ1 receptor blockade on self-administration and conditioned reinstatement motivated by cocaine vs. natural reward**  
R. Martin-Fardon¹, T. Maurice², H. Aujla¹, W.D. Bowen³ and F. Weiss¹, ¹The Scripps Research Inst, La Jolla, CA, ²EPHE, Montpellier II University, Montpellier, France and ³Brown University, Providence, RI

37 **Neuroadaptations caused by active self-administration of methamphetamine: Upregulation of sigma-1 receptors in locus ceruleus**  
T. Hayashi¹, Z. Justinova², G. Cormaci¹, S.R. Goldberg² and T.P. Su¹, ¹Cellular Pathobiology Unit/DPS/CNRB, and ²Preclinical Pharmacology Section, Intramural Research Program, NIDA/NIH, Baltimore, MD

38 **Dendritic arborization and anchorings of NMDA and AMPA receptors in primary hippocampal neurons are controlled by sigma-1 receptors at ER**  
S.Y. Tsai, T. Hayashi and T.P. Su, Cellular Pathobiology Unit/DPS/CNRB, NIDA/NIH, Intramural Research Program, Baltimore, MD

39 **Dopamine via reactive oxygen species upregulates sigma-1 receptors in a biological system: Implication for cellular survival and neuroplasticity**  
T. Mori, T. Hayashi and T.P. Su, Cellular Pathobiology Unit/DPS/CNRB, NIDA/NIH, Intramural Research Program, DHHS, Baltimore, MD

40 **Acute methamphetamine exposure reduces NMDA-induced neurotoxicity**  
K.J. Smith, R.L. Self, M.T. Bardo and M.A. Prendergast, Psychology, University of Kentucky, Lexington, KY

41 **Methamphetamine induces dopaminergic neurotoxicity via cross-talk between neurodegenerative process and inflammatory stress pathway**  
D. Ikegami, M. Narita, K. Kurokawa, M. Asato, K. Niikura, K. Miyoshi, K. Miyagawa, K. Nanjo, Y. Nagumo, M. Takatsu, S. Enomoto, M. Suzuki and T. Suzuki, Toxicology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo, Japan

42 **Methamphetamine vaccine in rodents**  
F. Orson¹², C.N. Haile¹², B. Kinsey¹², T.A. Kosten¹², R. Rossen¹², R. Baughn¹² and T.R. Kosten¹², ¹Baylor College of Medicine, Houston, TX and ²Michael E. DeBakey VA Medical Center, Houston, TX

43 **Effects of cocaine esterase following its repeated administration with cocaine in mice**  
M.C. Ko¹, J.E. Pascoe¹, D. Narasimhan¹, N.W. Lukacs², R.K. Sunahara¹ and J.H. Woods¹, ¹Pharmacology, and ²Pathology, University of Michigan, Ann Arbor, MI

44 **Human cocaine hydrolase as treatment for cocaine overdose and abuse**  
S. Brimijoin¹, Y. Gao¹ and M.E. Carroll², ¹Molecular Pharmacology, Mayo Clinic, Rochester, MN and ²Psychiatry, University of Minnesota, Minneapolis, MN

**MARIJUANA: HUMAN STUDIES**

45 **Elevated ratings of craving at baseline predict a robust response to smoked placebo marijuana**  
L.D. Nickerson¹², K.P. Lindsey¹², E.T. Ryan¹ and S.E. Lukas¹², ¹BIC/BPRL, McLean Hospital, Belmont, MA and ²Psychiatry, Harvard Medical School, Boston, MA

46 **Marijuana drug and expectancy effects on subjective and behavioral measures**  
J. Metrik¹, P.M. Monti¹², D.J. Rohsenow¹², C.W. Kahler¹ and J. McGeary¹², ¹Center for Alcohol and Addiction Studies, Brown University, and ²Veterans Affairs Medical Center, Providence, RI
47 Atomoxetine for treatment of marijuana dependence: Limited efficacy and high incidence of GI adverse events in a pilot study
   C.F. Tirado\textsuperscript{1}, M. Goldman\textsuperscript{3}, K. Kampman\textsuperscript{2} and C. O'Brien\textsuperscript{2}, \textsuperscript{1}Psychiatry, University of Texas Southwestern Medical Center, Dallas, TX and \textsuperscript{2}University of Pennsylvania, Philadelphia, PA

48 Utility of a contingency management strategy to improve retention in a pharmacologic treatment trial targeting cannabis dependence
   F.R. Levin\textsuperscript{1,2}, J. Mariani\textsuperscript{1,2}, M. Chicurel\textsuperscript{1}, S.M. Evans\textsuperscript{1} and D.J. Brooks\textsuperscript{1}, \textsuperscript{1}Substance Abuse, NYSPI, and \textsuperscript{2}Psychiatry, Columbia University, New York, NY

49 Methylphenidate-SODAS improves Attention-Deficit Hyperactivity Disorder symptoms in adolescents with illicit substance use disorder: A randomized crossover clinical trial
   C.M. Szobot\textsuperscript{1,2}, B. Katz\textsuperscript{1}, T. Schaefer\textsuperscript{1,2}, P. Rua\textsuperscript{1,2}, M. Walcher\textsuperscript{1,2}, F. Pechansky\textsuperscript{1} and L. Rohde\textsuperscript{1}, \textsuperscript{1}Federal University of Rio Grande do Sul, and \textsuperscript{2}Universidade Luterana do Brasil, Porto Alegre, Brazil

50 Methylphenidate-SODAS reduces DAT binding in adolescents with ADHD plus substance use disorder: A Single Photon Emission Computed Tomography with [Tc99m]TRODAT-1 study
   L. Rohde\textsuperscript{1}, M. Shih\textsuperscript{2}, T. Schaefer\textsuperscript{1,3}, M. Hoexter\textsuperscript{2}, E. Estrela\textsuperscript{3}, Y. Fu\textsuperscript{5}, F. Pechansky\textsuperscript{1}, R. Bressan\textsuperscript{2} and C. Szobot\textsuperscript{1,3}, \textsuperscript{1}Fed. U. Rio Grande do Sul, Porto Alegre, \textsuperscript{2}U. Fed. de São Paulo, \textsuperscript{3}Sta Casa de Misericórdia, Porto Alegre, \textsuperscript{4}ULBRA, Canoas, Brazil and \textsuperscript{5}INER, Taiwan, China

51 Prefrontal cortex morphometry in abstinent adolescent marijuana users: Subtle gender effects
   K.L. Medina\textsuperscript{1}, B.J. Nagel\textsuperscript{1}, K.L. Hanson\textsuperscript{1}, T. McQueeny\textsuperscript{1} and S.F. Tapert\textsuperscript{1}, \textsuperscript{1}Psychiatry, UCSD, San Diego, CA and \textsuperscript{2}OHSU, Portland, OR

52 Laboratory measures of impulsivity in adolescent marijuana users
   E.E. Shannon\textsuperscript{1}, C.R. Duncan\textsuperscript{1}, C.W. Mathias\textsuperscript{1}, D.M. Marsh\textsuperscript{1}, A. Liguori\textsuperscript{2} and D.M. Dougherty\textsuperscript{1}, \textsuperscript{1}Psychiatry and Behavioral Medicine, and \textsuperscript{2}Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC

53 Relation between neurobehavior disinhibition and substance use during adolescence in males and females
   L. Kirisci, R. Tarter, S.B. Aytaclar and M. Vanyukov, Pharmaceutical Sciences, University of Pittsburgh, Pittsburgh, PA

54 Trajectories of drug use and contextual factors among minority youth
   Y.F. Thomas\textsuperscript{1}, M.F. Lopez\textsuperscript{1}, Z. Tang\textsuperscript{2} and R. Orwin\textsuperscript{2}, \textsuperscript{1}NIDA/NIH, Bethesda, MD and \textsuperscript{2}WESTAT, Rockville, MD

55 Impact of adolescents' perceived need for therapeutic assistance within the family on outcomes for adolescents in substance use treatment
   G.D. Jones, \textsuperscript{1}Heritage Foundation Inc., Thomasville, GA and \textsuperscript{2}Harold Abel School of Psychology, Capella University, Minneapolis, MN

56 Heterogenity of treatment effects for adolescent SUDSs: A randomized clinical trial
   H. Hops, H.B. Waldron, J.L. Brody, C.W. Turner and T.J. Ozechowski, Oregon Research Institute, Eugene, OR

57 Profile of adolescent cannabis consumers in the Autonomous Region of Valencia, Spain
   J.C. Valderrama\textsuperscript{1}, S. Tomas\textsuperscript{2}, N. Llorens\textsuperscript{1}, M.J. Torrijos\textsuperscript{3}, J. Aguilar\textsuperscript{3}, P. Needle\textsuperscript{4} and J.C. Perez de los Cobos\textsuperscript{1,5}, \textsuperscript{1}CSIC-U. de Valencia, \textsuperscript{2}Direccion General de Drogodependencias, & \textsuperscript{3}FEPAD, Valencia, \textsuperscript{4}NIDA[External Consultant], Atlanta, GA
58 Marriage and illicit drug use
G.G. Homish¹, K.E. Leonard¹,² and J.R. Cornelius³, ¹Research Institute on Addictions, and
²Department of Psychiatry, University at Buffalo, Buffalo, NY and ³Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA

59 Who’s starting to smoke cannabis in the early 21st century? An international perspective
F.A. Fiestas¹,², C.F. Rios-Bedoya¹ and J.C. Anthony¹, ¹Epidemiology, Michigan State University, East Lansing, MI and ²Laboratorios de Investigacion y Desarrollo, Universidad Peruana Cayetano Heredia, Lima, Peru

60 Geographic clusters of recent cannabis use in New Zealand
K.M. Bohnert¹, J.E. Wells², L. Degenhardt³ and J.C. Anthony¹, ¹Epidemiology, Michigan State University, East Lansing, MI. ²University of Otago, Christchurch, New Zealand and ³University of New South Wales, Sydney, NSW, Australia

61 Modeling population heterogeneity via GLMM and GEE. Analyses of cannabis involvement among Hispanics in the U.S
S. Zhu¹,², P.L. Chapman², D.C. Browne¹ and F.A. Wagner¹, ¹DARP/CHDS/ DPHA, Morgan State University, Baltimore, MD and ²Department of Statistics, Colorado State University, Fort Collins, CO

62 Has onset of cannabis use shifted to younger ages? Results from the Epidemiological Survey on Substance Abuse in Germany
R. Augustin, L. Kraus and G. Bühringer, IFT Institut für Therapieforschung, Munich, Germany

63 The effects of counter advertising on the uses of alcohol and drugs among Hispanic adolescents
D. Lee, Health Care Administration and Public Health, Cleveland State University, Cleveland, OH

64 Chronic marijuana abuse is associated with low blood pressure and low cholesterol levels
W. Better, R.I. Herning and J.L. Cadet, Molecular Neuropsychiatry, NIDA/IRP, Baltimore, MD

65 Cognitive performance in HIV+ and HIV- marijuana smokers
S.L. Collins¹,², R.W. Foltin¹,² and M. Haney¹,², ¹Psychiatry, Columbia University College of Physicians & Surgeons, and ²New York State Psychiatric Institute, New York, NY

66 Dronabinol and marijuana in HIV+ marijuana smokers: Caloric intake, mood and sleep
M. Haney¹, E.W. Gunderson¹, J. Rabkin¹, C.L. Hart¹,², S.K. Vosburg¹, S.D. Comer¹ and R.W. Foltin¹, ¹Psychiatry, and ²Psychology, Columbia University, New York, NY

67 Development of a model-based self-report measure of marijuana’s subjects effects: A preliminary Web-based study
J. Hopper¹, A.J. Tracy² and S.E. Lukas¹, ¹Behavioral Psychopharmacology Research Lab, McLean Hospital/Harvard Medical School, Belmont, MA and ²Wellesley Centers for Women, Wellesley, MA

68 Cannabis dependence and early cannabis use are associated with reduced educational attainment in young adults from two offspring-of-twins studies
J.D. Grant¹, A.C. Heath¹, J.F. Scherrer¹,², A.E. Duncan¹, M.T. Lynskey¹, J.R. Haber³, T. Jacob³ and K.K. Bucholz¹, ¹Psychiatry, Washington University School of Medicine, and ²St. Louis VAMC, St. Louis, MO and ³Palo Alto VAHCS, Menlo Park, CA

69 A twin study of the associations between cannabis and alcohol use/symptomatology
M. Lynskey¹, J.D. Grant¹, K.K. Bucholz¹, P.A. Madden¹, A.C. Heath¹ and N.G. Martin², ¹Psychiatry, Washington University School of Medicine, St. Louis, MO and ²Queensland Institute of Medical Research, Brisbane, QLD, Australia
70 From first use to regular use of cannabis and cocaine across subgroups of Hispanics
F.A. Wagner, S. Zhu and D.C. Browne, DARP/CHDS/PSRC, Morgan State University, Baltimore, MD

71 Substance abuse and dependence prevalence rates among impoverished Americans: Examining racial differences
L.C. Windsor, 1Special Populations Research, National Development and Research Institutes, New York, NY and 2Social Work, University of Texas, Austin, TX

72 Frequent cannabis consumers in the community: Use of other substances, schizotypy, aggressiveness, depressiveness, and sensation-seeking
M. Schaub, L. Boesch and R. Stohler, Research Group on Substance Use Disorders, Psychiatric University Hospital Zurich, Zurich, Switzerland

POLYDRUG TREATMENT II

73 Predictors of treatment outcomes among African-American veterans participating in substance abuse treatment with a contingency management component
K.D. Griffith1, S. Ferrell1, K. Sorocco2, and A. Vincent3, 1University of Oklahoma Health Sciences Center, and 2VA Medical Center, Oklahoma City, OK, and 3C-SHOP, University of Oklahoma, Norman, OK

74 Evaluating predictors of abstinence during abstinence-based reinforcement and a minimal contingency aftercare
C.M. Carpenedo1, R.S. Gardner1, L.P. Jacobs1, J.L. Barone1, E. Bresani1, B.E. Versek1, B.J. Rosenwasser1, K. Lynch2,1 and K.C. Kirby1,2, 1Treatment Research Institute, Philadelphia, PA and 2University of Pennsylvania, Philadelphia, PA

75 Predicting continuous abstinence over three years among former polysubstance users: Toward a comprehensive model
A.B. Laudet1 and W.L. White3, 1Center for the Study of Addictions and Recovery, NDRI, New York City, NY and 2Chestnut Health Systems, Bloomington, IL

76 Correlates of long-term recovery after treatment
M.L. Dennis1, C.K. Scott2 and M.L. Foss2, 1Chestnut Health Systems, Bloomington, IL and 2Lighthouse Institute - Chicago, Chestnut Health Systems, Chicago, IL

77 A procedure to retrieve dropout subjects from a cohort study of patients with multiple addictions (substance and non-substance) in Aquitaine, France
M.P. Rousselet, E. Lavie, C. Denis, M. Fatseas and M. Auriacombe, Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen Bordeaux 2, Bordeaux, France

78 Time to remission from alcohol, nicotine, and illegal drug dependence in the U.S.
H. Chilcoat1,2 and D.J. Webb1, 1Worldwide Epidemiology, GlaxoSmithKline, Research Triangle Park, NC and 2Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

79 Changes in the social networks of heroin and cocaine users after quitting
A.S. Buchanan and C. Latkin, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

80 The association of participation in spiritually based after-care programs (12-step) with drug-free status and secondary treatment outcomes at one year
R.A. Denisico1, Y. Gayane2 and N. Fink2, 1National Institute on Drug Abuse, Bethesda, MD and 2Johns Hopkins School of Public Health, Baltimore, MD
81 Is polysubstance use a predictor of AA disaffiliation? 
M.P. Bogenschutz and J.S. Tonigan, Center on Alcoholism, Substance Abuse, and Addiction, University of New Mexico, and Psychiatry, University of New Mexico School of Medicine, Albuquerque, NM

82 Legal status of dependent subjects seeking treatment in outpatient addiction centers in Aquitaine, France
Z. Massida, M. Augis, C. Denis, V. Beltran, E. Lavie, M. Fatseas, J.P. Daulouede and M. Auriacombe, Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen Bordeaux 2, Bordeaux, and Bizia Addiction Center, Bayonne, France

83 Illicit substance use amongst gang youth in Los Angeles
B. Sanders, S.E. Lankenau and J. Jackson-Bloom, University of Southern California, Hollywood, and Childrens Hospital Los Angeles, Los Angeles, CA

84 Relationship between abstinence-based drug treatment centers and crime

85 The association between parental drug use and sex trade among drug-using women
A.L. Lawson, L.J. Floyd and W.W. Latimer, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

86 Latinas in primary relationships: Acculturation, relationship power, substance use and sexual risk behaviors
K. Ragsdale and C. Gore-Felton, National Development & Research Institutes, New York, NY and Stanford University School of Medicine, Stanford, CA

87 Substance use among transgender women in New York City

88 Substance use and behavioral health in medical students
D. Haller, M.C. Acosta, I. Wood and M.E. Olbrisch, 1Psychiatry, St. Luke's-Roosevelt Hospital and Columbia University, New York, NY and 2Psychiatry, Virginia Commonwealth University, Richmond, VA

89 The self-perceived motivation for using addictive substances. A cross-sectional study of substance-dependent patients
M. Fatseas, E. Lavie, C. Denis and M. Auriacombe, Addiction Psychiatry JE2358/INSERM-IFR99, Universite Victor Segalen Bordeaux 2, Bordeaux, France

90 Trends in substance abuse treatment admissions among older adults from 1992-2004
M. Lofwall, A. Schuster and E.C. Strain, 1Department of Psychiatry, University of Kentucky, Lexington, KY, 2School of Public Health, and 3Department of Psychiatry and Behavioral Sciences, Johns Hopkins University, Baltimore, MD

91 Acculturation and polysubstance abuse
C.L. Arfken, S. Kubia and M. Farrag, 1Psychiatry, Wayne State University, Detroit, 2Michigan State University, East Lansing, and 3ACCESS Mental Health Services, Dearborn, MI

92 Ethnic differences in the psychosocial correlates of dropout from a residential therapeutic community
W.M. Aklin, L.M. Macarelli and S.A. Ball, Psychiatry, Yale School of Medicine, New Haven, CT
Why some injection drug users lick their needles
M. Deutscher and D.C. Perlman, Division of Infectious Diseases, Beth Israel Medical Center, New York, NY

Injection risk behaviors reported by audio computer-assisted and interviewer-administered surveys
B. Leigh¹, R.X. Lee², D.D. Brewer³ and H.C. Hagan⁴, ¹University of Washington, ²Public Health - Seattle King County, and ³Interdisciplinary Scientific Research, Seattle, WA, and ⁴National Development and Research Institutes, New York, NY

Changes in response mode for the Balloon Analogue Risk Task
D.E. Baruch¹, T.J. Pleskac², T.S. Wallsten¹, W. Aklin¹ and C. Lejuez¹, ¹University of Maryland, College Park, MD and ²University of Basel, Basel, Switzerland

Can we assess lifetime substance use by telephone in less than 10 minutes? Findings from the CARDIA study
S. Kertesz¹, M. Pletcher², S. Samples¹, C. Balentine¹, J. Tucker¹ and J. Schumacher¹, ¹University of Alabama, Birmingham, AL and ²University of California San Francisco, CA

MORTALITY

Increases in methadone-related adverse events: Pills or liquid?
J.C. Maxwell, Addiction Research Institute, University of Texas at Austin, Austin, TX

Prescription drug mortality among older women in rural Virginia
M.J. Wunsch¹, K. Nakamoto², W. Massello⁴, G. Behonick³ and S. Schnoll², ¹VA Col. of Osteopathic Med., ²VA Tech, Blacksburg, VA, ³Toxicology, U. of Massachusetts, Worcester, MA, ⁴Western District Office of the Chief Medical Examiner, Roanoke, VA and ²Pinney Assoc. Inc, Bethesda, MD

Breaking the news or fueling the story? Impact of media reporting on opioid-related mortality
J.S. Brownstein¹ and N. Dasgupta², ¹Pediatrics, Harvard Medical School, Boston, MA and ²Epidemiology, University of North Carolina, Chapel Hill, NC

Life-time overdose in Swedish prisoners with opioid use. Risk factors identified with the Addiction Severity Index
A. Hakansson¹, F. Schlyter² and M. Berglund¹, ¹Lund University, Malmo, Sweden and ²Swedish Prison and Probation Service, Norrkoping, Sweden

Recent drug use, homelessness and increased short-term mortality in people with HIV and alcohol problems
J.H. Samet¹, A.Y. Walley¹, D.M. Cheng¹, H. Libman², D. Nunes¹, C.R. Horsburgh¹ and R. Saitz¹, ¹General Internal Medicine, Boston University School of Medicine, and ²Harvard Medical School, Boston, MA

Femoral blood concentrations of opiates in forensic autopsy cases
K. Alkass¹, J.J. Strandberg¹, F.C. Kugelberg² and H. Druid¹, ¹Forensic Medicine, Karolinska Institute, Stockholm, and ²Forensic Toxicology, National Board of Forensic Medicine, Linkoping, Sweden

Toward an understanding of differential pathways to non-suicidal self-injury and suicide
M. Bornovalova¹, M. Levy², M. Tull¹, K. Gratzi and C. Lejuez¹, ¹University of Maryland, College Park, MD and ²Arizona State University, Tempe, AZ
**PREVENTION**

104 *Hepatitis B vaccination at syringe-exchange programs*
L.E. Grau¹, R. Heimer¹, Y. Hu¹, M. Singer², G. Scott², P.A. Marshall³ and K.H. Seal⁴
¹Yale Univ., New Haven, CT, ²Hispanic Health Council, Hartford, CT, ³DePaul Univ., Chicago, IL
⁴Case Western Reserve Univ., Cleveland, OH and ⁵VA Medical Center, San Francisco, CA

105 *Reducing risky relationships for HIV: Developing an intervention for hi-risk women*
C.G. Leukefeld¹, M. Staton-Tindall¹, C. Oser¹, J. Inciardi², H. Surrat², P. Friedmann⁴, F. Taxman³ and J. Clarke⁴
¹University of KY, Lexington, KY, ²University of DE, Coral Gables, FL, ³VA Commonwealth University, Richmond, VA and ⁴Brown University, Providence, RI

106 *Reducing HIV infection among injecting drug users in the China-Vietnam Cross-Border Project*
D.C. Des Jarlais¹, R. Kling², T.M. Hammett², D. Ngu², W. Liu², Y. Chen², K.T. Binh² and
P. Friedmann¹, ¹Baron Edmond de Rothschild Chemical Dependency Institute, Beth Israel Medical Center, New York, NY and ²Abt Associates Inc., Cambridge, MA

107 *Patterns of HIV testing among drug users in St. Petersburg, Russia*
L.M. Niccolai¹, O. Toussova², S. Verevochkin², R. Heimer¹ and A. Kozlov²
¹Epidemiology and Public Health, Yale University, New Haven, CT and ²Biomedical Center, St. Petersburg, Russian Federation

108 *Externalizing behaviors among children of HIV+ drug users: Drug users in parent’s network as social ecological risks*
A. Knowlton, A. Buchanan and C. Latkin, Johns Hopkins School of Public Health, Baltimore, MD

109 *Couples- vs. individual-based therapy for maternal drug users: Effects on children’s adjustment*
W.K. Lam¹, M.L. Kelley² and W.S. Fals-Stewart³, ¹RTI International, Research Triangle Park, NC, ²Old Dominion University, Norfolk, VA and ³University of Rochester, Rochester, NY

110 *Preliminary findings on dyadic interactions from the Mothers and Toddlers Program, an attachment-based parenting intervention for substance-abusing mothers*
C. DeCoste, N. Schmitt and N. Suchman, Yale University School of Medicine, West Haven, CT

111 *Psychopathology as mediator in the prediction of substance use by parental child abuse potential in girls*
A.C. Mezzich and B.S. Day, Pharmaceutical Sciences, University of Pittsburgh, Pittsburgh, PA

112 *Enhancing identification of child maltreatment risk with indirect substance abuse items*
S.J. Ondersma¹, J.R. Beatty²¹, L. Strathdee³ and A. Sykes⁴, ¹Psychiatry and OB/GYN, ²Psychology, ³Karmanos Cancer Institute, and ⁴Educational Psychology, Wayne State University, Detroit, MI

113 *The impact of parent gender on predictors of preschool problems in substance-abusing families*
M. Burstein¹ and C. Stanger², ¹Behavioral Psychology, KKI, Johns Hopkins University School of Medicine, Baltimore, MD and ²Center for Addiction Research, Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR

114 *The effect of intimate partner violence on receptive syringe sharing among young female injection drug users: An analysis of mediation effects*
K.D. Wagner¹, S.M. Hudson², M. Latka³, S.A. Strathdee⁴, H. Thiede⁵, M.E. Mackesy-Amiti⁶ and R.S. Garfein⁴, ¹USC Sch. Med. Alhambra, ²Health Res. Assoc., Los Angeles, CA, ³NY Academy of Medicine, NY, NY, ⁴UCSD Sch. of Medicine, San Diego, CA, ⁵Public Health - Seattle & King County, Seattle, WA and ⁶U. of Illinois, Chicago, IL
Female IDUs' sex work and diminishing social support: Tanzanian women’s independence and isolation
S. McCurdy, G.P. Kilonzo, M.T. Leshabari, S. Mujaya and M. Williams, Sch. of Public Health, U. of Texas Houston Health Science Ctr., Houston, TX, Psychiatry, and Sch. of Public Health, Muhimibili College of Health Sciences, Dar es Salaam, Tanzania

Treatment site differences in retention of mentally ill patients under state-wide performance-based contracting of outpatient drug and alcohol services

Results on the use of illicit drugs in arrestees in Santiago Chile, 2005
L.H. Caris, P. Hurtado and M. Martin, School of Public Health, Universidad de Chile, Ministry of Health, Santiago, Chile

Characteristics of male drug users in a prison population in Sri Lanka
A. Stadlin, L.O. Dissabandara and S. Dias, School of Medical Science, Griffith University, Southport, QLD, Australia and Faculty of Medicine, University of Peradeniya, Kandy, Sri Lanka

Characteristics of amphetamine users in a sample of Swedish prisoners
M. Berglund, A. Hakansson and F. Schlyter, Lund University, Malmo, Sweden and Swedish Prison and Probation Service, Norrkoping, Sweden

Incarceration and drug of choice in South Africa

Effectiveness of buprenorphine maintenance in jail: A pilot study

A randomized clinical trial of methadone maintenance for prisoners: 6-month outcomes
M.S. Gordon, T.W. Kinlock and R.P. Schwartz, Social Research Center, Friends Research Institute, Baltimore, MD

Predictors of successful retention and enrollment in an outpatient Jamaican drug court
K.E. Goulbourne and K.L. Cropsey, Epidemiology and Community Health, Virginia Commonwealth University, Richmond, VA and Virginia Commonwealth University, Richmond, VA

The treatment needs of females with a substance use disorder in the Puerto Rican prison system: Implications for treatment planning
A. Hernandez and C. Albizu-Garcia, Center for Evaluation and Sociomedical Research, UPR-Medical Sciences Campus, San Juan, Puerto Rico

Group IPT for women prison with comorbid substance use and depression
J.E. Johnson and C. Zlotnick, Psychiatry and Human Behavior, Brown University, Providence, RI

Predictors of drug treatment completion among parole violators
D.A. Zanis, D.M. Coviello and J.J. Lloyd, Temple University, and University of Pennsylvania, Philadelphia, PA
127 Effects of a history of violent crime on treatment retention at the Substance Treatment and Research Service of Columbia University
B.R. Nordstrom, J. Mariani, A. Bisaga, E. Nunes, D. Brooks and F.R. Levin, Division on Substance Abuse, Department of Psychiatry, College of Physicians and Surgeons of Columbia University, New York, NY

128 Treatment response of incarcerated female substance abusers
J.Y. Sacks, CIRP, NDRI, Inc., New York, NY

129 Do research intermediaries reduce perceived coercion in drug court research?

130 Attitudes toward research among female offenders and generalizable methods for improving research ethics among high-risk populations
J.M. DuBois¹, L.B. Cottler² and C. Callahan³, ¹Saint Louis University, and ²Washington University School of Medicine, St. Louis, MO

131 HIV risk behaviors and intention to change among heterosexual methamphetamine-using offenders in drug treatment
M. Brecht and E. Evans, Integrated Substance Abuse Programs, UCLA, Los Angeles, CA

132 Methamphetamine use and high-risk sexual risk behaviors among incarcerated female adolescents with a sexually transmitted disease in Los Angeles County Juvenile Halls
J. Steinberg¹, M. Boudov¹, P. Kerndt¹, C. Grella², and C. Kadnka³, ¹Los Angeles County Dept. of Public Health, ²UCLA Integrated Substance Abuse Programs, Los Angeles, CA, and ³Juvenile Court Health Ser., Dept. of Health Services, USC, Los Angeles, CA

133 Gender effects on longitudinal models of marijuana use and sexual risk behavior among criminally involved adolescents
S. Schmiege, K. Seals, M. Broaddus and A. Bryan, University of Colorado at Boulder, Boulder, CO

134 Prevalence of substance use disorders among adjudicated youth
C. Hopfer¹, S. Salomonsen-Sautel¹, R. Corley², S.H. Rhee², T.J. Crowley¹, C. Helmkamp¹, R. Nichols¹, C. Bryan¹, J. Lubansky¹, S. Hooks¹, J. Pelle¹, D. Malberg¹ and C. Hartman¹, ¹UCDHSC, Denver, and ²University of Colorado at Boulder, Boulder, CO

135 Childhood adverse events and current traumatic distress: A comparison of men and women prisoners
N.P. Messina and C. Grella, Integrated Substance Abuse Programs, UCLA, Los Angeles, CA

136 The daily struggle: A qualitative study of the process of long-term abstinence from heroin use among female ex-offenders
N.J. Tiburcio, ¹Educational Opportunity and Diversity, Graduate Center of New York, ²Criminal Justice, John Jay College of Criminal Justice, and ³Research, National Development and Research Institutes, New York, NY

137 The CO Women’s Prison Project - Prelim. outcomes at 12 months post-prison exit: Comparing SA beh., HIV and other risk beh., and serv.needs/utiliz. of young and mature female offenders
M.L. Schoeneberger² and J.Y. Sacks², ¹NDRI-CIRP, Denver, CO and ²NDRI-CIRP, New York, NY

137.5

137.5
PROGRAM DESCRIPTION

138 A comprehensive Web-based screening system of multiple high risk behaviors for youth
J.E. Sexton¹, S. Libretto¹, H. Wong¹, S. Nemes² and J. Hoffman¹, ¹Danya International, Inc., and ²Social Solutions International, Olney, MD

139 Focus Forward: A comprehensive wellness program for the workplace
K.M. Rabon-Stith¹, Y.H. Wong¹, S. Libretto¹, J. Namur-Karp², S. Nemes², C. Argueta¹, J. Jones¹ and A. Hernandez¹, ¹Public Health Research, Danya International, Silver Spring, and ²Social Solutions International, Olney, MD

140 StartSMART: Effect of tobacco prevention on middle school youth
S.L. Zack¹, Y.H. Wong¹, J. Jones¹, J. Weil², S. Nemes² and J. Hoffman¹, ¹Public Health Research, Danya International, Inc., Silver Spring, and ²Social Solutions International, Olney, MD

141 Developing a knowledge management system for tobacco use prevention and control professionals and advocates
D. Petska¹, Y.H. Wong¹, S. Libretto¹, J. Jones¹, J. Hoffman¹, V. Motaparthy¹ and L. Hess², ¹Danya International, Inc., Silver Spring, and ²Social Solutions International, Inc., Olney, MD

142 How much science exists in our academic addiction counseling programs: A national survey to gauge the penetration level of the neuroscience and biology of drug abuse and addiction
N.A. Roget¹, M. Berry¹, S. Clinkinbeard¹, A. Broadus¹, B. Larsen² and A.H. Skinstad², ¹University of Nevada, Reno, Reno, NV and ²University of Iowa, Iowa City, IA

143 An international core addiction training curriculum: The Treatnet training package
R. Rawson¹, M. Zarza¹, A. Bellows¹, T. Freese¹, A. Hasson¹, M. Shawkey³, W. Ling¹, D. Carise², R. Ali¹ and J. Tomas-Rosello⁵, ¹UCLA, Los Angeles, CA, ²Treatment Research Institute, Philadelphia, PA, ³Assuit University, Assuit, Egypt, ⁴University of Adelaide, Australia and ⁵UN Office of Drugs and Crime, Vienna, Austria

144 Treatnet-international network of drug dependence treatment and rehabilitation resource centres
J. Tomas-Rossello, T. Treatnet Network and A. Busse, Division of Operations/Prevention Treatment and Rehabilitation Unit, United Nations Office on Drugs and Crime, Vienna, Austria

145 Chase Brexton Health Services, Inc. Targeted capacity expansion program for substance abuse treatment and HIV/AIDS services
A. de Jong, D. Haltiwanger and P. Clemmey, Behavioral Health, Chase Brexton Health Services, Baltimore, MD

146 Prospective, multicenter, observational study on adherence with viral hepatitis C treatments (CHEOBS): Impact of treatment substitution in drug users on sustained virologic response
J. Lang¹ and P. Melin³, ¹General Hospital, Saint Dizier, France and ³Psychiatric Dept., Hospital, Erstein, France

147 “The female step” - medical-social day center for drug-addicted prostitutes
H. Mell¹ and Y. Gur², ¹Israel National Antidrug Authority, Jerusalem, and ²Israel Health Ministry, Tel Aviv, Israel

148 Women only - therapeutic community for addict women
S. Lamberg and H. Mell, Israel National Antidrug Authority, Jerusalem, Israel

89
149 Outcomes measures for sexual minority patients in an opioid treatment program
R. Shelton, J. Mitchell and L.S. Brown, Jr., Evaluation and Research, Addiction Research and 
Treatment Corporation, Brooklyn, NY

150 Can psychosocial treatment increase positive outcomes in buprenorphine-treated opioid- 
dependent adults?
J. Jenkins, M.P. Hillhouse and W. Ling, Integrated Substance Abuse Programs, University of 
California, Los Angeles, Los Angeles, CA

151 Buprenorphine retention in the CTN START Study: An unexpected observation
A. Hasson, C. Thomas, J. Jenkins and W. Ling, Integrated Substance Abuse Programs, 
University of California, Los Angeles, Los Angeles, CA

152 Improving client engagement and retention in treatment: The Los Angeles County process 
improvement pilot project
B.A. Rutkowski1,2, R.A. Rawson1,2, S. Gallon3, W. Sugita4, T.E. Freese1,2 and T. Molfenter2, 
1Pacific Southwest ATTC, and 2UCLA, Los Angeles, CA, 3Oregon Health & Sci. U., Portland, 
OR, 4County of LA Department of Public Health, LA, CA and 5U. of Wisconsin-Madison, WI

153 Perspectives of client substance abuse and domestic violence among clinicians employed by 
opioid treatment programs and domestic violence shelters
M.M. Chu1,2, R.E. Sage1,2, T. Jospitre1, S. Griffing1, L. Madry1 and B. Primm1,2, 1Urban 
Resource Institute, and 2Addiction Research and Treatment Corporation, Brooklyn, NY

154 Computer-assisted, PPC-based patient triage for substance abuse treatment
H. Wong1, S. Libretto1, J. Sexton1, J. Hoffman1, S. Nemes2, P. Earley2, R. LeFebvre3 and D. 
Mee-Lee4, 1Danya Int’l, Inc., Silver Spring, MD, 2Social Solutions International, Olney, MD, 
3Earley Associates, PC, Atlanta, GA and 4DML Training and Consulting, Davis, CA

155 114 cocaine and heroin abusers, 226 PalmPilots: Initial experiences with Ecological 
Momentary Assessment at a methadone clinic
D.H. Epstein, K.L. Preston and J. Schmittner, Treatment Section, NIDA, Intramural Research 
Program, Baltimore, MD

156 Developing clinical supervision training tools for drug abuse counselors
R. Oser1, S. Libretto1, T. Durham2, H. Wong1, D. Petska1 and M. Landry1, 1Danya 
International, MD and 2Danya Institute, Silver Spring, MD

157 Computer-based knowledge exchange and skills training for addictions therapists
C. Barrick1, L. Collins1 and N. Smyth3, 1RIA, and 2Social Work, University at Buffalo, 
Buffalo, NY

158 Understanding prescription drug misuse among college students
S.E. Lord, J. Brevard and M. Watt, Inflexxion, Newton, MA

159 Mobile clinic for women in prostitution and drugs
Y. Goor1, T. Shohat2, S. Bueno de Mesquita3 and L. Levin4, 1Directer, Levinski Clinic, 
2District Health Office, Ministry of Health, 3Levinski Clinic, and 4Tel-Aviv University, 
Tel-Aviv, Israel

160 A model for implementing an evidence-based practice across 15 sites
S.H. Godley1, M.D. Godley1, R.J. Meyers2, J.E. Smith3, R.D. Muck3 and B.R. Garner1, 
1Lighthouse Institute, Chestnut Health Systems, Bloomington, IL, 2Psychology, University of 
New Mexico, Albuquerque, NM and 3Center for Substance Abuse Treatment, Rockville, MD
161 National Institute on Drug Abuse international program research training and exchange programs
   E.S. John¹, S.W. Gust² and E.L. Winstanley³, ¹IQ Solutions, Rockville, MD ²International Program, National Institute on Drug Abuse, Rockville, MD and ³Behavioral Pharmacology Research Unit, Johns Hopkins School of Medicine, Baltimore, MD

162 Current drug scheduling reviews reported by the Drug Enforcement Administration

163 Smoking cessation clinic at the University and Hospital Civil de Guadalajara, Mexico
   O. Campollo¹,4, E. Pérez-Castellanos², J.A. Gutierrez-Padilla³ and C.A. Hermosillo¹, ¹U. de Guadalajara, ²Subdirección de Enseñanza e Investigación, and ³UCINEX, and ⁴Servicio de Biología Molecular en Medicina, Antiguo Hosp. Civil de Guadalajara, Mexico

164 The state of clinical supervision in Nevada’s substance abuse treatment provider system: An examination of infrastructure and readiness to adopt evidence-based practices
   S. Clinkinbeard¹, N.A. Roget¹, M. Berry¹, M. Canfield², F. Parenti³ and A.H. Skinstad⁴, ¹University of Nevada, Reno, ²Nevada Substance Abuse Prevention & Treatment Agency, Carson City, and ³Nevada AADAPTS, Las Vegas, NV and ⁴University of Iowa, Iowa City, IA

165 A randomized, controlled, multi-site study of the effect of patient feedback on rates of attendance and abstinence in outpatient substance abuse treatment programs
   B. McClure¹, A. Kulaga¹, J. Rotrosen¹, P. Crits-Christoph², S. Ring-Kurtz², M. Worley² and R. Forman³, ¹Psychiatry, NYU School of Medicine, New York, NY, ²Psychiatry, University of Pennsylvania, Philadelphia, PA and ³Alkermes, Inc, Boston, MA

166 Creating an electronic resource guide: Linking services to client needs
   D.K. Loos, K.M. Casaletto and D. Carise, Treatment Systems Research, Treatment Research Institute, Philadelphia, PA

167 Adapting Washington Circle performance measures for publicly funded substance abuse treatment systems
   D. Garnick, C. Horgan, M. Lee and A. Acevedo, Heller School of Social Policy and Management, Brandeis University, Waltham, MA

168 Tools for international drug abuse research partnerships and online education
   C. Argueta¹, S. Libretto¹, Y.H. Wong¹, J. Hunt-Glassman¹, J. Hoffman¹, J. Harris² and B. Amend³, ¹Danya International, Silver Spring, MD and ²Medical Directions, Inc., Tucson, AZ

169 Need for technical assistance and training on problem gambling among substance use treatment and other social/health service providers
   E. Evans and M. Brecht, Integrated Substance Abuse Programs, UCLA, Los Angeles, CA

170 Withdrawn
   P. Lawrinton¹, A. Roche¹ and J. Copeland³, ¹National Centre for Education and Training on Addiction, Flinders U., Adelaide, SA, Australia and ³National Drug and Alcohol Research Centre, U. of New South Wales, Sydney, NSW, Australia

171 Evaluation of general organizational index for evidence-based practices in a community treatment agency
   P.K. Horvatich, J.S. Knisely and D.R. Hall, Psychiatry, VCU, Richmond, VA

172 The evaluation of the dissemination of an integrated mental health intervention for alcohol and other drug treatment clients: PsyCheck Phase III
   N. Lee, J. Cameron, T. Brooke and S. Roeg, Clinical Research, Turning Point Alchohol and Drug Centre, Fitzroy, VIC, Australia
Symposium XV  
CCQ 206AB  
10:00 AM - 12:00 PM  

INDIVIDUAL DIFFERENCES IN STRESS RESPONSE:  
SEX, SMOKING AND SNP’S (SINGLE NUCLEOTIDE POLYMORPHISMS)  

Chairs: Harriet de Wit and Gary Wand  

10:00 Determinants of acute stress response: Sex, personality, smoking and genetics  
Emma Childs, University of Chicago, Chicago, IL  

10:25 Stress cortisol response variation and risk for addiction  
William R. Lovallo, VA Medical Center and University of Oklahoma Health Sciences Center, Oklahoma City, OK  

10:50 Blunted opiate modulation of hypothalamic-pituitary-adrenocortical activity in smoking men and women  
Mustafa al’Absi, University of Minnesota Medical School, Duluth, MN  

11:15 Stress reactivity in cocaine-dependent individuals: The impact of gender and task  
Kathleen Brady, Medical University South Carolina, Institute of Psychiatry, Charleston, SC  

11:40 Relationship between cortisol responses to psychological stress and mesolimbic dopamine  
Gary Wand, Johns Hopkins University School of Medicine, Baltimore, MD

Oral Communications 21  
CCQ 205ABC  
10:00 AM - 12:00 PM

EPIDEMIOLOGY: BY THE NUMBERS

Chairs: Meredith Smith and Carlos Rios-Bedoya  

10:00 Early-onset cannabis use in opioid-dependent cases and neighborhood controls  
E.C. Nelson¹, M.T. Lynskey¹, W. Howells¹, L. Degenhardt², R.P. Mattick³ and N.G. Martin³,  
¹Washington University, St. Louis, MO, ²University of New South Wales, Sydney, NSW, and  
³Genetic Epidemiology, Queensland Institute of Medical Research, Brisbane, QLD, Australia  

10:15 Who’s starting to use cocaine in the early 21st century? An international perspective  
C.F. Ríos-Bedoya, F. Fiestas and J.C. Anthony, Epidemiology, Michigan State University, East Lansing, MI  

10:30 Gender and the prevalence and correlates of substance use disorders among 12-21 year-olds in the US  
W. Becker¹, J.M. TetrauLt², L. Sullivan¹ and D. Fiellin¹, ¹Yale University, New Haven, CT and ²West Haven VA Hospital, West Haven, CT  

10:45 Risk for cocaine use among non-medical users of prescription stimulants: Results of a longitudinal study of college students  
A. Arria¹, K. Caldeira¹, K. O’Grady², K. Vincent¹ and E. Wish¹, ¹Center for Substance Abuse Research, and ²Psychology, University of Maryland, College Park, MD  

11:00 The effect of migration to the US on substance use disorders among return migrants and Mexican families of migrants  
G. Borges¹, M. Medina-Mora¹, J. Breslau² and S. Aguilar-Gaxiola², ¹Epidemiology, Instituto Nacional de Psiquiatria & Universidad Autónoma Metropolitana-Xochimilco, Mexico, and ²Center for Reducing Health Disparities, UC, Davis, Sacramento, CA
11:15 Early onset cannabis problems and young adult major depression: Male-female variation
V.S. Harder¹, E.A. Stuart¹ and J.C. Anthony², ¹Mental Health, Johns Hopkins University, Baltimore, MD and ²Epidemiology, Michigan State University, East Lansing, MI

11:30 From first cannabis use to cannabis use disorder: Age of onset and the risk and speed of transition in adolescence
S. Behrendt¹, H.U. Wittchen¹, K. Beesdo¹ and R. Lieb², ¹Institute of Clinical Psychology and Psychotherapy, Technical University Dresden, Dresden, Germany and ²Institute of Psychology, University of Basel, Basel, Switzerland

11:45 Predicting rates of admission to methadone maintenance treatment for heroin and opioid analgesic abuse as a function of community-level characteristics
M.Y. Smith¹, A. Rosenblum² and C. Fong², ¹Purdue Pharma LP, Stamford, CT and ²NDRI, New York, NY

Oral Communications 22

CCQ 301AB
10:00 AM - 12:00 PM

MARIJUANA AND CANNABINOIDS: WEEDING OUT MECHANISMS

Chairs: Scott Rawls and Diana Dow-Edwards

10:00 Effects of methanandamide in combination with Δ⁹ tetrahydrocannabinol (Δ⁹-THC) in C57BL/6J mice discriminating Δ⁹-THC
L. McMahon, Pharmacology, University of Texas Health Science Center, San Antonio, TX

10:15 Discriminative stimulus effects of Δ⁹-tetrahydrocannabinol (Δ⁹-THC) in rhesus monkeys receiving morphine, heroin, or naltrexone
J. Carlisle and L. McMahon, Pharmacology, University of Texas Health Science Center, San Antonio, TX

10:30 Cannabinoid-evoked hypothermia in rats is dependent on nociceptin/orphanin FQ receptor activation
S.M. Rawls¹, T. Rodriguez¹, J.A. Schroeder² and N. Zaveri³, ¹Pharmaceutical Sciences, Temple University, Philadelphia, PA, ²Psychology, Connecticut College, New London, CT and ³Drug Discovery Program, SRI International, Menlo Park, CA

10:45 Sex-specific changes in opioid and dopamine receptors gene expression in striatum of CB1 transgenic mice
T.M. Gerald¹, A. Howlett² and S.O. Franklin¹, ¹North Carolina Central University, Durham, NC and ²Wake Forest University, Winston-Salem, NC

11:00 Sex differences in the locomotion-depressing effects of tetrahydrocannabinol during adolescence
L.C. Harte and D. Dow-Edwards, Physiology/Pharmacology, SUNY Downstate, Brooklyn, NY

11:15 Oral THC attenuates cue-induced marijuana craving in cannabis-dependent humans
L.H. Lundahl¹, L. Cederlind¹ and C.E. Johanson², ¹Wayne State University School of Medicine, Detroit, MI and ²Loyola University, Chicago, IL

11:30 A pharmacological analysis of Δ⁹-THC in humans
J.A. Lile, T.H. Kelly, D.A. Hudson and L.R. Hays, University of Kentucky College of Medicine, Lexington, KY
11:45  

**Effects of adolescent marijuana use on fMRI brain activation to spatial working memory**

J. Winward¹, A.D. Schweinsburg¹, K.L. Medina², T. McQueeney¹ and S.F. Tapert¹, ¹VA San Diego Healthcare System, and ²University of California, San Diego, San Diego, San Diego, CA

---

**Oral Communications 23**

CCQ 303AB

10:00 AM - 12:00 PM

**NOVEL PHARMACOTHERAPIES:**

*SAY “NO” TO THE STATUS QUO*

Chairs: Ryan Lanier and Adam Bisaga

10:00  

**Evaluation of a flexible-dosing strategy of varenicline for smoking cessation**

R. Niaura¹, D.E. Jorenby², J.T. Hays³, J.E. Pappas⁴ and F.T. Leone⁵, ¹Brown University, Providence, RI, ²University of Wisconsin, Madison, WI, ³Mayo Clinic College of Medicine, Rochester, MN, ⁴Kentucky Medical Research Center, Lexington, KY and ⁵Thomas Jefferson University, Philadelphia, PA

10:15  

**Treating opioid dependence: Clinical evaluation of a transdermal buprenorphine formulation**

R.K. Lanier¹, J.A. Harrison¹, E.S. Nuwayser², A. Umbricht¹ and G.E. Bigelow¹, ¹Johns Hopkins School of Medicine, Baltimore, MD and ²Biotek, Inc., Wellesley, MA

10:30  

**Venlafaxine in the treatment of heroin withdrawal—a double blind, placebo-controlled trial**

S. Lin, Taipei City Psychiatric Center, Taipei, Taiwan

10:45  

**Randomized, double-blind, dose-effect evaluation of opioid blockade by extended-release naltrexone**

G.E. Bigelow¹, K.L. Preston², J. Schmittner², Q. Dong³ and D.R. Gastfriend³, ¹Johns Hopkins University, Baltimore, MD, ²National Institute on Drug Abuse, Baltimore, MD and ³Alkermes, Inc., Cambridge, MA

11:00  

**Efficacy of a cocaine vaccine for the treatment of cocaine dependence in methadone-maintained patients**

B.A. Martell¹, E. Mitchell⁴, J. Poling⁵, T. Gardner⁶ and T.R. Kosten⁷, ¹Medicine, and ²Psychiatry, Yale Univ. School of Medicine, New Haven, and ³West Haven, ⁴VAMC, West Haven, CT, Baylor College of Medicine, and ⁷Michael E. DeBakey VAMC, Houston, TX

11:15  

**Using contingency management with levodopa-carbidopa for cocaine treatment: A comparison of three different target outcomes**

J.M. Schmitz¹, M. Mooney², F.G. Moeller¹ and J. Grabowski¹, ¹University of Texas, Houston, TX and ²University of Minnesota, Minneapolis, MN

11:30  

**Memantine treatment of cocaine dependence**

A. Bisaga, E. Aharonovich, F. Garawi, F. Levin, W. Raby, J. Mariani and E. Nunes, NYS Psychiatric Institute/Columbia University, New York, NY

11:45  

**Acute pretreatment with d-amphetamine enhances the subject-rated and cardiovascular, but not the reinforcing, effects of d-amphetamine**

W.W. Stoops¹, A.R. Vansickel¹, J.A. Lile¹, P.E. Glaser³ and C.R. Rush¹, ¹Behavioral Science, ²Psychology, and ³Psychiatry, University of Kentucky, Lexington, KY

---

**Brunch with Champions**

(Pre-Registrants Only)

Hilton Villeray

12:00 - 2:00 PM
Thursday, June 21, 2007

Symposium XVI

STIMULANT-ASSOCIATED COGNITIVE ABNORMALITIES: MECHANISMS AND IMPACT ON REWARD-RELATED BEHAVIOR AND ADDICTION

Chairs: Ari D. Kalechstein and J. David Jentsch

2:00  Effects of self-administered cocaine on multiple memory system functioning in adult vs. adolescents
      Kathleen Kantak, Boston University, Boston, MA

2:20  Dopaminergic adaptations are linked to poor cognitive control in a monkey model for methamphetamine dependence
      J. David Jentsch, University of California, Los Angeles, Los Angeles, CA

2:40  Does pretreatment with modafinil reverse methamphetamine-associated neurocognitive impairment?
      Ari D. Kalechstein, University of California, Los Angeles, Los Angeles, CA

Oral Communications 24

CANNABINOID ABUSE: DIAGNOSIS AND TREATMENT

Chairs: Deborah Hasin and Aimee McRae

2:00  DSM-IV cannabis dependence: Categorical or dimensional phenotype?
      D. Hasin\textsuperscript{1,2} and D. Alderson\textsuperscript{2}, \textsuperscript{1}Columbia University, New York, NY and \textsuperscript{2}NYS Psychiatric Institute, New York, NY

2:15  Cannabis withdrawal is common among treatment-seeking adolescents with cannabis dependence and depression
      J.R. Cornelius, T. Chung, C. Martin, D.B. Clark, D. Thatcher and D.S. Wood, Psychiatry, University of Pittsburgh, Pittsburgh, PA

2:30  Disturbance of sleep onset and sleep maintenance after discontinuation of marijuana use
      K.I. Bolla\textsuperscript{1,2}, S. Lesage\textsuperscript{1}, C. Gamaldo\textsuperscript{1}, D. Neubauer\textsuperscript{1}, F. Funderburk\textsuperscript{1}, P. David\textsuperscript{1} and J. Lud Cadet\textsuperscript{2}, \textsuperscript{1}Neurology, Johns Hopkins Univ. School of Medicine, MD and \textsuperscript{2}DHHS, NIDA/NIH, Baltimore, MD

2:45  Effects of mitrazapine on withdrawal from dependent cannabis use
      A. Frewen\textsuperscript{1,2}, M.E. Montebello\textsuperscript{1}, A. Baillie\textsuperscript{2} and F. Rea\textsuperscript{1}, \textsuperscript{1}The Langton Centre, and \textsuperscript{2}Macquarie University, Sydney, NSW, Australia

3:00  Tolerability and effects of oral tetrahydrocannabinol in older adolescents with cannabis use disorders
      K.M. Gray\textsuperscript{1}, D. Christie\textsuperscript{1}, C.L. Hart\textsuperscript{2} and H.P. Upadhyaya\textsuperscript{1}, \textsuperscript{1}Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC and \textsuperscript{2}New York State Psychiatric Institute, New York, NY

3:15  Back to basics: The relationship of quantity, frequency and the duration of heaviest cannabis use to addiction
      L.B. Cottler and A. Ben Abdallah, Psychiatry, Washington University School of Medicine, St. Louis, MO
3:30  Cannabis chronic users: Does abstinence change neuropsychological performance?
M.F. Novaes¹, P.P. Almeida¹, P.J. Cunha³, F. Jungerman¹, R.R. Laranjeira¹, A.L. Lacerda¹², and R.A. Bressan¹,¹².¹¹ Linc Universidade Federal Sào Paulo,¹² UNIAD, Universidade Federal Sào Paulo, and ³PAD, HIAE, Sào Paulo, Brazil

3:45  Baseline predictors for continuation to medication treatment for marijuana-dependent individuals
A. McRae¹, R.E. Carter², S.A. Simpson¹, S.J. Anderson¹, A.E. Herrin² and K.T. Brady¹, ¹Psychiatry, and ²Biostatistics, Bioinformatics, and Epidemiology, Medical University of South Carolina, Charleston, SC

Oral Communications 25

CCQ 303AB

NICOTINE TREATMENT

2:00  Gender differences in tobacco dependence measures and withdrawal
M.E. Piper, S.S. Smith, M.C. Fiore and T.B. Baker, School of Medicine and Public Health, University of Wisconsin, Madison, WI

2:15  Menstrual phase effects on smoking cessation: A pilot feasibility study
M. Carpenter¹, M. Saladin¹, S. LaRowe¹, A. Leinbach¹ and H. Upadhyaya¹. ¹Psychiatry & Behavioral Sciences, and ²Hollings Cancer Center, Medical University of South Carolina, Charleston, SC

2:30  Distress tolerance as a predictor of early smoking relapse
B. Stipleman¹, M. Bornovalova¹, R. Brown², C. Kahler², D. Strong², M. Zvolensky³ and C. Lejuez¹, ¹University of Maryland, College Park, MD, ²Brown University, Providence, RI and ³University of Vermont, Burlington, VT

2:45  Impulsivity as a predictor of smoking status and smoking cessation success in adolescents
S. Krishnan-Sarin¹, B. Reynolds², T. Liss¹, A. McFetridge¹, D. Cavallo¹, T. Schepis¹, A. Smith¹, M. Potenza¹ and K. Carroll¹, ¹Psychiatry, Yale University School of Medicine, New Haven, CT and ²Pediatrics, Ohio State University, Columbus, OH

3:00  Effects of nicotine exposure following brief abstinence: Examining human drug priming effects
R. Vandrey¹, M.L. Stitzer¹ and E.C. Donny², ¹Johns Hopkins University, Baltimore, MD and ²University of Pittsburgh, Pittsburgh, PA

3:15  Adolescent smokers' motivation to quit and point prevalence abstinence index
C.S. Parzynski, M. Jaszna-Gasior, L.A. Garver, K.M. Lee, C.E. Wieczorek and E.T. Moolchan, NIDA IRP, NIH, Baltimore, MD

3:30  Sustained-release bupropion combined with transdermal nicotine patch for smoking cessation in schizophrenia: Results of a double-blind, randomized, placebo-controlled clinical trial
A.H. Weinberger¹, J.C. Vescicchio¹, K.A. Sacco¹, C.L. Creeden¹, E.L. Reutenauer¹ and T.P. George¹,¹² ¹Psychiatry, Yale University School of Medicine, New Haven, CT and ²Psychiatry, Centre for Addiction and Mental Health, Toronto, ON, Canada
3:45 Characteristics of HIV+ cigarette smokers enrolling in a smoking treatment clinical trial
G. Humfleet, S. Hall, K. Delucchi, J. Dilley and G. Harrison, University of California San Francisco, San Francisco, CA

Symposium XVII

CCQ 206AB
3:00 - 4:00 PM

PRIMARY FINDINGS FROM HIV/AIDS RESEARCH IN THE NIDA CLINICAL TRIALS NETWORK

Chair: Donald A. Calsyn

3:00 Primary results from CTN safer sex skills groups for men
Donald Calsyn, University of Washington, Seattle, WA

3:20 Primary results from CTN HIV/STD safer sex skills groups for women
Susan Tross, New York State Psychiatric Institute, New York, NY

3:40 Primary results from CTN HIV & HCV intervention in drug treatment settings
Robert Booth, University of Colorado Health Sciences Center, Denver, CO

SWEEPSTAKES DRAWING

CCQ 205ABC
4:05 PM

YOU MUST BE SEATED IN ONE OF THE SESSIONS AT 4:00 PM IN ORDER TO HAVE YOUR BADGE COLLECTED

HAVE A SAFE TRIP HOME!
SEE YOU IN SAN JUAN, PUERTO RICO, JUNE 14-19, 2008
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abanades, S.</td>
<td>4</td>
<td>Ali, R.</td>
<td>22, 45,</td>
</tr>
<tr>
<td>Ablondi, K.</td>
<td>61</td>
<td>Alkass, K.</td>
<td>33, 85</td>
</tr>
<tr>
<td>Abu-Asba, K.</td>
<td>13</td>
<td>Almeida, A.</td>
<td>38</td>
</tr>
<tr>
<td>Accornero, V.H.</td>
<td>27</td>
<td>Almeida, P.P.</td>
<td>96</td>
</tr>
<tr>
<td>Acevedo, A.</td>
<td>91</td>
<td>Alten, F.</td>
<td>41</td>
</tr>
<tr>
<td>Achat-Mendes, C.</td>
<td>56</td>
<td>Alvarado, G.F.</td>
<td>35, 48</td>
</tr>
<tr>
<td>Acheson, A.</td>
<td>69</td>
<td>Alvarado, M.</td>
<td>35</td>
</tr>
<tr>
<td>Acosta, M.C.</td>
<td>84</td>
<td>Amable, R.</td>
<td>62</td>
</tr>
<tr>
<td>Acuna, G.</td>
<td>35</td>
<td>Amador, N.J.</td>
<td>54</td>
</tr>
<tr>
<td>Adelson, M.</td>
<td>19, 63</td>
<td>Amass, L.</td>
<td>58</td>
</tr>
<tr>
<td>Adler, L.A.</td>
<td>24</td>
<td>Ambrosio, E.</td>
<td>56</td>
</tr>
<tr>
<td>Adler, M.W.</td>
<td>54</td>
<td>Amend, B.</td>
<td>91</td>
</tr>
<tr>
<td>Aeschbach Jachmann, C.</td>
<td>72</td>
<td>Amesty, S.</td>
<td>20</td>
</tr>
<tr>
<td>Agrawal, A.</td>
<td>34</td>
<td>Amine, L.</td>
<td>78</td>
</tr>
<tr>
<td>Aguerrtexe-Colina, A.</td>
<td>42, 43, 61</td>
<td>Amadio, K.</td>
<td>72</td>
</tr>
<tr>
<td>Aguilar, J.</td>
<td>81</td>
<td>Amrhein, P.C.</td>
<td>64</td>
</tr>
<tr>
<td>Aguilar, V.</td>
<td>55</td>
<td>Anastasio, N.C.</td>
<td>53</td>
</tr>
<tr>
<td>Aguilar-Gaxiola, S.</td>
<td>93</td>
<td>Andersen, R.M.</td>
<td>72</td>
</tr>
<tr>
<td>Aguirre, A.</td>
<td>27</td>
<td>Anderson, C.M.</td>
<td>28</td>
</tr>
<tr>
<td>Aharonovich, E.</td>
<td>35, 57, 63, 94</td>
<td>Anderson, K.L.</td>
<td>34, 49</td>
</tr>
<tr>
<td>Ahmed, M.S.</td>
<td>61</td>
<td>Anderson, S.J.</td>
<td>41, 96</td>
</tr>
<tr>
<td>Ahmed, S.</td>
<td>6</td>
<td>Ang, A.</td>
<td>32</td>
</tr>
<tr>
<td>Akerele, E.O.</td>
<td>66</td>
<td>Anggatiredja, K.</td>
<td>10</td>
</tr>
<tr>
<td>Aklin, W.M.</td>
<td>84, 85</td>
<td>Anker, J.J.</td>
<td>55</td>
</tr>
<tr>
<td>al’Absi, M.</td>
<td>92</td>
<td>Annon, J.</td>
<td>18</td>
</tr>
<tr>
<td>AlAfiﬁ, M.S.</td>
<td>40</td>
<td>Anthony, J.C.</td>
<td>27, 39, 40, 48, 76, 82, 92, 93</td>
</tr>
<tr>
<td>Albizur-Garcia, C.</td>
<td>75, 87</td>
<td>Aoo, N.</td>
<td>11</td>
</tr>
<tr>
<td>Albizur-Garcia, C.E.</td>
<td>45</td>
<td>Arabia, C.</td>
<td>18</td>
</tr>
<tr>
<td>Alcantara, L.I.</td>
<td>36</td>
<td>Arangua, L.</td>
<td>72</td>
</tr>
<tr>
<td>Alderson, D.</td>
<td>21, 46, 72, 95</td>
<td>Arastu, M.</td>
<td>29</td>
</tr>
<tr>
<td>Aleixandre, R.</td>
<td>35, 46</td>
<td>Arfken, C.L.</td>
<td>40, 84</td>
</tr>
<tr>
<td>Alessi, S.M.</td>
<td>64</td>
<td>Argueta, C.</td>
<td>89, 91</td>
</tr>
<tr>
<td>Alexander, J.</td>
<td>47</td>
<td>Armstrong, K.M.</td>
<td>84</td>
</tr>
<tr>
<td>Alexander, M.</td>
<td>36, 37</td>
<td>Arnsten, J.H.</td>
<td>47, 72</td>
</tr>
<tr>
<td>Alexandre, P.K.</td>
<td>64</td>
<td>Arria, A.</td>
<td>92</td>
</tr>
<tr>
<td>Alexi, D.</td>
<td>17</td>
<td>Arroyo, Y.</td>
<td>55</td>
</tr>
<tr>
<td>Alexoff, D.</td>
<td>36</td>
<td>Arteaga, O.</td>
<td>35</td>
</tr>
<tr>
<td>Alford, D.P.</td>
<td>45</td>
<td>Ary, A.W.</td>
<td>79</td>
</tr>
<tr>
<td>Asato, M.</td>
<td>80</td>
<td>Asenjo, P.</td>
<td>35</td>
</tr>
<tr>
<td>Ashby, Jr., C.</td>
<td>34, 79</td>
<td>Ashworth, J.B.</td>
<td>73</td>
</tr>
<tr>
<td>Atkins, A.L.</td>
<td>56</td>
<td>Ator, N.A.</td>
<td>4</td>
</tr>
<tr>
<td>Auclair, C.</td>
<td>17</td>
<td>Audet, A.</td>
<td>44</td>
</tr>
<tr>
<td>Augis, M.</td>
<td>84</td>
<td>Augustin, R.</td>
<td>59, 82</td>
</tr>
<tr>
<td>Aujla, H.</td>
<td>8, 80</td>
<td>Auriacombe, M.</td>
<td>11, 16, 36, 42, 43, 60, 61, 83, 84</td>
</tr>
<tr>
<td>Babaloni, S.</td>
<td>18</td>
<td>Babuscio, T.</td>
<td>38</td>
</tr>
<tr>
<td>Babuscio, T.</td>
<td>38</td>
<td>Back, S.E.</td>
<td>9, 29, 48, 60</td>
</tr>
<tr>
<td>Baella, S.A.</td>
<td>24</td>
<td>Baewert, A.</td>
<td>72</td>
</tr>
<tr>
<td>Baigett, M.J.</td>
<td>53</td>
<td>Bailey, C.P.</td>
<td>77</td>
</tr>
<tr>
<td>Bailey, J.E.</td>
<td>43, 66, 73</td>
<td>Bailey, M.</td>
<td>61</td>
</tr>
<tr>
<td>Bailer, A.</td>
<td>95</td>
<td>Baker, B.</td>
<td>48</td>
</tr>
<tr>
<td>Baker, D.</td>
<td>49</td>
<td>Baker, T.B.</td>
<td>96</td>
</tr>
<tr>
<td>Balda, M.A.</td>
<td>34</td>
<td>Balducci, X.</td>
<td>42</td>
</tr>
<tr>
<td>Baldwin, A.E.</td>
<td>34</td>
<td>Baldwin, G.C.</td>
<td>20</td>
</tr>
<tr>
<td>Balentine, C.</td>
<td>85</td>
<td>Ball, S.A.</td>
<td>60, 84</td>
</tr>
<tr>
<td>Ball, W.J.</td>
<td>70, 75</td>
<td>Balster, R.L.</td>
<td>12, 77</td>
</tr>
<tr>
<td>Bandstra, E.S.</td>
<td>27</td>
<td>Bano, K.</td>
<td>56, 79</td>
</tr>
<tr>
<td>Author Name</td>
<td>Pages</td>
<td>Author Name</td>
<td>Pages</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------</td>
<td>------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Bar-Hamburger, R.</td>
<td>13, 14</td>
<td>Bender, R.E.</td>
<td>64</td>
</tr>
<tr>
<td>Bar-On, E.</td>
<td>14</td>
<td>Benibgui, M.</td>
<td>13</td>
</tr>
<tr>
<td>Barbour, R.</td>
<td>23</td>
<td>Bennett, A.J.</td>
<td>36</td>
</tr>
<tr>
<td>Bardo, M.T.</td>
<td>57, 78, 79, 80</td>
<td>Benoit, C.M.</td>
<td>45</td>
</tr>
<tr>
<td>Barksdale, W.</td>
<td>18</td>
<td>Benyamina, A.</td>
<td>35</td>
</tr>
<tr>
<td>Barnett, N.P.</td>
<td>24</td>
<td>Benyamini, Y.</td>
<td>19</td>
</tr>
<tr>
<td>Barone, J.L.</td>
<td>3, 83</td>
<td>Berglund, M.</td>
<td>85, 87</td>
</tr>
<tr>
<td>Barr, C.S.</td>
<td>52</td>
<td>Bergman, J.</td>
<td>56, 77</td>
</tr>
<tr>
<td>Barr, G.</td>
<td>54</td>
<td>Bergquist, K.L.</td>
<td>8</td>
</tr>
<tr>
<td>Barral, D.</td>
<td>4</td>
<td>Berry, M.</td>
<td>89, 91</td>
</tr>
<tr>
<td>Barral, S.</td>
<td>68, 71</td>
<td>Beseler, C.</td>
<td>35</td>
</tr>
<tr>
<td>Barrick, C.</td>
<td>90</td>
<td>Bespalov, A.</td>
<td>17</td>
</tr>
<tr>
<td>Barros, T.L.</td>
<td>75</td>
<td>Best, D.</td>
<td>74</td>
</tr>
<tr>
<td>Barry, D.T.</td>
<td>18, 29</td>
<td>Best, S.E.</td>
<td>49</td>
</tr>
<tr>
<td>Bart, G.</td>
<td>43</td>
<td>Better, W.E.</td>
<td>58, 82</td>
</tr>
<tr>
<td>Baruch, D.E.</td>
<td>85</td>
<td>Betzler, T.</td>
<td>41</td>
</tr>
<tr>
<td>Bassani, D.G.</td>
<td>25</td>
<td>Bevis, R.A.</td>
<td>34</td>
</tr>
<tr>
<td>Bastos, F.I.</td>
<td>47</td>
<td>Bhagwagar, Z.</td>
<td>57</td>
</tr>
<tr>
<td>Bates, M.E.</td>
<td>19</td>
<td>Bickel, W.K.</td>
<td>39, 40</td>
</tr>
<tr>
<td>Batis, J.</td>
<td>53</td>
<td>Biegel, D.E.</td>
<td>24</td>
</tr>
<tr>
<td>Batki, S.L.</td>
<td>72</td>
<td>Bigbee, J.W.</td>
<td>27</td>
</tr>
<tr>
<td>Bauer, L.O.</td>
<td>38</td>
<td>Bigelow, G.E.</td>
<td>16, 57, 94</td>
</tr>
<tr>
<td>Bauernfeind, A.</td>
<td>4</td>
<td>Bilansky, A.</td>
<td>44</td>
</tr>
<tr>
<td>Baughn, R.</td>
<td>80</td>
<td>Binh, K.T.</td>
<td>86</td>
</tr>
<tr>
<td>Bauzo, R.M.</td>
<td>56</td>
<td>Bini, E.J.</td>
<td>21, 46, 90</td>
</tr>
<tr>
<td>Bear, A.</td>
<td>69</td>
<td>Birk, T.</td>
<td>16</td>
</tr>
<tr>
<td>Beardsley, P.M.</td>
<td>49</td>
<td>Bisaga, A.</td>
<td>57, 63, 94</td>
</tr>
<tr>
<td>Beatty, J.R.</td>
<td>62, 86</td>
<td>Birsch, K.</td>
<td>17</td>
</tr>
<tr>
<td>Becker, G.L.</td>
<td>5</td>
<td>Biswasai, D.</td>
<td>57</td>
</tr>
<tr>
<td>Becker, K.G.</td>
<td>62</td>
<td>Biswas, K.</td>
<td>57</td>
</tr>
<tr>
<td>Becker, W.</td>
<td>44, 45, 53, 92</td>
<td>Blackmer, T.</td>
<td>64</td>
</tr>
<tr>
<td>Bedi, G.</td>
<td>13</td>
<td>Blough, B.</td>
<td>12</td>
</tr>
<tr>
<td>Beesdo, K.</td>
<td>93</td>
<td>Bobashev, G.</td>
<td>6, 16</td>
</tr>
<tr>
<td>Behonick, G.</td>
<td>85</td>
<td>Bodenheimer, H.</td>
<td>20</td>
</tr>
<tr>
<td>Behrendt, S.</td>
<td>93</td>
<td>Boesch, L.</td>
<td>17, 83</td>
</tr>
<tr>
<td>Beitel, M.</td>
<td>29</td>
<td>Bogenschutz, M.P.</td>
<td>84</td>
</tr>
<tr>
<td>Bell, C.</td>
<td>47</td>
<td>Bohn, M.</td>
<td>36</td>
</tr>
<tr>
<td>Bellows, A.</td>
<td>89</td>
<td>Bohnert, K.M.</td>
<td>82</td>
</tr>
<tr>
<td>Beltran, V.</td>
<td>42, 43, 60, 61, 84</td>
<td>Bois, F.</td>
<td>28</td>
</tr>
<tr>
<td>Ben Abdallah, A.</td>
<td>13, 20, 21, 59, 96</td>
<td>Boix, F.</td>
<td>78</td>
</tr>
<tr>
<td>Benamar, K.</td>
<td>54</td>
<td>Bolaños, M.</td>
<td>46</td>
</tr>
<tr>
<td>Benasutti, K.M.</td>
<td>88</td>
<td>Bolla, K.I.</td>
<td>16, 95</td>
</tr>
<tr>
<td>Bon, D.</td>
<td>3</td>
<td>Bond, A.</td>
<td>11</td>
</tr>
<tr>
<td>Bonkovsky, H.</td>
<td>20</td>
<td>Botticelli, M.</td>
<td>45</td>
</tr>
<tr>
<td>Bonnet, C.</td>
<td>60</td>
<td>Boudov, M.</td>
<td>88</td>
</tr>
<tr>
<td>Booth, B.M.</td>
<td>9</td>
<td>Bouis, F.</td>
<td>69</td>
</tr>
<tr>
<td>Booth, R.E.</td>
<td>22</td>
<td>Bounds, M.C.</td>
<td>36</td>
</tr>
<tr>
<td>Borg, L.</td>
<td>68</td>
<td>Bowen, R.</td>
<td>61</td>
</tr>
<tr>
<td>Borges, G.</td>
<td>93</td>
<td>Bowen, S. E.</td>
<td>27, 53</td>
</tr>
<tr>
<td>Borgland, S.</td>
<td>2</td>
<td>Bowen, W.D.</td>
<td>80</td>
</tr>
<tr>
<td>Boris, B.</td>
<td>74</td>
<td>Bowers, C.</td>
<td>90</td>
</tr>
<tr>
<td>Bornovalova, M.</td>
<td>48, 85, 96</td>
<td>Brady, K.T.</td>
<td>8, 9, 29, 41, 48, 56, 59, 60, 92, 96</td>
</tr>
<tr>
<td>Boss-Edwards, V.</td>
<td>9</td>
<td>Brady, R.</td>
<td>40</td>
</tr>
<tr>
<td>Branch, M.N.</td>
<td>9</td>
<td>Branchs, B.</td>
<td>17, 65</td>
</tr>
<tr>
<td>Brasz, C.M.</td>
<td>5</td>
<td>Brasic, J.</td>
<td>37</td>
</tr>
<tr>
<td>Brecht, M.</td>
<td>88, 91</td>
<td>Bredberg, L.</td>
<td>33</td>
</tr>
<tr>
<td>Brendel, M.</td>
<td>37</td>
<td>Bresani, E.</td>
<td>3, 83</td>
</tr>
<tr>
<td>Bressee, C.</td>
<td>28</td>
<td>Bressee, C.</td>
<td>28</td>
</tr>
<tr>
<td>Breslau, J.</td>
<td>93</td>
<td>Breslow, J.</td>
<td>20</td>
</tr>
<tr>
<td>Bressan, R.A.</td>
<td>81, 96</td>
<td>Brevard, J.A.</td>
<td>43, 73, 90</td>
</tr>
<tr>
<td>Brewer, D.D.</td>
<td>85</td>
<td>Brewer, T.</td>
<td>47</td>
</tr>
<tr>
<td>Brewer, J.</td>
<td>40</td>
<td>Brewster, J.</td>
<td>40</td>
</tr>
<tr>
<td>Brewster, J.T.</td>
<td>22</td>
<td>Brimijoin, S.</td>
<td>80</td>
</tr>
<tr>
<td>Brimson, M.</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td>Pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broaddus, M.</td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broaddus, A.</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brody, A.L.</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brody, J.L.</td>
<td>81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brooke, T.</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brooks, A.C.</td>
<td>61, 64, 87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brooks, D.J.</td>
<td>42, 81, 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broome, K.M.</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brooner, R. K.</td>
<td>22, 26, 29, 61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brouwer, K.C.</td>
<td>32, 43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, B.S.</td>
<td>17, 18, 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, C.</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, D.</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, F.</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, J.</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, L.S.</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, R.</td>
<td>42, 96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, R.W.</td>
<td>78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, S.</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, Jr., L.S.</td>
<td>21, 46, 90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Browne, D.C.</td>
<td>82, 83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Browne, F.</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brownstein, J.S.</td>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broz, D.</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bruce, R.</td>
<td>21, 66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bruijnzeel, A.W.</td>
<td>28, 77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brunelle, E.</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bryan, A.</td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bryan, C.</td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buavirat, A.</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buchanan, A.S.</td>
<td>83, 86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bucholz, K.K.</td>
<td>25, 34, 82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buck, A.</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budman, S.H.</td>
<td>43, 73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bueno, F.</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bueno de Mesquita, S.</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buesing, W.R.</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bühringer, G.</td>
<td>59, 82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burakov, A.</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burke, C.K.</td>
<td>26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bürki, C.</td>
<td>16</td>
</tr>
<tr>
<td>Burmeister, M.</td>
<td>68</td>
</tr>
<tr>
<td>Burney-Nissen, L.</td>
<td>7</td>
</tr>
<tr>
<td>Burns, L.</td>
<td>62</td>
</tr>
<tr>
<td>Burstain, A.</td>
<td>38</td>
</tr>
<tr>
<td>Burstain, M.</td>
<td>86</td>
</tr>
<tr>
<td>Burt, D.</td>
<td>31</td>
</tr>
<tr>
<td>Busch, S.</td>
<td>37, 45</td>
</tr>
<tr>
<td>Busse, A.</td>
<td>89</td>
</tr>
<tr>
<td>Busse, G.D.</td>
<td>10, 55</td>
</tr>
<tr>
<td>Bustamante, I.V.</td>
<td>35, 39, 46</td>
</tr>
<tr>
<td>Busto, U.E.</td>
<td>42, 71</td>
</tr>
<tr>
<td>Butelman, E.R.</td>
<td>5, 78</td>
</tr>
<tr>
<td>Butler, S.F.</td>
<td>43, 45, 73</td>
</tr>
<tr>
<td>Cacciola, J.S.</td>
<td>41</td>
</tr>
<tr>
<td>Cadet, J.L.</td>
<td>58, 82, 95</td>
</tr>
<tr>
<td>Calabrese, V.S.</td>
<td>45</td>
</tr>
<tr>
<td>Caldeira, K.</td>
<td>92</td>
</tr>
<tr>
<td>Calderón, J.</td>
<td>14, 15</td>
</tr>
<tr>
<td>Callaghan, R.</td>
<td>17, 40</td>
</tr>
<tr>
<td>Callahan, C.</td>
<td>20, 59</td>
</tr>
<tr>
<td>Cairney, J.</td>
<td>25</td>
</tr>
<tr>
<td>Calarco, E.</td>
<td>39</td>
</tr>
<tr>
<td>Calynik, D.</td>
<td>17, 97</td>
</tr>
<tr>
<td>Cameron, J.</td>
<td>92</td>
</tr>
<tr>
<td>Campagna, E.J.</td>
<td>43</td>
</tr>
<tr>
<td>Campbell, A.</td>
<td>18</td>
</tr>
<tr>
<td>Campbell, J.</td>
<td>60</td>
</tr>
<tr>
<td>Campollo, O.</td>
<td>23, 91</td>
</tr>
<tr>
<td>Canfield, K.</td>
<td>72</td>
</tr>
<tr>
<td>Canfield, M.</td>
<td>91</td>
</tr>
<tr>
<td>Cannistraci, C.</td>
<td>4</td>
</tr>
<tr>
<td>Cantillano, V.</td>
<td>58, 74</td>
</tr>
<tr>
<td>Cao, L.Y.</td>
<td>41</td>
</tr>
<tr>
<td>Caraballo, G.</td>
<td>45</td>
</tr>
<tr>
<td>Cardenas, G.</td>
<td>47</td>
</tr>
<tr>
<td>Caris, L.H.</td>
<td>87</td>
</tr>
<tr>
<td>Carise, D.</td>
<td>61, 64, 87, 89, 91</td>
</tr>
<tr>
<td>Carlin, J.B.</td>
<td>14</td>
</tr>
<tr>
<td>Carlisle, J.</td>
<td>93</td>
</tr>
<tr>
<td>Carlson, G.</td>
<td>43</td>
</tr>
<tr>
<td>Carlson, R.G.</td>
<td>13, 59</td>
</tr>
<tr>
<td>Carmichael, B.</td>
<td>10</td>
</tr>
<tr>
<td>Carnell, A.</td>
<td>68</td>
</tr>
<tr>
<td>Caron, M.G.</td>
<td>4</td>
</tr>
<tr>
<td>Carpenedo, C.M.</td>
<td>3, 83</td>
</tr>
<tr>
<td>Carpenter, K.M.</td>
<td>64</td>
</tr>
<tr>
<td>Carpenter, M.</td>
<td>39, 96</td>
</tr>
<tr>
<td>Carr, S.M.</td>
<td>91</td>
</tr>
<tr>
<td>Carroll, F.I.</td>
<td>2, 10, 51, 77</td>
</tr>
<tr>
<td>Carroll, K.</td>
<td>38, 57, 96</td>
</tr>
<tr>
<td>Carroll, M.E.</td>
<td>24, 55, 67, 80</td>
</tr>
<tr>
<td>Carrow, G.</td>
<td>44</td>
</tr>
<tr>
<td>Carter, C.S.</td>
<td>29</td>
</tr>
<tr>
<td>Carter, K.E.</td>
<td>14</td>
</tr>
<tr>
<td>Carter, L.P.</td>
<td>4</td>
</tr>
<tr>
<td>Carter, R.E.</td>
<td>41, 59, 60, 96</td>
</tr>
<tr>
<td>Cary, M.S.</td>
<td>58</td>
</tr>
<tr>
<td>Cebasek-Travnik, Z.</td>
<td>35</td>
</tr>
<tr>
<td>Cederlind, L.</td>
<td>93</td>
</tr>
<tr>
<td>Celentano, D.</td>
<td>43</td>
</tr>
<tr>
<td>Cen, X.</td>
<td>77</td>
</tr>
<tr>
<td>Castellano, M.</td>
<td>35</td>
</tr>
<tr>
<td>Cattan, L.</td>
<td>18</td>
</tr>
<tr>
<td>Cavallo, D.</td>
<td>96</td>
</tr>
<tr>
<td>Cebasek-Travnik, Z.</td>
<td>35</td>
</tr>
<tr>
<td>Chang Fung, E.</td>
<td>11</td>
</tr>
<tr>
<td>Chapman, P.L.</td>
<td>82</td>
</tr>
<tr>
<td>Charboneau, E.</td>
<td>4</td>
</tr>
<tr>
<td>Chase, S.</td>
<td>62</td>
</tr>
<tr>
<td>Chavchanidze, M.</td>
<td>17</td>
</tr>
<tr>
<td>Author Name</td>
<td>Pages</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Chawarski, M.C.</td>
<td>16, 18, 21, 45</td>
</tr>
<tr>
<td>Chen, A.</td>
<td>68</td>
</tr>
<tr>
<td>Chen, J.</td>
<td>62</td>
</tr>
<tr>
<td>Chen, K.S.</td>
<td>52</td>
</tr>
<tr>
<td>Chen, S.A.</td>
<td>52</td>
</tr>
<tr>
<td>Chen, X.</td>
<td>54</td>
</tr>
<tr>
<td>Chen, Y.</td>
<td>10, 86</td>
</tr>
<tr>
<td>Cheng, D.M.</td>
<td>85</td>
</tr>
<tr>
<td>Cheng, H.</td>
<td>40</td>
</tr>
<tr>
<td>Chhetri, M.B.</td>
<td>21</td>
</tr>
<tr>
<td>Chiamwongpaet, S.</td>
<td>22</td>
</tr>
<tr>
<td>Chiang, C.N.</td>
<td>70</td>
</tr>
<tr>
<td>Chiang, N.</td>
<td>75</td>
</tr>
<tr>
<td>Chiauzzi, E.</td>
<td>45</td>
</tr>
<tr>
<td>Chickering, S.</td>
<td>16</td>
</tr>
<tr>
<td>Chicurel, M.</td>
<td>81</td>
</tr>
<tr>
<td>Chilcoat, H.D.</td>
<td>22, 24, 83</td>
</tr>
<tr>
<td>Childress, A.R.</td>
<td>37, 38, 51, 57, 69</td>
</tr>
<tr>
<td>Childs, E.</td>
<td>8, 9, 92</td>
</tr>
<tr>
<td>Chisin, R.</td>
<td>28</td>
</tr>
<tr>
<td>Chisolm, M.</td>
<td>63</td>
</tr>
<tr>
<td>Cho, D.W.</td>
<td>15</td>
</tr>
<tr>
<td>Choi, D.</td>
<td>61</td>
</tr>
<tr>
<td>Chopra, M.P.</td>
<td>16, 57</td>
</tr>
<tr>
<td>Choy, R.</td>
<td>55</td>
</tr>
<tr>
<td>Chrisman, A.K.</td>
<td>40</td>
</tr>
<tr>
<td>Christie, D.</td>
<td>95</td>
</tr>
<tr>
<td>Chu, M.</td>
<td>60, 90</td>
</tr>
<tr>
<td>Chu, M.M.</td>
<td>90</td>
</tr>
<tr>
<td>Chung, T.</td>
<td>95</td>
</tr>
<tr>
<td>Cicero, T.J.</td>
<td>45</td>
</tr>
<tr>
<td>Ciraulo, D.A.</td>
<td>37</td>
</tr>
<tr>
<td>Clair, M.</td>
<td>24</td>
</tr>
<tr>
<td>Clark, D.B.</td>
<td>14, 16, 25, 95</td>
</tr>
<tr>
<td>Clark, M.</td>
<td>29</td>
</tr>
<tr>
<td>Clarke, J.</td>
<td>86</td>
</tr>
<tr>
<td>Clayton, T.</td>
<td>52</td>
</tr>
<tr>
<td>Cleland, C.M.</td>
<td>35, 73</td>
</tr>
<tr>
<td>Clemmey, P.</td>
<td>89</td>
</tr>
<tr>
<td>Clerkin, S.</td>
<td>36</td>
</tr>
<tr>
<td>Clinkinbeard, S.</td>
<td>89, 91</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Author Name</td>
<td>Pages</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Dasgupta, N.</td>
<td>24, 85</td>
</tr>
<tr>
<td>Daughters, S.B.</td>
<td>9, 14, 60</td>
</tr>
<tr>
<td>Daulouede, J.P.</td>
<td>11, 42, 43, 60, 61, 84</td>
</tr>
<tr>
<td>Davey-Rothwell, M.A.</td>
<td>19</td>
</tr>
<tr>
<td>David, P.</td>
<td>95</td>
</tr>
<tr>
<td>Davidson, P.</td>
<td>72</td>
</tr>
<tr>
<td>Davies, R.</td>
<td>15</td>
</tr>
<tr>
<td>Davis, C.M.</td>
<td>77</td>
</tr>
<tr>
<td>Davis, Jr., K.H.</td>
<td>51</td>
</tr>
<tr>
<td>Day, B.S.</td>
<td>86</td>
</tr>
<tr>
<td>Day, N.L.</td>
<td>63</td>
</tr>
<tr>
<td>De Genna, N.M.</td>
<td>14</td>
</tr>
<tr>
<td>de Guzman, R.L.</td>
<td>22</td>
</tr>
<tr>
<td>De Jong, A.</td>
<td>89</td>
</tr>
<tr>
<td>De La Garza, H., R.</td>
<td>9, 19, 33, 34, 41</td>
</tr>
<tr>
<td>De La Torre, R.</td>
<td>4, 11, 53</td>
</tr>
<tr>
<td>de Wit, H.</td>
<td>8, 9, 56</td>
</tr>
<tr>
<td>Dean, R.L.</td>
<td>29</td>
</tr>
<tr>
<td>Deaver, D.R.</td>
<td>29</td>
</tr>
<tr>
<td>DeBoni, R.</td>
<td>15</td>
</tr>
<tr>
<td>Debuire, B.</td>
<td>35</td>
</tr>
<tr>
<td>DeCoste, C.</td>
<td>63, 86</td>
</tr>
<tr>
<td>DeCuBellis, S.</td>
<td>25</td>
</tr>
<tr>
<td>Degenhardt, L.</td>
<td>14, 82, 92</td>
</tr>
<tr>
<td>DeGruttola, V.</td>
<td>47</td>
</tr>
<tr>
<td>del Olmo, N.</td>
<td>56</td>
</tr>
<tr>
<td>del Río, C.</td>
<td>47</td>
</tr>
<tr>
<td>DelAstorre, A.</td>
<td>22</td>
</tr>
<tr>
<td>Delucchi, K.L.</td>
<td>40, 74, 97</td>
</tr>
<tr>
<td>Dempsey, C.L.</td>
<td>40</td>
</tr>
<tr>
<td>Denis, C.</td>
<td>11, 42, 60, 83, 84</td>
</tr>
<tr>
<td>Denisico, R.A.</td>
<td>83</td>
</tr>
<tr>
<td>Dennis, M.L.</td>
<td>21, 22, 41, 50, 60, 83</td>
</tr>
<tr>
<td>Des Jarlais, D.C.</td>
<td>21, 35, 86</td>
</tr>
<tr>
<td>Desai, N.G.</td>
<td>20, 46</td>
</tr>
<tr>
<td>Desai, R.A.</td>
<td>44, 53, 71</td>
</tr>
<tr>
<td>Desai, R.I.</td>
<td>56</td>
</tr>
<tr>
<td>Deschamps, J.R.</td>
<td>51</td>
</tr>
<tr>
<td>Deshmukh, S.</td>
<td>61</td>
</tr>
<tr>
<td>Detre, J.</td>
<td>37, 69</td>
</tr>
<tr>
<td>Deutscher, M.</td>
<td>85</td>
</tr>
<tr>
<td>Devi, L.</td>
<td>5, 77</td>
</tr>
<tr>
<td>Devous, M.D.</td>
<td>49</td>
</tr>
<tr>
<td>Dewey, S.L.</td>
<td>36, 69</td>
</tr>
<tr>
<td>Dewey, W.L.</td>
<td>54, 77</td>
</tr>
<tr>
<td>Dias, S.</td>
<td>87</td>
</tr>
<tr>
<td>Dickinson, J.R.</td>
<td>43, 73</td>
</tr>
<tr>
<td>Didenko, T.</td>
<td>17</td>
</tr>
<tr>
<td>Diers, J.</td>
<td>12</td>
</tr>
<tr>
<td>Dietrich, M.</td>
<td>4</td>
</tr>
<tr>
<td>Dilley, J.</td>
<td>97</td>
</tr>
<tr>
<td>Dillon, A.R.</td>
<td>41</td>
</tr>
<tr>
<td>Dillon, C.</td>
<td>34</td>
</tr>
<tr>
<td>Dillon, P.</td>
<td>11, 67</td>
</tr>
<tr>
<td>Dimmock, J.A.</td>
<td>72</td>
</tr>
<tr>
<td>Dissabandara, L.O.</td>
<td>87</td>
</tr>
<tr>
<td>Dixon, L.B.</td>
<td>84</td>
</tr>
<tr>
<td>Doherty, E.E.</td>
<td>48</td>
</tr>
<tr>
<td>Domier, C.P.</td>
<td>18, 38</td>
</tr>
<tr>
<td>Dominguez, G.</td>
<td>90</td>
</tr>
<tr>
<td>Dong, N.</td>
<td>29</td>
</tr>
<tr>
<td>Dong, Q.</td>
<td>36, 94</td>
</tr>
<tr>
<td>Donlin, W.D.</td>
<td>3</td>
</tr>
<tr>
<td>Donny, E.C.</td>
<td>57, 96</td>
</tr>
<tr>
<td>Donovick, R.</td>
<td>33</td>
</tr>
<tr>
<td>Dorado, M.L.</td>
<td>57</td>
</tr>
<tr>
<td>Doraimani, G.</td>
<td>18</td>
</tr>
<tr>
<td>Dorsey, C.</td>
<td>37</td>
</tr>
<tr>
<td>Dorst, R.</td>
<td>32</td>
</tr>
<tr>
<td>Dosh, T.</td>
<td>63</td>
</tr>
<tr>
<td>Dougherty, D.M.</td>
<td>81</td>
</tr>
<tr>
<td>Dow-Edwards, D.</td>
<td>55, 93</td>
</tr>
<tr>
<td>Dowling, K.</td>
<td>64</td>
</tr>
<tr>
<td>Druid, H.</td>
<td>33, 85</td>
</tr>
<tr>
<td>Dubernert, J.</td>
<td>61</td>
</tr>
<tr>
<td>Duberstein, P.R.</td>
<td>40</td>
</tr>
<tr>
<td>DuBois, J.M.</td>
<td>88</td>
</tr>
<tr>
<td>Dugosh, K.L.</td>
<td>3, 60, 88</td>
</tr>
<tr>
<td>Duka, T.</td>
<td>23</td>
</tr>
<tr>
<td>Duke, A.N.</td>
<td>52</td>
</tr>
<tr>
<td>Dumchev, K.</td>
<td>47, 72</td>
</tr>
<tr>
<td>Duncan, A.E.</td>
<td>82</td>
</tr>
<tr>
<td>Duncan, C.R.</td>
<td>81</td>
</tr>
<tr>
<td>Duncan, J.</td>
<td>60</td>
</tr>
<tr>
<td>Dundon, W.</td>
<td>57</td>
</tr>
<tr>
<td>Dunlap, E.</td>
<td>15, 43</td>
</tr>
<tr>
<td>Dunlap, S.</td>
<td>53, 59</td>
</tr>
<tr>
<td>Dunn, K.E.</td>
<td>39</td>
</tr>
<tr>
<td>DuPree, J.</td>
<td>29</td>
</tr>
<tr>
<td>Duque, L.</td>
<td>49</td>
</tr>
<tr>
<td>Durham, T.G.</td>
<td>46, 90</td>
</tr>
<tr>
<td>Dürsteler-MacFarland, K.M.</td>
<td>16, 18</td>
</tr>
<tr>
<td>Dvoryak, S.</td>
<td>2, 22</td>
</tr>
<tr>
<td>Dwoskin, L.P.</td>
<td>78</td>
</tr>
<tr>
<td>Dykstra, L.A.</td>
<td>8, 10</td>
</tr>
<tr>
<td>Dziopa, E.</td>
<td>55</td>
</tr>
<tr>
<td>Dziopa, E.I.</td>
<td>54</td>
</tr>
<tr>
<td>Eaddy, J.L.</td>
<td>55</td>
</tr>
<tr>
<td>Eadie, J.</td>
<td>44</td>
</tr>
<tr>
<td>Earley, P.</td>
<td>90</td>
</tr>
<tr>
<td>Earleywine, M.</td>
<td>44</td>
</tr>
<tr>
<td>Easterling, K.</td>
<td>76</td>
</tr>
<tr>
<td>Ebenbichler, M.</td>
<td>16</td>
</tr>
<tr>
<td>Ebner, N.</td>
<td>72</td>
</tr>
<tr>
<td>Eddington, N.D.</td>
<td>12</td>
</tr>
<tr>
<td>Edmundson, E.</td>
<td>61, 64</td>
</tr>
<tr>
<td>Egorova, V.</td>
<td>17</td>
</tr>
<tr>
<td>Ehringer, M.A.</td>
<td>35</td>
</tr>
<tr>
<td>Ehrman, R.</td>
<td>37, 69</td>
</tr>
<tr>
<td>Eisenstein, T.K.</td>
<td>20</td>
</tr>
<tr>
<td>Elkader, A.</td>
<td>17, 44</td>
</tr>
<tr>
<td>Elkashef, A.</td>
<td>30, 51, 57</td>
</tr>
<tr>
<td>ElSousi, S.</td>
<td>40</td>
</tr>
<tr>
<td>Emurian, C.S.</td>
<td>18</td>
</tr>
<tr>
<td>Endo, K.</td>
<td>35</td>
</tr>
<tr>
<td>English, J.S.</td>
<td>40</td>
</tr>
<tr>
<td>Enomoto, S.</td>
<td>80</td>
</tr>
<tr>
<td>Ensminger, M.E.</td>
<td>48</td>
</tr>
<tr>
<td>Epstein, D.H.</td>
<td>3, 39, 58, 60, 90</td>
</tr>
<tr>
<td>Errico, S.L.</td>
<td>62</td>
</tr>
<tr>
<td>Ertischek, M.D.</td>
<td>44, 66</td>
</tr>
<tr>
<td>Ervin, F.R.</td>
<td>49</td>
</tr>
<tr>
<td>Esterlis, I.</td>
<td>28, 69</td>
</tr>
<tr>
<td>Estevez, N.</td>
<td>9</td>
</tr>
<tr>
<td>Estrela, E.</td>
<td>81</td>
</tr>
<tr>
<td>Author</td>
<td>Pages</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Evans, E.</td>
<td>88, 91</td>
</tr>
<tr>
<td>Evans, J.</td>
<td>72</td>
</tr>
<tr>
<td>Evans, S.E.</td>
<td>33</td>
</tr>
<tr>
<td>Evans, S.M.</td>
<td>18, 67, 81</td>
</tr>
<tr>
<td>Even-Sapir, E.</td>
<td>28</td>
</tr>
<tr>
<td>Evela, M.</td>
<td>10, 77</td>
</tr>
<tr>
<td>Eyre, S.</td>
<td>22</td>
</tr>
<tr>
<td>Fabian, F.</td>
<td>39</td>
</tr>
<tr>
<td>Fagan, P.</td>
<td>61</td>
</tr>
<tr>
<td>Fague, M.S.</td>
<td>13</td>
</tr>
<tr>
<td>Fairbairn, C.</td>
<td>57</td>
</tr>
<tr>
<td>Falcao-Dodson, M.</td>
<td>25</td>
</tr>
<tr>
<td>Falcioni, J.</td>
<td>29</td>
</tr>
<tr>
<td>Falck, R.</td>
<td>13, 59</td>
</tr>
<tr>
<td>Fallon, B.</td>
<td>40</td>
</tr>
<tr>
<td>Fals-Stewart, W.S.</td>
<td>65, 86</td>
</tr>
<tr>
<td>Fan, J.</td>
<td>36</td>
</tr>
<tr>
<td>Fan, W.</td>
<td>68</td>
</tr>
<tr>
<td>Fang, L.J.</td>
<td>84</td>
</tr>
<tr>
<td>Fant, R.V.</td>
<td>44, 66</td>
</tr>
<tr>
<td>Fantegrossi, B.</td>
<td>12</td>
</tr>
<tr>
<td>Fantegrossi, W.E.</td>
<td>9</td>
</tr>
<tr>
<td>Farabiee, D.</td>
<td>70</td>
</tr>
<tr>
<td>Farquharson, A.L.</td>
<td>12</td>
</tr>
<tr>
<td>Farrag, M.</td>
<td>84</td>
</tr>
<tr>
<td>Farre, M.</td>
<td>4, 11, 53</td>
</tr>
<tr>
<td>Fatseas, M.</td>
<td>36, 60, 83, 84</td>
</tr>
<tr>
<td>Fay, B.J.</td>
<td>58</td>
</tr>
<tr>
<td>Feldman, Z.</td>
<td>6, 16, 40</td>
</tr>
<tr>
<td>Felgate, P.D.</td>
<td>4</td>
</tr>
<tr>
<td>Feltenstein, M.W.</td>
<td>55</td>
</tr>
<tr>
<td>Ferdinand, R.F.</td>
<td>42</td>
</tr>
<tr>
<td>Fernandez, E.G.</td>
<td>75</td>
</tr>
<tr>
<td>Fernandez, K.</td>
<td>45</td>
</tr>
<tr>
<td>Fernandez-Hermida, J.R.</td>
<td>57</td>
</tr>
<tr>
<td>Ferre, S.</td>
<td>76</td>
</tr>
<tr>
<td>Ferrell, S.</td>
<td>83</td>
</tr>
<tr>
<td>Festinger, D.S.</td>
<td>3, 44, 60, 88</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Feussner, G.K.</td>
<td>91</td>
</tr>
<tr>
<td>ffrench-Mullen, J.</td>
<td>71</td>
</tr>
<tr>
<td>Field, C.</td>
<td>60</td>
</tr>
<tr>
<td>Field, M.</td>
<td>23</td>
</tr>
<tr>
<td>Name</td>
<td>Pages</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Garcia Lecumberri, C.</td>
<td>56</td>
</tr>
<tr>
<td>Garcia-Rodriguez, O.</td>
<td>57</td>
</tr>
<tr>
<td>Gardner, E.L.</td>
<td>34, 36,</td>
</tr>
<tr>
<td></td>
<td>79</td>
</tr>
<tr>
<td>Gardner, R.S.</td>
<td>3, 83</td>
</tr>
<tr>
<td>Gardner, T.</td>
<td>19, 94</td>
</tr>
<tr>
<td>Garfein, R.S.</td>
<td>86</td>
</tr>
<tr>
<td>Garmendia, M.</td>
<td>35</td>
</tr>
<tr>
<td>Garner, B.</td>
<td>22</td>
</tr>
<tr>
<td>Garner, B.R.</td>
<td>90</td>
</tr>
<tr>
<td>Garnick, D.</td>
<td>91</td>
</tr>
<tr>
<td>Garrity, T.F.</td>
<td>9, 14</td>
</tr>
<tr>
<td></td>
<td>96</td>
</tr>
<tr>
<td>Garvin, E.C.</td>
<td>21</td>
</tr>
<tr>
<td>Gasior, M.J.</td>
<td>39, 42</td>
</tr>
<tr>
<td>Gastfriend, D.R.</td>
<td>29, 94</td>
</tr>
<tr>
<td>Gatch, M.B.</td>
<td>53</td>
</tr>
<tr>
<td>Gatchalian, K.</td>
<td>39</td>
</tr>
<tr>
<td>Gauchet, A.</td>
<td>17, 72</td>
</tr>
<tr>
<td>Gayane, Y.</td>
<td>83</td>
</tr>
<tr>
<td>Gelberg, L.</td>
<td>72</td>
</tr>
<tr>
<td>Gelernter, J.</td>
<td>46</td>
</tr>
<tr>
<td>Geller, H.M.</td>
<td>62</td>
</tr>
<tr>
<td>Gelston, E.A.</td>
<td>12</td>
</tr>
<tr>
<td>Genca, E.</td>
<td>4</td>
</tr>
<tr>
<td>Gentil, V.</td>
<td>25</td>
</tr>
<tr>
<td>George, T.P.</td>
<td>5, 67, 97</td>
</tr>
<tr>
<td>Gerak, L.R.</td>
<td>5, 78</td>
</tr>
<tr>
<td>Gerald, T.M.</td>
<td>93</td>
</tr>
<tr>
<td>Gerbaud, L.</td>
<td>17</td>
</tr>
<tr>
<td>Ghandour, L.A.</td>
<td>19</td>
</tr>
<tr>
<td>Ghee, S.</td>
<td>68</td>
</tr>
<tr>
<td>Ghitza, U.E.</td>
<td>58, 60</td>
</tr>
<tr>
<td>Ghoddoussi, F.</td>
<td>4</td>
</tr>
<tr>
<td>Ghozland, S.G.</td>
<td>91</td>
</tr>
<tr>
<td>Gifford, A.L.</td>
<td>45, 69</td>
</tr>
<tr>
<td>Gignoux, N.</td>
<td>17</td>
</tr>
<tr>
<td>Gilbert, J.</td>
<td>31, 79</td>
</tr>
<tr>
<td>Gilmore, J.</td>
<td>25</td>
</tr>
<tr>
<td>Gilmour, S.</td>
<td>62</td>
</tr>
<tr>
<td>Gilpin, N.W.</td>
<td>4</td>
</tr>
<tr>
<td>Ginsburg, B.C.</td>
<td>52</td>
</tr>
<tr>
<td>Giordano, L.</td>
<td>40</td>
</tr>
<tr>
<td>Author Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Haber, J.R.</td>
<td>82</td>
</tr>
<tr>
<td>Habrat, B.</td>
<td>22</td>
</tr>
<tr>
<td>Haddox, J.D.</td>
<td>44, 65, 66, 73</td>
</tr>
<tr>
<td>Hagan, H.C.</td>
<td>21, 85</td>
</tr>
<tr>
<td>Hahn, J.</td>
<td>43, 72</td>
</tr>
<tr>
<td>Haile, C.N.</td>
<td>11, 80</td>
</tr>
<tr>
<td>Hakansson, A.</td>
<td>85, 87</td>
</tr>
<tr>
<td>Hakun, J.G.</td>
<td>37, 38</td>
</tr>
<tr>
<td>Hall, D.R.</td>
<td>91</td>
</tr>
<tr>
<td>Hall, F.S.</td>
<td>55</td>
</tr>
<tr>
<td>Hall, J.</td>
<td>47</td>
</tr>
<tr>
<td>Hall, S.</td>
<td>97</td>
</tr>
<tr>
<td>Hall, T.</td>
<td>14</td>
</tr>
<tr>
<td>Halladay, L.R.</td>
<td>24</td>
</tr>
<tr>
<td>Haller, D.</td>
<td>84</td>
</tr>
<tr>
<td>Halperin, E.</td>
<td>71</td>
</tr>
<tr>
<td>Halperin, J.</td>
<td>36</td>
</tr>
<tr>
<td>Haltiwanger, D.</td>
<td>89</td>
</tr>
<tr>
<td>Hamidovic, A.</td>
<td>8</td>
</tr>
<tr>
<td>Hamilton, A.</td>
<td>32</td>
</tr>
<tr>
<td>Hammett, T.M.</td>
<td>86</td>
</tr>
<tr>
<td>Han, D.</td>
<td>37, 71</td>
</tr>
<tr>
<td>Han, J.</td>
<td>59</td>
</tr>
<tr>
<td>Handal, M.</td>
<td>78</td>
</tr>
<tr>
<td>Handler, S.L.</td>
<td>52</td>
</tr>
<tr>
<td>Haney, M.</td>
<td>12, 58, 82</td>
</tr>
<tr>
<td>Hankins, G.</td>
<td>61</td>
</tr>
<tr>
<td>Hanlon, C.A.</td>
<td>26, 37</td>
</tr>
<tr>
<td>Hanner, J.</td>
<td>13</td>
</tr>
<tr>
<td>Hannigan, J.H.</td>
<td>27, 53</td>
</tr>
<tr>
<td>Hanson, G.R.</td>
<td>56, 79</td>
</tr>
<tr>
<td>Hanson, G.W.</td>
<td>65</td>
</tr>
<tr>
<td>Hanson, K.L.</td>
<td>81</td>
</tr>
<tr>
<td>Haraguchi, A.</td>
<td>35</td>
</tr>
<tr>
<td>Harder, V.S.</td>
<td>93</td>
</tr>
<tr>
<td>Harney, A.</td>
<td>32</td>
</tr>
<tr>
<td>Harris, A.C.</td>
<td>78</td>
</tr>
<tr>
<td>Harris, D.S.</td>
<td>36</td>
</tr>
<tr>
<td>Harris, J.</td>
<td>91</td>
</tr>
<tr>
<td>Harris, K.M.</td>
<td>15</td>
</tr>
<tr>
<td>Harris, T.S.</td>
<td>49</td>
</tr>
<tr>
<td>Harris, Jr., K.A.</td>
<td>72</td>
</tr>
<tr>
<td>Harrison, E.L.</td>
<td>9</td>
</tr>
<tr>
<td>Herrin, A.E.</td>
<td>41, 59, 60, 96</td>
</tr>
<tr>
<td>Herrin, A.E.</td>
<td>41, 59, 60, 96</td>
</tr>
<tr>
<td>Herrin, A.E.</td>
<td>41, 59, 60, 96</td>
</tr>
<tr>
<td>Herrin, A.E.</td>
<td>41, 59, 60, 96</td>
</tr>
<tr>
<td>Hertzbach, R.L.</td>
<td>52</td>
</tr>
<tr>
<td>Higuer-Matas, A.</td>
<td>56</td>
</tr>
<tr>
<td>Hillhouse, M.P.</td>
<td>18, 32, 90</td>
</tr>
<tr>
<td>Hiller, W.</td>
<td>46</td>
</tr>
<tr>
<td>Hilton, J.</td>
<td>37</td>
</tr>
<tr>
<td>Hiranta, T.</td>
<td>10</td>
</tr>
<tr>
<td>Hironaka, N.</td>
<td>78</td>
</tr>
<tr>
<td>Hoff, D.</td>
<td>46</td>
</tr>
<tr>
<td>Hoff, L.</td>
<td>6</td>
</tr>
<tr>
<td>Hoffman, J.</td>
<td>89, 90, 91</td>
</tr>
<tr>
<td>Hoffman, K.</td>
<td>61</td>
</tr>
<tr>
<td>Hole, A.V.</td>
<td>69</td>
</tr>
</tbody>
</table>
AUTHOR INDEX

Holtman, J.R. 73  Hyde, E.M. 4  42
Holtz, N.A. 55  Hyde, M. 54  Jie, S. 22
Holtzman, S.G. 8, 76  Hyman, S.M. 37  Jimenez, M.J. 59
Homish, G.G. 82  Ichenhower, M. 36  Joe, G.W. 65
Hong, K.I. 8, 37  Ialongo, N. 39  Johanson, C.E. 13, 93
Hooks, S. 88  Icenhower, M. 36  John, E.S. 91
Hopfer, C. 88  Ikegami, D. 80  Johncilla, M. 34, 79
Hopper, J. 82  Inciardi, J.A. 42, 44, 65, 66
Hops, H. 25, 81  Ito, M. 78  Jones, H.E. 17, 62,
Horey, J. 63  Indig, D. 61  Jones, J. 89
Horgan, C. 91  Iordanou, J.C.  Johnson, G.S. 27
Hori, T. 35  Irvine, R.J. 4, 6, 29  Johnson, J.E. 87
Horner, M. 58  Irwin, L.N. 28  Johnson, K.M. 53
Horsburgh, C.R. 85  Isaac, S. 77  Johnson, M.W. 66
Horton, T. 47  Ishibashi, Y. 35  Johnson, R.E. 19, 62
Horton, Jr., A.M. 66  Itasaka, M. 78  Jones, E. 45
Horvatich, P.K. 91  Ito, M. 78  Jones, G.D. 81
Howell, C.C. 29  Itzhak, Y. 34, 49  Jones, H.E. 17, 62,
Howell, L.L. 9, 36, 56  Ivanov, I. 36  Jorenby, D.E. 94
Howells, W. 92  Izenwasser, S. 24  Jones, R.T. 75
Howlett, A.C. 8, 93  Jachimowicz, M. 55  Jose, P. 40
Hu, Y. 86  Jackson, B. 33  Joseph, H. 87
Hua, W. 43  Jackson-Bloom, J. 22, 84  Joshi, D. 29
Huang, W. 11  Jacob, T. 82  Jospitre, T. 60, 90
Hubbard, R. 60  Jacobs, L.P. 3, 83  Joyce, J.N. 24, 79
Hucks-Ortiz, C. 21  Jaehne, E.J. 6  Juliano, T. 75
Hudson, D.A. 94  Jaffe, J.H. 22  Jungerman, F. 96
Hudson, S.M. 86  Jaffe, W.B. 64  Justinova, Z. 80
Huettner, S. 17  James, E.C. 3, 44
Hughes, J.R. 39  Janowsky, A. 12  Kadrmka, C. 88
Huizink, A. 42  Janssen, A. 33  Kahler, C.W. 42, 80,
Humphlet, G. 97  Janssen, L. 62  96
Hungund, B.L. 27  Jasinski, D.R. 12, 62  Kahn, R. 57
Hunt-Glassman, J. 91  Jaszyca-Gasior, M. 39, 62, 57
Hunter, D. 54  96  Kalayesi, R. 57
Hunter, J. 18, 32  Jayaram-Lindstrom, N. 33  Kalechstein, A.D. 33, 41,
Hunter, S.B. 25  Jenab, S. 54, 55  95
Hunziker, H. 17  Jenciust, S.T. 15  Kamei, H. 78
Hurley, C. 33  Jenkins, J. 18, 90  Kamien, J. 58
Hurley, M. 12  Jensen, J.E. 37  Kaminska, D. 34
Hurtado, P. 87  Jentsch, J.D. 95  Kaminski, B.J. 4
Husband, S. 12  Jepson, C. 39  Kamon, J.L. 15
Husky, M.M. 63  Jessup, M.A. 45  Kampman, K.M. 57, 81
Hutchinson, D. 62  Ji, F. 34, 68  Kang, M. 22
Hwahng, S. 84  Jiang, H. 18, 40, 49, 56,
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Pages</th>
<th>Author Name</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaplan, G.B.</td>
<td>25, 38</td>
<td>Kilien, T.</td>
<td>18</td>
</tr>
<tr>
<td>Kaplan, J.R.</td>
<td>24, 36</td>
<td>Kilonzo, G.P.</td>
<td>87</td>
</tr>
<tr>
<td>Karam, E.G.</td>
<td>19</td>
<td>Kim, E.</td>
<td>71</td>
</tr>
<tr>
<td>Karg, R.S.</td>
<td>19</td>
<td>Kimmel, H.L.</td>
<td>56</td>
</tr>
<tr>
<td>Karila, L.</td>
<td>35</td>
<td>King, A.</td>
<td>8</td>
</tr>
<tr>
<td>Karir, M.</td>
<td>40</td>
<td>King, S.</td>
<td>18</td>
</tr>
<tr>
<td>Kaspar, C.</td>
<td>55</td>
<td>King, V.L.</td>
<td>22</td>
</tr>
<tr>
<td>Katz, B.</td>
<td>81</td>
<td>Kinlock, T.W.</td>
<td>75, 87</td>
</tr>
<tr>
<td>Katz, E.</td>
<td>49</td>
<td>Kinsey, B.</td>
<td>80</td>
</tr>
<tr>
<td>Katz, E.C.</td>
<td>18</td>
<td>Kippin, T.E.</td>
<td>49, 55</td>
</tr>
<tr>
<td>Katz, N.P.</td>
<td>31, 43</td>
<td>Kirby, K.C.</td>
<td>3, 83</td>
</tr>
<tr>
<td>Kaufman, B.</td>
<td>66</td>
<td>Kirby, L.</td>
<td>76</td>
</tr>
<tr>
<td>Kaufman, M.J.</td>
<td>37, 69, 75</td>
<td>Kirisci, L.</td>
<td>81</td>
</tr>
<tr>
<td>Keane, M.</td>
<td>4</td>
<td>Kirtscher, K.</td>
<td>10</td>
</tr>
<tr>
<td>Keane, T.</td>
<td>29</td>
<td>Kishioaka, S.</td>
<td>78</td>
</tr>
<tr>
<td>Keeney, F.</td>
<td>74</td>
<td>Kitaichi, K.</td>
<td>10</td>
</tr>
<tr>
<td>Kell, M.J.</td>
<td>12</td>
<td>Kleber, H.</td>
<td>31</td>
</tr>
<tr>
<td>Kelley, J.B.</td>
<td>49</td>
<td>Klein, E.</td>
<td>63</td>
</tr>
<tr>
<td>Kelley, M.L.</td>
<td>86</td>
<td>Kline, A.</td>
<td>25, 63,</td>
</tr>
<tr>
<td>Kelly, M.</td>
<td>55</td>
<td>Kline, A.T.</td>
<td>44, 66</td>
</tr>
<tr>
<td>Kelly, M.B.</td>
<td>63</td>
<td>Kling, R.</td>
<td>86</td>
</tr>
<tr>
<td>Kelly, S.M.</td>
<td>17, 19</td>
<td>Klockgether, T.</td>
<td>71</td>
</tr>
<tr>
<td>Kelly, T.H.</td>
<td>18, 63, 94</td>
<td>Kloczynski, T.</td>
<td>28, 69</td>
</tr>
<tr>
<td>Kemp, J.</td>
<td>87</td>
<td>Knealing, T.W.</td>
<td>3</td>
</tr>
<tr>
<td>Kenna, G.A.</td>
<td>25</td>
<td>Knight, D.K.</td>
<td>64</td>
</tr>
<tr>
<td>Kennedy, C.L.</td>
<td>10</td>
<td>Knight, K.</td>
<td>70</td>
</tr>
<tr>
<td>Kennedy, J.L.</td>
<td>25, 71</td>
<td>Knisely, J.S.</td>
<td>59, 91</td>
</tr>
<tr>
<td>Kenny, C.A.</td>
<td>19, 33</td>
<td>Knoeller, G.</td>
<td>72</td>
</tr>
<tr>
<td>Kenny, P.</td>
<td>32</td>
<td>Knowlton, A.</td>
<td>86</td>
</tr>
<tr>
<td>Kerndt, P.</td>
<td>47, 88</td>
<td>Knudsen, J.R.</td>
<td>46</td>
</tr>
<tr>
<td>Kerstetter, K.A.</td>
<td>49, 55</td>
<td>Knudson, I.M.</td>
<td>55</td>
</tr>
<tr>
<td>Kertesz, S.G.</td>
<td>3, 58, 85</td>
<td>Ko, M.C.</td>
<td>80</td>
</tr>
<tr>
<td>Kerwin, M.</td>
<td>18</td>
<td>Koblin, B.</td>
<td>20</td>
</tr>
<tr>
<td>Kessler, F.K.</td>
<td>54</td>
<td>Koek, W.</td>
<td>4</td>
</tr>
<tr>
<td>Keyes, K.</td>
<td>35, 42</td>
<td>Kohut, S.J.</td>
<td>23, 52</td>
</tr>
<tr>
<td>Kholan, M.</td>
<td>4</td>
<td>Köllgen, H.</td>
<td>71</td>
</tr>
<tr>
<td>Khroyan, T.</td>
<td>2</td>
<td>Kollins, S.H.</td>
<td>40</td>
</tr>
<tr>
<td>Kidorf, M.S.</td>
<td>22, 26</td>
<td>Kolodziej, M.E.</td>
<td>60</td>
</tr>
<tr>
<td>Kiertscher, S.M.</td>
<td>20</td>
<td>Koob, G.F.</td>
<td>4</td>
</tr>
<tr>
<td>Kiguchi, N.</td>
<td>78</td>
<td>Korostynski, M.</td>
<td>34</td>
</tr>
<tr>
<td>Kilby, S.</td>
<td>57</td>
<td>Kosten, T.</td>
<td>19</td>
</tr>
<tr>
<td>Kosten, T.A.</td>
<td>11, 41, 80</td>
<td>Kosten, T.R.</td>
<td>11, 26, 37, 41, 57, 80, 94</td>
</tr>
<tr>
<td>Kosten, T.R.</td>
<td>11, 26</td>
<td>Kourniotis, E.</td>
<td>40</td>
</tr>
<tr>
<td>Kowal, B.P.</td>
<td>39, 40</td>
<td>Kowaleczyk, W.J.</td>
<td>54, 73</td>
</tr>
<tr>
<td>Kozlov, A.A.</td>
<td>23, 86</td>
<td>Kozlov, A.P.</td>
<td>22, 23</td>
</tr>
<tr>
<td>Kramer, L.A.</td>
<td>37, 69</td>
<td>Kranzler, H.</td>
<td>46</td>
</tr>
<tr>
<td>Kraus, L.</td>
<td>59, 82</td>
<td>Kreek, M.J.</td>
<td>5, 8, 9, 10, 34, 68, 71, 76, 78, 79</td>
</tr>
<tr>
<td>Kreiner, P.</td>
<td>44</td>
<td>Krikschiukaita, K.</td>
<td>29</td>
</tr>
<tr>
<td>Krishnan, S.</td>
<td>12</td>
<td>Krishnan-Sarin, S.</td>
<td>28, 69, 73, 96</td>
</tr>
<tr>
<td>Kritz, S.A.</td>
<td>21, 46, 72, 90</td>
<td>Kronstrand, R.</td>
<td>33</td>
</tr>
<tr>
<td>Krupitsky, E.</td>
<td>16, 17</td>
<td>Kruzich, P.J.</td>
<td>55</td>
</tr>
<tr>
<td>Kryatova, O.</td>
<td>12</td>
<td>Kubiaik, S.</td>
<td>84</td>
</tr>
<tr>
<td>Kufahl, P.R.</td>
<td>24</td>
<td>Kuoppasalmi, K.</td>
<td>30</td>
</tr>
<tr>
<td>Kuper, T.</td>
<td>47</td>
<td>Kuh, J.</td>
<td>63</td>
</tr>
<tr>
<td>Kulaga, A.</td>
<td>91</td>
<td>Kumar, A.</td>
<td>37</td>
</tr>
<tr>
<td>Kuntz, K.L.</td>
<td>34</td>
<td>Kuo, M.</td>
<td>45</td>
</tr>
<tr>
<td>Kuropasalmi, K.</td>
<td>30</td>
<td>Kurtz, S.P.</td>
<td>13, 42, 44, 45</td>
</tr>
<tr>
<td>Kurokawa, K.</td>
<td>79, 80</td>
<td>Kurokawa, K.</td>
<td>35</td>
</tr>
<tr>
<td>Kurokawa, T.</td>
<td>35</td>
<td>Kurokawa, T.</td>
<td>35</td>
</tr>
<tr>
<td>Kuzumaki, N.</td>
<td>54</td>
<td>Kurokawa, T.</td>
<td>35</td>
</tr>
<tr>
<td>Ladewig, D.</td>
<td>16, 18</td>
<td>Lam, W.K.</td>
<td>74, 86</td>
</tr>
<tr>
<td>Author Name</td>
<td>Page Numbers</td>
<td>Alternate Names</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Lamb, R.J.</td>
<td>52, 69, 82</td>
<td>Levine, S.</td>
<td></td>
</tr>
<tr>
<td>Lamberg, S.</td>
<td>89</td>
<td>Levinson, M.</td>
<td></td>
</tr>
<tr>
<td>Lambert-Harris, C.A.</td>
<td>15</td>
<td>Levitin, T.</td>
<td></td>
</tr>
<tr>
<td>Landavazo, T.</td>
<td>12</td>
<td>Levin, O.</td>
<td></td>
</tr>
<tr>
<td>Landes, R.</td>
<td>39</td>
<td>Levy, R.</td>
<td></td>
</tr>
<tr>
<td>Landry, M.</td>
<td>90</td>
<td>Lewin, A.H.</td>
<td></td>
</tr>
<tr>
<td>Lane, S.D.</td>
<td>34, 56, 69</td>
<td>Lewis, S.</td>
<td></td>
</tr>
<tr>
<td>Lanfranco, M.F.</td>
<td>79</td>
<td>Li, J.</td>
<td></td>
</tr>
<tr>
<td>Lang, J.</td>
<td>89</td>
<td>Li, M.D.</td>
<td></td>
</tr>
<tr>
<td>Langer, S.</td>
<td>56</td>
<td>Li, N.</td>
<td></td>
</tr>
<tr>
<td>Langevin, D.</td>
<td>37, 69</td>
<td>Li, S.J.</td>
<td></td>
</tr>
<tr>
<td>Langleben, D.</td>
<td>94</td>
<td>Li, X.</td>
<td></td>
</tr>
<tr>
<td>Lankenau, S.E.</td>
<td>22, 84</td>
<td>Li, Y.</td>
<td></td>
</tr>
<tr>
<td>Lapham, S.</td>
<td>36</td>
<td>Liautaud, J.</td>
<td></td>
</tr>
<tr>
<td>Lappaleinen, J.</td>
<td>71</td>
<td>Liberto, J.G.</td>
<td></td>
</tr>
<tr>
<td>Laranjeira, R.R.</td>
<td>96</td>
<td>Libman, H.</td>
<td></td>
</tr>
<tr>
<td>Laurence, J.J.</td>
<td>38</td>
<td>Libretto, S.</td>
<td></td>
</tr>
<tr>
<td>Larkby, C.</td>
<td>63</td>
<td>Lieb, R.</td>
<td></td>
</tr>
<tr>
<td>Larkins, S.</td>
<td>21</td>
<td>Liebling, C.</td>
<td></td>
</tr>
<tr>
<td>LaRowe, S.</td>
<td>8, 19, 57, 78</td>
<td>Libschtz, J.</td>
<td></td>
</tr>
<tr>
<td>Larsen, B.</td>
<td>89</td>
<td>Liguori, A.</td>
<td></td>
</tr>
<tr>
<td>Larson, E.B.</td>
<td>55</td>
<td>Lile, J.A.</td>
<td></td>
</tr>
<tr>
<td>Latimer, W.W.</td>
<td>14, 21, 43, 62</td>
<td>Lim, K.</td>
<td></td>
</tr>
<tr>
<td>Lavenhagen, J.</td>
<td>36</td>
<td>Lin, J.L.</td>
<td></td>
</tr>
<tr>
<td>Latka, M.</td>
<td>86</td>
<td>Lin, S.</td>
<td></td>
</tr>
<tr>
<td>Latkin, C.A.</td>
<td>17, 19, 22, 43</td>
<td>Linares Scott, T.</td>
<td></td>
</tr>
<tr>
<td>Lau, S.</td>
<td>11</td>
<td>Lincoln, M.F.</td>
<td></td>
</tr>
<tr>
<td>Laudet, A.B.</td>
<td>48, 83</td>
<td>Lindsay, J.</td>
<td></td>
</tr>
<tr>
<td>Lavery, M.E.</td>
<td>64</td>
<td>Lindsey, K.P.</td>
<td></td>
</tr>
<tr>
<td>Lavie, E.</td>
<td>11, 42, 60, 83</td>
<td>Ling, W.</td>
<td></td>
</tr>
<tr>
<td>Lawrental, E.</td>
<td>9</td>
<td>3, 18, 29, 89, 90</td>
<td>Linkugel, J.L.</td>
</tr>
<tr>
<td>Lawrinson, P.</td>
<td>91</td>
<td>Linnebank, M.</td>
<td></td>
</tr>
<tr>
<td>Lawson, A.L.</td>
<td>21, 84</td>
<td>Lintzeris, N.</td>
<td></td>
</tr>
<tr>
<td>Le Foll, B.</td>
<td>2, 28</td>
<td>Liss, T.</td>
<td></td>
</tr>
<tr>
<td>Lebeau, B.D.</td>
<td>72</td>
<td>Listerud, J.</td>
<td></td>
</tr>
<tr>
<td>Lebeau, B.</td>
<td>18</td>
<td>Litwin, A.H.</td>
<td></td>
</tr>
<tr>
<td>Lebeau, R.</td>
<td>24</td>
<td>Liu, W.</td>
<td></td>
</tr>
<tr>
<td>Lebrao, M.</td>
<td>23</td>
<td>Liu, X.</td>
<td></td>
</tr>
<tr>
<td>Ledgerwood, D.M.</td>
<td>64</td>
<td>Livengood, L.B.</td>
<td></td>
</tr>
<tr>
<td>Lee, C.</td>
<td>62</td>
<td>Llorca, P.M.</td>
<td></td>
</tr>
<tr>
<td>Lee, D.E.</td>
<td>36, 59, 72</td>
<td>Llorens, N.</td>
<td></td>
</tr>
</tbody>
</table>

Page 108
<table>
<thead>
<tr>
<th>Author</th>
<th>Page Numbers</th>
<th>Author</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Llosa, L.</td>
<td>11</td>
<td>Madani, F.</td>
<td>15</td>
</tr>
<tr>
<td>Llosa, T.</td>
<td>11</td>
<td>Madden, P.A.</td>
<td>82</td>
</tr>
<tr>
<td>Lloyd, J.J.</td>
<td>17, 87</td>
<td>Madray, C.</td>
<td>90</td>
</tr>
<tr>
<td>Lobo, D.S.</td>
<td>25</td>
<td>Maier, W.</td>
<td>71</td>
</tr>
<tr>
<td>Lofwall, M.R.</td>
<td>73, 84</td>
<td>Maeda, T.</td>
<td>78</td>
</tr>
<tr>
<td>London, E.D.</td>
<td>38</td>
<td>Magis-Rodriguez, C.</td>
<td>43</td>
</tr>
<tr>
<td>Looby, A.</td>
<td>44, 75</td>
<td>Magura, S.</td>
<td>41, 73</td>
</tr>
<tr>
<td>Loos, D.K.</td>
<td>91</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Lopatko, O.V.</td>
<td>12</td>
<td>Mahadevan, M.</td>
<td>46</td>
</tr>
<tr>
<td>Lopez, I.</td>
<td>57</td>
<td>Mahoney, III, J.J.</td>
<td>33, 41</td>
</tr>
<tr>
<td>Lopez, J.C.</td>
<td>53</td>
<td>Maier, W.</td>
<td>71</td>
</tr>
<tr>
<td>Lopez, M.F.</td>
<td>81</td>
<td>Maisto, S.A.</td>
<td>58</td>
</tr>
<tr>
<td>Lópes-Quintero, C.</td>
<td>13</td>
<td>Maitre, C.</td>
<td>43</td>
</tr>
<tr>
<td>Lord, S.E.</td>
<td>44, 90</td>
<td>Malberg, D.</td>
<td>88</td>
</tr>
<tr>
<td>Lorin, L.</td>
<td>44</td>
<td>Malcolm, R.J.</td>
<td>19, 57, 58, 66</td>
</tr>
<tr>
<td>Losonczy, M.</td>
<td>63</td>
<td>Malina, M.</td>
<td>5</td>
</tr>
<tr>
<td>Lott, D.C.</td>
<td>15</td>
<td>Malison, R.T.</td>
<td>20, 57</td>
</tr>
<tr>
<td>Lou, C.</td>
<td>43</td>
<td>Mallya, G.</td>
<td>75</td>
</tr>
<tr>
<td>Lovallo, W.R.</td>
<td>69, 92</td>
<td>Malta, M.</td>
<td>47</td>
</tr>
<tr>
<td>Lowen, S.B.</td>
<td>37</td>
<td>Manari, A.</td>
<td>75</td>
</tr>
<tr>
<td>Lozada, R.</td>
<td>22, 32, 43</td>
<td>Mancha, B.E.</td>
<td>21, 43</td>
</tr>
<tr>
<td>Lorin, L.</td>
<td>44</td>
<td>Mancino, M.J.</td>
<td>6, 16, 40, 57</td>
</tr>
<tr>
<td>Lubansky, J.</td>
<td>88</td>
<td>Manik-Perlman, T.</td>
<td>64</td>
</tr>
<tr>
<td>Lukacs, N.W.</td>
<td>80</td>
<td>Mandau, M.</td>
<td>5</td>
</tr>
<tr>
<td>Lukas, S.E.</td>
<td>37, 53, 59, 69, 75, 80, 82</td>
<td>Mandell, W.</td>
<td>64</td>
</tr>
<tr>
<td>Lum, P.</td>
<td>43, 72</td>
<td>Mangrum, L.</td>
<td>35, 41</td>
</tr>
<tr>
<td>Lundahl, L.H.</td>
<td>13, 93</td>
<td>Manser, K.</td>
<td>72</td>
</tr>
<tr>
<td>Luo, X.</td>
<td>47</td>
<td>Manser, S.T.</td>
<td>45</td>
</tr>
<tr>
<td>Lynch, F.</td>
<td>43</td>
<td>Mantlwa, F.</td>
<td>87</td>
</tr>
<tr>
<td>Lynch, K.G.</td>
<td>57, 58, 60, 83, 87</td>
<td>Mantsch, J.</td>
<td>49</td>
</tr>
<tr>
<td>Lynch, W.J.</td>
<td>27</td>
<td>Mantisios, A.</td>
<td>32, 43</td>
</tr>
<tr>
<td>Lynskey, M.T.</td>
<td>82, 92</td>
<td>Manubay, J.</td>
<td>54</td>
</tr>
<tr>
<td>Lyoo, I.K.</td>
<td>37, 71</td>
<td>Marchei, E.</td>
<td>53</td>
</tr>
<tr>
<td>Ma, J.Z.</td>
<td>71</td>
<td>Marcinkiewcz, C.</td>
<td>77</td>
</tr>
<tr>
<td>Maalouf, W.E.</td>
<td>19</td>
<td>Mardiatic, R.</td>
<td>22</td>
</tr>
<tr>
<td>Maccarelli, L.M.</td>
<td>84</td>
<td>Mardikian, P.</td>
<td>19, 57</td>
</tr>
<tr>
<td>MacDougall, M.R.</td>
<td>37, 69</td>
<td>Mari, J.</td>
<td>46</td>
</tr>
<tr>
<td>Maciel, L.A.</td>
<td>36</td>
<td>Mariani, J.J.</td>
<td>42, 57</td>
</tr>
<tr>
<td>MacKerell, A.D.</td>
<td>12</td>
<td>Markou, A.</td>
<td>2</td>
</tr>
<tr>
<td>Mackesy-Amiti, M.E.</td>
<td>86</td>
<td>Marlowe, D.B.</td>
<td>3, 44, 60, 88</td>
</tr>
<tr>
<td>MacKillop, J.</td>
<td>36</td>
<td>Maroga, C.</td>
<td>87</td>
</tr>
<tr>
<td>MacKinnon, S.M.</td>
<td>38</td>
<td>Maroga, C.</td>
<td>87</td>
</tr>
<tr>
<td>Author Index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCorvy, J.D. 77</td>
<td>Menikov, A. 14</td>
<td>Molonyane, S. 87</td>
<td></td>
</tr>
<tr>
<td>McCoy, C.B. 27, 47</td>
<td>Mennis, J. 64</td>
<td>Monks, T. 11</td>
<td></td>
</tr>
<tr>
<td>McCracken, J.T. 34</td>
<td>Menoyo, E. 4</td>
<td>Montebello, M.E. 95</td>
<td></td>
</tr>
<tr>
<td>McCurdy, C.R. 12</td>
<td>Meredith, G.E. 79</td>
<td>Monteiro, M. 47</td>
<td></td>
</tr>
<tr>
<td>McCurdy, S. 87</td>
<td>Mericle, A.A. 41</td>
<td>Monterosso, J. 38</td>
<td></td>
</tr>
<tr>
<td>McDonald, C.L. 44</td>
<td>Merrill, J. 45</td>
<td>Monti, P.M. 24, 38, 80</td>
<td></td>
</tr>
<tr>
<td>McDonald, P. 53</td>
<td>Mertens, J. 43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McDouggall, S.A. 24</td>
<td>Mesangeau, C. 12</td>
<td>Monto, A. 20</td>
<td></td>
</tr>
<tr>
<td>McFadden, M.E. 14</td>
<td>Messina, N.P. 88</td>
<td>Montoya, I.D. 19, 67</td>
<td></td>
</tr>
<tr>
<td>McFetridge, A. 96</td>
<td>Metcalfe, J.A. 33</td>
<td>Moody, D.E. 51</td>
<td></td>
</tr>
<tr>
<td>McGeary, J. 80</td>
<td>Michaels, C.C. 8, 76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGovern, M.P. 15, 63</td>
<td>Meyers, R.J. 90</td>
<td>Moore, B.C. 18, 24, 45</td>
<td></td>
</tr>
<tr>
<td>McHugh, R. 41</td>
<td>Mezghanni, M. 3</td>
<td>Moore, J. 20</td>
<td></td>
</tr>
<tr>
<td>McIntosh, S. 10</td>
<td>Mezzieh, A.C. 86</td>
<td>Moore, R.J. 24</td>
<td></td>
</tr>
<tr>
<td>McIntyre, S.A. 14</td>
<td>Micah, C.C. 8, 76</td>
<td>Morales, M. 44</td>
<td></td>
</tr>
<tr>
<td>McKay, J.R. 58</td>
<td>Mickiewicz, A.L. 68</td>
<td>Moran, P. 14</td>
<td></td>
</tr>
<tr>
<td>Mcke, S.A. 9, 63</td>
<td>Miguëns, M. 56</td>
<td>Morgan, D. 29</td>
<td></td>
</tr>
<tr>
<td>McKinchar, T.L. 57</td>
<td>Miller, M.D. 37</td>
<td>Morgan, P.T. 20, 57</td>
<td></td>
</tr>
<tr>
<td>McReay, J. 80</td>
<td>Millson, M. 46</td>
<td>Morgan, R.W. 77</td>
<td></td>
</tr>
<tr>
<td>Mclelan, A.T. 61, 87</td>
<td>Milby, J.B. 3, 58</td>
<td>Morgan-Lopez, A.A. 65</td>
<td></td>
</tr>
<tr>
<td>McMahon, L. 93</td>
<td>Millo, L. 62</td>
<td>Moreavek, J. 15</td>
<td></td>
</tr>
<tr>
<td>McMahon, T.J. 24</td>
<td>Miller, J. 49</td>
<td>Moreira, E.C. 63</td>
<td></td>
</tr>
<tr>
<td>McNeil, J.F. 75</td>
<td>Miller, L.L. 8</td>
<td>Morgan, D. 29</td>
<td></td>
</tr>
<tr>
<td>McNicholas, L. 45</td>
<td>Miller, S. 90</td>
<td>Morgan, R.W. 77</td>
<td></td>
</tr>
<tr>
<td>McQueeney, T. 81, 94</td>
<td>Miller, M.D. 37</td>
<td>Moran, J.I. 54, 55</td>
<td></td>
</tr>
<tr>
<td>McRae, A.L. 8, 41, 48, 59, 96</td>
<td>Milosevic, A. 13</td>
<td>Moreo, C.E. 27</td>
<td></td>
</tr>
<tr>
<td>McWilliams, S.B. 69</td>
<td>Minnerly, A.C. 55</td>
<td>Moskalewicz, J. 22</td>
<td></td>
</tr>
<tr>
<td>Meade, C.S. 21</td>
<td>Minnes, S. 14, 27</td>
<td>Moskau, M. 71</td>
<td></td>
</tr>
<tr>
<td>Medina, K.L. 81, 94</td>
<td>Mintzer, M.Z. 4, 16</td>
<td>Motaparthy, V. 89</td>
<td></td>
</tr>
<tr>
<td>Medina-Mora, M. 93</td>
<td>Mirhej, G. 46</td>
<td>Moukaddam, N. 34, 59</td>
<td></td>
</tr>
<tr>
<td>Medaloff, D.R. 84</td>
<td>Mitchell, E. 19, 94</td>
<td>Moura, Y.G. 15</td>
<td></td>
</tr>
<tr>
<td>Me-Lee, D. 90</td>
<td>Mitchell, J. 90</td>
<td>Muchowski, P. 60</td>
<td></td>
</tr>
<tr>
<td>Meissler, J.J. 20</td>
<td>Mitchell, J.M. 52</td>
<td>Muck, R.D. 90</td>
<td></td>
</tr>
<tr>
<td>Melanko, S. 39</td>
<td>Mitchell, M.M. 21, 43</td>
<td>Mujaya, S. 87</td>
<td></td>
</tr>
<tr>
<td>Melin, P. 17, 72, 89</td>
<td>Miyagawa, K. 80</td>
<td>Mun, E.Y. 19</td>
<td></td>
</tr>
<tr>
<td>Mell, H. 89</td>
<td>Miyata, H. 78</td>
<td>Munafio, M. 23</td>
<td></td>
</tr>
<tr>
<td>Mello, N.K. 38, 55, 68</td>
<td>Miyoshi, K. 54, 80</td>
<td>Munoz-Plaza, C. 21</td>
<td></td>
</tr>
<tr>
<td>Meltzer, D. 69</td>
<td>Moeller, F. 69</td>
<td>Moskau, M. 71</td>
<td></td>
</tr>
<tr>
<td>Meltzer, P.C. 12</td>
<td>Moeller, F.G. 34, 37, 56, 94</td>
<td>Motaparthy, V. 89</td>
<td></td>
</tr>
<tr>
<td>Mendelson, J.E. 75</td>
<td>Mokri, A. 2, 16, 22, 45</td>
<td>Moukaddam, N. 34, 59</td>
<td></td>
</tr>
<tr>
<td>Mendelson, J.H. 6, 38, 55</td>
<td>Moleeko, A.G. 87</td>
<td>Moura, Y.G. 15</td>
<td></td>
</tr>
<tr>
<td>Mendelson, T. 62</td>
<td>Molfenter, T. 90</td>
<td>Muchowski, P. 60</td>
<td></td>
</tr>
<tr>
<td>Mendoza-Garcia, M. 23</td>
<td>Molonyane, S. 87</td>
<td>Munafio, M. 23</td>
<td></td>
</tr>
</tbody>
</table>
AUTHOR INDEX

Muratake, T. 35  Nestler, E.J. 79  O'Connor, P. 18, 45
Murnane, A.C. 9, 36  Neubauer, D. 95  O'Dell, L.E. 28
Murphy, J.G. 36  Neufeld, K.J. 26  O'Driscoll, K. 29
Murphy, M.K. 60  Neugebauer, N.M. 78  O'Grady, K.E. 17, 19,
                      Neumark, Y. 13, 20  22, 92
Nabeshima, T. 77, 78  Newcombe, D. 22  O'Hara, K. 68, 71
Nader, M.A. 24, 36  Newcorn, J. 36  O'Laco, E. 19
Nader, S. 24  Newman, A.H. 56  O'Mahoney, B. 4, 11
Nagai, T. 78  Newman, J. 24  O'Malley, S. 28, 69
Nagel, B.J. 81  Newton, T.F. 9, 19, 58
Nagumo, Y. 80  33, 34, 41  Oga, Y. 35
Nahar, N.S. 66  Neznanov, C. 17  Oh, S. 37
Najavits, L.M. 19  Ng, D. 86  Okao, E.O. 66
Nakajima, A. 77  Niaura, R. 94  Olbrisch, M.E. 84
Nakamichi, N. 78  Nicastri, S. 58  Oldham, R. 59
Nakamoto, K. 85  Nicolai, L.M. 86  Oliveira, L.G. 47, 59
Nakamoto, S. 58  Nichols, R. 88  Oliveto, A. 6, 16,
Nakayama, K. 78  Nicholson, K.L. 12, 77  40, 57
Nam-Karp, J. 89  Nickerson, L.D. 37, 69, 45
Nandi, A. 43  80  Olsen, Y. 45
Nanjo, K. 54, 80  Nielsen, D.A. 25, 34, Olson, D.P. 38, 75
Nanovskaya, T.N. 61  68  Ondersma, S.J. 62, 86
Napier, T.C. 34, 68, 79  Nielsen, S. 11  Oransky, M. 46
Nappo, S.A. 47, 59  Niikura, K. 54, 80  Orson, F. 80
Naranjo, C. 42  Nitta, A. 77  Orth, B. 59
Narasimhan, D. 80  Niwa, M. 77  Orwa, M.A. 64
Narayana, P.A. 37, 69  Nobuta, H. 28  Orwin, R. 81
Narita, M. 54, 79, 80  Noda, Y. 77  Osborne, A. 21
Natividad, L.A. 28  Nordstrom, B.R. 88  Oser, C.B. 48, 63,
                      75  86  Oser, R. 90
Navarro, H.A. 12, 53, 77  Norman, M.K. 75  Osredkar, T. 24, 79
Navata, Y. 10  North, C.S. 67  Oswald, L.M. 37
Needle, P. 35, 46, 81  Noto, A.R. 15, 36  Otsashvili, D. 17
                       Oursi, S.D. 67  Ott, J. 34, 68, 71
                       Novaes, M.F. 96
Negrón, J. 14, 15  Nunes, D. 85  Otting, A. 71
Negus, S.S. 5, 55, 68, 69  Nunes, E.V. 18, 40, 42, 57, 63, 64, 88, 94
                       Nuttbrock, L.A. 84
Neisewander, J.L. 24, 55, 79  Nuwayser, E.S. 94  Owens, M. 70
                       Nuzzo, P.A. 57, 73  Owens, S.M. 75
Nelson, A.R. 16  O'Brien, C.P. 37, 47, 51, 57, 69, 81
Nelson, E.C. 92  O'Brien, N. 17  Paciorek, A. 43
Nemes, S. 74, 89, 90  Paciorek, A. 43
Nemiroff, D. 64  O'Brien, N. 17  Paciorek, A. 43
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pade, P.A.</td>
<td>59</td>
</tr>
<tr>
<td>Padovano, A.</td>
<td>3</td>
</tr>
<tr>
<td>Page, K.M.</td>
<td>12</td>
</tr>
<tr>
<td>Page-Shafer, K.</td>
<td>72</td>
</tr>
<tr>
<td>Palau, C.</td>
<td>57</td>
</tr>
<tr>
<td>Paliwal, P.</td>
<td>20, 63</td>
</tr>
<tr>
<td>Palmer, R.S.</td>
<td>60</td>
</tr>
<tr>
<td>Panas, L.</td>
<td>44</td>
</tr>
<tr>
<td>Pantalon, M.V.</td>
<td>18, 64</td>
</tr>
<tr>
<td>Pappas, J.E.</td>
<td>94</td>
</tr>
<tr>
<td>Pardo, R.</td>
<td>4</td>
</tr>
<tr>
<td>Parenti, F.</td>
<td>91</td>
</tr>
<tr>
<td>Park, S.</td>
<td>4</td>
</tr>
<tr>
<td>Paronis, C.A.</td>
<td>56, 77</td>
</tr>
<tr>
<td>Parrino, M.</td>
<td>73</td>
</tr>
<tr>
<td>Parsons, J.T.</td>
<td>13, 47</td>
</tr>
<tr>
<td>Parthasarathy, S.</td>
<td>43</td>
</tr>
<tr>
<td>Partilla, J.S.</td>
<td>12</td>
</tr>
<tr>
<td>Parzynski, C.S.</td>
<td>39, 42, 96</td>
</tr>
<tr>
<td>Pascoe, J.E.</td>
<td>80</td>
</tr>
<tr>
<td>Patak, M.</td>
<td>39</td>
</tr>
<tr>
<td>Patapis, N.S.</td>
<td>44, 88</td>
</tr>
<tr>
<td>Patel, K.M.</td>
<td>34</td>
</tr>
<tr>
<td>Patel, V.</td>
<td>36</td>
</tr>
<tr>
<td>Patrikeeva, S.</td>
<td>61</td>
</tr>
<tr>
<td>Patterson, F.</td>
<td>39</td>
</tr>
<tr>
<td>Patterson, T.L.</td>
<td>22, 32</td>
</tr>
<tr>
<td>Patton, G.</td>
<td>14</td>
</tr>
<tr>
<td>Payne, R.</td>
<td>29</td>
</tr>
<tr>
<td>Payne, T.J.</td>
<td>71</td>
</tr>
<tr>
<td>Pechansky, F.</td>
<td>2, 15, 81</td>
</tr>
<tr>
<td>Pechnick, R.N.</td>
<td>28</td>
</tr>
<tr>
<td>Peck, J.</td>
<td>58</td>
</tr>
<tr>
<td>Pecoraro, A.</td>
<td>41</td>
</tr>
<tr>
<td>Pedersen, D.</td>
<td>35</td>
</tr>
<tr>
<td>Peirce, J.</td>
<td>22, 26</td>
</tr>
<tr>
<td>Peles, E.</td>
<td>9, 19, 63, 68</td>
</tr>
<tr>
<td>63, 68</td>
<td></td>
</tr>
<tr>
<td>Peille, J.</td>
<td>88</td>
</tr>
<tr>
<td>Pellegrini, M.</td>
<td>53</td>
</tr>
<tr>
<td>Peltzer, K.F.</td>
<td>66</td>
</tr>
<tr>
<td>Penetar, D.</td>
<td>53, 59</td>
</tr>
<tr>
<td>Peng, X.</td>
<td>34, 79</td>
</tr>
<tr>
<td>Pennay, A.</td>
<td>32</td>
</tr>
<tr>
<td>Pentel, P.R.</td>
<td>70, 78</td>
</tr>
<tr>
<td>Pérez-Castellanos, E.</td>
<td>91</td>
</tr>
<tr>
<td>Perfetti, X.</td>
<td>11</td>
</tr>
<tr>
<td>Perlin, T.E.</td>
<td>35</td>
</tr>
<tr>
<td>Perlman, D.C.</td>
<td>85</td>
</tr>
<tr>
<td>Perrine, S.A.</td>
<td>4</td>
</tr>
<tr>
<td>Perron, B.E.</td>
<td>15</td>
</tr>
<tr>
<td>Perry, E.</td>
<td>69</td>
</tr>
<tr>
<td>Perry, J.L.</td>
<td>24, 57</td>
</tr>
<tr>
<td>Peters, E.N.</td>
<td>39</td>
</tr>
<tr>
<td>Peterson, J.A.</td>
<td>17, 19</td>
</tr>
<tr>
<td>Petijean, S.</td>
<td>16, 18</td>
</tr>
<tr>
<td>Petrakis, I.</td>
<td>71</td>
</tr>
<tr>
<td>Petry, N.M.</td>
<td>64</td>
</tr>
<tr>
<td>Petska, D.</td>
<td>89, 90</td>
</tr>
<tr>
<td>Pettinati, H.M.</td>
<td>57</td>
</tr>
<tr>
<td>Pham, P.</td>
<td>35</td>
</tr>
<tr>
<td>Phaswana-Mafuya, M.N.</td>
<td>66</td>
</tr>
<tr>
<td>Phaswana-Mafuya, N.</td>
<td>66</td>
</tr>
<tr>
<td>Philbin, M.</td>
<td>22</td>
</tr>
<tr>
<td>Phillips, K.T.</td>
<td>20</td>
</tr>
<tr>
<td>Phoenix, N.W.</td>
<td>64</td>
</tr>
<tr>
<td>Piazza, M.</td>
<td>35</td>
</tr>
<tr>
<td>Picetti, R.</td>
<td>8, 34</td>
</tr>
<tr>
<td>Pich, M.L.</td>
<td>44</td>
</tr>
<tr>
<td>Pichini, S.</td>
<td>53</td>
</tr>
<tr>
<td>Piechota, M.</td>
<td>34</td>
</tr>
<tr>
<td>Pieper, B.A.</td>
<td>16</td>
</tr>
<tr>
<td>Pierre, P.J.</td>
<td>36</td>
</tr>
<tr>
<td>Pihlgren, E.</td>
<td>40</td>
</tr>
<tr>
<td>Pimentel, J.</td>
<td>25</td>
</tr>
<tr>
<td>Pinquart, M.</td>
<td>40</td>
</tr>
<tr>
<td>Piomelli, D.</td>
<td>67</td>
</tr>
<tr>
<td>Piper, M.E.</td>
<td>96</td>
</tr>
<tr>
<td>Pittman, B.</td>
<td>57</td>
</tr>
<tr>
<td>Pizarro, N.</td>
<td>11</td>
</tr>
<tr>
<td>Pladna, H.</td>
<td>14</td>
</tr>
<tr>
<td>Plasencia Perez, S.</td>
<td>23</td>
</tr>
<tr>
<td>Platt, D.M.</td>
<td>52, 56, 79</td>
</tr>
<tr>
<td>Pleskac, T.J.</td>
<td>85</td>
</tr>
<tr>
<td>Fletcher, M.</td>
<td>85</td>
</tr>
<tr>
<td>Ploutz-Snyder, R.</td>
<td>72</td>
</tr>
<tr>
<td>Poland, R.</td>
<td>28</td>
</tr>
<tr>
<td>Polen, M.</td>
<td>43</td>
</tr>
<tr>
<td>Poletti, G.</td>
<td>46</td>
</tr>
<tr>
<td>Poling, J.</td>
<td>19, 57, 94</td>
</tr>
<tr>
<td>Pollini, R.A.</td>
<td>43</td>
</tr>
<tr>
<td>Polsky, D.</td>
<td>50</td>
</tr>
<tr>
<td>Polt, R.</td>
<td>5</td>
</tr>
<tr>
<td>Popuch, R.E.</td>
<td>41</td>
</tr>
<tr>
<td>Porrino, L.J.</td>
<td>26, 37</td>
</tr>
<tr>
<td>Porter, M.A.</td>
<td>53</td>
</tr>
<tr>
<td>Potenza, M.</td>
<td>96</td>
</tr>
<tr>
<td>Potter, J.P.</td>
<td>41</td>
</tr>
<tr>
<td>Poupaert, J.H.</td>
<td>12</td>
</tr>
<tr>
<td>Pournaghass-Tehrani, S.</td>
<td>10</td>
</tr>
<tr>
<td>Poznyak, V.</td>
<td>22</td>
</tr>
<tr>
<td>Prado, M.</td>
<td>28</td>
</tr>
<tr>
<td>Prendergast, M.A.</td>
<td>48, 80</td>
</tr>
<tr>
<td>Prescott, A.</td>
<td>28</td>
</tr>
<tr>
<td>Presti, D.E.</td>
<td>53</td>
</tr>
<tr>
<td>Preston, K.L.</td>
<td>3, 19, 58, 60, 90, 94</td>
</tr>
<tr>
<td>Price, R.K.</td>
<td>34</td>
</tr>
<tr>
<td>Primm, B.</td>
<td>90</td>
</tr>
<tr>
<td>Prisinziano, T.</td>
<td>5</td>
</tr>
<tr>
<td>Proano, P.</td>
<td>60</td>
</tr>
<tr>
<td>Pruizinsky, R.</td>
<td>57</td>
</tr>
<tr>
<td>Przewlocki, R.</td>
<td>34</td>
</tr>
<tr>
<td>Pu, M.</td>
<td>17, 32</td>
</tr>
<tr>
<td>Puerta, C.</td>
<td>58</td>
</tr>
<tr>
<td>Pujadas, M.</td>
<td>53</td>
</tr>
<tr>
<td>Purington, L.</td>
<td>12</td>
</tr>
<tr>
<td>Qin, Y.</td>
<td>71</td>
</tr>
<tr>
<td>Quinones-Jenab, V.</td>
<td>54, 55</td>
</tr>
<tr>
<td>Rabkin, J.</td>
<td>82</td>
</tr>
<tr>
<td>Rabon-Stith, K.M.</td>
<td>89</td>
</tr>
<tr>
<td>Raby, W.</td>
<td>57, 63, 94</td>
</tr>
<tr>
<td>Radovanovic, M.</td>
<td>35</td>
</tr>
</tbody>
</table>
AUTHOR INDEX

Ragsdale, K. 84
Raj, V. 4
Ramchand, R. 15
Ramirez, D.R. 55
Ramlow, B. 63
Ramsey, J.L. 24
Randall, M. 71
Randesi, M. 79
Rashchian, N. 14
Ravi, H. 40
Rawls, S.M. 93
Rawson, R.A. 32, 89, 90
Ray, B. 68
Ray, R. 39
Ray, S. 19
Raybuck, J.D. 28
Razzouk, D. 46
Rea, F. 95
Reback, C.J. 58
Redman, J. 13
Reed, B. 5, 34
Reeves, K. 38
Reeves, S. 29
Rehm, J. 65
Reichel, C.M. 34
Reid, M.S. 40, 42
Reitano, K. 29
Renard, D. 24
Renes, S. 66
Renshaw, P.F. 28, 37, 38, 69, 71, 75
Reutenauer, E.L. 97
Reviriego, E. 16, 36
Reyes, J.C. 14, 15
Reynaud, M. 35
Reynolds, B. 39, 48, 96
Reynolds, E. 14
Reynolds, E.K. 14
Rhee, S.H. 88
Rice, K.C. 53, 68, 77
Rich, J.D. 75
Richards, J.B. 56
Riddick, N.V. 36
Ridenour, T. 14, 27
Rieckmann, T. 64
Riggs, P.D. 15, 16
Riley, A.L. 10, 15
Rios, C. 24
Ríos-Bedoya, C.F. 82, 92
Ripel, Á. 78
Risinger, R. 49
Risk, N.K. 34
Ritter, J.K. 54
Robertson, M. 72
Robles, R.R. 14, 15
Robe, A. 91
Roddy, J.K. 24
Rodriguez, A. 47
Rodriguez, J. 59
Rodriguez, T. 93
Rogel, S. 92
Rogers, R. 62
Rogers, T.J. 54
Rogawski, M. 12
Rogers, J. 68
Rogawski, M. 12
Rogers, J. 68
Rogers, J.M. 66
Rohde, L. 81
Rohde, M. 95
Rohes, M.J. 40
Rohsenow, D.J. 25, 38, 80
Rohan, M. 38
Rohn, M.A. 7, 65, 89, 91
Rohman, R.B. 12
Rokito, L. 36
Rots, M. 21, 40
Rouault, M. 34
Rounsaville, B.J. 38, 41
Roussy, E.T. 47
Ruedi-Bettischen, D. 79
Rukstalis, M. 39
Runyon, S.P. 12
Runyon, S.P. 12
Rutkowski, B.A. 32, 90
Rutledge, M. 53
Ryan, E.T. 69, 80
Rylkova, D. 28
Sabet, K. 65
Sabo, A. 44
Sacco, K.A. 97
Saccone, P.A. 73
Sacks, J.Y. 88
Sacks, S. 70
Saffroy, R. 35
Safron, A. 66
Sagastegui, S. 46
Sage, R.E. 60, 90
Sage, R.E. 60, 90
<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saito, K.</td>
<td>77</td>
</tr>
<tr>
<td>Saitz, R.</td>
<td>29, 85</td>
</tr>
<tr>
<td>Sakai, J.T.</td>
<td>35</td>
</tr>
<tr>
<td>Saladin, M.E.</td>
<td>9, 48, 96</td>
</tr>
<tr>
<td>Salama, C.H.</td>
<td>43, 62</td>
</tr>
<tr>
<td>Salazar, J.</td>
<td>22</td>
</tr>
<tr>
<td>Saldana, B.S., C.</td>
<td>58</td>
</tr>
<tr>
<td>Salem, A.</td>
<td>6</td>
</tr>
<tr>
<td>Salomonsen-Sautel, S.</td>
<td>88</td>
</tr>
<tr>
<td>Saman, D.</td>
<td>14, 25</td>
</tr>
<tr>
<td>Samet, J.H.</td>
<td>29, 85</td>
</tr>
<tr>
<td>Samper, T.</td>
<td>18</td>
</tr>
<tr>
<td>Samples, S.</td>
<td>85</td>
</tr>
<tr>
<td>Sampson, R.</td>
<td>18</td>
</tr>
<tr>
<td>Samuels, B.</td>
<td>64</td>
</tr>
<tr>
<td>Sanchez, A.</td>
<td>57</td>
</tr>
<tr>
<td>Sanchez, E.S.</td>
<td>27</td>
</tr>
<tr>
<td>Sanchez, J.F.</td>
<td>62</td>
</tr>
<tr>
<td>Sanchez, Z.M.</td>
<td>47</td>
</tr>
<tr>
<td>Sander, L.M.</td>
<td>13</td>
</tr>
<tr>
<td>Sanders, A.V.</td>
<td>77</td>
</tr>
<tr>
<td>Sanders, B.</td>
<td>22, 84</td>
</tr>
<tr>
<td>Sandler dela Cruz, A.M.</td>
<td>54</td>
</tr>
<tr>
<td>Sands, B.</td>
<td>48</td>
</tr>
<tr>
<td>Sannerud, C.A.</td>
<td>51, 91</td>
</tr>
<tr>
<td>Santa Ana, E.J.</td>
<td>38</td>
</tr>
<tr>
<td>Santana, N.</td>
<td>87</td>
</tr>
<tr>
<td>Santis, R.</td>
<td>35, 59</td>
</tr>
<tr>
<td>Sarabia, S.</td>
<td>46</td>
</tr>
<tr>
<td>Sargeant, M.N.</td>
<td>9, 14, 60</td>
</tr>
<tr>
<td>Saria, A.</td>
<td>68</td>
</tr>
<tr>
<td>Sarid-Segal, O.</td>
<td>37</td>
</tr>
<tr>
<td>Sason, A.</td>
<td>63</td>
</tr>
<tr>
<td>Satayathum, S.</td>
<td>14, 27</td>
</tr>
<tr>
<td>Sato, S.M.</td>
<td>9</td>
</tr>
<tr>
<td>Sato-Bigbee, C.</td>
<td>27</td>
</tr>
<tr>
<td>Sawyer, G.W.</td>
<td>5</td>
</tr>
<tr>
<td>Sawyer, K.M.</td>
<td>19</td>
</tr>
<tr>
<td>Saxon, A.J.</td>
<td>45</td>
</tr>
<tr>
<td>Sayre, S.L.</td>
<td>59</td>
</tr>
<tr>
<td>Schaefer, T.</td>
<td>81</td>
</tr>
<tr>
<td>Schaub, M.</td>
<td>83</td>
</tr>
<tr>
<td>Schenk, S.</td>
<td>12</td>
</tr>
<tr>
<td>Schepis, T.S.</td>
<td>73, 96</td>
</tr>
<tr>
<td>Scherr, J.F.</td>
<td>82</td>
</tr>
<tr>
<td>Schiffer, W.K.</td>
<td>36, 69</td>
</tr>
<tr>
<td>Schlussman, S.D.</td>
<td>76</td>
</tr>
<tr>
<td>Schlyter, F.</td>
<td>85, 87</td>
</tr>
<tr>
<td>Schmiege, S.</td>
<td>88</td>
</tr>
<tr>
<td>Schmitt, N.</td>
<td>63, 86</td>
</tr>
<tr>
<td>Schmitt, J.M.</td>
<td>18, 34, 87</td>
</tr>
<tr>
<td>Schmucktiz, C.</td>
<td>11</td>
</tr>
<tr>
<td>Schneider, J.</td>
<td>42</td>
</tr>
<tr>
<td>Schnell, S.H.</td>
<td>44, 66, 43, 62, 87</td>
</tr>
<tr>
<td>Schonel, K.</td>
<td>74</td>
</tr>
<tr>
<td>Schoeneberger, M.L.</td>
<td>88</td>
</tr>
<tr>
<td>Schori, M.</td>
<td>9</td>
</tr>
<tr>
<td>Schottenfeld, R.S.</td>
<td>21, 29, 45, 64</td>
</tr>
<tr>
<td>Schreffler, E.R.</td>
<td>49</td>
</tr>
<tr>
<td>Schreiber, E.A.</td>
<td>64</td>
</tr>
<tr>
<td>Schreiber, S.</td>
<td>9, 63</td>
</tr>
<tr>
<td>Schroeder, J.A.</td>
<td>93</td>
</tr>
<tr>
<td>Schroeder, J.R.</td>
<td>19</td>
</tr>
<tr>
<td>Schrott, L.M.</td>
<td>27</td>
</tr>
<tr>
<td>Schulman, B.</td>
<td>45</td>
</tr>
<tr>
<td>Schulz, K.</td>
<td>36</td>
</tr>
<tr>
<td>Schumacher, J.E.</td>
<td>3, 47, 58, 72, 85</td>
</tr>
<tr>
<td>Schuster, A.</td>
<td>84</td>
</tr>
<tr>
<td>Schuster, C.</td>
<td>16</td>
</tr>
<tr>
<td>Schuster, R.M.</td>
<td>9, 60</td>
</tr>
<tr>
<td>Schütz, C.G.</td>
<td>71</td>
</tr>
<tr>
<td>Schwartz, R.P.</td>
<td>17, 18, 19, 22, 87</td>
</tr>
<tr>
<td>Shippenberg, A.D.</td>
<td>94</td>
</tr>
<tr>
<td>Scott, C.K.</td>
<td>21, 41, 60, 83</td>
</tr>
<tr>
<td>Scott, G.</td>
<td>86</td>
</tr>
<tr>
<td>Seal, K.H.</td>
<td>86</td>
</tr>
<tr>
<td>Seals, K.</td>
<td>88</td>
</tr>
<tr>
<td>Sears, E.A.</td>
<td>17</td>
</tr>
<tr>
<td>Secades-Villa, R.</td>
<td>57</td>
</tr>
<tr>
<td>See, R.E.</td>
<td>55, 68</td>
</tr>
<tr>
<td>Segarra, A.C.</td>
<td>55</td>
</tr>
<tr>
<td>Seibyl, J.</td>
<td>28, 69</td>
</tr>
<tr>
<td>Seigal, S.</td>
<td>39</td>
</tr>
<tr>
<td>Seignourel, P.J.</td>
<td>18</td>
</tr>
<tr>
<td>Seip, K.M.</td>
<td>54, 55</td>
</tr>
<tr>
<td>Seishita, M.</td>
<td>77</td>
</tr>
<tr>
<td>Seitz, P.K.</td>
<td>79</td>
</tr>
<tr>
<td>Self, R.L.</td>
<td>80</td>
</tr>
<tr>
<td>Sellers, E.M.</td>
<td>38, 74</td>
</tr>
<tr>
<td>Semmler, A.</td>
<td>71</td>
</tr>
<tr>
<td>Semple, S.</td>
<td>22</td>
</tr>
<tr>
<td>Seno, E.</td>
<td>35</td>
</tr>
<tr>
<td>Seshima, M.</td>
<td>77</td>
</tr>
<tr>
<td>Severino, J.</td>
<td>13, 47</td>
</tr>
<tr>
<td>Severtson, S.G.</td>
<td>14, 21, 43, 62, 87</td>
</tr>
<tr>
<td>Sexton, J.E.</td>
<td>74, 89, 90</td>
</tr>
<tr>
<td>Shaboltas, A.V.</td>
<td>23</td>
</tr>
<tr>
<td>Shack, J.</td>
<td>20</td>
</tr>
<tr>
<td>Shafer, K.</td>
<td>43</td>
</tr>
<tr>
<td>Shaiikh, J.</td>
<td>12</td>
</tr>
<tr>
<td>Shakibaie Smith, S.</td>
<td>18</td>
</tr>
<tr>
<td>Shaller, N.</td>
<td>56</td>
</tr>
<tr>
<td>Shannon, E.E.</td>
<td>81</td>
</tr>
<tr>
<td>Sharma, G.</td>
<td>46</td>
</tr>
<tr>
<td>Sharma, S.</td>
<td>46</td>
</tr>
<tr>
<td>Shawkey, M.</td>
<td>89</td>
</tr>
<tr>
<td>Shelton, K.L.</td>
<td>49</td>
</tr>
<tr>
<td>Shelton, R.</td>
<td>90</td>
</tr>
<tr>
<td>Shen, F.</td>
<td>79</td>
</tr>
<tr>
<td>Shen, J.</td>
<td>62</td>
</tr>
<tr>
<td>Shen, L.</td>
<td>77</td>
</tr>
<tr>
<td>Sheppard, A.B.</td>
<td>78</td>
</tr>
<tr>
<td>Shi, P.</td>
<td>13</td>
</tr>
<tr>
<td>Shi, Y.G.</td>
<td>77</td>
</tr>
<tr>
<td>Shih, M.</td>
<td>81</td>
</tr>
<tr>
<td>Shivers, K.Y.</td>
<td>54</td>
</tr>
<tr>
<td>Shoham, M.</td>
<td>13</td>
</tr>
<tr>
<td>Shoham, V.</td>
<td>40</td>
</tr>
<tr>
<td>Shohat, T.</td>
<td>90</td>
</tr>
<tr>
<td>Sholar, M.B.</td>
<td>38</td>
</tr>
<tr>
<td>Shoptaw, S.</td>
<td>3, 21, 47, 57</td>
</tr>
<tr>
<td>Shrotsbridge, T.</td>
<td>77</td>
</tr>
<tr>
<td>Shu, Y.</td>
<td>81</td>
</tr>
</tbody>
</table>
AUTHOR INDEX

Siegel, A.J. 38
Sieweke, S. 3, 58
Sifaneck, S.J. 15
Sigmon, S.C. 39, 50, 57
Silins, E. 11, 67
Silva, E.A. 36
Silverman, K. 3
Simone, N.M 14
Simpson, A. 39
Simpson, D.D. 65
Simpson, G.R. 27
Simpson, S.A. 96
Sindelar, J. 45
Singer, L.T. 14, 27
Singer, M. 46, 86
Singh, A. 24
Singletary, B. 61
Singleton, E. 33
Sinha, R. 8, 9, 20, 37, 67
Sinitsyna, L. 22
Siiñol, N. 58
Sircar, R. 27
Siroti, A. 38
Skinstad, A.H. 7, 64, 65, 89, 91
Skurtveit, S. 78
Slavina, T. 17
Slaymaker, V. 48
Slesnick, N. 22
Slobodyanyuk, P. 47, 72
Smelson, D.A. 63, 64
Smith, A.R. 29, 96
Smith, B.E. 42
Smith, C. 72
Smith, C.E. 76
Smith, F.L. 54, 77
Smith, J.E. 10, 90
Smith, J.L. 64
Smith, K.J. 80
Smith, M. 31
Smith, M.Y. 44, 65, 66, 93
Smith, S.S. 96
Smyth, E. 72
Smyth, N. 90
Snow, C. 32
Soderman, A.R. 79
Sofuoglu, M. 38, 68
Soldyshev, R. 47, 72
Somogyi, A.A. 12
Song, Y. 47
Sonne, S.C. 40, 42
Sorensen, J. 47
Sorocco, K. 83
Speck, K.J. 65
Spence, R. 35
Spiga, R. 20, 64
Spiller, K. 34
Sproule, B.A. 17, 42, 44
Squires, D. 61
Stockl, P. 68
Stadlin, A. 87
Stahler, G. 64
Staines, H. 22
Stairs, D.J. 78
Staley, J. 28, 69
Stallings, M.C. 35
Stanger, C. 86
Stanick, V. 48
Staton-Tindall, M. 48, 86
Stein, L. 24
Stein, M.D. 20
Steinberg, J.L. 34, 37, 56, 69, 88
Steinley-Bumgarner, M. 35
Steinmiller, C.L. 24, 36
Steinwachs, D.M. 15, 64
Stephens, S.L. 54, 73
Stevens, C.W. 5
Stewart, S. 5
Stiklus, S. 28, 69
Stimson, G.V. 35
Stine, S.M. 16
Stipleman, B. 96
Stitzer, M.L. 3, 16, 96
Stohler, R. 17, 83
Stott, A.L. 48
Stoope, W.W. 11, 94
Storti, S. 61
Stover, S.K. 15, 16, 39
Strain, E.C. 16, 63, 84
Strandberg, J.J. 33, 85
Strasser, A.A. 39
Strasser, J. 16, 18
Strathdee, L. 86
Strathdee, S.A. 17, 22, 32, 43, 47, 86
Strauss, S.M. 21
Streeter, C.C. 37
Strike, C. 46
Striley, C.W. 59, 76
Strong, D. 96
Strutynski, K. 72
Stuart, E.A. 93
Stuebner, N.M. 24
Sturm, K. 68
Su, T.P. 62, 80
Subramaniam, G. 50
Suchman, N. 63, 86
Suga, R. 35
Sugita, W. 90
Suh, J.J.-S. 26, 37
Sulkowski, M. 20
Sullivan, B.N. 65
Sullivan, L. 18, 44, 92
Sullivan, M.A. 54, 73
Sullivan, T. 47
Sumpter, R. 90
Sun, D. 71
Sun, W. 55
Sunahara, R.K. 80
Sung, Y.H. 37
Surratt, H.L. 42, 44, 45, 86
Sussner, B. 63
Suzuki, M. 77, 79, 80
<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
<th>First Author</th>
<th>Last Author</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swann, A.C.</td>
<td>34, 56</td>
<td>Thiele, H.</td>
<td>Tusibulsky, V.L.</td>
<td>11, 75</td>
</tr>
<tr>
<td>Swendsen, J.</td>
<td>42</td>
<td>Thomas, C.</td>
<td>Tull, M.T.</td>
<td>42, 48, 85</td>
</tr>
<tr>
<td>Swift, R.M.</td>
<td>25, 38</td>
<td>Thomas, C.S.</td>
<td>Turner, C.W.</td>
<td>81</td>
</tr>
<tr>
<td>Swingedouw, V.</td>
<td>16</td>
<td>Thomas, D.</td>
<td>Turner, T.</td>
<td>58</td>
</tr>
<tr>
<td>Sykes, A.</td>
<td>86</td>
<td>Thomas, Y.F.</td>
<td>Turner, W.C.</td>
<td>15</td>
</tr>
<tr>
<td>Sylvia, M.</td>
<td>61</td>
<td>Thorner, E.D.</td>
<td>Tuten, M.</td>
<td>17, 62, 63</td>
</tr>
<tr>
<td>Szalay, J.J.</td>
<td>56</td>
<td>Thurmond, A.</td>
<td>Tyson, C.</td>
<td>42</td>
</tr>
<tr>
<td>Szobot, C.M.</td>
<td>81</td>
<td>Thurstone, C.</td>
<td>Tyzios, G.K.</td>
<td>62</td>
</tr>
<tr>
<td>Szumlinski, K.K.</td>
<td>79</td>
<td>Tiburcio, N.J.</td>
<td>Tziortzis, D.</td>
<td>19</td>
</tr>
<tr>
<td>Tabet, M.R.</td>
<td>75</td>
<td>Tidey, J.W.</td>
<td>Tziortzis, D.</td>
<td>19</td>
</tr>
<tr>
<td>Taffé, M.A.</td>
<td>4</td>
<td>Tilekar, S.</td>
<td>Uchtenhagen, A.</td>
<td>22</td>
</tr>
<tr>
<td>Taheri Nakhost, H.</td>
<td>16</td>
<td>Tirado, C.F.</td>
<td>Udo, T.</td>
<td>19</td>
</tr>
<tr>
<td>Tajima, B.M.</td>
<td>40, 74</td>
<td>Tobin, K.E.</td>
<td>Umbricht, A.</td>
<td>94</td>
</tr>
<tr>
<td>Takatsu, M.</td>
<td>80</td>
<td>Todtenkopf, M.S.</td>
<td>Umeno, M.</td>
<td>35</td>
</tr>
<tr>
<td>Takiguchi, M.</td>
<td>58</td>
<td>Toll, L.</td>
<td>Unterwald, E.M.</td>
<td>11, 49, 79</td>
</tr>
<tr>
<td>Takuma, K.</td>
<td>78</td>
<td>Tolliver, B.K.</td>
<td>Uzep, A.</td>
<td>53</td>
</tr>
<tr>
<td>Tamagnan, G.</td>
<td>28, 69</td>
<td>Tolliver, J.M.</td>
<td>Uzep, A.</td>
<td>53</td>
</tr>
<tr>
<td>Tan, Y.L.</td>
<td>41</td>
<td>Tomás, S.</td>
<td>Upadhyaya, A.</td>
<td>96</td>
</tr>
<tr>
<td>Tancer, M.E.</td>
<td>13</td>
<td>Torrjo, M.J.</td>
<td>Upadhyaya, H.P.</td>
<td>39, 95</td>
</tr>
<tr>
<td>Tang, Z.</td>
<td>81</td>
<td>Tomas-Rosello, J.</td>
<td>Urratu, C.</td>
<td>43</td>
</tr>
<tr>
<td>Tansil, D.</td>
<td>16</td>
<td>Tonigan, J.S.</td>
<td>Urbanoski, K.A.</td>
<td>25</td>
</tr>
<tr>
<td>Tapert, S.F.</td>
<td>81, 94</td>
<td>Torrington, M.</td>
<td>Utami, D.S.</td>
<td>22</td>
</tr>
<tr>
<td>Tarquinio, C.</td>
<td>17</td>
<td>Toro, L.</td>
<td>Vaddiparti, K.</td>
<td>59</td>
</tr>
<tr>
<td>Tartarini, W.B.</td>
<td>37</td>
<td>Torrens, M.</td>
<td>Vahabzadeh, M.</td>
<td>3</td>
</tr>
<tr>
<td>Tarter, R.</td>
<td>81</td>
<td>Torres, I.</td>
<td>Vahabzadeh, M.</td>
<td>3</td>
</tr>
<tr>
<td>Tashkin, D.P.</td>
<td>20</td>
<td>Torres, Y.M.</td>
<td>Vandrey, R.G.</td>
<td>16, 96</td>
</tr>
<tr>
<td>Tatom, J.B.</td>
<td>27</td>
<td>Torrjo, M.J.</td>
<td>Vansickel, A.R.</td>
<td>11, 94</td>
</tr>
<tr>
<td>Tavares, H.</td>
<td>25</td>
<td>Torrington, M.</td>
<td>Vanyukov, M.</td>
<td>81</td>
</tr>
<tr>
<td>Tavares, J.</td>
<td>40</td>
<td>Tortajada, S.</td>
<td>Vargas-Lopez, R.</td>
<td>23</td>
</tr>
<tr>
<td>Taxman, F.</td>
<td>70, 86</td>
<td>Toussova, O.</td>
<td>Vassil, K.</td>
<td>57</td>
</tr>
<tr>
<td>Taylor, C.M.</td>
<td>53</td>
<td>Tracy, A.J.</td>
<td>Vashil, B.</td>
<td>19</td>
</tr>
<tr>
<td>Taylor, D.</td>
<td>11</td>
<td>Tracy, K.</td>
<td>Vasheril, T.</td>
<td>10</td>
</tr>
<tr>
<td>Taylor, L.</td>
<td>40</td>
<td>Trafton, J.A.</td>
<td>Vaswan, M.</td>
<td>20</td>
</tr>
<tr>
<td>Tella, S.R.</td>
<td>91</td>
<td>Traviglini, L.A.</td>
<td>Vashil, E.</td>
<td>19</td>
</tr>
<tr>
<td>Templin, T.</td>
<td>16</td>
<td>Traynor, J.R.</td>
<td>Vasyrillo, T.</td>
<td>10</td>
</tr>
<tr>
<td>TenHave, T.R.</td>
<td>58</td>
<td>Treatnet Network, T.</td>
<td>Vawsh, M.</td>
<td>20</td>
</tr>
<tr>
<td>Terwilliger, R.A.</td>
<td>16</td>
<td>Trecki, J.</td>
<td>Vaughn, T.</td>
<td>7</td>
</tr>
<tr>
<td>Teter, C.J.</td>
<td>44, 75</td>
<td>Trifiletti, L.C.</td>
<td>Vawsh, M.</td>
<td>20</td>
</tr>
<tr>
<td>Tetrault, J.M.</td>
<td>44, 92</td>
<td>Trksak, G.H.</td>
<td>Vawsh, M.</td>
<td>20</td>
</tr>
<tr>
<td>Thatcher, D.</td>
<td>16, 95</td>
<td>Tross, S.</td>
<td>Vawsh, M.</td>
<td>20</td>
</tr>
<tr>
<td>Thau, K.</td>
<td>72</td>
<td>Trujols, J.</td>
<td>Vawsh, M.</td>
<td>20</td>
</tr>
<tr>
<td>Author Name</td>
<td>Page Numbers</td>
<td>Page Numbers</td>
<td>Author Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Verbitskaya, E.</td>
<td>17, Walton-Moss, B.</td>
<td>60, White, J.M.</td>
<td>4, 12,</td>
<td>29, 30</td>
</tr>
<tr>
<td>Verduin, M.L.</td>
<td>9, 41, 59</td>
<td>Verduin, M.L.</td>
<td>9, 41, 59</td>
<td>White, S.J.</td>
</tr>
<tr>
<td>Verevochkin, S.</td>
<td>86, Wang, J.</td>
<td>13, 21,</td>
<td>White, W.L.</td>
<td>83</td>
</tr>
<tr>
<td>Verevochkin, S.V.</td>
<td>23</td>
<td>35, 59</td>
<td>Whittaker, K.M.</td>
<td>20</td>
</tr>
<tr>
<td>Versek, B.E.</td>
<td>3, 83, Wang, X.</td>
<td>13</td>
<td>Williams, A.M.</td>
<td>46</td>
</tr>
<tr>
<td>Vessicchio, J.C.</td>
<td>97, Wang, Y.</td>
<td>6</td>
<td>Williams, C.</td>
<td>18, 74</td>
</tr>
<tr>
<td>Vettese, L.C.</td>
<td>5</td>
<td>10, 37,</td>
<td>Williams, M.J.</td>
<td>49, 58, 87</td>
</tr>
<tr>
<td>Vicknasingam, B.</td>
<td>45</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vidal-Infer, A.</td>
<td>18</td>
<td>Ward, E.</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Villano, C.L.</td>
<td>41</td>
<td>Ward, S.J.</td>
<td>8, 10</td>
<td></td>
</tr>
<tr>
<td>Vincent, A.</td>
<td>83</td>
<td>Warner, K.</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Vincent, K.</td>
<td>92</td>
<td>Washington, K.</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Vindenes, V.</td>
<td>78</td>
<td>Watkins, K.</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Vitale, R.M.</td>
<td>62</td>
<td>Watt, M.</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Vlahov, D.</td>
<td>20, 22, Weaver, M.T.</td>
<td>9</td>
<td>Windsor, L.C.</td>
<td>83</td>
</tr>
<tr>
<td>Voci, F.</td>
<td>30, 51, 67</td>
<td>Webb, D.J.</td>
<td>83</td>
<td>Winklbaur, B.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Webster, J.M.</td>
<td>9</td>
<td>Winstanley, E.L.</td>
</tr>
<tr>
<td>Vogel, H.</td>
<td>41</td>
<td>Webster, M.</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Volz, T.J.</td>
<td>79</td>
<td>Wechsberg, W.M.</td>
<td>19, 45</td>
<td>Winters, K.</td>
</tr>
<tr>
<td>von Thomsen, S.</td>
<td>14</td>
<td>Wee, S.</td>
<td>4</td>
<td>Winward, J.</td>
</tr>
<tr>
<td>Vosburg, S.K.</td>
<td>16, 54, 58, 73, 82</td>
<td>Weerts, E.M.</td>
<td>4</td>
<td>Wish, E.</td>
</tr>
<tr>
<td>Vrana, K.E.</td>
<td>34</td>
<td>Weierstall, K.</td>
<td>55</td>
<td>Wisner, K.L.</td>
</tr>
<tr>
<td>Vuchinich, R.E.</td>
<td>3, 58</td>
<td>Weil, J.</td>
<td>89</td>
<td>Wittchen, H.U.</td>
</tr>
<tr>
<td>Wada, K.</td>
<td>11</td>
<td>Weinberger, A.H.</td>
<td>97</td>
<td>Wolkin, A.</td>
</tr>
<tr>
<td>Wagner, F.A.</td>
<td>82, 83</td>
<td>Weiss, F.</td>
<td>8, 80</td>
<td>Wong, D.F.</td>
</tr>
<tr>
<td>Wagner, K.D.</td>
<td>86</td>
<td>Weiss, M.D.</td>
<td>24</td>
<td>Wong, H.</td>
</tr>
<tr>
<td>Wagreich, E.M.</td>
<td>34</td>
<td>Weiss, R.D.</td>
<td>19, 21,</td>
<td>Wong, Y.H.</td>
</tr>
<tr>
<td>Walcher, M.</td>
<td>81</td>
<td>29, 60, 64</td>
<td></td>
<td>Wood, D.S.</td>
</tr>
<tr>
<td>Waldron, H.B.</td>
<td>25, 81</td>
<td>Weiss, S.M.</td>
<td>61</td>
<td>Wood, I.</td>
</tr>
<tr>
<td>Waldron, M.</td>
<td>14</td>
<td>Weissman, E.</td>
<td>41</td>
<td>Wood, R.I.</td>
</tr>
<tr>
<td>Waldrop, A.E.</td>
<td>8, 9, 29, 48, 56</td>
<td>Weisman, E.</td>
<td>28</td>
<td>Woods, J.H.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wells, J.E.</td>
<td>82</td>
<td>Woods, W.L.</td>
</tr>
<tr>
<td>Walker, C.</td>
<td>48</td>
<td>Wenger, G.R.</td>
<td>52</td>
<td>Woody, G.E.</td>
</tr>
<tr>
<td>Walker, E.A.</td>
<td>10</td>
<td>Wenghofer, E.</td>
<td>46</td>
<td>Woolson, R.F.</td>
</tr>
<tr>
<td>Wallace, D.</td>
<td>3, 58</td>
<td>Wertheim, C.</td>
<td>28</td>
<td>Wooters, T.</td>
</tr>
<tr>
<td>Walley, A.Y.</td>
<td>45, 85</td>
<td>Wesnuski, S.A.</td>
<td>61</td>
<td>Worley, M.</td>
</tr>
<tr>
<td>Wallis, A.B.</td>
<td>64</td>
<td>West, B.T.</td>
<td>44</td>
<td>Wright, T.M.</td>
</tr>
<tr>
<td>Wallsten, T.S.</td>
<td>85</td>
<td>Weston, J.L.</td>
<td>16</td>
<td>Wu, G.Y.</td>
</tr>
<tr>
<td>Walsh, S.L.</td>
<td>57, 73</td>
<td>Whitaker, D.</td>
<td>14</td>
<td>Wu, L.</td>
</tr>
<tr>
<td>Walters, V.</td>
<td>62</td>
<td>White, D.</td>
<td>76</td>
<td>Wu, N.S.</td>
</tr>
<tr>
<td>Author</td>
<td>Pages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wu, Y.</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wüllner, U.</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wunsch, M.J.</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xi, Z.</td>
<td>34, 79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xia, Y.</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xu, J.</td>
<td>28, 38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xue, L.</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yager, L.</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yama, M.</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamada, K.</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamada, Y.</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamamoto, A.</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamamoto, C.</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamamoto, R.</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamamoto, T.</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamashita, M.</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yang, K.</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yang, P.B.</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yang, Y.</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yang, Z.</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yapp, R.</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yaragudri, V.K.</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yasseen, B.</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ye, W.</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yeatts, S.D.</td>
<td>9, 48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yemini, Z.</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yi, R.</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yoo, S.</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yoon, J.H.</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young, A.M.</td>
<td>10, 77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuferov, V.</td>
<td>5, 34, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yurovsky, P.</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zack, M.</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zack, S.L.</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zanis, D.A.</td>
<td>61, 87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zarza, M.</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zavala, A.R.</td>
<td>24, 79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zaveri, N.</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zawertailo, L.A.</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zawodna, M.</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zernig, G.</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zezyulin, O.</td>
<td>47, 72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhan, C.-G.</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhu, S.</td>
<td>82, 83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ziedonis, D.</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zielinski, T.</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zlotnick, C.</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zuccaro, P.</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zule, W.A.</td>
<td>20, 21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zur, J.</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zvartau, E.</td>
<td>16, 17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zvolensky, M.</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zweben, J.</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SYMPOSIA

Sunday, June 17

On the Horizon: Next Generation Addiction Medications
Chairs: Lawrence Toll and F. Ivy Carroll

At the present time, opioid receptor-directed agonists and antagonists are the only medications approved for drug abuse treatment by the FDA. Over the past several years, a great deal of effort has gone into the identification of additional targets and individual medications that would be useful for treating addiction to other abused drugs including nicotine, alcohol, marijuana, and particularly cocaine and methamphetamine. The primary targets for cocaine abuse have been the dopamine transporter and dopamine receptors. However, additional targets, probably those that modulate dopamine neurotransmission, may be useful for attenuation of abuse of more than one abused drug. In this symposium we will discuss the effectiveness of five potential addiction medication targets: kappa opioid receptor antagonists, cannabinoid CB-1 receptor antagonists, glutamate mGluR5 receptor antagonists, orexin/hypocretin receptor antagonists, and NOP (ORL-1) receptor agonists. These targets are at different points along the medication development pathway going from CB-1 receptors, with a drug in clinical use (Rimonabant), to the hypocretin/orexin system that only recently was discovered to be involved in drug abuse. We will discuss mechanisms of action, reasons why these are good targets, and lead compounds if they exist. These talks should give a background of the involvement of several neurotransmitter systems in the addiction process and stimulate research into these important potential addiction medications.

Evidence-Based Treatment in the Developing World: The Expanding Scope of CPDD
Chairs: George E. Woody and Gabriele Fischer

Substance abuse is driving the HIV epidemic in many areas of the world, particularly in developing countries. These include Brazil, where inhaling and injecting cocaine is a major problem, and Former Soviet States, Iran, and Malaysia, where injecting heroin is the main route of HIV transmission. There are many opportunities for reducing the spread of AIDS in these countries by expanding drug abuse treatment since it has been under-developed and because we can measure outcome to determine what works, and we have effective treatments that can probably be applied in other settings, especially those for heroin addiction. CPDD investigators, supported by NIDA and NIAID funding, have become involved in collaborations with investigators in many developing countries with the main aim of expanding drug abuse treatment and reducing the spread of HIV. This symposium will present an overview of some of this work starting with Brazil, where it has been shown that the Addiction Severity Index can be adapted to Brazilian culture and used to assess treatment outcome; in Malaysia and Iran, where studies of buprenorphine, methadone and naltrexone have been conducted; in Ukraine, where demonstration projects and studies of buprenorphine and methadone are under way at some of the AIDS Centers; and Russia, where naltrexone has been effective in preventing relapse and reducing HIV risk behavior. These collaborations between CPDD investigators and clinical researchers in developing countries have the potential to make a significant
SYMPOSIA

contribution to improving global health. This symposium will introduce CPDD members to some of this work, its potential for improving global health, and what it might represent for the U.S.

*On the Road to Chemical Ligand Development for Drug Abuse Research*

Chairs: Christine Colvis and David Shurtleff

In June of 2005, the NIH launched the Molecular Screening Center Network (MLSCN) as part of the NIH Roadmap. The primary goal of the MLSCN is to facilitate development of chemical tools for biomedical research. The network of centers provides a variety of high throughput screening (HTS) platforms for screening the NIH chemical library using assays provided by the research community at large. This mini-symposium will highlight some of the HTS strategies, and available resources that are currently being used by NIDA investigators as a first step toward novel chemical reagent development for drug abuse research. Topics presented will include: (1) development and refinement of a bench-top assay to HTS format to look for allosteric modulators of opioid receptor heterodimerization, (2) use of HTS capabilities for rapid identification of novel lead compounds based on distinct modes of G-protein-coupled receptor (GPCR) signaling for probe development, and (3) strategies for the optimization of HTS leads for drug abuse research using chemical synthesis. Development of new compounds and research tools using these approaches will facilitate addiction research. Overall, this mini-symposium will give attendees an understanding of how HTS strategies and chemical synthesis and optimization approaches are being used, and made available to the research community, to discover and develop new biologically relevant chemical reagents as novel probes for drug abuse research, and as early leads for medication development.

*Oh Canada! Substance Abuse Research in Youth from Sea to Shining Sea*

Chairs: Lisa Vettese and Tony P. George

This symposium will provide an overview of critical factors underlying youth substance use and evidence-based treatment considerations for addressing problematic substance use in Canada. Research will be presented from a range of youth treatment settings across Canada. Dr. Lisa Vettese of Ryerson University, will present a randomized control trial comparing a motivational interviewing (MI) approach with an MI plus mindfulness skills approach for treating transition-age youth in an urban, outpatient youth addiction service. Applications of MI and skills-based approaches for youth substance use will be discussed. Dr. Sherry Stewart of Dalhousie University will describe a set of novel interventions that intervene at the level of personality risk. The efficacy of these interventions in reducing drinking behavior among high school students in rural Nova Scotia, urban British Columbia, as well as First Nations communities, will be discussed. Dr. Tony George of the University of Toronto will serve as panel discussant, and recommend future directions for addiction treatment research for youth and young adults in Canada and abroad.
SYMPOSIA

Monday, June 18

Cognitive and Emotional Processing Biases in Addiction: Cognitive, Behavioral, and Psychopharmacological Mechanisms
Chairs: Matt Field and Theodora Duka

Drug abuse is characterized by biases in the processing of drug-related stimuli, as those stimuli tend to ‘grab the attention’, and this may mediate their influence on drug-seeking behavior. Over the past five years, a number of research groups have been working to clarify the cognitive and psychopharmacological processes that underpin these biases, together with investigating their links to craving, drug-seeking behavior, and relapse. This symposium brings together leading international researchers in this field, who have taken diverse but overlapping approaches to the study of these phenomena. It will provide an overview of the latest research into cognitive and emotional biases from a variety of different levels of explanation: including molecular genetic, psychobiological, cognitive, and behavioral. Lee Hogarth will discuss research which implicates the role of attentional processing of drug conditioned stimuli as a mediator of drug seeking behaviors. Matt Field and Ingmar Franken will discuss the complex inter-relationships between subjective craving, inhibitory control, and attentional biases, with Matt Field focusing on laboratory studies and Ingmar Franken discussing candidate brain mechanisms. Marcus Munafo will discuss the extent to which genetics can influence the development and nature of attentional processes involved in addictive behaviours, and how these processes can be influenced by pharmacological manipulations of the serotonergic and dopaminergic systems. Finally, Theodora Duka will discuss research into cognitive biases and cognitive deficits in alcohol abusers, which will include a consideration of the clinical implications of these processes for relapse and the development of novel treatments.

Affective Dysfunction in Substance Abuse: Neuroimaging
Chairs: Thomas R. Kosten and Staci Gruber

Recent neuroimaging studies using functional MRI (fMRI), PET and SPECT are showing functional correlates of impaired affective processing in substance abusers. These functional abnormalities may form part of the substrate for the high comorbidity of depressive disorders and substance abuse. Four laboratories examining this issue have found that brain activations to affective stimuli are abnormally reduced in subjects recovering from dependence on drugs ranging from stimulants to cannabinoids. This abnormal affective processing may occur as early in the neural circuitry as the auditory and visual cortex (Kosten), but the abnormality extends to other associative areas, particularly the anterior cingulate (ACg) (Suh). Suh found lower baseline rCBF in left ACg predicted higher depressive symptoms in cocaine patients, suggesting that fronto-limbic dysregulation may be responsible for the high comorbidity of depression symptoms and cocaine dependence. This dysregulation is probably occurring early in the neural circuitry before conscious awareness, because even during conditions of masked affect presentations (backward masked affect) ACg activation as assessed by fMRI is reduced compared to normal controls (Gruber). Finally, just as mood and affective
processing improve with continued abstinence and often without specific treatment, these associated abnormalities in brain activity, as assessed using PET techniques, appear to normalize during abstinence (Hanlon). However, the temporal course of normalization during abstinence differs between affective symptoms and brain activity. Thus, we are beginning to identify abnormalities in neural circuits that parallel the course of affective disturbances in substance abusers, which may open the way for targeted treatment approaches including pharmacotherapy.

Tuesday, June 19

*How are Genes Affecting Risk for Alcohol Dependence Relevant to Drug Dependence?*

Chairs: Henry Kranzler and Joel Gelernter

Alcohol and drug use disorders co-occur commonly in both clinical and population samples. Genetic epidemiology studies have suggested that heritable risk for substance dependence can be either shared for alcohol and drug dependence, or unique to one or the other of these phenotypes. Using both linkage analysis and candidate gene association studies, findings have emerged showing that a number of genes may contribute differentially to alcohol dependence, co-morbid alcohol and drug dependence, or drug dependence. This symposium will focus on findings that illustrate all of these possible effects. Dr. Kranzler will discuss recent findings showing both main effects of serotonergic system genes on risk of drug dependence and gene X environment effects with both alcohol and drug dependence. Dr. Gelernter will describe recent findings implicating a cluster of genes on chromosome 11q (including *DRD2*, the gene encoding the dopamine-2 receptor) with association to drug dependence and alcohol dependence. Dr. Covault will present data showing associations of GABA-A receptor subunit genes that appear to be relatively specific to alcohol dependence. Dr. Luo will present the results of analyses showing that alcohol dehydrogenase genes, which have until recently been thought to influence risk only for alcohol dependence, also moderate risk for drug dependence alone, as well as co-morbid alcohol and drug dependence. Dr. O’Brien will consider the clinical and research implications of these findings in the context of the high co-morbidity of alcohol and drug use disorders.
The prevalence of tobacco and marijuana use disorders in individuals with schizophrenia is substantially higher than in the general population. There is converging evidence to suggest that neurobiological dysfunction associated with these disorders may confer vulnerability to the initiation and maintenance of drug dependence in schizophrenia. This symposium will take a translational neuroscience approach to understanding addiction vulnerability in schizophrenia, with a focus on smoked behaviors such as nicotine and cannabinoids. Daniele Piomelli will discuss the neurobiology of the endocannabinoid system in schizophrenia, and evidence that endocannabinoids are elevated in the CSF of patients with schizophrenia. This presentation will be followed by a review of the evidence for nicotinic receptor dysregulation and related neurotransmitter systems and the relationship to neurocognitive endophenotypes in schizophrenic patients by Sherry Leonard. Cyril D’Souza would then describe human laboratory studies of nicotine and cannabis effects on cognitive and clinical function in individuals with schizophrenia. Finally, Ivan Montoya would discuss medication development strategies for nicotine and cannabis addiction in schizophrenia. Tony George would act as discussant for this symposium and integrate findings from all four presentations, with a proposal for new research directions to increase our understanding and prevention of these co-morbidities.

Progesterone Effects on Stress and Cocaine Intake: Translation from the Laboratory to the Clinic
Chairs: Rajita Sinha and Nancy Mello

Growing evidence indicates sex differences in the subjective, behavioral and physiological responses to cocaine, cocaine cues and stress in cocaine dependence. Gonadal hormones may mediate these sex differences, and progesterone appears to attenuate both responses to stress and to cocaine. This symposium will present preclinical and clinical data to highlight these effects of progesterone and discuss its potential as a viable treatment for cocaine dependence in women. The speakers will present translational research on (1) progesterone effects on stress and cue-induced cocaine craving, arousal and relapse susceptibility, (2) the effects of progesterone on subjective, behavioral and physiological responses to cocaine, and (3) preclinical and clinical development of progesterone as an effective treatment for cocaine relapse prevention, especially in women. Dr. Carroll will describe preclinical studies showing the effects of estrogen and progesterone on cocaine self-administration and on reinstatement. Dr. Sinha will present data on alterations in sex hormone levels, negative affect and craving during the first month of cocaine abstinence and progesterone-related effects on stress-induced and drug cue-induced craving, physiological responses and cocaine relapse susceptibility. Dr. Evans will present laboratory and clinical findings on sex-specific effects of oral micronized progesterone on the subjective effects of cocaine and cocaine self-
SYMPOSIA

administration. Dr. Sofuoglu will present both laboratory data on progesterone’s effects on the subjective responses to cocaine and clinical trial data demonstrating preliminary efficacy of progesterone treatment for cocaine dependence. Finally, Dr. Mello will discuss parallels between preclinical and clinical studies of progesterone effects on cocaine self-administration and implications for treatment.

Improving Correctional and Re-Entry Resource Use and Planning Through Screening and Assessment: Findings from the CJ-DATS Collaborative
Chair: Carl Leukefeld

The limited number of addiction treatment slots available in correctional facilities speaks to the need for targeting treatment by need. Also, better understanding of the prevalence of substance abuse and related problems can inform planning. The panel will present four different projects of the NIDA Criminal Justice Drug Abuse Treatment Studies (CJ-DATS) collaborative concerning multi-site studies on screening and assessment for addictive disorders.

Current Practices in Screening and Assessment will describe the findings of a national survey of correctional agencies, showing the rates of use of different types of assessment tools, and organizational factors associated with the use of these tools.

The Inmate Pre-release Assessment (IPASS) tool was developed to assess risk of relapse and recidivism in order to match prisoners re-entering the community with appropriate treatment. The tool was tested through measurement of re-entering prisoners and comparisons of outcomes among those whose placement matched IPASS recommendations compared to those without a match.

The TCU Criminal Justice Client Evaluation of Self and Treatment (CJ-CEST) assesses change in motivation, psychosocial functioning, criminal thinking, and treatment progress. Analyses of the CJ-CEST’s psychometric properties and findings in criminal justice population show its utility in correction-based treatment.

The Co-occurring Disorders Screening Instrument (CODSI) for Mental Disorders was developed and tested to screen for mental disorders among prisoners in addiction treatment programs. This presentation will describe its properties and potential uses.

Newly Engineered Antibody and Enzyme Therapies for Treating Drug Abuse
Chairs: Michael Owens and C. Nora Chiang

Research toward the development of small molecule agonist or antagonist for treating stimulant abuse has not yielded an efficacious medication. However, a new generation of engineered protein medications designed to neutralize stimulant effects are providing innovative possibilities for treating drug abuse. These medications are enzymes to rapidly clear the drug from the body and monoclonal antibodies (mAb) to reverse a drug overdose or treat addiction. In this symposium, Paul Pentel will provide an overview focused on the clinical relevance of these new medications and the need for additional approaches for treating medical problems associated with cocaine, methamphetamine, phencyclidine, and nicotine addiction. Chang-Guo Zhan will present strategies for the rational design of high-activity enzyme mutants of human butyrylcholinesterase for treating cocaine overdose. James Woods will describe the development and evaluation of
a bacterium-derived cocaine esterase for treating cocaine toxicity and abuse. He will also
discuss the use of protein engineering techniques to decrease antigenicity and prolong the
half-life of the esterase. Andrew Norman will discuss the creation and testing of a
humanized anti-cocaine mAb for treating cocaine abuse. The presentation will include the
strategies for engineering the mAb into a form that would be safe and effective in
humans. Michael Owens will discuss therapeutic mAb for phencyclidine and
methamphetamine developed to treat addiction and overdose. The presentation will
emphasize the conversion of the mAb into human forms in preparation for clinical trials
and the use of antibody fragments as novel treatments for drug addiction.

Phenotyping Risk-Taking: Quantifying Adolescent Behavioral Disinhibition for
Genetic and Imaging Studies of Drug Dependence
Chair: Thomas J. Crowley

Adolescent-onset drug dependence is highly associated with a latent behavioral construct
variously described as risk-taking, rule-breaking, behavioral disinhibition, or conduct
disorder. Those terms reflect investigators' different methods for operationalizing that
latent construct: clinical history, laboratory behavioral tests, self-report of real-life
behaviors, parents' behavioral ratings, and DSM diagnoses or symptom counts. Growing
evidence suggests that the same genes may influence both the propensity for pathological
substance involvement and that behavioral construct. Moreover, that behavioral
construct may be associated with imaged functional brain abnormalities. Genetic and
imaging studies fundamentally seek associations between behavior and degree of family
relatedness, DNA structure, brain activity, or brain morphology. More accurately
measuring this behavioral construct could increase power in such analyses. We present
and compare multiple methods for operationalizing this behavioral construct for imaging
and genetic studies of adolescent drug dependence. Lejuez describes in-vivo assessments
of risk-taking propensity using the Balloon Analogue Risk Task, distress intolerance
using the Behavioral Indicator of Resiliency to Distress, and measurements of
environmental conditions for assessing gene-environment interactions. Brown describes
personality, substance-use outcome expectancies, and imaging measures of
disinhibition as they relate to conjoint substance dependence and conduct disorder, using
aggression as an example. Crowley describes applying DSM-IV symptom counts and
laboratory tests of risk-taking, memory and attention to genetic and imaging studies.
Attendees will learn advantages and disadvantages of various measures of risk-taking for
genetic and imaging studies in adolescent drug dependence.

Initiating Opioid Agonist Therapy in U.S. Jails and Prisons: Feasibility and Evidence
from Three Ongoing Studies
Chairs: Josia D. Rich and Robert Schwartz

Opioid agonist therapy (OAT) is highly effective in reducing drug injection, drug-related
criminal behavior and risk behaviors for HIV infection. Nearly 20% of U.S. inmates have
a history of heroin use and nearly 60% of heroin-dependent individuals cycle through the
criminal justice system each year. Despite this, the use of OAT in U.S. correctional
settings is rare. This symposium will describe barriers to providing OAT in the
corrections system in the U.S. These include stigma, inadequate medical infrastructure, perceived and real logistical challenges of administering medications in prisons and in linking patients to aftercare, and the competing philosophies of treatment and custody and control. Three ongoing studies of OAT in prisons will be presented: a randomized trial in Rhode Island of initiating methadone just prior to release vs. after release, a randomized trial in Baltimore comparing: 1) counseling in prison with passive treatment referral on release; 2) counseling in prison with methadone admission upon release; and, 3) counseling and methadone in prison with methadone transfer upon release, an open label trial of buprenorphine in a San Juan pre-release prison with linkage to primary care upon release. Some participants are actively using heroin and others are non-tolerant. The specific aims are to 1) describe challenges and responses to working in the criminal justice system to provide pre & post release OAT; 2) describe the use of methadone and buprenorphine in tolerant and non-tolerant individuals within the corrections system; and, 3) to describe outcomes of these interventions.

*Caffeine as a Gateway to Addiction?*

Chair: Roland Griffiths

Caffeine is the most widely used mood-altering drug in the world. Although not associated with life-threatening health risk, clinical research on caffeine tolerance, withdrawal, reinforcement and the caffeine dependence syndrome suggest that caffeine provides a useful model system for understanding drug abuse. New epidemiological and neurobiological data suggest interesting interactions between caffeine and classic drugs of abuse. In this symposium, Jim Anthony will present evidence from longitudinal research with an epidemiological sample: higher levels of caffeine use in early adolescence are associated with subsequent onset of cocaine use by young adulthood in females but not males. Sergi Ferre will present new neurobiological data on the pharmacological effects of caffeine, which behaves as a non-selective adenosine receptor antagonist. Heteromers of different adenosine receptor subtypes and of adenosine receptors with dopamine, glutamate and cannabinoid receptors are newly identified targets for caffeine in the brain. These targets may be associated with tolerance to caffeine’s psychomotor effects and with addiction to a variety of other drugs. Finally, Catherine Striley and Linda Cottler will present rates of caffeine-related symptoms from 167 users drinking one or more caffeinated beverage in the last week. Using adopted DSM-IV criteria, 35% met caffeine dependence. Caffeine’s dependence liability will be compared with that of alcohol and tobacco among users of all three. Associations between caffeine use and other drug use, including stimulants, will be reported. Implications for DSM V will be discussed.
There are multiple, bi-directional links between stress and drug use. Chronic or acute exposure to stress may increase vulnerability to use drugs, stress may alter subjective or behavioral responses to drugs, and chronic use of drugs may itself be a source of stress. It is known that individuals differ in their responses to environmental stressors, and there has been some recent progress in identifying sources of variability in stress responses. In this symposium several substance abuse researchers will present new laboratory data describing genetic, hormonal, and behavioral sources of variability in responses to acute stress. Together these studies provide insights into the complex interactive relations between stress and drug use.

Stimulant-Associated Cognitive Abnormalities: Mechanisms and Impact on Reward-Related Behavior and Addiction
Chair: Ari D. Kalechstein and J. David Jentsch

Over the past 15 – 20 years, a growing literature has documented the association between stimulant exposure and neurocognitive impairment; however, these deficits were traditionally viewed as an epiphenomenological occurrence of addiction that was not linked to meaningful outcomes and were not integrated into descriptive models of addiction. In recent years, there has been an evolution in the conceptualization of stimulant addiction such that neurocognitive impairment is viewed as a critical facet of the disease. Following from this paradigmatic shift, neuroscientists have sought to clarify three primary issues related to stimulant–associated neurocognitive impairment: (1) Can these neurocognitive impairments be reversed? (2) What are the implications of these neurocognitive impairments for day-to-day functioning? (3) What are the neurobiological determinants of these deficits? The proposed symposium addresses these aims in the context of presentations that discuss how neurocognitive impairments are cardinal features of stimulant addiction. This panel will discuss the relationship of neurocognition to relapse liability in humans, and whether these deficits can be pharmacologically managed therapeutically, e.g, by modafinil. In addition, pre-clinical research utilizing rodents will focus on the susceptibility of the adolescent and adult brain to cognitive impairment in response to stimulant exposure, and a primate model of methamphetamine dependence will be described which links poor cognitive function with specific adaptations in the dopamine system. The findings from the presented studies highlight the relevance and mechanistic foundation of neurocognitive impairment in addiction.

Primary Findings from HIV/AIDS Research in the NIDA Clinical Trials Network
Chair: Donald A. Calsyn

Prevention of HIV/AIDS among drug users engaged in substance abuse treatment continues to be an important public health focus. Scientifically validated interventions
have been developed to prevent HIV infection among substance users. The Clinical Trials Network (CTN) of the National Institute on Drug Abuse has conducted three multi-site clinical trials with the focus of reducing involvement in HIV/AIDS risk behaviors among drug users in treatment. The primary outcome findings from these trials will be presented. Donald Calsyn and Susan Tross are the lead investigators of CTN protocols testing the efficacy of gender specific safer sex intervention for women and men in drug abuse treatment. In these protocols, a five-session multi-modal gender-specific group intervention was compared to a single session didactic presentation similar to those typically provided in substance abuse treatment programs. Susan Tross reports on the women’s study results (n=515 from 12 clinics). Donald Calsyn reports on the men’s study results (n=594 from 14 clinics). Lead investigator Robert Booth summarizes primary findings from participants (n=646 from 8 centers) in a multi-site trial conducted in detoxification centers in which the standard HIV “testing and counseling” intervention was compared to a “therapeutic alliance” intervention and to treatment as usual as methods for reducing involvement in HIV-related risk behaviors. Presenters will conclude by discussing challenges involved in conducting HIV risk reduction research protocols in community treatment programs. Many of these programs have not previously been involved in research endeavors.
WORKSHOPS

Sunday, June 18

Mathematical Modeling in Biological and Epidemiological Studies of Drug Addiction
Chairs: Georgiy Bobashev and Boris Gutkin

Scientific discussions that started at the mathematical modeling workshop at the 2006 CPDD Annual Meeting have resulted in at least 2 joint publications and a couple of new collaborative projects. At the 2007 workshop, we will reintroduce applications of mathematical modeling to the substance use researchers and present new developments. The major goal is to develop a dialogue between the experimental scientists represented at the main meeting and the budding computational theory of addiction and drug use. In epidemiology, modeling allows scientists to simulate the consequences of various intervention and prevention scenarios, while in biology modeling allows to describe and simulate complex neurophysiological processes. During the workshop we will discuss several modeling examples. These will include models describing Injecting Drug Users (IDU) networks, ethnography of drug dealer – drug user interaction, neuro-computational models that relate decision making to neurotransmitter interaction, and reinforcement learning models of the transition from use to addiction. The goal is to attract new researchers and further expand the collaborations between scientists in both epidemiological and biological areas.

Helping Teens with Problems of Drug Dependence and Crime
Chairs: Laura Burney Nissen

Many youth in juvenile detention in the United States have a problem with drug dependence. However, once they commit a crime and enter the juvenile justice system, they are typically not helped with the drug or alcohol problem that helped land them there in the first place. This leads to recidivism, costs to the community and essentially, lives lost. The Robert Wood Johnson Foundation recognizes this as a national health issue and has committed $21 million to help solve the problem through an initiative called Reclaiming Futures. Reclaiming Futures is in 10 locations across the U.S. creating ways to help teens in trouble with drugs, alcohol and crime. In this workshop we will share a six-step model we have created to bring together the courts, probation officers, drug abuse counselors, families and communities to reclaim the lives of these youth. We will share best practices and real life examples so people attending the workshop can learn how better to cope with this issue in their own area.

Clinical Supervision in Substance Abuse Treatment: A Neglected Art
Chairs: Anne Helene Skinstad and Thomas Vaughn

Clinical supervision is an integral part of the professional development of therapists as well as an essential element in efforts to facilitate the adoption of empirically supported treatments. Many substance abuse treatment programs are able to provide only very limited educational support for clinical supervisors. Moreover, most have but limited time to provide clinical supervision to counselors and therapists working with substance
abuse clients. This workshop has two foci. The first focus will be on new research examining the extent and nature of clinical supervision in substance abuse treatment facilities. The second focus will be on productive and empirically supported models for clinical supervision applied to the substance abuse counseling field and guidelines for clinical supervision in substance abuse treatment. Dr. Tom Vaughn will present data on clinical supervision from a national survey of outpatient clinics in the U.S. Nancy Roget and Dr. Anne Skinstad will present data from a workforce development survey conducted with clinical supervisors in the Mountain West and Prairielands ATTCs, respectively. General conclusions from these 3 studies show that clinical supervision conducted by clinical supervisors are for the most part reviewing of charts and other forms of administrative supervision. Dr. Steven Gallon will share newly developed guidelines for clinical supervision for substance abuse counseling developed by CSAT. At the end of the workshop, Drs. Skinstad and Gallon and Ms. Roget will discuss and evaluate current models for training of clinical supervisors in community based treatment centers for substance abuse.

What’s New at NIDA and NIH; Electronic Submission of Applications and More  
Chairs: Teri Levitin, and Mark Swieter

This workshop is intended to provide an opportunity for participants to learn about new policies and procedures at NIH and NIDA that are relevant to them. Topics will include electronic submission of grant applications, changes in the peer review process at NIDA and the Center for Scientific Review (CSR), tips on how to write a good grant application, and ways to get help on application preparation. Other topics and questions of interest to the audience will be addressed. This is very much an interactive, audience-directed activity. We see this workshop as a public service to the CPDD community, with the issues we discuss determined by audience interest. Although we have a list of topics of interest, audience members may ask about the budget, recent Advisory Council Reports, new research directions at NIDA, various NIH mechanisms, or any other subject.

NIDA Workshop on International Research and Collaboration  
Chair: Steven Gust

Exchange ideas with 160 U.S. and foreign scientists, and learn about the research they conduct outside of the United States. CPDD attendees can explore areas of mutual scientific interest with potential collaborators from other countries. Meet NIDA staff who will discuss NIDA's international activities and priorities. Participants also will have a hands-on opportunity to try out new Web tools that support collaborative research like the NIDA Methadone Research Web Guide and an online tool, the NIDA International Virtual Collaboratory (NIVC). The NIVC allows drug abuse researchers to collaborate across widespread geographical regions by using live audio/video virtual meetings, discussion forums, document editing and storage tools, online resources, and a searchable and easily updated online database.
Abuse liability testing has long been an integral component of drug development, and members of CPDD have historically played a key role in developing experimental procedures and research strategies for investigating the abuse-related effects of new drugs. Results from abuse liability testing have been used by industry, academia and government to guide the selection of drugs for further development and by Regulatory Agencies to determine appropriate constraints on drug availability. The purpose of this workshop will be to focus on the practice of abuse liability testing from an industry perspective. In particular, the workshop will address specific industry goals for abuse liability testing, the regulatory context within which that testing takes place, and the challenges faced in the design, conduct and interpretation of abuse liability studies. The dynamics of these issues will be further illustrated with case studies on two recently marketed drugs. This workshop will serve as an extension of the recent Conference on Preclinical Abuse Liability Testing, which was held in Annapolis, MD, October 2006. Abstracts and selected slide presentations from the Annapolis meeting can be found on the CPDD website at <http://www.cpdd.vcu.edu/Pages/Index/ConfPrecliniAbuseLiabTesting.htm>.

**Monday, June 18**

*Computational Modeling of Complex Systems in Problems of Drug Dependence: A New Research Solution*

Chair: Mark Froimowitz

Molecular and cellular technologies have produced a catalogue of elements controlling human biological networks; this systems view is now the gatekeeper to improving treatment of complex diseases including drug addiction. The current understanding of predisposition to, initiation and establishment of addiction is limited by silo-like pillars of knowledge which, while detailed in narrow aspects, cannot be effectively drawn together into a cohesive or testable physiological theory. Computational simulations or models can be constructed from both qualitative and quantitative data, and certain simulation methods can explicitly model areas of uncertainty, allowing for testing of alternative theories or options. The state of the art in drug dependence research can be highly leveraged by modeling because new insights need to be driven by a synthesis of molecular data (receptor biology, gene expression data, biochemical data on receptor trafficking or turnover, predisposing gene variants, etc) with clinical phenomena (response to treatments, euphoria, depression, drug-seeking behavior, relapse, etc) and neurobiological data (brain imaging, synapse biology, etc).
This symposium will comprise four presentations: data from three clinical trials from the US, Australia, and Finland, and an update on medications targets for stimulant addiction. The first study randomized individuals with amphetamine dependence to aripiprazole (15 mg/d), slow release methylphenidate (54 mg/d) or placebo for 20 weeks. The primary outcome measure was the proportion of amphetamine-positive urine samples. Results of an interim-analysis on the first 53 patients showed that patients on aripiprazole had more amphetamine-positive urine samples than patients in the placebo group (OR = 3.77, 95% CI 1.55–9.18, p = 0.003), whereas patients who received methylphenidate had fewer amphetamine-positive urine samples than patients who had received placebo (OR = 0.46, 95% CI 0.26–0.81, p = 0.008). The second presentation is from the dexamphetamine study where subjects were randomized to receive dexamphetamine up to 110 mg/day or placebo capsules for a period of three months. Outcome measures included medication safety, treatment retention and amphetamine use evaluated by self-report and hair analysis. An interim analysis on 30 subjects recruited to date showed that subject retention was not significantly different between groups. There were significant reductions in self-reported methamphetamine use, confirmed by hair analysis, between baseline and follow-up within each group. The third study, a trial of modafinil for cocaine dependence randomized 210 subjects to 200 mg, 400 mg, of modafinil or placebo. Primary outcome is proportion of cocaine non-use days. This study has finished recruitment and the data is being analyzed. The fourth presentation will highlight medications targets to treat stimulant dependence.

In response to the dramatic rise in opioid analgesic abuse in the United States, the Food and Drug Administration has called for sponsors to develop plans outlining how they propose to minimize the risks of abuse and diversion of their opioid analgesic products post-marketing. The scope of these “Risk Minimization Action Plans” (RiskMAPS), however, remains to be fully defined, and the most effective, evidence-based tools to employ in this regard have not as yet been identified. In addition to industry, a number of key stakeholders have a vested interest in combating the opioid analgesic abuse problem. These include healthcare professionals, prevention researchers, drug treatment specialists, schools, the criminal justice system, other governmental agencies (federal, state and local), and patients with chronic pain. The purpose of this symposium will be to address the following questions: 1) In what ways and to what extent (e.g., expertise, resources) can each of the main stakeholders best contribute to addressing this problem? 2) What models of collaboration can be used in order to bring the collective expertise and resources of diverse parties to bear most effectively on this issue? And, 3) What models have been tested to date, and with what result? The aims of the session are three-fold: 1) to raise awareness of this topic among researchers, industry, government and other policy-makers; 2) to generate dialogue among key stakeholders; and, 3) to identify
WORKSHOPS

promising models for building collaborative partnerships across the public and private sector to reduce opioid analgesic abuse.

Tuesday, June 19

**Opioid Use Disorder in Adolescents: Epidemiology, Patient Characteristics, Evidence-Based Treatments and Cost-Effectiveness of Buprenorphine Treatment**

Chairs: Geetha Subramaniam and Michael Dennis

This workshop will focus on the topic of opioid use disorder (OUD) in adolescents. The following four presenters will discuss the extent of the problem, the evidence and the cost-effectiveness of treatment and discuss future directions:

- Dr. Geetha Subramaniam will present an overview of the prevalence of opioid use and abuse among adolescents in the US; and provide psychiatric and substance use characteristics and HIV-risk behavior among treatment seeking adolescents with OUD.
- Dr. Marsch will provide an overview of results to date from clinical trials research examining combined behavioral (including behavioral therapy and contingency management interventions) and pharmacological (including buprenorphine and naltrexone) treatments for opioid-dependent adolescents.
- Dr. Woody will present findings from a recently completed study for opioid dependent patients aged 15-21 that was done in the NIDA Clinical Trials Network. The study compared a 14 day outpatient detoxification using counseling and buprenorphine/naloxone with a 3-month period of counseling and buprenorphine/naloxone.
- Dr. Polsky will present preliminary results from a comprehensive economic analysis of a CTN clinical trial of Bup/Nal facilitated rehabilitation for opioid dependent adolescents/young adults. Dr. Dennis will conclude by leading SASATE membership in a brief business meeting.

**13th Annual Contingency Management Working Group**

Chair: Stacey Sigmon

The Annual Meeting of the Contingency Management Working Group represents an opportunity each year at CPDD for the dissemination and discussion of current research in the area of contingency management interventions for treating drug abuse. The behavioral approach represents one of the most effective interventions for the treatment substance abuse, and contingency management procedures have been consistently demonstrated to be efficacious in reducing use of a wide range of drugs across a variety of populations. At the 13th Annual Meeting of the Contingency Management Working Group in 2007, junior and senior researchers will present preliminary data from ongoing studies.
WORKSHOPS

Issues in Medications Development for Relapse Prevention
Chairs: David McCann and Ahmed Elkashef

This workshop is aimed at preclinical and clinical drug abuse researchers with an interest in medications development for relapse prevention. The opening presentation will describe the importance of relapse prevention in drug addiction treatment and the "clinical need" that drives medications development efforts. This will be followed by two preclinical presentations: 1) a general review of animal models of relapse and 2) a critical discussion of the use of the popular extinction/reinstatement rat model of relapse in medications discovery. Human laboratory models of relapse will then be reviewed, with a focus on past approaches, pitfalls and future directions. The final presentation will focus on important considerations in the design of clinical trials to assess the efficacy of relapse prevention medications. Steps that can be taken toward the validation of animal and human laboratory models of relapse will be an important topic of discussion.

NIDA Drug Supply and Analytical Services Program – An Overview
Chairs: Hari H. Singh and David Shurtleff

The National Institutes on Drug Abuse (NIDA) provides an array of services at no cost to qualified research investigators through its Drug Supply, Crystallography, and Analytical Services Programs. Although these programs have been in existence for quite some time, many research investigators, particularly early career investigators, are not aware of them or of the services they can provide. This workshop will give CPDD attendees an opportunity to learn about these important and wide-ranging services. Highlighted topics will include (1) an overview of NIDA’s Drug Supply and related programs, which include the supply of DEA controlled drugs and other chemical substances that may or may not be controlled, but serve as biological probes for basic research and help in developing possible therapeutics for the treatment of drug addiction, (2) procedures for the acquisition of inventoried substances, their storage and distribution under a controlled environment, (3) procedures for requesting synthesis of wholly new compounds for research, (4) procedures for X-ray crystallography of chemical compounds and biological substrates, (5) procedures for analysis of experimental samples by various analytical techniques, and (6) finally, guidance on acquiring DEA registration and licenses for using DEA controlled substances for research. Overall, this NIDA-sponsored workshop will provide a detailed overview of NIDA Drug Supply & Analytical Services System’s purpose, procedures, and functioning, so that new and experienced research investigators can take advantage of these freely available services that will and reduce the cost to and facilitate the research of individual investigators.
The following organizations have generously supported the work of the College on Problems of Drug Dependence during the past year:

Catalyst Pharmaceutical Partners

CSAT (Center for Substance Abuse Treatment)

NIDA (National Institute on Drug Abuse)

Penwest Pharmaceuticals Co.

Pfizer Inc.

Reckitt Benckiser Pharmaceuticals, Inc.

Shire US Inc.