THE ISGIDAR NEWSLETTER

Volume 34, No. 1 May 2009

President of ISGIDAR

Elise Weerts, Ph.D.
Division of Behavioral Biology
Johns Hopkins Univ. School of Med
5510 Nathan Shock Drive
Suite 3000
Baltimore, MD 21224
eweerts@jhmi.edu

Chief Technology Officer

Jonathan B. Kamien, Ph.D. Biopsych Consulting 3450 Vista Haven Road Sherman Oaks, CA 91403 (818) 783-2486 jkamien@biopsych.com

International Vice-President

Gerald Zernig, MD, Assoc.Prof. Division of Neurochemistry Department of Psychiatry Medical University Innsbruck Anichstrasse 35 A-6020 Innsbruck Austria Ph. +43-699-1714-1714 fax +43-512-504-25866 or -23716 gerald.zernig@uibk.ac.at

Secretary of ISGIDAR

S. Barak Caine, Ph.D.
Alcohol & Drug Abuse Res Ctr
McLean Hospital
Harvard Medical School
115 Mill Street
Belmont, MA 02478
barak@mclean.harvard.edu

Treasurer of ISGIDAR

Wendy J. Lynch, Ph.D.
Depts. of Psychiatry &
Neurobehavioral Sciences
University of Virginia
1670 Discovery Drive
Charlottesville, VA 22911
(434) 243-0580
wlynch@virginia.edu

ISGIDAR e-mail address: <u>ISGIDAR-L@VENUS.VCU.EDU</u>

ISGIDAR Website: WWW.ISGIDAR.ORG

PLEASE ATTEND!!!

2009 ISGIDAR SCIENTIFIC MEETING—RENO/SPARKS, NEVADA

The 2009 annual ISGIDAR Scientific Meeting will be held Saturday June 20th as a satellite session immediately preceding the annual scientific meeting of the College on Problems of Drug Dependence. The location is John Ascuaga's Nugget Casino Resort, Reno/Sparks, Nevada. Continental breakfast and registration begin at 8:30 AM. Talks are from 9 AM to 4:15 with a 70 min lunch break beginning at 12:20 PM. Registration is \$80 and can be paid in advance or at the door. Lunch will be free with pre-registration by May 15 th. If you have not pre-registered but you would like to attend the luncheon, please send an e-mail message to the President eweerts@jhmi.edu ASAP to hold a space. The anticipated schedule is shown on the next two pages.

2009 ISGIDAR Meeting Program

8:30 a.m. - 5:00 p.m. Saturday, June 20th, 2009 John Ascuaga's Nugget Casino Resort, Reno/Sparks, Nevada

8:30 a.m. Registration (\$80) and Continental Breakfast

8:55 Opening Remarks - Elise M. Weerts, President

9:00 Angela N. Duke, Barbara J. Kaminski, and Elise M. Weerts

Division of Behavioral Biology, Johns Hopkins University

The Effects of Baclofen on Alcohol Seeking and Consumption under a Chained Schedule of Reinforcement in Baboons

9:20 Richard A. Meisch, Thomas H. Gomez, and John Grabowski

The University of Texas Health Science Center at Houston Medical School Effects Of d-Amphetamine Pretreatment On Cocaine-Seeking Behavior Maintained Under An Interlocking Schedule.

9:40 Morgane Thomsen and S. Barak Caine

Alcohol and Drug Abuse Research Center, McLean Hospital, Harvard Medical School *Muscarinic modulation of discriminative stimulus and reinforcing effects of cocaine*

10:00 Chris Podlesnik, Corina Jimenez-Gomez, and James H. Woods

University of Michigan

Choice Procedures And The Aversive Effects Of Drugs In Rats: Preliminary Findings

10:20 - 10:40 COFFEE BREAK

Special Symposium and Discussion of Methods Evaluating Drug Reinforcement

10:40 William E. Fantegrossi

Department of Pharmacology & Toxicology, University of Arkansas for Medical Sciences Tweaking the assay: are our self-administration methods sufficient to detect reinforcing effects of hallucinogen-like drugs in laboratory animals?

11:00 Francesco Leri, Mark Tucci, and Anne-Marie Levy

Department of Psychology, University of Guelph, Ontario, Canada Place Conditioning In Rats: The Difficulties Of A Simple Procedure

11:20 Richard De La Garza and T.F. Newton

Baylor College of Medicine

When subjective and reinforcing effects data don't coincide - What does it mean, and are some data always more meaningful than others?

Student Paper Award Winner

12:00 Justin J. Anker

Department of Psychiatry, University of Minnesota Progesterone metabolite, allopregnanolone, attenuates cocaine-seeking behavior in female rats

12:20 – 1:30 LUNCH BREAK (Registration required for Luncheon)

2009 ISGIDAR Meeting Program (continued)

8:30 a.m. - 5:00 p.m. Saturday, June 20th, 2009 John Ascuaga's Nugget Casino Resort, Reno/Sparks, Nevada

AFTERNOON SESSION

1:30 Kenneth Perkins, Amy Grottenthaler, and Annette Wilson

University of Pittsburgh

No Reinforcement Enhancing Effects Of Nicotine In Humans

1:50 Mark Greenwald

Dept. of Psychiatry and Behavioral Neurosciences, Wayne State University School of Medicine Behavioral Pharmacogenetic Analysis Of Opioid Seeking Behavior

2:10 Kenneth Grasing and Shuangteng He

Kansas City Veterans Affairs Medical Center & the Division of Clinical Pharmacology, Department of Medicine, University of Kansas School of Medicine Selective Breeding For Differences In Cocaine Self-Administration

2:30 Thomas A. Green

Center for Addiction Research, Department of Pharmacology and Toxicology, UT Medical Branch Mechanisms of Environmental Enrichment-Mediated Decreases in Self-Administration of Cocaine and Amphetamine

2:50 AFTERNOON SNACK BREAK

3:10 Jennifer Newman and Jack Bergman

Alcohol and Drug Abuse Research Center, McLean Hospital, Harvard Medical School Effects Of Chronic Modafinil On Methamphetamine Self-Administration

3:30 Fei Shen, Gloria E. Meredith, and Celeste Napier

Theravance Inc., Chicago Medical School & Rosalind Franklin University of Medicine and Science, and Rush University Medical Center

The Critical Role Of Hippocampal Neurotrophic Factor Trkb And Glutamatergic NMDA Receptors In Amphetamine Reward-Mediated Behavior

3:50 Stolerman IP, Meisch RM, Tsibulsky V.

Institute of Psychiatry, De Crespigny Park, London SE5 8AF, UK, Department of Psychiatry and Behavioral Sciences, The University of Texas at Houston, and Department of Psychiatry, University of Cincinnati

The Drug Self-Administration Database

4:15 p.m. ISGIDAR BUSINESS MEETING & SOCIAL (OPEN TO ALL ATTENDEES)

Voting in New Members Election of New ISGIDAR Secretary

The 2009 ISGIDAR Meeting was supported in part by the generous contribution of Grunenthal USA, Inc.

UPCOMING MEETING ANNOUNCEMENTS

2010 ISGIDAR SCIENTIFIC MEETING—SCOTTSDALE, ARIZONA Fairmont Scottsdale – June 12, 2010 http://www.cpdd.vcu.edu/Pages/Meetings/FutureMeet.html

2nd Latin American SRNT Regional Conference Mexico City, October 2009 http://www.srnt.org/

2010 SRNT Annual Meeting, Hilton Hotel, Baltimore, MD February 24-27, 2010 http://www.srnt.org/

2010 Behavioral Pharmacology Society—Anaheim, CA April 23rd – 24th , 2010 http://www.aspet.org/public/meetings/meetings.html

PAST MEETING REPORT

2008 ISGIDAR SCIENTIFIC MEETING—Quebec City, Quebec, Canada

The 2008 annual ISGIDAR Scientific Meeting was held Saturday 14 June at the Caribe Hilton, San Juan. As usual, the meeting was held as a satellite session immediately preceding the annual scientific meeting of the College on Problems of Drug Dependence. Scientific papers were presented between 8:30 and 5:25 PM (see below for program) and the business meeting was held immediately thereafter.

2008 ISGIDAR SCIENTIFIC PROGRAM (PAST MEETING)

The Caribe Hilton, San Juan, Puerto Rico, June 14, 2008

- **8:35 Amy K. Goodwin** and Nancy A. Ator. Johns Hopkins University School of Medicine. Self-administration of the tryptamine derivatives 5-MeO-MIPT and 4-OH-DIPT in baboons.
- **9:00 Steven R. Goldberg**. NIH/NIDA intramural Research Program, Baltimore, MD Adenosine A_{2A} and cannabinoid CB₁ interactions in squirrel monkeys.
- 9:25 Jose A. Crespo, Petra Stöckl, Katja Zorn, Alois Saria and **Gerald Zernig**, Experimental Psychiatry Unit, Department of Psychiatry, Medical University Innsbruck, Austria, Nucleus accumbens core acetylcholine is preferentially activated during drug- vs food reinforcement acquisition.
- **10:50 Richard Foltin**. Department of Psychiatry, Columbia University and the New York State Psychiatric Institute. Who put the self in self-administration?
- **10:45 Jennifer Tidey**, Brown University, Center for Alcohol & Addiction Studies, Providence RI. Separate and combined effects of nicotine and sensorimotor replacement on smoking behavior in smokers with schizophrenia
- **11:10 Jin H. Yoon**, Stephen T. Higgins & Matthew P. Bradstreet. Depts of Psychiatry & Psychology University of Vermont. Influence of initial abstinence from cigarette smoking on impulsive responding, smoking preference, and participant ratings. **(Student Paper Award Winner)**
- **11:35 Karine Guillem** and Laura L. Peoples, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA. Increase in nicotine-seeking-related signals of accumbal neurons following abstinence: Contribution to nicotine addiction and relapse (**Invited Student Speaker**)
- **12:00 Morgane Thomsen,** McLean Hospital / Harvard Medical School, Belmont, MA. Cocaine self-administration studies in knockout mice lacking DAT or SERT or both.
- **1:30 S. Steve Negus**, VCU, Behavioral economic analysis of interactions between mu and kappa opioid agonists in a drug self-administration procedure
- 1:55 Sandra D Comer, Maria A. Sullivan, Suzanne K. Vosburg, Jeanne M. Manubay, and Ziva D. Cooper, Department of Psychiatry, Columbia University and the New York State Psychiatric Institute. Reinforcing effects of intravenously-delivered buprenorphine compared to buprenorphine/naloxone in individuals maintained on sublingual buprenorphine.
- **2:20** Francesco Leri, AnneMarie Levy and Shabdis Djazayeri, Department of Psychology, University of Guelph, Guelph (ON), Assessment of conditioned reinforcing effects of oxycodone in rats: dose-response and reinstatement.
- **2:45 Mark Greenwald**, Dept. of Psychiatry and Behavioral Neurosciences, Wayne State University School of Medicine, Detroit, MI. Rationality of drug seeking in heroin addicts: Sensitivity to drug price, openness of economy, and concurrent non-drug reinforcer magnitude.
- **3:05 David J. McCann**, Medications Discovery and Toxicology Branch, NIH/NIDA. Medications discovery for drug addiction treatment: Methods, results and future directions.
- **3:50 S. Barak Caine** McLean Hospital and Harvard Medical School, Belmont, MA. Effects of mGluR5 antagonists in rodents trained to discriminate or self-administer cocaine.
- **4:10 John D. Roache** and Richard J. Lamb. Behavioral Pharmacology Group, University of Texas Health Science Center at San Antonio. Repeated i.v. self-administration of Cocaine in a human laboratory model of conditioning: Correlations with in-study craving and post-study cocaine use.
- **4:35 Kenneth Grasing**, Yungao Yang, and Shuangteng He. Substance Abuse Research Laboratory, Kansas City Veterans Affairs Medical Center, University of Kansas School of Medicine, Kansas City, Kansas. Pharmacogenetics of Tacrine's Effects on Cocaine Self-Administration.
- **5:00 Ian Stolerman**, V Tsibulsky, Richard A Meisch, and Jonathan B. Kamien. Establishment of a new database on drug self-administration: a progress report

BIBLIOGRAPHY Recent publications of ISGIDAR Members

Barak Caine

Thomsen M, Hall, FS, Uhl, GR, Caine SB. Dramatically decreased cocaine self-administration in dopamine but not serotonin transporter knockout mice. Journal of Neuroscience 2009: 29:1087-1092

Galici, Ruggero

Gerak LR, Galici R, France CP. Self administration of heroin and cocaine in morphine-dependent and morphine-withdrawn rhesus monkeys. Psychopharmacology (Berl). 2009 Feb 5. [Epub ahead of print]

Kenneth Grasing

He, S., Yang, Y., Mathur, D., and Grasing, K. Selective breeding for intravenous drug self-administration in rats: a pilot study, Behavioural Pharmacology, 2008, 19, 751-764.

Jonathan Katz

Krasnova, I.N., Li, S.M., Wood, W.H., McCoy, M.T., Prabhu, V.V., Becker, K.G., Katz, J.L. and Cadet, J.L. Transcriptional responses to reinforcing effects of cocaine in the rat hippocampus and cortex. Genes, Brain and Behavior, 7: 193-202, 2008.

Loland, C.J., Desai, R.I., Zou, M.-F., Cao, J., Grundt, P., Gerstbrein, K., Sitte, H.H., Newman, A.H., Katz, J.L. and Gether, U. Relationship between conformational changes in the dopamine transporter and cocaine-like subjective effects of uptake inhibitors. Molecular Pharmacology, 73: 813-823, 2008.

Tanda, G., Kopajtic, T.A. and Katz, J. L. Cocaine-like neurochemical effects of antihistaminic medications. Journal of Neurochemistry, 106: 147-157, 2008.

Newman, A. H. and Katz, J. L. The Benztropines: Atypical Dopamine Uptake Inhibitors that Provide Clues About Cocaine's Mechanism at the Dopamine Transporter. In: M. L. Trudell and Izenwasser, S. (Eds.) Dopamine Transporter: Biology, Chemistry and Pharmacology. Wiley Series in Drug Discovery and Development, John Wiley & Sons. 2008. pp. 171-209.

Hiranita, T., Soto, P.L., Newman, A.H. and Katz, J.L. Assessment of reinforcing effects of benztropine analogs and their effects on cocaine self-administration in rats: Comparisons with monoamine uptake inhibitors. Journal of Pharmacology and Experimental Therapeutics, Published February 19, 2009; doi: 10.1124/jpet.108.145813

Leri, Francesco

Levy AM, Choleris E, Leri F (2009) Enhancing effect of heroin on social recognition learning in male Sprague-Dawley rats: modulation by heroin pre-exposure. Psychopharmacology, in press.

BIBLIOGRAPHY Recent publications of ISGIDAR Members (continued)

Zuzana Justinova

Le Foll B, Justinova Z, Wertheim CE, Barnes C, Goldberg SR. Topiramate does not alter nicotine or cocaine discrimination in rats. Behavioural Pharmacology, 2008, 19(1):13-20

Ferrada C, Ferré S, Casadó V, Cortes A, Justinova Z, Barnes C, Canela EI, Goldberg SR, Leurs R, Lluis C, Franco R. Interactions between histamine H(3) and dopamine D(2) receptors and the implications for striatal function. Neuropharmacology, 2008, 55(2): 190-197

Justinova Z, Munzar P, Panlilio LV, Yasar S, Redhi GH, Tanda G, Goldberg SR. Blockade of THC-seeking behavior and relapse in monkeys by the cannabinoid CB1-receptor antagonist rimonabant. Neuropsychopharmacology, 2008, 33: 2870-2877

Justinova Z, Ferré S, Barnes C, Wertheim CE, Pappas LA, Goldberg SR, Le Foll B. Effects of chronic caffeine exposure on adenosinergic modulation of the discriminative-stimulus effects of nicotine, methamphetamine, and cocaine. Psychopharmacology, 2009, 203(2): 355-67

Justinova Z, Mangieri RA, Bortolato M, Chefer SI, Mukhin AG, Clapper JR, King AR, Yasar S, Redhi GH, Piomelli D, Goldberg SR. Fatty acid amide hydrolase inhibition heightens anandamide signaling without producing reinforcing effects in primates. Biological Psychiatry, 2008, 64(11): 930-7

Scherma M, Panlilio LV, Fadda P, Fattore L, Gamaleddin I, Le Foll B, Justinova Z, Mikics E, Haller J, Medalie J, Stroik J, Barnes C, Yasar S, Tanda G, Piomelli D, Fratta W, Goldberg SR. Inhibition of anandamide hydrolysis by cyclohexyl carbamic acid 3'-carbamoyl-3-yl ester (URB597) reverses abuse-related behavioral and neurochemical effects of nicotine in rats. Journal of Pharmacology and Experimental Therapeutics, 2008, 327(2): 482-90

Panlilio LV, Mazzola C, Medalie J, Hahn B, Justinova Z, Cadet JL, Yasar S, Goldberg SR. Anandamide induces behavioral disruption in an attention task in rats through a vanilloid-dependent mechanism. Psychopharmacology, 2009, 203(3):529-38

Steve Negus

Dean, Reginald; Bilsky, Edward J.; Negus, S. Stevens (Eds.) Opiate Receptors and Antagonists, From Bench to Clinic. Series: Contemporary Neuroscience 2009, IV, Hardcover, ISBN: 978-1-58829-881-2

Mike Nader

Beveridge TJR, Smith HR, Nader MA, Porrino LJ. Abstinence from chronic cocaine self-administration alters striatal dopamine systems in rhesus monkeys. Neuropsychopharmacology, in press.

Czoty PW, Riddick NV, Gage HD, Sandridge JM, Nader SH, Garg S, Bounds M, Garg PK, Nader MA. Effect of menstrual cycle phase on dopamine D2 receptor availability in female cynomolgus monkeys. Neuropsychopharmacology 2009; 34: 548-554.

BIBLIOGRAPHY Recent publications of ISGIDAR Members (continued)

Mike Nader (continued)

Martelle JL, Nader MA. A within-subject assessment of the discriminative stimulus and reinforcing effects of self-administered cocaine in rhesus monkeys. Psychopharmacology, in press.

Banks ML, Czoty PW, Gage HD, Bounds MC, Garg PK, Garg S, Nader MA. Effects of cocaine and MDMA self-administration on serotonin transporter availability in monkeys. Neuropsychopharmacology 2008; 33: 219-225.

Banks ML, Czoty PW, Sprague JE, Nader MA. Influence of thyroid hormones on 3,4-methylenedioxymethamphetamine-induced thermogenesis and reinforcing strength in monkeys. Behav Pharmacol 2008; 19: 167-170.

Banks ML, Gould RW, Czoty PW, Nader MA. Relationship between response rates and measures of reinforcing strength using a choice procedure in monkeys. Behav Pharmacol 2008; 19: 365-369.

Banks ML, Sprague JE, Czoty PW, Nader MA. Effects of ambient temperature on the relative reinforcing strength of MDMA using a choice procedure in monkeys. Psychopharmacology 2008; 196: 63-70.

Martelle JL, Czoty PW, Nader MA. Effect of time-out duration on the reinforcing strength of cocaine assessed under a progressive-ratio schedule in rhesus monkeys. Behav Pharmacol 2008; 19: 743-746.

Nader MA, Czoty PW. Brain imaging in nonhuman primates: insights into drug addiction. ILAR 2008; 49: 89-102.

Nader MA, Czoty PW, Gould RW, Riddick NV. PET imaging studies of dopamine receptors in primate models of addiction. Phil Trans Royal Soc B 2008; 363: 3223-3232.

Kenneth Perkins

Perkins, K.A., & Scott, J. Sex differences in long-term smoking cessation rates due to nicotine patch. Nicotine and Tobacco Research, 2008, 10, 1245-1251.

Perkins, K.A., Lerman, C., Stitzer, M.L., Fonte, C.A., Briski, J.L., Scott, J.A., & Chengappa, K.N.R. Development of procedures for early screening of smoking cessation medications in humans. Clinical Pharmacology and Therapeutics, 2008, 84, 216-221.

Perkins, K.A., Lerman, C., Grottenthaler, A., Ciccocioppo, M., Milanak, M., Conklin, C.A., Bergen, A.W., & Benowitz, N.L. Dopamine and opioid gene variants are associated with increased smoking reward and reinforcement due to negative mood. Behavioural Pharmacology, 2008, 19, 641-649.

BIBLIOGRAPHY Recent publications of ISGIDAR Members (continued)

Kenneth Perkins (continued)

Perkins, K.A., Lerman, C., Coddington, S.B., Jetton, C., Karelitz, J.L., Scott, J., & Wilson, A.S. Initial nicotine sensitivity in humans as a function of impulsivity. Psychopharmacology, 2008, 200, 529-544.

Perkins, K.A. Sex differences in nicotine reinforcement and reward: influences on the persistence of tobacco smoking. In Bevins, R. & Caggiula, A.R. (eds) The Motivational Impact of Nicotine and its Role in Tobacco Use. New York: Springer-Verlag, 2008, pp. 143-169.

Perkins, K.A., Coddington, S.B., Karelitz, J.L., Jetton, C., Scott, J., Wilson, A.S., & Lerman, C. Variability in initial nicotine sensitivity due to sex, history of other drug use, and parental smoking. Drug and Alcohol Dependence, 2009, 99, 47-57.

Morgane Thomsen

Thomsen M, Fink-Jensen A, Woldbye W, Wörtwein G, Sager T, Holm R, Pepe L, Caine SB. Effects of acute and chronic aripiprazole treatment on choice between cocaine self-administration and food under a concurrent schedule of reinforcement in rats. Psychopharmacology 2008:201;43-53

Elise M. Weerts

Kaminski, B.J., Goodwin, A.K., Weerts, E.M. (2008) Dissociation of alcohol seeking and consumption under a chained schedule of oral alcohol reinforcement in baboons. Alcoholism Clinical and Experimental Research 32(6): 1014-1022

Goodwin, A.K., Brown, P.R., Jansen, E.W.W., Jakobs, C., Gibson, K.M., Weerts, E.M. Behavioral effects and pharmacokinetics of gamma-hydroxybutyrate (GHB) precursors gamma-butyrolactone (GBL) and 1,4-butanediol (1,4-BD) in baboons. Psychopharmacology (in press); Epub ahead of Print; DOI 10.1007/s00213-009-1477-8

William Woolverton

Woolverton, W.L., Myerson, J. and Green, L.: Delay discounting of cocaine by rhesus monkeys. Exp. Clin. Psychopharm. 15: 238-244, 2007.

Woolverton, W.L., Wang, Z., Vasterling, T., Carroll, F.I. and Tallarida, R.: Self-administration of drug mixtures with monkeys: combining drugs with comparable mechanisms of action. Psychopharmacology 196: 575-582, 2008.

Woolverton, W.L., Wang, Z., Vasterling, T., Carroll, F.I. and Tallarida, R.: Self-administration of cocaine-remifentanil mixtures by monkeys: an isobolographic analysis. Psychopharmacology 198: 387-394, 2008.

Wang, Z. and Woolverton, W.L.: Super-additive interaction of the reinforcing effects of cocaine and H1-antihistamines in rhesus monkeys. Pharmacol. Biochem. Behav. 91: 590-595, 2009.

Woolverton, W.L. and Wang, Z.: Self-administration of cocaine-pentobarbital mixtures by rhesus monkeys. Drug Alc. Depend. 100: 272-276, 2009.

POSITIONS AVAILABLE

DOCTORAL RESEARCH SCHOLARSHIP: Vice Chancellor's Strategic Research Doctoral Scholarship, School of Psychology, Victoria University of Wellington, New Zealand. **Susan Schenk**, Research Professor, School of Psychology, Victoria University of Wellington, PO Box 600, Wellington, New Zealand, susan.schenk@vuw.ac.nz, www.victoria.ac.nz/scholarships

POSTDOCTORAL FELLOW: The National Institute on Drug Abuse (NIDA), Intramural Research Program (IRP), National Institutes of Health (NIH), Department of Health and Human Services (DHHS) has a postdoctoral position available in the area of human nicotine psychopharmacology. Current studies with adult and adolescent smokers and schizophrenia patients are focused on 1) genetics of nicotine reinforcement and cue reactivity and 2) effects of nicotine and nicotine withdrawal on attention and cognition. The candidate must have a Ph.D.; a background in behavioral genetics, cognitive or experimental psychology, or behavioral pharmacology is highly desirable. Candidates must be U.S. citizens or permanent residents. Salary range is \$41,200 to \$50,500 depending on experience. Applicants should submit a curriculum vitae, statement of research interests, and 3 reference letters to: **Stephen Heishman**, Ph.D., NIDA IRP, 251 Bayview Blvd, Baltimore, MD 21224. Inquiries: 443.740.2458 or heishman@nih.gov. DHHS and NIH are Equal Opportunity Employers and encourage applications from women and minorities.

POSTDOCTORAL FELLOW: I am looking for one or two candidates to fill post-doctoral research positions in my laboratory at the NIDA Intramural Research Program (formerly the Addiction Research Center). Fellows will have opportunities for training in a wide range of behavioral and in vitro techniques for studying drugs of abuse. Applicants must have completed doctoral training in pharmacology, psychology, neuroscience or a related discipline. Salary is competitive commensurate with experience. For more details on the positions please contact me directly at the e-mail address or phone number shown below. To apply please forward a curriculum vitae, statement of research interests, and three letters of reference to me at the address below. Jonathan L. Katz, Ph.D. Medications Discovery Research Branch Psychobiology Section NIDA Intramural Research Program 251 Bayview Boulevard, Suite 200 Baltimore, MD 21224 ph: 443-740-2582 fax: 443-740-2829

POSTDOCTORAL POSITION: The University of Vermont announces the availability of a post-doctoral research fellowship position in an internationally recognized center of excellence for the study of drug abuse. Fellows have opportunities for training in a wide range of treatment-outcome and human laboratory research. Current openings are with SARAH H. HEIL (Sarah.Heil@uvm.edu, 802-656-8712) and STEPHEN T. HIGGINS (Stephen.Higgins@uvm.edu, 802-656-9614) on projects characterizing nicotine withdrawal in pregnant cigarette smokers and developing efficacious behavioral therapies for cigarette smoking among pregnant women. Applicants must have completed doctoral training in psychology, behavior analysis, or a related discipline and be U.S. citizens or permanent residents. Salary is competitive commensurate with experience (PGY 1 to PGY 7) and supported by an NIDA/NIH Institutional Training Award. For more details on the position please contact the investigators at the e-mail addresses/phone #s shown above. To apply please forward a curriculum vitae, statement of research interests, and three letters of reference in c/o Ms. Diana Cain, University of Vermont, Dept. of Psychiatry, UHC Campus, Rm. 3101C Old Hall, MS#482, Burlington, VT 05401. The University of Vermont is an affirmative action and equal opportunity employer.

POSITIONS AVAILABLE (continued)

POSTDOCTORAL FELLOW: Barak Caine would be pleased to interview candidates for up to three years of postdoctoral training in the Neuroscience Program, Alcohol & Drug Abuse Research Center, McLean Hospital, Harvard Medical School. There are three principal criteria upon which candidates will be evaluated, in order of importance, as follows. (1) Overlapping research interests with the P.I.; (2) potential to carry out the work with initiative, intellectual contribution, and a degree of independence; (3) potential and willingness to actively contribute within (a) a small group of students, technicians, postdoctoral trainees and faculty in the laboratory (i.e., "works well with others"), and (b) weekly meetings of postdoctoral fellows and investigators from the entire Alcohol & Drug Abuse Research Center (i.e., data presentations and scientific discourse); (4) eligibility for support under a NIDA T32 training grant mechanism. For research interests, see representative publications in "Bibliography" in this newsletter (see both Barak Caine and Morgane Thomsen). Send preliminary inquiries to barak@mclean.harvard.edu.

JUNIOR FACULTY POSITION: Assistant Neuroscientist wanted. Establish & maintain an independent research program in addiction-related, behavioral pharmacology. Supervise Lab experiments. Teach advanced topics in neuroscience. Must have Ph.D. in Neuroscience, Pharmacology or rel. field & 2 yrs. exp. in same type of job or 2 yrs. research exp. in behavioral pharmacology or psychopharmacology inv. addiction-related lab research, incl. administering drugs to mice using chronic intravenous routes of administration & using animal models of drug abuse & schizophrenia. Proven research capability in neurobiology of drug addiction or psychopharmacology, as demonstrated by publication in peer-review scientific journals. Send C.V. to S. Barak Caine, Ph.D., Assoc. Professor, Mclean Hospital, 115 Mill St., Belmont, MA 02478.

RESEARCH TITLE FACULTY POSITION: The Department of Behavioral Science in the College of Medicine at the University of Kentucky, is seeking a Research Assistant Professor to work on substance abuse projects with emphasis on the human behavioral pharmacology of commonly abused drugs. Special emphasis is placed on elucidating behavioral and neuropharmacological mechanisms involved in stimulant abuse, identifying putative pharmacotherapies for the treatment of stimulant abuse and dependence, evaluating individual differences in drug abuse vulnerability and translating basic and applied research for treatment and prevention. The Department of Behavioral Science is an exciting and productive research environment. The position is in the non-tenured research title series with an appointment in the Department of Behavioral Science. The University of Kentucky is located in Lexington, Kentucky known for its outstanding quality of life. Lexington is a growing community of approximately 330,000 with excellent schools, diverse business and industry, excellent recreational opportunities, and a variety of cultural events. Information about the Department is available at www.mc.uky.edu/behavioralscience. The Assistant Professor will also be encouraged to carry out independent research on drug and alcohol issues, and will be expected to obtain extramural funding to establish and maintain an independent research program. Candidates should qualify for faculty appointment in the Department of Behavioral Science. A terminal degree with two years of experience is suggested. Competitive candidates will have demonstrated an ability to carry out research and be able to effectively communicate with research staff and with program personnel. Applicants should submit a vita and three letters of reference to Craig R. Rush, Department of Behavioral Science, Medical Behavioral Science Building, Lexington, KY 40536-0086. Additional information can be obtained by e-mail (crush2@email.uky.edu). Review of applications will begin immediately and will continue until

POSITIONS AVAILABLE (continued)

the position is filled. All applicants will be required to pass a pre-employment drug screen and undergo a pre-employment national background check as mandated by University of Kentucky Human Resources. The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.

EXCIPIENTS

From Jonathan Katz:

https://www.medicinescomplete.com/mc/excipients/current/login.htm?uri=http%3A%2F%2Fwww.medicinescomplete.com%2Fmc%2Fexcipients%2Fcurrent%2F