

The ISGIDAR NEWSLETTER

VOL. 24, NO. 1 March, 1998

INTERNATIONAL STUDY GROUP INVESTIGATING DRUGS AS REINFORCERS

CORRESPONDENCE

ABOUT ISGIDAR: <i>(President of ISGIDAR)</i>	ABOUT ISGIDAR NEWSLETTER: <i>(Secretary of ISGIDAR)</i>
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INDEX

ISGIDAR STUDENT TRAVEL

AWARD

ISGIDAR LUNCHEON

INFORMATION

RECENT PUBLICATIONS FROM
OUR MEMBERS

POSITIONS AVAILABLE

1998 ISGIDAR SCIENTIFIC MEETING -- SCOTTSDALE, ARIZONA

The 1998 annual **ISGIDAR Scientific Meeting** will be held Saturday 13 June 1998 at the Scottsdale Princess resort in Scottsdale, AZ. As usual, the meeting will be held as a satellite session immediately preceding the annual scientific meeting of the College on Problems of Drug Dependence. ISGIDAR registration will begin at 8:30 am. The registration fee is \$25. Paper presentations will be scheduled between 9 am and 5 pm, and the business meeting will be held from 5 to 5:30 pm. We are especially pleased to announce that **Dr. Charles R. Schuster**, currently Professor of Psychiatry at Wayne State University School of Medicine, and former Director of the National Institute on Drug Abuse, will be an invited speaker. In addition, several senior members of ISGIDAR have requested a discussion regarding measurement of the

efficacy of reinforcing stimuli (with emphasis upon drug reinforcers) at the meeting. This is a particularly timely issue considering the resources being devoted to the development of "anti-addiction" medications. Stimulating this discussion will be presentations by **Drs. J. Woods, R. Meisch, W. Woolverton, and W. Bickel** and their associates.

*If you wish, you may also **advance register** (\$25 which does not include lunch) by sending a check to Marilyn Carroll at the address below. Receipts for meal costs (and registration) will be provided at the meeting. Submit **advanced registration** payable to ISGIDAR to: **Dr. Marilyn Carroll**, Psychiatry Department, Box 392 UMHC, University of Minnesota, Minneapolis, MN 55455*

To **present a paper at the ISGIDAR meeting**, please send an **abstract** by May 20, 1998 to Patrick Beardsley at the address listed above. Abstracts should conform to the general format used for abstract submissions to the CPDD Meetings although length and other formatting details need not be adhered to. Please note that papers submitted to ISGIDAR should not also be presented at CPDD. The amount of time available for each talk will depend on the number of papers submitted but will not be less than 20 minutes.

Student Travel Award

ISGIDAR will again sponsor a Student Paper Competition Award for a new investigator to present a paper on drug self-administration research. Up to \$500 in reasonable and documented travel costs will be paid to the winner to present a paper at ISGIDAR. Payment will be made upon submission of travel receipts to the ISGIDAR Treasurer. Those who do not receive the award, but who receive good reviews will be encouraged to present their papers at the ISGIDAR meeting.

ELIGIBILITY:

- Applicants must be enrolled in a graduate program and be working toward a doctorate or have received their doctorate within the last five years (after June 1, 1993).
- Applicants who are not ISGIDAR members must be sponsored by an ISGIDAR member.
- The research to be reported at ISGIDAR must not already be published.

MANUSCRIPT REQUIREMENTS:

- Papers should not be more than 10 pages excluding figures and references.
- The length and scope of the paper should be consistent with a 20-25 minute slide presentation.
- Please include paper title, name, address, phone number and author's signature on the cover page of the manuscript. The signature and typed name of the author's sponsor should also appear on the cover page after a statement indicating that the applicant made a significant scientific contribution to the research. Submit four copies, double-spaced.

REVIEW:

Each manuscript will be independently reviewed by the ISGIDAR officers for originality, scientific contribution, methodology and clarity. Blind review is possible upon request. Reviewers will not participate in the review of papers from their own institution.

Submit manuscripts to:

Patrick M. Beardsley, Ph.D.
Medical College of Virginia
Dept. of Pharmacology and Toxicology

P.O. Box 980613
Richmond, VA 23298-0613

Luncheon Information

Our President (not Clinton but Beardsley) has been in discussion with the Scottsdale Princess via the Sailair folks trying to negotiate an affordable luncheon during the ISGIDAR meeting. Previously, those choosing to attend the ISGIDAR luncheon paid about \$15. This year the Scottsdale Princess initially quoted a price of \$36 a person for a basic buffet lunch which is in excess of most of our per diems. Negotiations are ongoing and there is some hope that a satisfying lunch can still be provided at the Princess for \$15. Regardless of the outcome of these negotiations, we will have an ISGIDAR luncheon. If the Princess remains prohibitively expensive, off-site restaurants have already been identified as potential luncheon sites. Luncheon information, including costs and content, along with sign-up sheets will be available at the ISGIDAR registration desk. ISGIDAR's luncheon has always been a great chance to meet colleagues, discuss science (baseball, music, politics and other reinforcers or punishers) and to find out who is looking for students or looking to place students.

Members: Recent Publications

Papers for 1997-1998

Marilyn E. Carroll, Department of Psychiatry, Box 392 UMHC, University of Minnesota, Minneapolis, MN 55455, Phone: 612-626-6289; Fax: 612-624-8935; e-mail: mcarroll@tx.umn.edu

Rodefer JS, Mattox AJ, Thompson SS and Carroll ME (1997) Effects of buprenorphine and an alternative nondrug reinforcer, alone and in combination, on smoked cocaine self-administration in monkeys. *Drug and Alcohol Dependence*, 45:27-29.

Mattox AJ and Carroll ME (1997) Smoked heroin and cocaine base (speedball) combinations in rhesus monkeys. *Experimental and Clinical Psychopharmacology*, 5:113-118.

Carroll ME and Lac ST (1997) Acquisition of i.v. amphetamine and cocaine self-administration in rats as a function of dose. *Psychopharmacology*, 129:206-214.

Rodefer JS and Carroll ME (1997) A comparison of progressive ratio schedules vs behavioral economic measures: Effect of an alternative reinforcer on the reinforcing efficacy of phencyclidine. *Psychopharmacology*, 132:95-103.

Lynch WJ, Labounty LP and Carroll ME (1997) A novel paradigm to investigate regulation of drug intake in rats self-administering i.v. cocaine or heroin. *Experimental and Clinical Psychopharmacology*, in press.

Campbell UC, Thompson SS and Carroll ME (1997) Acquisition of oral phencyclidine (PCP) self-administration in rhesus monkeys: Effects of dose and an alternative nondrug reinforcer. *Psychopharmacology*, in press.

Carroll ME and Lac ST (1997) The effects of dietary caffeine and the amount and palatability of food on acquisition of cocaine self-administration in rats. *Psychopharmacology*, in press.

Carroll ME: Interactions of food and addiction. In: Niesink RJM, Hoefakker RE, Westera W, Jaspers RMA, Kornet LMW and Boobis S (Eds.) *Neurobehavioral Toxicology and Addiction: Food, Drugs and Environment*, The Netherlands: Open University Press, 1997, pp 725-749.

Carroll ME and Mattox AJ: Drug reinforcement in animals. In: Johnson BA and Roache JD (Eds.) Drug Addiction and its Treatment: Nexus of Neuroscience and Behavior. Lippencott-Raven Press: New York, 1997, pp. 3-38.

Carroll ME: Caffeine: Psychological and psychiatric consequences. In: Ammerman RT, Tartar RE and Ott PJ (Eds.) Handbook of Substance Abuse: Neurobehavioral Pharmacology, Plenum, Inc.: New York, NY, in press, 1998.

Carroll ME and Bickel WK: Behavioral-environmental determinants of the reinforcing functions of cocaine. In: Higgins S and Katz JL (Eds.) Cocaine Abuse: Basic Determinants, Clinical Applications, and Policy. Plenum, Inc.: New York, in press, 1998.

Bernstein GA, Carroll ME, Walters AM, Crosby RD, Perwien AR and Benowitz NL Caffeine withdrawal effects in normal children. Journal of the American Academy of Child and Adolescent Psychiatry, in press, 1998.

Carroll ME: Income alters the relative reinforcing effects of drug and nondrug reinforcers. In: Chaloupka, FJ, Bickel WK, Grossman, M and Saffer H (Eds.) The economic Analysis of Substance Use and Abuse: An Integration of Econometric and Behavioral Economic Research . National Bureau of Economic Research., Cambridge, MA., in press, 1998.

Richard W. Foltin, Ph.D., Associate Professor, Department of Psychiatry, College of Physicians and Surgeons of Columbia University, The New York State Psychiatric Institute, 722 West 168th St, Unit 54, New York, NY 10032. Phone (212) 543-5981; FAX (212) 543-5991; rwf@columbia.edu

Kelly, T.H., Foltin, R.W., Emurian, C.S., & Fischman, M.W. Are choice and self-administration of marijuana related to Δ^9 -THC content? Exp. Clin. Psychopharm. 5: 74-82, 1997.

Volkow, N.D., Wang, G.-J., Fischman, M., Foltin, R., Fowler, J.S., Abumrad, N.N., Vitkun, S., Logan, J., Gatley, S.J., Pappas, N., Hitzemann, R., & Shea, C.E. Relationship between subjective effects of cocaine and dopamine transporter occupancy. Nature, 386: 827-830, 1997.

Foltin, R.W. Food and amphetamine self-administration by baboons: effects of alternatives. J. Exp. Anal. Behav. 68:47-66, 1997.

Haney, M., Comer S.D., Ward A.S., Foltin R.W., & Fischman M.W. Factors influencing marijuana self-administration by humans. Behav. Pharmacol, 8: 101-112, 1997.

Foltin, R.W., & Evans, S.E., A novel protocol for studying food or drug seeking in rhesus monkeys. Psychopharmacol. 132: 209-216, 1997.

Ward, A.S., Haney, H., Fischman, M.W., & Foltin, R.W. Binge cocaine self-administration in humans: Intravenous cocaine. Psychopharmacol., 132: 375-381, 1997.

Ward A.S., Comer S.D., Haney M., Foltin R.W., Fischman M.W. Effects of a monetary alternative on marijuana self-administration. Behavioural Pharmacology, 8: 275-286, 1997.

Ward A.S., Haney M., Fischman M.W., & Foltin R.W. Binge cocaine self administration by humans: Smoked cocaine. Behavioural Pharmacology 8: 736-744, 1997.

William L. Woolverton, Ph.D., Professor and Director, Division of Neurobiology and Behavior Research, Department of Psychiatry and Human Behavior, University of Mississippi Medical Center, 2500 N. State Street, Jackson, MS 39216. Phone: 601-984-5898; FAX: 601-984-5899; woolvert@fiona.umsmed.edu

Rowlett, J.K. and Woolverton, W.L.: Discriminative-stimulus effects of zolpidem in pentobarbital-trained subjects: I. Comparison with triazolam in rhesus monkeys and rats. J. Pharmacol. Exp. Ther. 280: 162-173, 1997

Rush, C.R., Madakasira, S., Goldman, N.H., Woolverton, W.L. and Rowlett, J.K.: Discriminative-stimulus effects of zolpidem in pentobarbital-trained subjects: II. Comparison with triazolam and caffeine in humans. *J. Pharmacol. Exp. Ther.* 280: 174-188, 1997.

Woolverton, W.L. and English, J.A.: Effects of some phenylethylamines in rhesus monkeys trained to discriminate (+)-amphetamine from saline. *Drug Alc. Dep.* 44: 79-85, 1997.

Woolverton, W.L., English, J.A. and Weed, M.R.: Choice between cocaine and food in a discrete trials procedure in monkeys: A unit price analysis. *Psychopharmacology* 133: 269-274, 1997.

Weed, M.R., Paul, I.A., Dwoskin, L.P., Moore, S.E. and Woolverton, W.L.: The relationship between reinforcing effects and in vitro effects of D1 agonists in monkeys. *J. Pharmacol. Exp. Ther.* 283: 29-38, 1997.

Rowlett, J.K. and Woolverton, W.L. Self-administration of cocaine and heroin combinations by rhesus monkeys under a progressive-ratio schedule. *Psychopharmacology* 133: 363-371, 1997.

Woolverton, W.L. and English, J.A.: Further analysis of choice between cocaine and food using the unit price model of behavioral economics. *Drug Alc. Dep.* 49: 71-78, 1997.

Rowlett, J.K. and Woolverton, W.L. Discriminative stimulus effects of benzodiazepine agonists and partial agonists in pentobarbital-trained monkeys. *Behav. Pharmacol.*, in press.

Woolverton, W.L. and Rowlett, J.K.: Choice maintained by cocaine or food in rhesus monkeys: Effects of varying probability of reinforcement. *Psychopharmacology*, in press.

Woolverton, W.L., Wilcox, K.M. and Rowlett, J.K.: Self-administration of cocaine-heroin combinations by rhesus monkeys: antagonism by naltrexone. *J. Pharmacol. Exp. Ther.*, in press.

Harriet de Wit, Associate Professor, Department of Psychiatry, MC 3077, University of Chicago, 5841 S. Maryland Ave., Chicago, IL. 60637. Phone (773) 702-1537; FAX: (773) 702-6454; hdew@midway.uchicago.edu

Brauer, L.H. and H. de Wit High dose pimozide does not block amphetamine-induced euphoria in normal volunteers. *Pharmacol. Biochem. Behav.* 56: 265-272, 1997.

Brauer, L.H., A.J. Goudie and H. de Wit Dopamine ligands and the stimulus effects of amphetamine: Animal models vs human laboratory data. *Psychopharmacology*, 130: 2-13, 1997.

de Wit, H. and M. Rukstalis Effects of triazolam across the menstrual cycle in women: Relationship to progesterone, estradiol and allopregnanolone levels. *Psychopharmacology*, 130: 69-78, 1997.

Richards, J.B., S.H. Mitchell, H. de Wit, L.S. Seiden Determination of discount functions in rats with an adjusting amount procedure. *JEAB* 67: 353-366, 1997.

Zacny, J.P., S.H. Mitchell, M.J. Cramblett, H. de Wit The effects of ethanol on the relative preference for cigarettes. *Behav. Pharmacol.* 8: 75-81, 1997.

de Wit, H., M. Clark and L.H. Brauer Effects of d-amphetamine in grouped vs isolated humans. *Pharmacol. Biochem. Behav.* 57: 333-340, 1997.

Doty, P., J.M. Kirk, M.J. Cramblett, H. de Wit Behavioral responses to ethanol in light and moderate drinkers following naltrexone pretreatment. *Drug Alc. Depend.* 47: 109-116, 1997.

Kirk, J.M., P. Doty and H. de Wit Effects of expectancies on subjective responses to oral delta-9-tetrahydrocannabinol. *Pharmacol. Biochem. Behav.* 59: 287-293, 1998.

de Wit, H., J. M. Kirk and A. Justice Behavioral pharmacology of cannabinoids. In: Tarter, R.E., Ammerman, R.T. and Ott, P.J. (Eds) Sourcebook on Substance Abuse: Etiology, Methodology and Intervention. (in press)

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Galinkin, J. L., Janiszewski, D., Young, C. J., Klafta, J. M., Klock, P. A., Coalson, D. W., Apfelbaum, J. L., & Zacny, J. P. (1997). The subjective, psychomotor, cognitive and analgesic effects of subanesthetic concentrations of sevoflurane and nitrous oxide. *Anesthesiology*, 87: 1082-1088.

Zacny, J. P., Cho, A. M., Toledano, A. Y., Galinkin, J., Coalson, D.W., Klock, P. A., Klafta, J. M., & Young, C. J. (1997). Effects of information on the reinforcing, subjective, and psychomotor effects of nitrous oxide in healthy volunteers. *Drug Alc Depend* 48: 85-95.

Zacny, J. P., Conley, K., & Galinkin, J. (1997). Comparing the subjective, psychomotor, and physiological effects of buprenorphine and morphine in healthy volunteers. *J Pharmacol Exp Ther* 282: 1187-1197.

Young, C. J., Coalson, D. W., Klock, A., Klafta, J., Goldsher, G., Apfelbaum, J. L., & Zacny, J. P. (1997). Analgesic and other effects of thiopental at steady-state concentrations in human volunteers. *Acta Anaesthesiol. Scandinav.* 41: 903-910.

Hasegawa, A. E. & Zacny, J. P. (1997). Effects of three L-type calcium channel blockers on morphine effects in healthy volunteers. *Anesth Analg* 85: 633-638.

Conley, K. M., Toledano, A. Y., Apfelbaum, J. L., & Zacny, J. P. (1997). The modulating effects of a cold water stimulus on opioid effects in volunteers. *Psychopharmacology*, 131: 313-320.

Zacny, J. P., Conley, K., & Marks, S. (1997). Comparing the subjective, psychomotor, and physiological effects of intravenous nalbuphine and morphine in healthy volunteers. *J Pharmacol Exp Ther* 280: 1159-1169.

Cho, A. M., Coalson, D. W., Klock, P. A., Klafta, J. M., Marks, S., Toledano, A. Y., Apfelbaum, J. L., & Zacny, J. P. (1997). The effects of alcohol history on the reinforcing, subjective and psychomotor effects of nitrous oxide in healthy volunteers. *Drug Alc Depend* 45: 63-70.

Margaret Haney, Ph.D., College of Physicians and Surgeons of Columbia University, NYSPI, 722 W.168th st #54, NY NY 10032. Phone (212) 740-0012; FAX: (212) 740-0767; mh235@columbia.edu

Haney M, Comer SD, Foltin RW, Fischman MW. (1997) Behavioral contingencies modulate alprazolam self-administration by humans. *Behavioural Pharmacology* 8:82-90.

Haney M, Comer SD, Ward AS, Foltin RW, Fischman MW. (1997) Factors influencing marijuana self-administration in humans. *Behavioural Pharmacology* 8:101-112.

Ward AS, Haney MH, Fischman MW, Foltin RW. (1997) Binge cocaine self-administration in humans: Intravenous cocaine. *Psychopharmacology* 132:375-381.

Haney M, Comer SD, Fischman MW, Foltin RW. (1997) Alprazolam increases food intake by humans. *Psychopharmacology* 132:311-314.

Ward AS, Comer SD, Haney MH, Fischman MW, Foltin RW. (1997) Effects of monetary alternatives on marijuana self-administration *Behavioural Pharmacology* 8:275-286.

Comer SD, Haney M, Foltin RW, Fischman MW. (1997) Cyproheptadine produced modest increases in total caloric intake by

humans. *Physiology and Behavior* 62:831-839.

Comer SD, Haney M, Foltin RW, Fischman MW. (1997) Effects of caffeine withdrawal on humans living in a residential laboratory. *Experimental Clinical Psychopharmacology* 5, 399-403.

Ward AS, Haney M, Fischman MW, Foltin RW. (1997) Binge cocaine self-administration: Smoked cocaine. *Behavioural Pharmacology*, 8:736-744.

Haney M, Fischman MW, Foltin RW. Effects of pergolide on cocaine self-administration in men and women. *Psychopharmacology* (in press).

POSITIONS AVAILABLE

MEDICAL COLLEGE OF VIRGINIA, DEPARTMENT OF PHARMACOLOGY & TOXICOLOGY

Postdoctoral research positions are available in **laboratory animal behavioral pharmacology**. Positions are possible utilizing almost any behavioral pharmacological approach to the study of the behavioral and/or neurochemical mechanisms mediating the activity of the drugs of abuse. Ongoing studies utilize mice, rats, squirrel monkeys, and rhesus monkeys in discrimination, self-administration, and other operant and respondent procedures involving all routes of systemic and central drug administration. Of particular current emphasis are studies involving the:

- pharmacology of dopamine D3 receptor ligands
- pharmacology of excitatory amino acid agents
- development of medications for the treatment of drug-dependency disorders
- pharmacology of behaviorally-active inhalation agents
- development of drug i.v. rat self-administration relapse procedures

Many opportunities exist for collaborating with other researchers in the department who have major research foci upon the stimulants and hallucinogens, cannabinoids, nicotine, and the opiates. Send vita, letter of interest, and names and telephone numbers of 2 references to: **Patrick M. Beardsley, Ph.D.** or **Robert L. Balster, Ph.D.**; Medical College of Virginia, Department of Pharmacology, P.O. Box 980613, Richmond, VA 23298-0613. (804) 828-5185.

POST-DOCTORAL POSITION IN NICOTINE/SMOKING RESEARCH

A post-doctoral position is available in nicotine/smoking research with Dr. Kenneth A. Perkins at the University of Pittsburgh. This research centers on the behavioral pharmacology of nicotine in humans. NIDA-supported projects include nicotine discrimination and the relationship of nicotine tolerance to tobacco dependence and self-administration. Other studies examine sex differences in nicotine effects and interactions between nicotine and other drugs. Collaboration with other faculty conducting similar research with non-human animals is possible. Applicants also interested in clinical research may become involved in smoking cessation studies.

Interested candidates should send a C.V. and letter of interest to:

Kenneth A. Perkins Ph.D., Professor of Psychiatry
WPIC, University of Pittsburgh School of Medicine
3811 O'Hara Street, Pittsburgh PA 15213
phone: (412) 624-1716; fax: (412) 624-6018

POSTDOCTORAL POSITION AT UNIV OF VERMONT TO ASSIST IN STUDIES OF REDUCED SMOKING AND CIGARETTE SUBSTITUTES:

The Human Behavioral Pharmacology Laboratory at UVM has a NIDA-funded training grant which has an opening for a postdoctoral fellow to work with John R. Hughes, M.D. on NIH and pharmaceutical company sponsored studies of the effects of reduced smoking and cigarette substitutes (e.g. Eclipse) in smokers not interested in quitting smoking. The fellowship is to begin between 7/1 and 9/15 and lasts for 2-3 yrs. The stipend is \$24,000/yr or more depending on experience plus \$1700 in travel/book funds plus medical coverage. Applicants must be US citizens and have their terminal degree. Applicants with a knowledge of behavior analysis and psychopharmacology are preferred.

For further information call Dr. Hughes at (802) 656-9610 or email at john.hughes@uvm.edu. Applications should include vita, description of research interests and career plans and names of references. Applications should be sent to John R. Hughes, M.D., Dept of Psychiatry, Univ of VT, 38 Fletcher Pl, Burlington VT 05401-1419.

POSTDOCTORAL POSITION AT LOUISIANA STATE UNIVERSITY

Postdoctoral Fellow Position in neuropharmacology available 1 April 1998 to study the relationships between activation of the hypothalamo-pituitary-adrenal axis and cocaine self-administration in rats. Applicants should have a Ph.D. and background in neuropharmacology, neuroendocrinology, behavioral pharmacology or neuroscience. Send curriculum vitae, description of research interests, reprints and the names of three references to R.N. Pechnick, Ph.D., Department of Pharmacology, LSU Medical Center, 1100 Florida Avenue, New Orleans, LA 70119-2799. AA/ADA/EOE.