#### NEWSLETTER

### **ISGIDAR**

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# INTERNATIONAL STUDY GROUP INVESTIGATING DRUGS AS REINFORCERS

#### CORRESPONDENCE

ABOUT ISGIDAR: (President of ISGIDAR)

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#### 1994 ISGIDAR SCIENTIFIC MEETING -- SCOTTSDALE

The 1995 ISGIDAR meeting was held June 10th in Scottsdale, AZ, as a satellite session of CPDD. A listing of the presentations is given below.

### Presentations at the 1995 ISGIDAR Meeting

- Invited Speaker: W. K. Bickel: Reexamining reinforcer efficacy: Methods, measures and metrics
- S. M. Evans and R. W. Foltin An animal model of craving
- M. Kelley-Poole and F. R. George Naltrexone antagonism of operant ethanol self-administration
- S. J. Heishman, J. E. Henningfield, C. R. Schuster, and S. R. Goldberg Opioid self-administration in humans: Effects of dose and alternative reinforcer
- J. L. Falk, A. Siris, and C. E. Lau Conditions sufficient for the production of oral selfadministration of cocaine or lidocaine solutions in preference to water
- M. A. Bozarth, C. M. Pudiak and R. KuoLee A comparison of cocaine, nicotine and pseudoephedrine facilitation of brain stimulation reward

- G. I. Elmer, J. L. Evans, S. R. Goldberg, C. J. Epstein, and J. L. Cadet Morphine self-administration behavior in transgenic super-oxide dismutase mice
- A. Liguori and J. R. Hughes Caffeine self-administration and withdrawal among cola and coffee drinkers
- R. A. Meisch, N. S. Want, and R. B. Stewart Relative reinforcing effects of different doses of methadone
- K. A. Perkins, J. E. Grobe, D. Weiss, and A. Caggiula Nicotine self-administration in humans
- M. Shoaib, C. W. Schindler, I. P. Stolerman and S. R. Goldberg Examination of the rewarding properties of nicotine in rats: Effects of nicotine pre-exposure
- R. W. Foltin Are self-administered drug and food economic substitutes
- K. Takada and T. Yanagita Influence of physostigmine on the reinforcing effects of cocaine and methamphetamine in rats
- W. L. Woolverton Drug choice in monkeys: Concurrent VI schedules of reinforcement

#### NOMINATIONS FOR ISGIDAR

Everyone is encouraged to submit nominations for ISGIDAR membership to the president at the address on the front of the newsletter. New members are essential to maintaining ISGIDAR as a vigorous organization. A letter of recommendation and vita are needed to be considered.

### COMMENTARY BY THE PRESIDENT OF ISGIDAR R. J. LAMB, Ph.D.

As president of ISGIDAR I would like to thank all the speakers at our last scientific meeting. Personally, I found the talks this year quite enjoyable and, perhaps, what is even more important I think I learn quite a bit from them. One thing that I found particularly noteworthy was the apparent shift from studies examining the biologic and pharmacological basis of a drug's reinforcing effects to talks about contextual and environmental determinants of the amount behavior maintained by drugs. I believe that both the older story of the previous years, studying the biology of addiction requires studying the biology of drug reinforcement, and this newer story that the reinforcing effects of drugs are modulated by the context and the environment of the organism, are stories we need to educate the larger scientific community about. This is one thing I would like to see ISGIDAR take a more active role in during the coming years. I would appreciate any suggestions and comments on this you may have (Email LambR@HAL.Hahnemann.edu).

The next thing that I would like to work on in ISGIDAR in the coming few years is making ISGIDAR a useful conduit of information to its members. One way I believe ISGIDAR has been good at this in the past is in the recent articles bibliography published in the newsletter. So, I hope all of you continue to send Patrick Beardsley the information he needs to keep this going. One way, I've tried to increase the useful information content of the newsletter is by asking Jaylan

Turkkan to write a short column for the newsletter. As most of you know Dr. Turkkan is Chief of the Behavioral Sciences Research Branch at NIDA. Thus, her column might provide us with some insight into what is happening within program at NIDA these days. The last thing related to ISGIDAR as an information conduit, is several people suggested that ISGIDAR might either at its regular meeting or on some other occasion try to get speakers on the behavioral determinants of reinforcement and the quantitative properties of reinforcement, so as to expand the basic understanding of its members on the changes that are happening in these areas and to promoter greater interactions between these researchers and ourselves.

The final topic I want to mention in this column is new members. I think this is something we as an organization need to work on. Therefore, I would like all of you to think about people doing work on drug reinforcement, but who are not members of ISGIDAR, and recruit them to be members of ISGIDAR. Similarly, those of you getting the Newsletter, but who are not yet members, apply today. Application is easy and the details of the process are outlined above.

## COMMENTARY BY THE CHIEF OF THE BEHAVIORAL SCIENCES RESEARCH BRANCH, NIDA

JAYLAN TURKKAN, Ph.D.

#### **NEW DIRECTIONS AT NIDA**

Along with the many changes underway at NIH, NIDA has undergone its share. In the past three years, NIDA has become an institute of the NIH, has acquired a new Director, has undergone a reorganization, has seen the retirement of many long term familiar staff, and is now preparing to merge many of its study sections with the NIH Division of Research Grants. NIDA researchers in the behavioral sciences have seen additional changes in both program and review sections with the creation of a new Behavioral Sciences Research Branch and the designation of a new Behavioral Sciences review committee. These latter changes reflect the NIDA Director Alan I. Leshner's commitment to bringing the best cutting-edge research in the behavioral sciences to bear on the wide spread problem of drug abuse.

As further demonstration of this commitment, NIDA recently has issued a Request for Applications\* that encourages researchers to submit proposals in basic behavioral research areas that have been previously underrepresented. Such topics include cognitive processes, health, behavior, motivation, social factors, and research in the biological basis of behavior. In another recent initiative, NIDA is encouraging research relating to drug abuse that does not necessarily administer drugs of abuse or study drug abusers in the research protocol. The goal is a create a funding program in basic behavioral research. The new attention to behavioral research at NIDA parallels the creation of the new Office of Behavioral and Social Sciences Research in the Office of the Director at NIH. This congressionally mandated office will be coordinating, focusing and enhancing behavioral science research throughout the NIH Institutes and Centers; hopefully it will also serve as a conduit of behavioral research information to the NIH Director.

Many in the research community have heard about down sizing and reinvention at the NIH. In part this has meant reductions in scientific and professional staff. The new Behavioral Sciences Research branch at NIDA is poised to face these challenges by modernizing its operations. Notably, the branch is taking advantage of the latest developments in computer technology to keep the academic community informed about upcoming opportunities. A listserv of internet email addresses is being developed, and a World Wide Web page for the branch is about to go on line at the NIDA Web site\*\*. On the Web, information about branch initiatives and events will be disseminated, and links to the NIH gopher will be available to allow access to full text of RFAs

and PAs. Also, automatic email to program staff can be sent, and articles can be posted complete with graphs and other images. In the future we hope to provide spoken material, "movies" (for example, lectures or presentations about programs), and interactive technologies at the Web site.

As we move into the new decade, we will be depending heavily upon investigators to keep us informed about the latest developments in their research areas, and to aid in reviewing applications. Members of ISGIDAR can be "instrumental" in this process.

Jaylan S. Turkkan, Ph.D. Chief, Behavioral Sciences Research Branch Division of Basic Research

\*RFA-DA-96-001 BROADENING BASIC BEHAVIORAL SCIENCES IN DRUG ABUSE. Application Deadline: November 14, 1995.

\*\* http://www.nida.nih.gov/

#### POST-DOCTORAL POSITIONS AND FELLOWSHIPS

#### POST-DOCTORAL POSITION

A postdoctoral position is available in the Psychobiology Laboratory of the Intramural Research Program at the National Institute on Drug Abuse, Addiction Research Center. Research focuses on the behavioral and neurochemical effects of drugs of abuse and particularly, the pharmacological mechanisms that underlie the behavioral effects of abused drugs. Current emphasis is on the behavioral effects of cocaine and related stimulants. Behavioral studies examine psychomotor stimulant actions, discriminative stimulus effects, and reinforcing effects. Neurochemical studies include receptor binding, functional assays of neurotransmitter uptake, and regulation of second messenger function. Applicants should have a strong interest in applying both neurochemical and behavioral assays to the study of the behavioral pharmacology of abused drugs. Applicants must have received Ph.D. degree within the last five years. Interested individuals should send curriculum vitae to: Jonathan L. Katz, Psychobiology Section, NIDA Addiction Research Center, P.O. Box 5180, Baltimore, MD21224, USA. Telephone: 410/550-1533.

#### POST-DOCTORAL POSITION IN BEHAVIORAL PHARMACOLOGY

Applications are invited for a post-doctoral research associate position in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center to conduct research in the behavioral pharmacology of drugs of abuse. Candidates should have a Ph.D. in Pharmacology, Psychology or Neuroscience and have some expertise in behavioral and/or neuropharmacology. The successful candidate will be expected to supervise technicians, prepare reports and manuscripts for publication and present research results at national meetings. Salary will be competitive and commensurate with experience. Interested applicants should send curriculum vitae, a statement of current and future research goals and names of three references to: William L. Woolverton, Ph.D., Department of Psychiatry and Human Behavior, The University of Mississippi Medical Center, 2500 N. State Street, Jackson, MS, 39216; Phone: 601-984-5898; FAX: 601-984-5899; Email: Woolvert@fiona.umsmed.edu.

#### POST-DOCTORAL POSITIONS

Postdoctoral positions are anticipated in nicotine/smoking research with Dr. Ken Perkins or Dr. Saul Shiffman at the University of Pittsburgh.

Dr. Shiffman's work focuses on processes that promote smoking relapse, including nicotine dependence, craving, mood disturbance, and coping. There is also opportunity to become involved in a variety of projects that apply field data collection using computer diaries to a range of behavioral medicine areas.

Dr. Perkins' research emphasizes human behavioral pharmacology involving nicotine and smoking. Projects include the relationship of nicotine discrimination and tolerance to tobacco dependence and self-administration. Involvement in clinical research examining the role of weight gain on success of smoking cessation is also possible.

Interested candidates should send a C.V. to Drs. Perkins or Shiffman at the addresses below by January 1.

Ken Perkins, Ph.D. Western Psychiatric Institute University of Pittsburgh School of Medicine 3811 O'Hara Street Pittsburgh, PA 15213 Saul Shiffman, Ph.D. Department of Psychology University of Pittsburgh 130 N. Bellefield Avenue, Suite 510 Pittsburgh, PA 15261

#### POST-DOCTORAL POSITION

A post-doctoral position is available to conduct studies on the behavioral, immunological and physiological effects of opioids and benzodiazepines and, in particular, to assess the effects of novel compounds in subjects that are dependent on prototypic drugs from each of these pharmacological classes. Applicants must have a Ph.D. in pharmacology, psychology, neuroscience or related field. The position is available immediately and appointment is for one year, renewable for up to three years. Please send letter of interest, CV and the names of three references to:

Charles P. France, Ph.D.
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#### **BIBLIOGRAPHY**

This is a listing of recent publications on drug reinforcement or on the behavioral pharmacology of drugs of abuse by ISGIDAR members:

Christine Sannerud, Ph.D.
Drug and Chemical Evaluation Section
Office of Diversion Control
Drug Enforcement Administration
Washington, DC 20537

Sannerud, C. A. and Ator, N. A.: Drug discrimination analysis of midazolam under a three-lever

William L. Woolverton, Ph.D. Department of Psychiatry and Human Behavior The University of Mississippi Medical Center 2500 N. State Street Jackson, MS, 39216

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- English, J.A., Rowlett, J.K. and Woolverton, W.L.: Unit price analysis of opioid consumption by monkeys responding under a progressive-ratio schedule of opioid injection. J. Exp. Anal. Behav., 1995, in press.
- Rowlett, J.K and Woolverton, W.L.: Evaluation of the effects of cocaine, heroin and naltrexone, alone and in combination, on milk drinking in rats. Behav. Pharmacol., in press.
- Woolverton, W.L. and Nader, M.A.: Effects of several benzodiazepines, alone and in combination with flumazenil, in rhesus monkeys trained to discriminate pentobarbital from saline. Psychopharmacology, in press.
- Kleven, M.S. and Woolverton, W.L.: Effects of exposure regimen on changes in sensitivity to the effects of cocaine on schedule-controlled behavior in rhesus monkeys. Behav. Brain Res., in press.
- Weed, M.R. and Woolverton, W.L. The reinforcing effects of dopamine D1 receptor agonists in rhesus monkeys. J. Pharmacol. Exp. Ther., in press.

James Zacney, Ph.D. Anesthesia and Critical Care University of Chicago 5841 S. Maryland Avenue Chicago, IL 60637

- Zacny JP, Coalson DW, Lichtor JL, Yajnik S. Thapar P. (1994) Effects of naloxone on the subjective and psychomotor effects of nitrous oxide in humans. <u>Pharmacology</u>. Biochemistry and Behavior, 49, 573-578.
- Zacny JP, Lichtor JL, Thapar P. Coalson DW, Flemming D, Thompson W (1994) Comparing the subjective, psychomotor, and physiological effects of intravenous butorphanol and morphine in healthy volunteers. <u>Journal of Pharmacology and Experimental Therapeutics</u>, 270, 579-588.
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- Pirec V, Coalson DW, Lichtor JL, Klafta J. Young C, Rupani G. Apfelbaum JL, Zacny JP (in press) Does cold-induced pain modulate the reinforcing effects of nitrous oxide in healthy volunteers? (Experimental and Clinical Psychopharmacology)
- Yajnik S. Thapar P. Lichtor JL, Patterson T. Zacny JP (in press) Effects of marijuana history on the subjective, psychomotor, and reinforcing effects of nitrous oxide in humans. (Drug and Alcohol Dependence)
- Mitchell SH, Laurent CL, de Wit H. Zacny JP. (in press) Effects of price, "openness" of the economy and magnitude of the alternative non-drug reinforcer on responding for caffeinated coffee. (Human Psychopharmacology: Clinical and Experimental)

#### ISGIDAR BIBLIOGRAPHY SUBMISSIONS

The pressroom of the ISGIDAR Newsletter encourages submission of recent references from its membership. References should be submitted electronically either by diskette mailed to the address below or via email to the NET address below. Please send references in a format akin to JPET format. Almost any word processing file format (PC or Mac) is digestible.

Thanks,

The Management

Transmit references to:

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