

## PSYCHOPHARMACOLOGY NEWSLETTER

(Division 28 - The American Psychological Association)

Issue No. 2, April, 1984

Don R. Cherek, Editor

### BEHAVIORAL AND CLINICAL PHARMACOLOGY AT THE ADDICTION RESEARCH CENTER IN BALTIMORE

The clinical laboratory of the Addiction Research Center is located at the Baltimore City Hospitals Campus. In the summer of 1984, this laboratory, along with the preclinical laboratories at Lexington and the University of Maryland, will move to a newly renovated building on the Baltimore City Hospitals Campus. The clinical laboratory is subdivided into several sections but there is continuous collaboration on studies and coordination in efforts among the investigators within and across the sections. Drugs recently under study include morphine, cocaine, d-amphetamine, diazepam, methadone, buprenorphine, marijuana, ethylketocyclazocine, nicotine (iv, gum & tobacco), and mecamylamine. This laboratory has its own pharmacy, 24-hour medical coverage, 10-14 bed residential research unit (with 14 nurses), a contract counseling and after-care staff, and facilities for testing subjects who are admitted for only one day (non-residents).

In the Clinical Psychology Section, Charles A. Haertzen, recently joined by John E. Hickey, is conducting a series of studies on the role of early drug experiences on subsequent patterns of drug abuse. Using objective psychometric instruments, levels and types of drug abuse are determined in persons admitted to the residential research unit. A structured Drug Interview Schedule is then administered to assess early drug experiences. Statistical analyses of the data are then performed to ascertain the relations between early and late drug use. A recent study, done in collaboration with the Clinical Pharmacology Section, is to use a similar strategy to assess the development of another type of compulsive behavior, viz. gambling.

In the Clinical Pharmacology Section, a variety of studies are being conducted to assess various mechanisms which underly drug abuse. Most of the studies involve a primary investigator who works in collaboration with another scientist who can bring some additional perspective to the study. Scott Lukas has

developed an EEG laboratory in which he uses the methods of power spectral analysis to objectively quantify EEG changes produced by administration and withdrawal from a variety of drugs. Additionally, Scott is conducting studies in which subjects indicate the onset and offset of drug-induced feeling states (e.g., euphoria) with changes in physiologic parameters including EEG. Scott Lukas has recently left the ARC to join Nancy Mello and Jack Mendelson at McClean Hospital in Boston.

Edythe London has established a human neuroscience laboratory through a collaborative relationship with the Johns Hopkins University School of Medicine. Using a PET scanner, she is mapping changes in regional cerebral glucose utilization which occur as a consequence of psychotropic drug administration in normal and drug-abusing subjects.

Ed Johnson and Don Jasinski are continuing a line of studies on the assessment of the abuse potential of a variety of substances. These studies use the methods of quantifying behavioral, subjective and physiologic effects of acute drug administration, substitution tests (during withdrawal), and most recently, patterns of drug self-administration. Additionally, they are studying the metabolism and kinetics of elimination of marijuana constituents.

Karen Kumor is developing new methods of scaling the subjective effects of acutely given drugs. In addition, she is currently setting up a hormonal assay laboratory to assess chronic as well as acute changes in various hormones as a function of drug administration. One series of studies will assess hormonal (e.g., epinephrine and norepinephrine) changes at 15-sec intervals, while simultaneously measuring changes in subjective and physiologic variables.

Jack Henningfield is conducting a series of studies using an intravenous drug self-administration paradigm modeled closely after those used in animal laboratories. In ongoing studies with nicotine, both the positive and negative reinforcing properties of nicotine injections are assessed. Some of these studies

are conducted in collaboration with Steve Goldberg.

The ARC is also conducting a variety of studies in collaboration with other laboratories. These include: studies on cigarette smoking in the natural environment and effects of drugs on cigarette smoking (The Johns Hopkins University School of Medicine), treatment of opioid-dependent persons with buprenorphine (The Johns Hopkins University School of Medicine), correspondence among use of tobacco, coffee, alcohol and other drugs of abuse by drug-abusing and alcoholic subjects (Addiction Research Foundation, Toronto), pharmacokinetics of nicotine as a function of nicotine delivered via several routes (University of California, San Francisco). The reuniting of the various ARC Laboratories in Lexington, Kentucky, and in Baltimore, in the new facility in Baltimore will mark a new era in ARC research. Visiting scientists to the Baltimore-Washington, D.C. area are welcome to stop at the ARC and to participate in area seminars.

Jack E. Henningfield

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#### RESEARCH IN THE AREA OF ALCOHOL AND AGING

In recognition of the large elderly American population which is increasing in size, and the relative lack of information on their alcohol-related problems, the National Institute on Alcohol Abuse and Alcoholism (NIAAA), in consultation with the National Institute on Aging (NIA), is actively encouraging the submission of grant applications in the alcohol-aging area.

Towards identifying needed research, NIAAA in collaboration with NIA and the National Institute of Mental Health, organized a workshop on the Nature and Extent of Alcohol Problems among the Elderly, held at Washington University in St. Louis, Missouri on November 3-4, 1983. It is anticipated that the proceedings from this workshop will become available in December 1984 on a first-come, first-served basis from a limited supply.

If you are interested in obtaining further information concerning the alcohol-aging effort, please communicate with Nathan Rosenberg, Ph.D., Health Scientist Administrator (301) 443-4223 who is coordinating NIAAA's alcohol-aging

research area. His mailing address is:

NIAAA, Room 14C-17  
5600 Fishers Lane  
Rockville, Maryland 20857.

The submission of concept papers to him prior to submission of formal applications may be helpful if you wish to discuss topics or have questions.

Ernestine Vanderveen, Ph.D.

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#### POSTDOCTORAL RESEARCH FELLOWSHIP In Alcohol Research

This is a two-year appointment, beginning in September 1984 with the Addictive Behaviors Research Center in the Department of Psychology at the University of Washington, and is funded by the National Institute on Alcohol Abuse and Alcoholism. The overall purpose is to provide postdoctoral training for individuals who wish to pursue a career in alcohol research, with an emphasis on the etiology and prevention of problem drinking and alcoholism. As this topic will be approached from both psychosocial and biobehavioral perspectives, individuals with background training in relevant areas of psychology (clinical, health psychology, physiological, social, cognitive, behavioral pharmacology, etc.) are encouraged to apply. Stipends begin at \$13,380/year and increase with postdoctoral experience. Applicants should submit a cover letter indicating areas of research interest, a vita, and three letters of recommendation by July 1, 1984 to

Alan Marlatt, Ph.D.  
Director  
Addictive Behaviors Research Center  
Department of Psychology (NI-25)  
University of Washington  
Seattle, WA 98105

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#### DIVISION OF EXERCISE AND SPORT PSYCHOLOGY TO FORM

For the last two years a group of psychologists from diverse backgrounds have formed

an Exercise and Sport Psychology Interest Group, which has functioned as an unaffiliated interest group within APA. Several symposia have been presented by Interest Group members at the annual APA meetings over the last few years, and some are planned for the 1984 APA. The APA Council has lifted the moratorium on the formation of new divisions, and the members of the Interest Group would like to move toward developing a Division of Exercise and Sport Psychology. For information on the Interest Group and the move for Divisional status, please contact

Steven R. Heyman  
Department of Psychology  
Box 3415  
University Station  
University of Wyoming  
Laramie, WY 82071 (307-766-6718/6303).

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**THE NEW YORK ACADEMY OF SCIENCES CONFERENCE ON  
MEMORY DYSFUNCTION:  
AN INTEGRATION OF ANIMAL AND HUMAN RESEARCH  
FROM PRECLINICAL AND CLINICAL PERSPECTIVES  
The Barbizon-Plaza Hotel  
New York City  
June 13-15, 1984**

The conference examines memory disorders as studied in the clinic and in animal models. Topics include: the description of amnesic syndromes; the neurochemical mechanisms underlying normal memory, the pathological changes responsible for amnesia, and therapeutic interventions for alleviating memory loss.

For a program and information about registration, write to:

Conference Department  
The New York Academy of Sciences  
2 East 63rd Street  
New York, NY 10021

Chairs: Dr. S. Corkin, Massachusetts Institute of Technology; Dr. Elkan Gamsu, Hoffman-La Roche, Inc.; and Dr. D. Olton, The Johns Hopkins University.

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## ASSOCIATION OF AMERICAN MEDICAL COLLEGES

### New Animal Legislation Introduced

A new bill, which if enacted, would seriously affect any Federal agency that supports or conducts research using live animals was introduced in the House of Representatives on March 8.

The primary purposes of the bill, H.R. 5098, sponsored by Rep. Robert G. Torricelli (D. NJ), are to "prevent duplicative experimentation or testing on live animals; and to "promote the advancement and use of modern technologies with respect to the storage and dissemination of biomedical information." To these ends, the bill requires that a "National Center for Research Accountability" be established. The members of this Center, who would be appointed by the President, are charged with the task of determining which, if any, of all the research proposals involving live animals--approved for funding by a Federal agency--are duplicative of the research completed or in process. If a proposal is determined to be essentially duplicative, no Federal funding may be used for such project. These decisions would be made after conducting comprehensive literature searches of all existing biomedical information.

The bill also calls for the modernization of biomedical information storage and dissemination by the National Library of Medicine. This would require, among other provisions, that the library make available to medical libraries, upon request, all full-text biomedical information owned by any Federal agency or available for use by Federal agencies; and support, by grants and contracts, the development of new information technologies for teaching demonstrations, and the training of people in these methods.

The AAMC has serious concerns about this bill, particularly the wide array of research that would be affected. Aside from objections in principle, the new administrative burden its enactment would create and the cost of implementing its provisions, would be enormous. The bill was referred to the Committee on Energy and Commerce, but no further action has been scheduled.

### Research Animals Stolen in California and Maryland

Reports of thefts of animals from medical research facilities in Los Angeles and Baltimore

have increased the fear that such incidents, left unpunished, could incite other raids around the country. Members of the Animal Liberation Front (ALF) claimed responsibility for the two incidents: in one, twelve dogs, five of which had surgically-implanted pacemakers worth up to \$5,000 each, were stolen from the Harbor-UCLA Memorial Center in Torrance, California; and in the second, six rats were "liberated" from labs on the Homewood Campus of Johns Hopkins University in Baltimore, Maryland. A spokeswoman for ALF claims that adopted homes have been found for the dogs and the rats. The research loss has been placed at \$100,000, but more costly yet is the time and effort lost as a result of the theft. Officials at the California facility flatly deny ALF's accusations that the animals were being treated cruelly and that research experiments do not take into account any pain inflicted on the animals.

To counteract widespread false information spread by groups such as the ALF, the Executive Vice President of the Harbor General Research and Education Department made a public statement pointing out that the care given these animals exceeds the requirements of current law governing the use of animals in research, and sets standards for their care and treatment. He also observed that scientists maintain healthy animals and treat them humanely in order to obtain reliable research results. The chief of cardiology at the Los Angeles Research Center said that the actions of such groups as the ALF, "are comparable to those of the IRA, the PLO and the SLA, with the only difference being that human lives are not taken directly."

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**AMERICAN PSYCHOLOGICAL ASSOCIATION  
NIH LEGISLATION: CALL FOR ACTION**

Legislation to reauthorize the National Institutes of Health (NIH) is one of the issues we hope will be taken up by the Senate in the next month. A number of important proposals are associated with this legislation that need the active support of the behavioral and social science research community. Please take a moment to read this and to write your Senators and urge them to approve two proposals that may encounter difficulty. The proposals are:

a federal study of animal research issues

proportional representation for behavioral and social scientists on NIH advisory councils

Each of these proposals is discussed in greater detail in the following paragraphs.

You have heard this message from us repeatedly, but we again must stress the value of individual effort. Writing your legislators requires only a small investment of your time. Yet, the potential rewards are great in terms of recognition and support for psychology and social and behavioral science.

**Animal Research:** For the past two years, Congress has been the setting for a great deal of debate on the use of animals in research. This debate has been valuable in many respects, but it also has been characterized by too-little information about how, what, and why animals are used in biomedical and behavioral research.

A proposal to increase information has been approved by the House of Representatives in its version of the NIH reauthorization bill. The bill calls for a comprehensive study by the National Academy of Sciences (NAS) of: (1) the number and type of animals now being used in research; (2) the purposes for which animals are used; and (3) the impact on the research enterprise of various legislative proposals that would regulate the use of animals in federally-supported research.

The study proposal also is contained in S.773, the Biomedical Research, Training and Medical Library Assistance Amendments (Hatch, R-JT), which is the Senate's version of the NIH Reauthorization bill. We anticipate that S.773 will be brought to the Senate floor for a vote in the next month. The study proposal is not as controversial as other animal research legislation, and it is supported by many scientific organizations, including APA. Nonetheless, it has attracted opposition from animal rights groups. The Senate needs better evidence of the research community's strong support for the NAS study, particularly if, as our position proposes, the study is to be completed as a prerequisite to considering other potentially restrictive legislation. We urge you to convey your views to your own senators as a constituent and as a researcher, asking that the NAS study on animal research be retained in the Senate's final version of S.773.

**NIH ADVISORY COUNCILS:** When S.773 is brought to the floor, the Senate will also be considering the House passed proposal to improve the representation of behavioral and social sciences on NIH advisory councils. These are the national panels that review and make critical

recommendations regarding NIH programs and priorities. The House proposal is to mandate that up to one third of the membership for NIH advisory councils be "experts in public health or the behavioral or social sciences." Included would be the national advisory councils for the National Institute of Child Health and Human Development, the National Institute on Aging, the National Heart, Lung and Blood Institute, the National Cancer Institute, and others.

At present, there is no parallel provision in S.773, and the House proposal is likely to encounter objections for two reasons. One is that this proposal is based on the notion of a quota, an approach that the Senate traditionally resists. The other is that some members of the Senate may not be aware of the important contribution made by the behavioral and social success in NIH research activities.

It is up to behavioral and social scientists to make their own case to the Senate. NIH supports a substantial amount of research in these areas--between \$85 and \$100 million per year from FY 80-82. But this is less than 3% of the over \$4 billion budget of NIH. We do not believe this amount is in keeping with recent national reports from the Surgeon General (Healthy People) and the Institute of Medicine (Health and Behavior), both of which emphasize the critical importance of behavioral factors in health. Increased emphasis on preventing health problems requires a commensurate increase in behavioral orientation and research.

We believe that appropriate behavioral expertise on advisory councils determining the size, shape, and direction of NIH's research activities is the most direct way of seeing that behavioral and social science research becomes a central component of NIH initiatives. This need must be communicated to the Senate.

**Contacting The Senate:** We are asking you to write to both your senators concerning S.773. Urge them to support the **National Academy of Sciences study on the use of animals in research**, and to support the House proposal to **"improve the representation of behavioral and social sciences on NIH advisory councils."**

Your letters do not need to be long. A sentence or two introducing yourself as a psychologist and constituent, giving your views on the issues, and asking for support is sufficient. We cannot expect Congress to be

responsive to psychology's concerns if we, as psychologists, do not raise those concerns. We cannot emphasize strongly enough that Congressional letters are crucial.

Send your letters to:

The Honorable \_\_\_\_\_  
United States Senate  
Washington, DC 20510

APA must be kept aware of your activities if we are to represent you. In turn, we will keep you informed of progress on these issues. Please send copies of your letters as well as of any responses you receive to:

APA Office of National Policy Studies  
1200 - Seventeenth Street, Northwest  
Washington, DC 20036

Any specific questions or requests for further information can be directed to Sarah Duffy at 202-955-7742.

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Members wishing to submit information or articles for inclusion in future Division 28 Newsletters, should send them to:

Don R. Cherek, Ph.D.  
Department of Psychiatry  
LSU Medical Center  
1501 Kings Highway  
P. O. Box 33932  
Shreveport, LA 71130

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### CONGRESSIONAL FUNDING

The following report has been taken from Report No. 84-5 AAMC President's Weekly Activities Report, February 1984.

Funding for the National Institute of Health is scheduled to increase \$89 million or a two-percent increase over current levels. This is intended to cover 5,000 new and competing grants and 9,000 research trainees. Overall, research at the Alcohol, Drug Abuse and Mental Health Administration is slated for a modest increase and no increases are proposed for research training. Mental Health research would take a cut, and, once again, the Administration has slated mental health clinical training for elimination.

APPROPRIATIONS (in millions)			
	Fiscal Year 1983	Estimated Fiscal Year 1984	Request Fiscal Year 1985
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ADAMHA			
NIMH			
Research	158.7	181.3	177.6
Research Training	15.3	15.4	15.4
NIDA			
Research	47.5	54.7	63.5
Research Training	0.9	0.9	0.9
NIAAA			
Research	33.3	42.9	47.8
Research Training	1.1	1.1	1.1
NIH			
NCI	987.6	1,077.3	1,101.1
NHLBI	624.2	703.2	718.8
NIDR	79.3	88.2	91.1
NIADDK	413.5	462.6	475.3
NIAID	279.1	314.1	325.4
NIGMS	369.8	415.6	423.8
NICHD	254.3	275.2	280.2
NEI	141.9	154.7	157.9
NIEHS	164.9	179.8	183.7
NIA	94.0	114.9	117.4
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