NEWSLINE

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CPDD President's Column

THOMAS R. KOSTEN, M.D.

PAST PRESIDENT

As my last Presidential article in CPDD Newsline, I would like to thank the many contributors to the great success of our annual meeting and my year as your President. I also want to express my optimism for the future of our shared careers in addictions research and our shared aspirations for the College. These aspirations were well illustrated by the June 2007 annual meeting highlights from Dr. Nora Volkow's presentation on ways to address this time of research funding challenges, and the ongoing connections of substance abuse to AIDS during the presentation by the Director of the National Institute on Allergy and Infectious Disease (NIAID) – Anthony Fauci MD. Because AIDS and other infectious diseases such as hepatitis C are national disease challenges that are increasingly prevalent in substance abusers, research proposals that link drug abuse with AIDS or hepatitis are likely to fit well within the new collaborative grant opportunities. To prepare for this grant environment, we need collaborations with scientists who are funded from other NIH Institutes. The most obvious Institute is NIAID because this area is already a substantial portion of the NIDA budget. I found this annual meeting provided inspiration to reach out to scientists working with NIAID and the other NIH institutes. The annual meeting also provided a forum to consider national policy issues in a very well attended and stimulating session organized by Martin Iguchi and Bill Dewey and highlighted by a spirited discussion of needle exchange programs. Following this forum the membership also warmly welcomed back the Deputy Director of the Office of National Drug Control Policy (ONDCP) – Bertha Madras PhD, a long-standing member of our College who presented some perspectives on national administration priorities.

Steve Higgins, the next president of CPDD, has already started his busy year with the membership's overwhelming response to his invitation to serve our College through its committees and task forces. Several of our past CPDD Presidents will also be serving the College on a task force to further define the activities of the executive office in order to prepare for recruiting and for providing optimal service to our membership. The members include Steve Holtzman as Chair, along with Mary Jeanne Kreek, Dorothy Hatsukami, Warren Bickel, George Bigelow, Kathryn Cunningham and me. Ex-officio members will be Steve Higgins and Sharon Walsh. While it is impossible to offer sufficient thanks to all who repeatedly agree to help for merely a "thank you" from whoever is the current CPDD president, please accept my heartfelt gratitude for your untiring commitment to our College. I also want to particularly thank the Friends of NIDA under its founder Bill Dewey, who continue to be one of our strongest links to NIDA, and who garners Congressional support, and Dorothy Hatsukami who has retired as Treasurer. She has done an extraordinary job for all of us, and will be followed by another devoted member of CPDD – Steve Holtzman.

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NIDA Mini-Convention

Frontiers in Addiction Research

Friday, November 2, 2007, 8:00 a.m.–6:00 p.m
San Diego Convention Center

At the NIDA mini-convention, a satellite meeting of the Society for Neuroscience (SfN) Annual Meeting, scientists will present recent findings and discuss future directions in the neurobiology of drug abuse and addiction. The mini-convention includes four symposia, the SfN Jacob Waletzky Memorial Lecture, and a Poster Session for Early Career Investigators

Symposia

- Neuronal Adaptations and Counter-adaptation
- Heteromerization of G-Protein-Coupled Receptors: Implications for CNS Function and \Dysfunction
- Glial Cells and Addiction
- Henri Begleiter Memorial Symposium (co-sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA))

Media Committee Report

John Hoffman, Susan Froemke, and Sheila Nevins, of HBO, were selected as 2007 CPDD Media Award winners, for producing the highly acclaimed multimedia series Addiction. The program was jointly produced by HBO, NIDA, NIAAA, and the Robert Wood Johnson Foundation. This multiplatform program includes documentary segments shown on the main HBO cable channel, HBO on Demand, podcasts, Webstreaming, DVD, and a book. Program content covers many facets of substance abuse including addiction treatment, recovery, research, and its effects on families and society. The centerpiece documentary segments are available for streaming without subscription. This program may be the most widely accessible documentary on addiction ever produced. All CPDD members are eligible to nominate candidates for the Media award. The Media Committee encourages you do so by emailing your suggestions to Marc J. Kaufman, Media Committee Chair (kaufman@mclean.harvard.edu). If you want to suggest high profile individuals/entities for this award, please considering doing so in the fall when their June schedules are not already committed.

-- Contributed by Marc Kaufman
Media Committee Chair

Committee on Abuse Liability Testing Report

The major task for the committee in the coming year will be to redefine the committee's mission. In the past, the CALT's main purpose was to serve as a liaison between the CPDD Board of Directors and the Drug Evaluation Committee. However, the Drug Evaluation Committee made a decision this year to cease its activities, and as a result, the primary mission of the CALT has also been completed. During the next year, the CALT will determine whether it can still play a role within CPDD to facilitate interactions between academic, industry and governmental entities with a shared interest in the science and practice of abuse liability testing. Mike Nader will serve as the new chair of the committee.

--Contributed by Steve Negus, Past Chair

President's Column *continued from page 1*

Our educational reach beyond our annual meeting is continuing. Our engagement with the Society for Neuroscience and the European College of Neuropsychopharmacology (ECNP) will continue over this next year. At the ECNP annual meeting in the fall of 2007, we will have a CPDD initiated symposium on neuroimaging featuring both new and established CPDD members. This CPDD symposium will complement a series of other symposia on substance abuse at that meeting being organized in collaboration with Drs. David Nutt and Gabriel Fischer, chair of our International Committee. A new task force under Jack Henningfield has developed a step-by-step guidebook for organizing successful educational activities through CPDD, and we hope to premiere this new product at next year's annual meeting through a satellite symposium immediately following the meeting starting on Thursday June 19, 2008. More details will be available later this year. Our Journal – Drug and Alcohol Dependence – also continues its educational successes and is among the top three in the field under the able leadership of Bob Balster and his associate editors.

I have been very proud to serve you during this past year and thank you for that opportunity.

Electronic Communications Committee Report

Committee reporting line

After years of being an outlier in the committee structure of the Board--having little or no turnover and functioning as a branch of the Executive Office--the Electronic Communications Committee will now function as a Committee of the Executive Office and make our report through the Executive Officer. What has not changed is our aim to provide service to the College and the membership that is responsive to the needs of the Board's Committees, Chairs, and members in general. With that said, everyone should continue to feel free to make their wishes and needs known to the Committee and we will continue to service those needs.

Abstract submission and presentation

Abstract submission and presentation was reviewed. All things considered, we were very pleased with the process. We will again have the submission online through our professional service, ScholarOne. The computer set-ups for presentation worked reasonably well. We are aware that the placement of the computers off the podium was a little problematic. We are considering the use of a remote mouse, or a single computer, running both the Windows and Mac platforms, to be placed on the podium. The resolution of this really depends on the ability to lock-down the laptops at the venue.

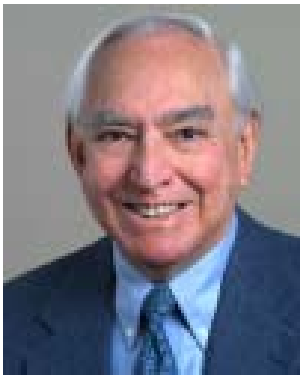
Web site

Our Web site is robust and continues to be enhanced. We are currently working on online voting and online membership application. Clearly, this is the public's window to CPDD. If you have suggestions/needs, please let us know.

What else is new?

Representatives from Elsevier, the publisher of Drug and Alcohol Dependence, were at our committee meeting. They are planning on making more services available to our membership. This will necessitate a new, one-time registration for members at their new site configuration. Members will be notified and supplied with Office-generated passwords to make the appropriate connections to obtain new services when available.

-- Contributed by Richard Eisenberg
Electronic Communications Committee Chair



Jack H. Mendelson, MD
8/30/29 - 8/15/07

Jack H. Mendelson MD, Professor of Psychiatry at the Harvard Medical School and Co-Director of the Alcohol and Drug Abuse Research Center at the McLean Hospital, died Wednesday, August 15th, 2007, after a brief illness. Jack was a member of the Board of Directors of the Committee on Problems of Drug Dependence (1974-1991), then became a Fellow of the College on Problems of Drug Dependence in 1992. In 2007, Jack shared the Nathan B. Eddy Award with his wife, Nancy K. Mello. He leaves his wife of 33 years, Nancy K. Mello, Ph.D., two sons, John E. Mendelson, M.D. and Adam Mendelson, a daughter, Ellen Mendelson Maher, and four grandchildren.

Those wishing to contribute to the establishment of an award for innovative research on substance abuse in honor of his memory, may send donations to the Jack H. Mendelson Memorial Fund, McLean Hospital, 115 Mill Street, Belmont, MA 02478.

69th Annual Scientific Meeting Highlights

For more photos of the 2007 CPDD meeting, go to CPDD.org, 2007 Recap

The 69th Annual Scientific Meeting of the CPDD was held June 16- 21, 2007, at the Hilton Quebec and the Quebec City Convention Centre in Quebec, Canada. There were 1264 attendees: 1230 scientific registrants--including 68 Members-In-Training and 133 pre-doctoral students--and 34 social registrants. Forty-five countries and territories were represented. Next to the United States, the largest contingents were from Canada (30), France (29), Japan (22), Australia (20), Spain (18), Sweden (14), Israel and Switzerland (11 each). There were 17 symposia and 25 oral communication sessions, 13 evening workshops and 4 breakfast poster sessions. Special addresses included:

- An address by the director of the National Institute on Drug Abuse, Nora Volkow, *Progress, Challenges & Opportunities at NIDA.*
- A report from the Office of National Drug Control Policy by Bertha Madras, Deputy Director, Demand Reduction on *Drug Policy: Prevention, Intervention, Treatment Programs.*
- The President's Lecture by Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases, on *HIV/AIDS in 2007: Progress and Priorities.*

-- Contributed by Ellen Geller

Meeting Highlights—The 2007 Distinguished Service Award

The Distinguished Service Award is initiated by the Executive Committee or the CPDD Board, and is given to an individual in recognition of exceptional service to the College.

2007 Awardee: Ellen B. Geller

Ellen B. Geller received her B.A. in biology from Temple University in 1972 and her M.A. in 1974. She did her graduate research in the area of circadian rhythms in the Psychobiology Program at Temple. Since 1974, she has been working with Dr. Martin Adler at the Temple University School of Medicine, primarily on the effects of morphine and endorphins on opioid receptors. Ms. Geller became Laboratory Supervisor in 1988 and has been the Scientific Coordinator for the Center for Substance Abuse Research since 1998. She is a co-investigator on the NIDA grants "Center on Intersystem Regulation by Drugs of Abuse" and " Opioids, Cannabinoids, Chemokines: Functional Implications". Among the research areas of greatest interest to her are body temperature regulation, analgesia, and, more recently, interactions between the opioid, cannabinoid and immune systems. Ms. Geller has been a member of CPDD since 1992 and has served as the Executive Assistant of the organization since 1986. She is a member of the Program (1990-present) and the Electronic Communications (2000-present) Committees of CPDD and has been involved with the meeting arrangements since 1979. In addition to CPDD, Ms. Geller is a member of the Society for Neuroscience, the American Society for Pharmacology and Experimental Therapeutics, the International Narcotics Research Conference, the International Cannabinoid Research Society, the Society on NeuroImmune Pharmacology and Sigma Xi. She has authored or co-authored approximately 95 publications and is an Associate Editor of *Factors Affecting the Actions of Narcotics*.

Introductory Remarks given by Sharon Walsh, Ph.D.

As Program Chair, I have had the privilege of working closely with Ellen Geller to develop the scientific program for our annual meeting for the past three years. Throughout this experience, I have learned a few secrets that I want to share with you. Most of you know that Marty Adler has served as Executive Officer for CPDD for 21

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Distinguished Service Award *continued from page 4*

years, participating in the management of all activities of the college. He is often thought of as the heart and soul of CPDD. What you may not know is that Ellen Geller has served the College for those same 21 years right alongside with Marty. While he may be the heart and soul of the organization, Ellen is clearly the brains of the operation.

Ellen's knowledge of all things CPDD is remarkable. Her contributions to developing and managing the scientific meeting are invaluable. She has taught me how to convert 900 abstracts into a 5-day schedule of activities—all in a period of 15 hours or less. She can track 1000 presenting authors and manage their concerns ranging from lost room reservations to failed video equipment. She can look at the dimensions of a meeting room and immediately know how many posters will fit. She is able to solve the incredible array of problems presented by agitated board members, uncooperative banquet managers, and troublesome Presidents and Program Chairs.

Remarkably, she does all of these things with great patience and grace. Her sincere commitment is what drives her service—and because she is modest and in no way inclined toward self-promotion, her pivotal role may go unnoticed by the membership at large. So I am very pleased to have the opportunity to brag about her accomplishments publicly. She is truly deserving of this award because her service has been great and certainly distinguished.

Acceptance Remarks by Ellen Geller

Well, I guess that I can't call this a thankless job anymore! I am very touched and honored to receive the Distinguished Service Award for my efforts on behalf of CPDD. Lest anyone think that this is a one-woman operation, though, I must acknowledge and thank the many people with whom I have worked over the years on putting the meeting together. First, let me thank the chairs of the Program Committee who have served since our office took over the organization of the annual meeting. In addition to Sharon and Tom Kosten, I want to thank Lou Harris, Mary Jeanne Kreek and Scott Lukas. All have done outstanding jobs as chairs and have been a pleasure to work with. In terms of the logistics of the meeting planning, I am extremely grateful for the help of the staff at SailAir Travel, especially Tina Haslett, with whom I have collaborated on meeting arrangements for about 17 years now. She has been a true partner in this enterprise and has contributed much to the success of the meeting as well as to the preservation of my sanity. I would like to again thank Rich Eisenberg and Jonathan Kamien, last year's recipients of this award, for all they have done and continue to do with respect to the program and abstract database. Of course, I am deeply indebted to the CPDD office staff, including Rochelle Davis, Neico Smith, and Connie Pollack who work so hard throughout the year and particularly so from the middle of January when the abstracts come in until everything gets shipped out a week before the annual meeting; to Toby Adler, who keeps the books, handles all the reimbursements and helps out at the registration desk; and to Melva Smith, our honorary CPDD staffer, who also assists with registration at the annual meeting and pitches in whenever we need her in the office. In addition, I thank Xiaohong Chen in our laboratory for organizing the AV team for the past few years. Most importantly, I have to thank the token male in our office, Marty Adler, who made this award possible by dumping on--I mean, delegating to me--so many of the responsibilities and tedious details involved in organizing this conference. In addition to his role as Executive Officer and hotel contract negotiator par excellence, he has been a great mentor, colleague and friend. Lastly, I want to thank my sister Sharon for making the effort to be here to share in my 5 minutes of fame, as I plan to do for her when she gets her first Emmy or Oscar.

It has been a privilege to serve this esteemed organization, and seeing the continuing growth of the annual scientific meeting in size and prominence over the years has been my intangible reward. I now sincerely thank you for this tangible one. It is very much appreciated.

Progress, Challenges & Opportunities at NIDA
from Nora D. Volkow, NIDA Director

"Given the growing importance of sexual transmission in new HIV infections, it is critical that research efforts be devoted to teasing apart the dynamic biological, social and environmental processes implicated in the behaviors that facilitate the sexual transmission of HIV among drug users."
– Nora Volkow

This research perspective brings attention to key aspects of NIDA's current research priorities on HIV/AIDS, the neurobiology of drug abuse and addiction, and on new research opportunities in the field of epigenetics.

HIV/AIDS. It is important and timely to highlight HIV/AIDS research at NIDA because drug abuse and addiction continue to fuel the spread of this epidemic in the United States and abroad. Evidence of the changing nature of the HIV epidemic continues to accumulate. Beginning in 1995, the US has seen dramatic declines in HIV death rates, accompanied by steep increases in the number of adults living with AIDS. Concomitantly, the proportion of AIDS cases attributable to injection drug use in the USA has declined, while the number attributable to heterosexual transmission has increased. Not surprisingly, some surveys have shown that the rates of HIV seroconversion among injection and non-injection drug abusers have virtually equalized in recent years (1).

NIDA's research examines various aspects of the complex interactions between HIV/AIDS, drug abuse, intoxication, and addiction. An important question is how acute and chronic drug intoxication alter brain function and impair decision making, leading to high-risk behaviors such as high-risk sexual encounters. Given the growing importance of sexual transmission in new HIV infections, it is critical that research efforts be devoted to teasing apart the dynamic biological, social and environmental processes implicated in the behaviors that facilitate the sexual transmission of HIV among drug users.

A comprehensive approach to addressing the current HIV/AIDS epidemics also requires a better understanding of how to develop and deploy more effective HIV prevention and treatment strategies, a goal that is facilitated by crafting interventions tailored to specific target groups. In the prevention area, for example, a recent study (2) revealed that, while young Caucasians are at elevated risk of contracting HIV when they engage in risky behaviors, young African Americans are at high risk even when their behaviors are normative. This result suggests that exhortations to avoid risky behaviors among African Americans will not be as effective as they might be among Caucasians. Another study of prevention provided evidence that voluntary screening for HIV is cost effective and should be expanded to include all adults in communities where the HIV prevalence is above 0.2 percent (3). This analysis, which supports new recommendations of the Centers for Disease Control and Prevention calling for routine HIV screening in all adults and adolescents, comes at a time when widely available HIV rapid screening is becoming a realistic possibility. Furthermore, since the FDA has approved a 20 minute $12-15 blood test kit that can be performed by counselors, all the elements are now in place for evaluating outcomes when integrating HIV rapid testing and counseling into drug treatment.

A crucial area in treatment research is to ensure the inclusion of substance abusers in clinical trials of vaccines, antimicrobials and antiviral agents for the prevention and treatment of HIV. Identification of interventions to minimize neurotoxicity from HIV is particularly relevant for substance abusers since the combination of HIV with drugs may be particularly neurotoxic. The feasibility of such an approach is illustrated by a recent preclinical study that showed that statins—a class of drugs already in use for lowering the level of bad cholesterol—appeared to protect human neurons against alcohol and HIV-mediated oxidative stress *in vitro* (4).

Neurobiology of drug abuse and addiction. We chose to also highlight NIDA's research on neurobiology of drug abuse because a better understanding of how neurons, neurotransmitters and brain circuits adapt and change in response to drugs and permissive environmental stimuli will help develop better interventions to prevent and treat

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Progress, Challenges & Opportunities *continued from page 4*

addictions. We now know that drugs of abuse produce a large number of adaptive (plastic) changes in neurons, networks and circuits. One of the remaining challenges is to determine which of these changes represent fundamental processes for the establishment of a particular stage in the progression from drug self-administration to habitual drug use, to addiction and relapse, in animals and in humans. Understanding the molecular mechanisms underlying such adaptive changes in brain structure and function, and how they interact with social, environmental, genetic and developmental factors, is a critical prerequisite for reversing some of those deleterious changes. For example, a functional polymorphism in the gene encoding the neurotransmitter-metabolizing enzyme monoamine oxidase A (MAO-A) was found to moderate the effect of maltreatment in a way that may explain why some children who are maltreated grow up to develop antisocial behaviors (5). We suspect this effect to be largely developmental since recent studies provide evidence that MAO-A allelic variations can affect the volumes of brain structures involved in emotion control (i.e., cingulate gyrus and amygdala) (6), providing a direct pathway for genotypic variables to influence a child's sensitivity to environmental insults. These types of new insights are the driving force behind NIDA's Genes, Environment and Development Initiative (GEDI), an interdisciplinary research program that envisions combining environmental, genetic, developmental and phenotypic components in order to provide usable resources and serve as a foundation for fine mapping of GEDI components (7).

At a fundamental level, most of these effects hinge on perturbations of neural connections and circuit interactions. This may be why we are finding growing evidence linking the establishment of addictive behaviors to the concomitant disruption of information processing in the brain. In this context, we have learned that chronic cocaine use enhances excitatory (glutamate) but suppresses inhibitory (GABA) neurotransmission. And recent studies also reveal that many of the genes whose expression become dysregulated during addiction, or have allelic variants that modulate addiction vulnerability, play roles in synaptic plasticity and could have a direct impact upon network physiology. A better understanding of the genetic bases of information processes and circuitry in the brain will offer many potential new targets for rational pharmacological intervention.

Epigenetics: a new research frontier. The field of epigenetics has become a hotbed of research activity in recent years. The main modes of epigenetic change involve a) the silencing of gene expression through DNA methylation at CpG motifs, b) the recruitment of noncoding RNAs for transcriptional and post-transcriptional regulation of gene expression and c) multiple chemical modifications of histone proteins, which modulate gene expression through the remodeling of chromatin (packaged DNA) structure. These epigenetic mechanisms appear to be responsible for a considerable proportion of the environment's ability to shape the circuits of emotion, particularly those impacted upon during critical periods of pre- and postnatal brain development. Chromatin remodeling effects have been detected in learning and memory paradigms as well as in animal models of cross-fostering, environmental enrichment and early maternal separation. Predictably, several epigenetic markers have been found to be altered in common brain disorders, including drug addiction (8). Presently, one of the major challenges is the identification of the most relevant, consistent and predictive epigenetic alterations from amongst the millions of cell-type specific epigenomic events that are constantly taking place. Consequently, improving the sensitivity, specificity and throughput of the technologies currently available to detect epigenetic modifications is a high priority area. Presently, the measurement of epigenetic marks in the brain is limited to small regions, however, new imaging tools and methods are being developed for monitoring tumor-induced changes in epigenetic activity that could be harnessed to study drug-induced changes in the whole brain. One example is a recently synthesized PET radiotracer capable of monitoring

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"One of the remaining challenges is to determine which of these [adaptive] changes represent fundamental processes for the establishment of a particular stage in the progression from drug self-administration to habitual drug use, to addiction and relapse. . ."
– Nora Volkow

Progress, Challenges & Opportunities *continued from page 4*

histone deacetylase--a key enzyme in the process of chromatin remodeling *in vivo*--that showed significant uptake and retention in the human brain. As these methods are further refined and validated it may be possible, in the not too distant future, to evaluate the effects of drug exposure in the expression of key enzymes involved in histone modifications.

Final comments. Our efforts to reduce the prevalence and impact of drug abuse in the nation yielded some remarkable results, but significant challenges still lie ahead. The 2006 Monitoring the Future survey of 8th, 10th and 12th graders shows that past-month use of illicit drugs dropped by 23.2 percent since 2001 (Figure 1), that cigarette smoking is at an all-time low for all three grades, and that alcohol and marijuana use continues to decrease. However, abuse of prescription opioids remains at unacceptably high levels in all grades, with nearly one in ten high school seniors having used Vicodin in the past year (Figure 2).

Clearly, there is reason to be optimistic, but more needs to be done. To confront this challenge we can now take advantage of the extraordinary technological advances and scientific opportunities unleashed in the post genomic era (Table 1). Our mission is to ensure that the knowledge we acquire be applied toward a better understanding of the effects of drugs and of addiction, but most importantly to their prevention and treatment.

"Presently, one of the major challenges is the identification of the most relevant, consistent and predictive epigenetic alterations from amongst the millions of cell-type specific epigenomic events that are constantly taking place. "
– Nora Volkow

Figure 1

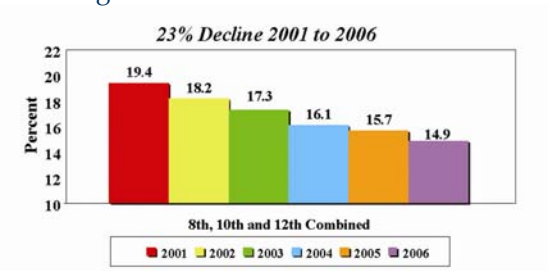
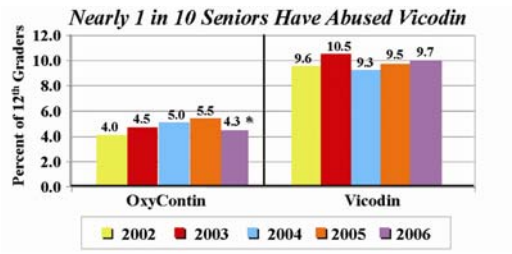


Figure 2



Source: University of Michigan, 2004 Monitoring the Future Study.

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Acknowledgement: I thank Dr. Ruben Baler for his editorial assistance.

Table 1. New research opportunities are constantly opening up as a direct result of fundamental discoveries in the field of drug abuse and addiction

Programmatic Opportunities	Scientific Focus
Gene x Environment x Development Interactions	• GEDI: U01 grants will focus on mapping the interactions between genes, environmental influences and developmental factors
Neuroimaging	• To dissect the effect of drugs on discrete neural circuits. Example: new insights into the role of the Insula in the manifestation of cravings • To develop new radiotracers. Example: MK-9470, a new selective, high-affinity, inverse agonist for the cannabinoid CB1 receptor with the potential to be a valuable, noninvasive research tool for the *in vivo* study of CB1R biology and pharmacology in a variety of neuropsychiatric disorders in humans.
Social Neuroscience	• To investigate the cognitive/behavioral processes and neurobiological mechanisms of social behavior relevant to alcohol and drug abuse and decision making and judgment over the life course.
Criminal Justice Initiative	• To disseminate Principles of Drug Addiction Treatment in the CJ system. • To educate and train judges on those principles. • Criminal Justice Drug Abuse Treatment Studies (CJ-DATS).
New awards	• Pioneer: To support individual scientists of exceptional creativity who propose pioneering approaches to major challenges in biomedical and behavioral research. • Avant-Garde: to support individual scientists of exceptional creativity who propose approaches in the forefront of drug abuse and HIV/AIDS research • Eureka (Exceptional, Unconventional Research Enabling Knowledge Acceleration). Through this modified R01, applicants can request up to $800K in direct costs over a maximum of 4 years. The short application should address the significance of the problem; the innovation/novelty of the hypothesis or methodology; the magnitude of the potential impact; and the size of the community affected. • GCRC (General Clinical Research Centers): to foster a synergistic approach to drug abuse and addiction research and to enable studies that would not occur without the climate, facilities and research resources that a research center can uniquely provide.
Roadmap 1.5	• To encourage transformative research in two major areas: 1) Epigenetics, to catalog genetic changes that affect gene expression but don't involve a change in sequence, and 2) the human microbiome project, to examine the body's microbial communities and their relation to disease. Two more projects to start as pilots include work on human phenotyping and protein probes. This is the second round of research initiatives that cut across all 27 institutes and centers at the NIH. The NIH projects spending $30 million next year and $80 million for each of the next 4 years.
Blueprint	• A cooperative effort among the 16 NIH Institutes, Centers and Offices that support neuroscience research. By pooling resources and expertise, the Blueprint supports the development of new tools, training opportunities, and other resources to assist neuroscientists in both basic and clinical research.

Congratulations to the 2007 Winner of the Smissman Award of the American Chemical Society

Kenner Rice
CPDD Fellow

The Smissman Award is given to a living scientist whose research, teaching, or service has had a substantial impact on the intellectual and theoretical development of the field of medicinal chemistry.

Dr. Rice has made significant contributions to the development of medications for the treatment of opioid and psychostimulant dependence.

Meeting Highlights: The 2007 Marian W. Fischman Award

This award in memory of Marian W. Fischman, a much admired leader in drug abuse research and an excellent scientist, was established in 2001 to recognize the contributions of an outstanding woman scientist in drug abuse research.

2007 Awardee: Dorothy K. Hatsukami, Ph.D.[1]

Dorothy Hatsukami graduated from the University of California, Berkeley in Psychology and received her Ph.D. in Clinical Psychology at the University of Minnesota. She immediately joined the faculty at the University of Minnesota in the Department of Psychiatry. She is currently the Forster Family Professor in Cancer Prevention and Professor of Psychiatry at the University of Minnesota, and Director of the Tobacco Use Research Programs. She has published extensively in the areas of nicotine addiction and its treatment among a general population of adult smokers, adolescents and smokeless tobacco users. She is currently a Principal Investigator of one of the NIH-funded Transdisciplinary Tobacco Use Research Centers (TTURC). This TTURC involves developing methods, measures and conceptual models for understanding tobacco toxicant exposure and its reduction. She is a co-recipient of the Ove Ferno award for her research on tobacco dependence. Because of her expertise, she has served on a number of national committees, including the National Advisory Council for Substance Abuse and Mental Health Services Administration, National Advisory Council on Drug Abuse, the Interagency Committee for Smoking and Health, Drug Control Research, Data, and Evaluation Committee for the Office of National Drug Control Policy, the Institute of Medicine and the Scientific Board of Counselors for the Intramural Research Program of NIDA. She is a past President of the Society on Research on Nicotine and Tobacco and past President of the College on Problems of Drug Dependence. She is currently the Treasurer of the College on Problems of Drug Dependence and has served in this position since 2004.

Introduction of Dr. Hatsukami by Jack E. Henningfield, Ph.D.

This is a joyous occasion because it commemorates the truly enduring impact of a pioneer in our field, and a powerful force in the College, Dr. Marian W. Fischman. Marian Fischman was a pioneering scientist, deeply appreciated mentor, inspiring teacher, a leader among leaders, a mother, and a friend to so many. Our memories are mixed with love, respect, and sadness.

But this occasion is joyous because we are here to celebrate and be inspired by another of our colleagues who embodies the spirit of Marian Fischman. Like earlier Lectureship Awardees, Dr. Hatsukami is a pioneer and leader greatly respected and admired in our organization and beyond. Let me remind you of the earlier Awardees:

- Dr. Chris-Ellyn Johanson
- Dr. Maxine Stitzer
- Dr. Nancy Mello
- Dr. Mary Jeanne Kreek
- Dr. Linda Dyskstra

What a powerhouse! What an enormous collective impact on the field, on the organization, and on public health! What a tribute to Marian Fischman! By the way, all of these leaders, like Dr. Fischman, have actively worked to support the recruitment and development of underrepresented populations to CPDD. And there are still more

[1]A condensed version of the 2007 Fischman Award Lecture given by Dr. Hatsukami will appear in the News & Views section of Drug and Alcohol Dependence.

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Marian Fischman Award *continued from page 10*

amongst us, yet to be honored in years to come, and more who have not yet joined, have not yet been born who will be honored in years to come.

Let me take just a few minutes to introduce Dr. Hatsukami. You have her biographical details. The problem is that space allowed only the equivalent of a few snowflakes on the tip of the Hatsukami iceberg of achievement. Her achievements include collaborations with Marian Fischman such as their provocative and influential 1996 JAMA review comparing powder and crack forms of cocaine which argued that the criminal sentencing disparities were not supported by the science.

Her impact is global. For example, her opinions aided the implementation of the first international treaty negotiated by the World Health Organization: The Tobacco Treaty or Framework Convention on Tobacco Control. But what is amazing is that her global impact involves so many efforts in such a diverse array of scientific domains: cocaine, tobacco, treatment, abuse liability testing, drug abuse prevention, psychometric scale development, and so much more.

But then such biographical facts are easily available to you so I thought I would do a bit of investigative reporting.

I remember being introduced to Dorothy at the University of Minnesota, I believe with both Roy Pickens and John Hughes claiming mentorship rights. Of course she was only about 9 years old then, but already identified as an emerging leader.

As I discovered, many others, like me, make the time to serve on efforts organized or led by Dorothy because we know she will lead us to the highest level of excellence, that it will be led and run well, and that we will experience the warmth and dignity that she exudes.

Some of Roy Pickens's favorite memories reflected his own sense of humor, which tested Dorothy's cool demeanor. While she was still a graduate student she was about to give her first formal presentation: It was on alcoholism treatment and the audience included representatives from Iceland. Just before the presentation, Roy told Dorothy that Iceland's Science Minister would be present. She managed to get over her shock and gave a brilliant lecture. Roy Pickens wrote: "Dorothy is one of my beloved people and was a graduate student anyone would be proud to claim." His only concern was that she might yet try to get even with him for his numerous humorous tests of her character.

John Hughes dispelled any notion that Dorothy's deferential style reflected insecurity. As he put it, and I quote: "Actually it was more me under Dorothy's wing than the other way around". He said she reminds him of the Rodin "Thinker" sculpture because of the way she would ponder and consider what she heard, and then challenge the idea in a thoughtful way that he felt was a characteristic she shared with Marian Fischman.

One of her supporters for this award, and a Marian Fischman awardee herself, wrote with passion that she felt honored to know Dorothy and to write on her behalf. She commented on the enormous range of Dr. Hatsukami's accomplishments and had great accolades for Dorothy's leadership. Let me read from this letter of support: "Despite her quiet demeanor, Dr. Hatsukami is a very strong and determined leader but she leads by building consensus and always behaves with humility, civility and integrity."

Equally insightful were the accolades from Dorothy's mentees and staff. Dr. Dace Svikis is one of the many who are proud to call Dorothy her mentor and who was deeply appreciative of Dorothy's patience and generosity with her time and nurturing. Dace also commented on Dorothy's being highly tuned to how other people feel and her ability to put them at ease and catalyze their development and contributions.

Such accolades were similar from her staff. People such as Kathy Longley are proud and appreciative of the opportunities; amazingly, even under times of severe stress such as working round the clock to make a major grant application deadline. In such times, she

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leads with strength and clarity, setting high standards of excellence but never demanding more from staff than from herself – even, by the way, during times that are so stressful than she might come to the office wearing shoes that were not from the same pair. Her staff also recounted one of Dorothy's many secrets to excellence and creativity: She said that in staff meetings Dr. Hatsukami makes sure that every voice and opinion is welcomed, treated with respect, and given consideration, no matter how outlandish or naïve, and regardless of the person's official status. This is the mark of a true and effective and respected leader.

Finally, I would be remiss if I did not comment on Dorothy's ability to do all of this while raising two boys – now off to college. As her staff recounted, she always emphasized the importance of family first in policy and deed.

Well there is so much more to tell about this most remarkable person, leader in science and policy, wife and mother of two sons, and friend and colleague to so many of us. But I think I have given you a sense of why so many of us feel her award will honor Marian Fischman. Dorothy Hatsukami embodies Marian Fischman's own spirit and legacy.

It is a privilege to know, collaborate, and be led by Dorothy and it is an honor for me to have this opportunity to thank her on behalf of all of us.

Newsflash from Roy Pickens: He says that the Prime Minister of Canada is in the audience to hear what Dr. Hatsukami has to say.

Acceptance Remarks by Dorothy Hatsukami

I want to thank Jack Henningfield for his very kind words. I am extremely delighted and grateful for receiving this award named in honor of a truly outstanding researcher and colleague. Dr. Marian Fischman epitomized an ideal colleague. She exuded confidence and competence and was extraordinarily generous with her time and support of younger scientists. For example, she provided tremendous assistance to me when I began my research in the area of smoked cocaine. The IRB at my University was incredulous that I would want to undertake a research project that involved administering smoked cocaine to human subjects. She wrote a lengthy letter in support of the proposed research projects and even volunteered to fly out to Minnesota to speak with the IRB members. She strongly believed in the importance of conducting the proposed research, which involved developing human laboratory models to understand factors that increase or decrease the reinforcing effects of cocaine, and she was tenacious in ensuring that no obstacle stood in the way of getting this work done.

I feel very privileged to have co-authored the JAMA article entitled, *Crack Cocaine and Cocaine Hydrochloride, Are the Differences Myth or Reality*, which discussed the lack of science base behind the 1 to 100 differential ratio in sentencing guidelines for crack cocaine versus cocaine hydrochloride. An individual in possession of 5 grams of crack cocaine is sentenced to the same extent as someone in possession of 500 grams of cocaine hydrochloride (Hatsukami and Fischman, 1996). We believed this sentencing guideline was prejudicial, unfairly targeting the male African American population. We also observed that many of those convicted were driven to crime because of their addiction to cocaine, and wrote that they would be best served by treatment rather than primarily through imprisonment. Although there was a tremendous amount of publicity surrounding the publication of this article in support of our conclusions, no changes have been made to the guidelines. However, this issue arises periodically because of its unjustness. In fact, the June 12, 2007 headlines from the NY Times read "Court to Weigh Disparities in Cocaine Laws." Hopefully we will eventually see a change in the guidelines so that they are science-based rather than fear-based. This article was my foray into translating science into policy and I am extremely grateful for the privilege of having worked with Marian on an article that clearly demonstrates her important research contributions.

Voice of Experience

An Interview with Griffith Edwards
1996 Eddy Award Winner

By Li-Tzy Wu

Dr. Griffith Edwards was the 1996 recipient of the Nathan B. Eddy Award. He was born in India and received his M.D. from Oxford University. His work has centered on the study and treatment of alcohol and other drug addiction. He established the UK National Addiction Center in London and served as Editor-in-Chief of the journal, *Addiction*, and as a member of WHO's Expert Advisory Panel on Drug Dependence. He is an author of the book *Alcohol Policy and the Public Good* (1994), which has been translated into eight languages. He lives with his wife, Sue, in Greenwich, London.

Newsline's Li-Tzy Wu:
How did you come to be a researcher in the substance abuse field?

Griffith Edwards:
So much is by accident and happenstance rather than planning and intention. When I went into medicine, it was with the idea of psychiatry in mind and the hope of an involvement in research, but looking back at that time I had no idea of what psychiatry was, or what research might mean. I qualified in medicine in 1955 and in 1959 got to the Maudsley campus, and that's where I'm still located after these few years. The involvement in addictions: an accident which has wonderfully rewarded me.

Who had the greatest influence on your development as scientist, and why?
I don't think it was ever one person. It was more an amalgamation of different very generous people influencing me at different stages in my development. Like at the start, Joseph Osipoff who did not teach me calculus but led me to discover it. Then Sandy Ogston, a biochemist who was my tutor at Oxford and with whom I would have an hour-long one-to-one supervision each week, and he taught me that there was a moving edge to knowledge and you better get out to it. Charles Fletcher, a chest physician who was passionate and witty, and told me about science as a political engagement. Well… and so many more people whom I've probably never thanked enough.

What's the best piece of advice you've ever received?
Don't let your work interfere with your dates – advice given to me to me when young by a dear and wise Aunt.

What is the most important contribution you have made to the field of substance abuse research?
The bits of what we do may in the end add up to something, but "the most important contribution", that idea doesn't grip me. I hope my work might perhaps add up to exemplifying the idea that it's important for researchers to listen to the people whose behaviour they are studying.

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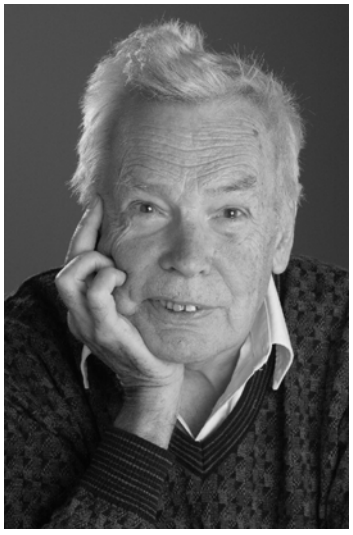
"I hope my work might perhaps add up to exemplifying the idea that it's important for researchers to listen to the people whose behaviour they are studying."
– *Griffith Edwards*



Voice of Experience–Interview with Griffith Edwards *continued from page 13*

What aspect of your career has been fulfilling? And frustrating?
Working with patients has always been intensely rewarding, and I've walked over to the clinic so gladly when research has seemed all frustration. And the footsteps have often gone also in the reverse direction, with research the solace when clinical work has been frustrating. Work with the journal Addiction has been happiness. And the attempt to make connection between research and policy: infinitely worthwhile but sometimes madly frustrating. Come to think of it, what is most rewarding in the career that has fallen towards me is that it allows me to live at the same time in several alternative worlds. I like that.

What was your reaction when you learned that you were going to receive the Nathan B. Eddy Award?
Stunned with amazement and still am. The award was made for me more personal because my dear and esteemed friend Jerome Jaffe gave the introductory address, so many other good friends were present, and by the younger researchers with whom I talked afterwards. I had known Nathan Eddy; that made it special too.

Has the Eddy Award had any impact on your career?
Having that reward makes me aware that I'm an actor in a large play where there are many star players. There is an inherent randomness about prizes, and I know that.

"It can be grotesque to debate whether Drug A or Drug B is more indicated for the treatment of a given patient's opiate dependence, while ignoring the adverse realities of the street in which they live as mere noise in the system."
– *Griffith Edwards*

In your opinion, what is the most important contribution anyone has made to the field of substance abuse research?
Well, there you go again with "most" and I'm once more going to sidestep the question. No, I'm not going to sidestep this time but enter an objection. The historians talk about "the great person view of history" and they see that view as suspect. Similarly, the view of history as great, abstracted, isolated events, as opposed to the flow and processes, they see that too as misleading. I think addictions as a mature science should try to avoid those kinds of errors. Let's honour Nathan Eddy, as a person, but let's try to understand the deep history of the science, the ideas which have fed it, the influence on it of context. Let's try to understand its failures and perversions as well as its successes.

If you had unlimited resources, what is one question or issue you would like to work on that you have not had a chance to address yet?
I'd go on stumbling along with a question that has possessed me these many years. What is this thing called "dependence"?

What is your favorite drug?
My favourite drug from the personal consumption point of view would be a fine vintage of Bordeaux.

What one thing would you rescue from your burning laboratory?
I've never had a laboratory. If my house caught on fire I'd rescue my 1804 copy of Thomas Trotter's Essay on Drunkenness." It was he who wrote "the habit of drunkenness is a disease of the mind." But to take him as an exemplifier of the "great man," or as a kind of Proto-Jellinek, would be absurd – to understand Trotter, we better start by trying to understand the European Enlightenment.

Grants are hard to get, manuscripts are hard to publish, experiments don't always work out as you hypothesize - what advice or encouragement can you offer to aspiring younger scientists who confront these obstacles?

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Voice of Experience–Interview with Griffith Edwards *continued from page 14*

Experience tells me how painful all those blocks and defeats you talk about can be. But really, I wouldn't at all easily go in and give advice. I would be more likely to sit around and listen, perhaps have that young person to supper in our home, sit out on the lawn if the weather was good, offer a glass of claret perhaps.

What is the most interesting/inspiring scientific manuscript you've read in the last year?
Again no "most", but I read with continuing reward a range of journals which between them give me some sense of our science.

Do you think we are headed in the right direction for finding the best treatment medications or approaches for addiction? What would you do differently, if anything?
I think we too often slip toward seeing the people concerned as passive recipients of our clever interventions while losing sight of the psychological and social dimensions. It can be grotesque to debate whether Drug A or Drug B is more indicated for the treatment of a given patient's opiate dependence, while ignoring the adverse realities of the street in which they live as mere noise in the system.

If you could sit down and speak to any scientist, living or not, who would it be and what would you want to talk about?
I would want to set up a party and would have Thomas Trotter, Benjamin Rush, Abe Wikler, Kettil Bruun, and 23 of my present friends come along.

How do you like to spend your time outside of science?
So many different ways, and sometimes just being idle and looking out of a window at a garden or at people on the pavement. Sue and I like pictures and music and landscapes and buildings, but more than anything we want to be with people with whom to share ease, joy and puzzlement.

What is your favorite book? Favorite art piece? Favorite music?
I don't have hierarchies or single choices. Please give me access to lots of books, let me visit the Academia in Venice once again, let me hear opera at Glyndbourne, and let me eat in small restaurants in the French countryside. I want to be enthused and amazed by all these things and much more.

What one thing would you have become, if not a scientist?
Probably I'm otherwise unemployable. My sense is that in this difficult endeavour called science, it is the friendship which counts for so much, is the essential subtext, that is the greatest reward. Let me thank you for your kindness in setting up this interview.

". . . in this difficult endeavour called science, it is the friendship which counts for so much . . . that is the greatest reward."
– Griffith Edwards

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Animals in Research Committee Report

The Animals in Research Committee has worked on the following issues in an effort to promote understanding of the importance of animals in biomedical research:

Forum at the CPDD Meeting

This year, for the annual forum to inform the membership about policy, legislative issues, and strategies to reduce the adverse impact of animal rights activists on biomedical research we invited Dr. Richard W. Bianco, Associate Vice President for Regulatory Affairs at the University of Minnesota, who addressed CPDD on behalf of Americans for Medical Progress, one of two research advocacy groups dedicated to protecting the interests of biomedical research with animals.

APHIS (Animal Plant and Health Inspection Service), USDA

CPDD committee members and interested others were asked to comment on the proposed rule change that would require the use of shift cages to transfer nonhuman primates. The rule would require special written approval from the Animal Care Regional Office to use well-established animal transfer techniques such as pole and collar, primate restraint chairs, etc. The committee submitted the collected comments.

Animal Enterprise Terrorism Act (AETA) HR4239/S.1926

Perhaps the most important development in our ongoing struggle with animal rights extremists was the passage of the Animal Enterprise Terrorism Act. The goal of the Act is to allow federal authorities to more effectively prevent, investigate, and prosecute animals rights extremists who try to stop biomedical research with animals by intimidation, harassment, and violence against scientists, research staff, their families, and companies who have business relations with a laboratory or research facility. Death threats, vandalism, and bombings are a prominent part of the armamentarium used by animal rights extremists.

Animals in Research List Serve

CPDD members are encouraged to join the Animals in Research List Serve (CPDD-AIR) so that they can receive information about legislative and regulatory initiatives that affect the use of animals in research. Interested CPDD members can request a subscription to the CPDD-AIR listserv by sending an email to Toby K. Eisenstein, Ph.D. at Temple University. <tke@temple.edu>

Funding for Advocacy Groups

The CPDD membership should be aware that despite a recent legislative victory (AETA) our two advocacy groups, NABR (National Association for Biomedical Research) and Americans for Medical Progress (AMP) are dramatically under funded in comparison to the animal rights organizations. Anything that CPDD members can do to enhance support for the NABR and AMP is definitely in our best interests.

Nancy Ator has been selected as the new Chair. She has a long history of effective advocacy for animal research.

-- Contributed by Nancy K. Mello, Ph.D.
Past Chair