

PENN PSYCHIATRY PERSPECTIVE

Perelman School of Medicine at the University of Pennsylvania | Department of Psychiatry

Ideas, Suggestions, and News!

We welcome your ideas, suggestions, and news about your activities for stories or announcements in *Penn Psychiatry Perspective*, the eNewsletter of the University of Pennsylvania Department of Psychiatry. Our goal is to offer useful and interesting news to readers and highlight our many outstanding faculty, programs, and services. Please submit your recommendations to psychweb@mail.med.upenn.edu.

Dwight L. Evans, MD
Ruth Meltzer Professor and Chair

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Departmental Goings On

Penn Psychiatry Study Shows First Signs that Drug Used to Treat ADHD May Improve Cognitive Difficulties for Menopausal Women



C. Neill Epperson, MD was the lead author of a new study providing evidence that a drug used to treat attention deficit hyperactivity disorder (ADHD) may help menopausal women who are dealing with the decline of executive functions. According to the research, women experiencing difficulty with executive functions such as motivation for work, time management, attention, organization, memory, and problem solving with onset during the menopause transition may find improvement with lisdexamfetamine (LDX). The study is the first to show that LDX improved subjective

and objective measures of cognitive decline commonly experienced in menopausal women. Results of the study were published online on June 11, 2015 in the journal *Psychopharmacology*.

“Reports of cognitive decline, particularly in executive functions, are widespread among menopausal women,” said Dr. Epperson in a June 11 Penn Medicine news release. “There are approximately 90 million post-menopausal women living in the U.S. alone, and with the average age of onset occurring at 52, the great majority of those women will live in the postmenopausal state for at least one-third of their lives. Therefore, promoting healthy cognitive aging among menopausal women should be a major public health goal.”

Study participants included 32 healthy, non-ADHD-diagnosed women between the ages of 45 and 60 experiencing difficulties with executive functions during the menopause transition. They received a once-daily dose of LDX (up to 60 mg/d) or placebo for four weeks before undergoing a two-week washout and being crossed over to the other condition for another four weeks. Psychostimulants such as LDX work by promoting the release of dopamine, which is impaired in ADHD and other disorders characterized by executive function problems.

The results of this study were promising but Dr. Epperson cautioned, “Although we observed that short-term use of LDX was well tolerated and effective in several subjective and objective areas, long-term studies of menopausal women receiving LDX are needed, similar to those conducted for ADHD patients. It is also important for clinicians to confirm that a woman’s complaints of worsening memory are in the executive function domains, are temporally related to the transition to menopause, and are not indicative of some

Departmental Goings On

ADHD Drug May Improve Cognitive Difficulties in Menopausal Women

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other pathological cognitive impairment before prescribing a trial of LDX."

The study was funded in part through an investigator-initiated research grant provided by Shire, the manufacturers of LDX. Research from the study was highlighted in a July 8, 2015 article and segment on CBS3 television (Philadelphia).

Dr. Epperson is Professor of Psychiatry and Obstetrics and Gynecology at Penn and Director of the Penn Center for Women's Behavioral Wellness (PCWBW) in the Department of Psychiatry. Other Penn Psychiatry and PCWBW co-authors included **Sheila Shanmugan, Deborah R. Kim, MD, Sarah B. Mathews, MD, Kathryn A. Czarkowski, MA, Jeanette Bradley, Dina H. Appleby,** and **Claudia Iannelli, MS.** Co-author **Mary D. Sammel, ScD** is affiliated with both the PCWBW and the Department of Biostatistics and Epidemiology at Penn. Co-author Thomas E. Brown, PhD is in the Department of Psychiatry at Yale University.

View the June 11, 2015 Penn Medicine news release at - http://www.uphs.upenn.edu/news/News_Releases/2015/06/epperson/

Penn Psychiatry Experts Present Study at SLEEP 2015



Dr. Goel



Dr. Spaeth



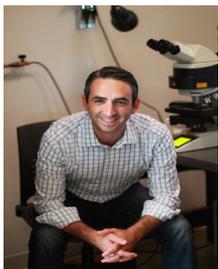
Dr. Dinges

The Penn Psychiatry research team of **Namni Goel, PhD, Andrea Spaeth, PhD,** and **David F. Dinges, PhD** presented an abstract indicating that adults who are chronically sleep restricted may need to compensate for decreased morning resting metabolic rate by reducing caloric intake or increasing physical activity to prevent weight gain. The abstract was presented in June 2015 at SLEEP 2015, the 29th annual meeting of the Associated Professional Sleep Societies LLC. Dr. Goel, the study's senior author, noted that "short sleep duration is a significant risk factor for weight gain and obesity, particularly in African Americans and men.

This research suggests that reducing the number of calories consumed can help prevent that weight gain and some of the health issues associated with obesity in Caucasians and particularly in African Americans." The study included data obtained from 36 healthy adults, ages 21 to 50.

Dr. Goel is Research Associate Professor of Psychology in Psychiatry. Dr. Dinges is Professor of Psychology in Psychiatry and Director of the Division of Sleep and Chronobiology. Dr. Spaeth is a Postdoctoral Fellow in the Division of Sleep and Chronobiology. All are members of the Department of Psychiatry at Penn.

Sleep Deprivation Reduces Aggression, Mating Behavior in Flies



Matthew S. Kayser, MD, PhD was the lead author on a new study probing the cellular and molecular mechanisms that govern aggression and sleep, using fruitflies (*Drosophila*) as the animal model. The research team found that sleep deprivation reduces aggression in fruitflies and affects their reproductive fitness. They also identified a molecular pathway involved in communicating sleep loss to aggression. The study was published online on July 28, 2015 in *eLife*.

Dr. Kayser noted in a July 28, 2015 Penn Medicine news release that the relative simplicity of the fruitfly model is an advantage to studying the sleep-aggression link. "We first sleep deprived the flies and looked at their fighting behavior, and saw a very clear effect on behavior," he said. "Suddenly they go from fighting quite a bit to sharing resources and not fighting much."

Dr. Kayser and his colleagues also studied the effects of reduced aggression on social behavior, specifically reproductive behavior and success. "We asked whether sleep deprivation affects sexual fitness?" The answer was yes - reduced aggressiveness of the sleep-deprived male flies clearly impaired their mating success when competing with non-sleepy males for females.

"Not to over-anthropomorphize," added Dr. Kayser, "but I think this reinforces that aggression is important for certain things, such as mating, not just a negative behavior. In the fly, aggression can be important for carrying on a species' genetic code, and if you do things that impede aggression, it can have negative consequences."

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Sleep Deprivation Reduces Aggression, Mating Behavior in Flies

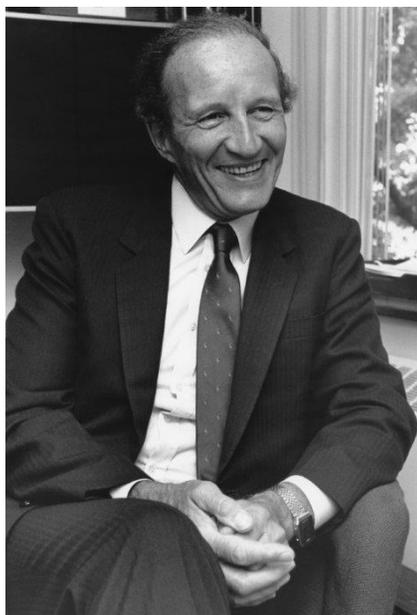
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Next steps include figuring out the neurobiological mechanisms that control the sleep-aggression link. Much farther in the future may be the possibility of clinical applications for humans. "I think that's a real attraction to studying aggression in the fly – to work on the cellular and molecular controls to understand the basic biology of this pathway so we can leverage this knowledge into something that is eventually clinically relevant," Dr. Kayser noted. The study research was highlighted in several media outlets, including *Sleep Review* and *ALN*.

Dr. Kayser is Assistant Professor of Psychiatry at Penn. Other Penn co-authors on the study included senior author Amita Sehgal, PhD, Benjamin Mainwaring, and Zhifeng Yue, all in Dr. Sehgal's laboratory in the Department of Neuroscience.

View the July 28, 2015 Penn Medicine news release at - http://www.uphs.upenn.edu/news/News_Releases/2015/07/sehgal/

Renowned Psychiatry Professor Karl Rickels Endows Third Professorship



Karl Rickels, MD, Professor of Psychiatry and the Stuart and Emily B.H. Mudd Professor of Human Behavior and Reproduction at the Perelman School of Medicine, has once again extended his enormous generosity to the Department of Psychiatry by endowing his third professorship.

At a festive event held at the Smilow Center for Translational Research on January 15, 2015, Penn Medicine, the Department, and over 130 guests celebrated the appointment of Chairman **Dwight L. Evans, MD** as the inaugural Roehrhoff Rickels Professor. The Professorship is intended to honor "a renowned psychiatrist known internationally for interest in translational medicine with particular interest in Biological Psychiatry inclusive of mood and anxiety and depression disorders." At the ceremony, J. Larry Jameson, MD, PhD, Executive Vice President of the University of Pennsylvania for the Health System and Dean of the Perelman School of Medicine, Ralph W. Muller, Chief Executive Officer of the University of Pennsylvania Health System, and Dr. Evans each thanked Dr. Rickels for his continuing benevolence to the Department, medical school, and University.

The Roehrhoff Rickels Chair honors Dr. Rickels' mother's and father's families, keeping with his lifelong devotion to his family, lovingly expressed through his support for the first two chairs he endowed. The Karl E. Rickels Professorship in Psychiatry, created in 1993 and held by **Wade H. Berrettini, MD, PhD**, honors the memory of

Dr. Rickels' father, Karl Eduard Rickels, the successful CEO of a chocolate company in Germany and, also, an economist, poet, musician/composer, philosopher, and fine artist. Through his encouragement and support, Dr. Rickels pursued his consequential career in medicine. The Karl and Linda Rickels Professorship in Psychiatry, established in 1998 and held by **Raquel E. Gur, MD, PhD**, honors his late and dear wife, Linda, who died in 2008.

This summer marks Dr. Rickels' 60th year as a member of Penn's Department of Psychiatry, since he began his residency in 1955. Over the past six decades, Dr. Rickels has earned the informal title of "Dean of Psychopharmacology of Anxiety Disorders" as a world-acclaimed pioneer in the discipline, particularly for his successful development and use of measurement-based therapy for anxiety and depression. In 2012 in Stockholm, Dr. Rickels received the "CINP Pioneers in Psychopharmacology Award" from the International College of Neuropsychopharmacology (CINP) for his groundbreaking work in the development of medications to treat anxiety disorders.

Dr. Rickels is the author of more than 600 scientific publications, books, chapters, and reviews on such diverse topics as anxiety, panic disorders, social phobias, depression, insomnia, PMS, and treatment response. Dr. Rickels is also the Founder of both the Mood and Anxiety Disorders Section in the Department of Psychiatry and the Division of Human Behavior and Reproduction in the Department of Obstetrics and Gynecology. He recounted his remarkable life and career in his memoir, *A Serendipitous Life: From German POW to American Psychiatrist*, published by Notting Hill Press in 2011.

Dr. Hadley Announces Retirement



Trevor Hadley, PhD and Cheryl Borck-Hadley, MSW

Trevor R. Hadley, PhD announced his retirement from the faculty in June after a long and distinguished career as a mental health services researcher and public policy expert. Dr. Hadley, Emeritus Professor of Psychology in Psychiatry at Penn, is the Founder and former Director of the Center for Mental Health Policy and Services Research (CMHPSR). He formerly served in public sector positions as commissioner and deputy commissioner in several state mental health agencies and currently serves as a consultant to the Philadelphia Department of Behavioral Health, several states, and national organizations. Dr. Hadley's research focused on utilization, cost, benefits, and staffing of mental health programs. In carrying out his research, he initiated, fostered, and maintained multiple essential collaborations with public mental health institutions. He recognized that these relationships pose many logistical and organizational difficulties, and he made maintenance of these bonds one of the unique strengths of

the CMHPSR. Internationally, Dr. Hadley's work has included consultation with mental health programs in England, Canada, Japan, Turkey, and with the World Health Organization. Dr. Hadley will continue providing leadership to the Public Psychiatry Fellowship Program in the Department and support to postdoctoral fellows.

The Department wishes Dr. Hadley all the best as he embarks on the next phase of his journey!

News and Announcements

In the News

Penn Department of Psychiatry faculty are highly acclaimed experts in their chosen fields, often contacted by local, national, and international media outlets for their knowledge about topics of immediate interest. In this section, we provide just a brief sample of the many recent interactions that our faculty have with the press. (For a more complete listing, please visit Penn Psychiatry In the News - <http://www.med.upenn.edu/psych/news.html>.)

Links Found Between HIV and Schizophrenia Diagnoses



Michael Blank, PhD was quoted in a July 10, 2015 Reuters Health story on a new study that found increased risks going both ways between diagnoses of HIV and schizophrenia. According to the story, HIV was linked to an increased risk of schizophrenia, and schizophrenia was linked to a higher risk of HIV, but only when coupled with substance abuse. Dr. Blank and **Marlene M. Eisenberg, PhD** co-wrote a commentary accompanying the study published online on July 2 in *The Lancet HIV*.

The findings in the new study point to the need for increased HIV testing in mental health centers, Dr. Blank said in the article, citing the inadequacies of the current situation. "It's an exception, rather than a rule, to have HIV tests available in a mental health clinic in the United States," he said. "Given that the risks of HIV are elevated, we're recommending that testing be available in mental health centers and that a treatment cascade be developed for mental illnesses and people with schizophrenia in particular." He added, "What we need to do is provide a care system for people who have lots of co-occurring conditions." Dr. Blank is Associate Professor of Psychology in Psychiatry and Co-Director of the Penn Mental Health AIDS Research Center in the Department of Psychiatry at Penn. Dr. Eisenberg is a Research Associate in the HIV/AIDS Prevention Research Division in the Department.

View the July 10, 2015 Reuters Health article at - <http://www.consultant360.com/story/links-found-between-hiv-and-schizophrenia-diagnoses>

Can Brain Games Change Behaviors Long Term?



Caryn Lerman, PhD was featured in a June 8, 2015 *Philadelphia Inquirer* story discussing her ongoing study investigating brain games, backed by a \$2 million National Cancer Institute (NCI) grant. "There's some evidence that brain games can improve cognitive functions," Dr. Lerman said. But the more important question, she told the *Inquirer*, is "can we change the brain to change behavior?" For example, could brain games help with healthy behaviors such as following a proper diet and avoiding smoking. The clinical trial supported by the NCI includes 200 adults ages 18 to 35 to test the theory "that if you activate these higher brain networks that are involved in executive control, the brain will assert more top-down control over lower regions of the brain that drive people to these gratifying behaviors like [unhealthy] eating and smoking," Dr. Lerman explained.



Also quoted in the piece is **Dawn J. Mechanic-Hamilton, PhD**, who has used a brain game as part of a comprehensive behavioral intervention program for adults with mild cognitive impairment in combination with classwork and individual coaching. "If you're going to spend time doing other things that are cognitively challenging," she said, such as taking music lessons or learning a language, "then you shouldn't replace it with a computerized program." On the other hand, Dr. Mechanic-Hamilton said, brain games are likely better for you than a few hours of TV watching - but even that's not clear. She added that researchers and clinicians are just beginning to examine to what extent and for whom brain games are beneficial.

Dr. Lerman is the Mary W. Calkins Professor in Penn's Department of Psychiatry and Annenberg School for Communication, Deputy Director of Penn's Abramson Cancer Center, and Co-Director of the Penn Medicine Neuroscience Center. Dr. Mechanic-Hamilton is Instructor in Psychiatry and Clinical Director of the Cognitive Fitness Program in the Penn Memory Center in the Department of Psychiatry.

View the June 8, 2015 *Philadelphia Inquirer* article at – http://articles.philly.com/2015-06-08/news/63149854_1_brain-games-lumosity-online-games

Dr. Basner Interviewed on the Science of Sleep



Mathias Basner, MD, PhD, Associate Professor of Sleep and Chronobiology in Psychiatry at Penn, shared his insights on the effects of sleep deprivation, the relationship between work and sleep, and the small steps anyone can take to improve their sleep immediately in a July 8, 2015 *Huffington Post* Q and A with Arianna Huffington. He responded to questions about his research on the effects of sleep loss on neurobehavioral and cognitive functions, sleep time and waking activities, and how to achieve better sleep. Among his observations, he told the *Huffington Post*, "Our research overwhelmingly showed that time spent working was the most prominent sleep thief. It was evident across all socio-demographic strata and no matter how we approached the question."

View Dr. Basner's July 8, 2015 *Huffington Post* interview at - http://www.huffingtonpost.com/arianna-huffington/mathias-basner-sleep_b_7754280.html

Leadership Appointments

Dr. Rostain Appointed Vice Chair for Education



Anthony L. Rostain, MD, MA has been appointed Vice Chair for Education of the Department of Psychiatry, effective September 1, 2015. For the past 16 years, Dr. Rostain has done exceptional work as Director of the Office of Education in the Department, and he will continue to work with Chair Dwight L. Evans, MD as he assumes expanded responsibilities to maximize educational excellence throughout the Department. In his new role, Dr. Rostain will have responsibility for all departmental education and training programs, including the psychiatric residency training program, the fellowship training programs, the postdoctoral and doctoral student programs, and the undergraduate medical education program.

In addition to his new role, Dr. Rostain is Professor of Psychiatry and Pediatrics at Penn and Director of the Adult Development Disorders Unit, which includes the Adult ADHD Treatment and Research Program - of which he is Co-Founder and Medical Director - and the Adult Social Learning Disorders Program. He is also Director of The Children's Hospital of Philadelphia (CHOP) Behavioral Health Center's Developmental Neuropsychiatry Program.

Awards and Honors

Dr. Lerman Receives NCI Outstanding Investigator Award



Caryn Lerman, PhD received the National Cancer Institute (NCI) Outstanding Investigator Award (OIA) in June 2015. This highly competitive honor is bestowed upon a special group of influential researchers with outstanding records of productivity in cancer research. The OIA supports investigators with up to \$600,000 in direct costs per year for seven years to provide funding stability. During her distinguished career, Dr. Lerman has focused on translating research in neuroscience, pharmacology, genetics, and behavioral science to develop innovative therapeutic approaches for behavior change. She has published over 355 peer-reviewed papers, including work that elucidates novel neurocognitive and neurochemical mechanisms underlying nicotine addiction and relapse. Her research explores how the brain's cognitive control system can be enhanced to improve self-control over behaviors that contribute to cancer risk.

Dr. Lerman will receive \$6.5 million over a seven-year period. This grant will continue to address the bold premise in her research - that it's possible to enhance the brain's capacity to over-ride behavioral habits that contribute to obesity and cigarette smoking, and ultimately to cancer. Such habits are associated with cognitive impairments and altered brain functions that can interfere with goal-directed behaviors.

Dr. Lerman has been continuously funded by the NCI since 1989, with grants totaling approximately \$67 million in total costs, including a \$20 million NCI Provocative Question Award. She has served on the NCI Board of Scientific Advisors, the National Human Genome Research Advisory Council, and the National Institutes on Drug Abuse Advisory Council. She is also the past President of the Society for Research on Nicotine and Tobacco, and an Elected Member of the National Academy of Medicine (formerly the Institute of Medicine).

Dr. Lerman is the Mary W. Calkins Professor in Penn's Department of Psychiatry and Annenberg School for Communication, Deputy Director of Penn's Abramson Cancer Center, and Co-Director of the Penn Medicine Neuroscience Center.

Dr. Beidas Selected to Receive ABCT Award



Rinad S. Beidas, PhD has been selected to receive the 2015 Association for Behavioral and Cognitive Therapies (ABCT) President's New Researcher Award. According to the ABCT, this award is "based upon an early program of research that reflects factors such as: consistency with the mission of ABCT; independent work published in high-impact journals; and promise of developing theoretical or practical applications that represent clear advances to the field." The ABCT is "a multidisciplinary organization committed to the advancement of scientific approaches to the understanding and improvement of human functioning through the investigation and application of behavioral, cognitive, and other evidence-based principles to the assessment, prevention, treatment of human problems, and the enhancement of health and well-being."

Dr. Beidas's research, supported through a K23 awarded by the National Institute of Mental Health (NIMH), centers on the dissemination and implementation of evidence-based practices (EBPs) for youth in community settings. Dr. Beidas is particularly interested in understanding how to most effectively support therapists, organizations, and systems in the implementation of EBPs for youth psychiatric disorders. She will receive the ABCT President's New Researcher Award at the ABCT's Annual Convention in November 2015 in Chicago. Dr. Beidas is Assistant Professor of Psychology in Psychiatry at Penn and the Director of Implementation Research at the Center for Mental Health Policy and Services Research in the Department of Psychiatry.

Dr. McKay Appointed to Serve on IPTA Study Section



James R. McKay, PhD has been appointed to serve as a member of the Interventions to Prevent and Treat Addictions (IPTA) Study Section of the NIH Center for Scientific Review for the term beginning July 1, 2015 and ending June 30, 2018. According to the Center, "members are selected on the basis of their demonstrated competence and achievement in their scientific discipline as evidenced by the quality of research accomplishments, publications in scientific journals, and other significant scientific activities, achievements and honors." The IPTA study section "reviews applications for qualitative and quantitative human research aimed at developing, modifying, adapting, piloting or testing interventions to prevent the onset of addictive and related problem behaviors, prevent the progression of substance use to abuse, curtail the progression of substance abuse to dependence, prevent relapse, and treat substance use disorders and other addictive behaviors, at the individual level. Prevention and treatment interventions tested under both

controlled (efficacy) and real-world (effectiveness) conditions are included."

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Dr. McKay Appointed to Serve on IPTA Study Section

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Dr. McKay is Professor of Psychology in Psychiatry at Penn and Director of the Center on the Continuum of Care in the Addictions in Penn's Department of Psychiatry and Director of the Center of Excellence in Substance Abuse Treatment and Education (CESATE) at the Corporal Michael J. Crescenz Veterans Affairs Medical Center in Philadelphia.

Dr. Ascher Honored by Philadelphia Psychiatric Society

Michael S. Ascher, MD has been selected to receive the 2015 Jack Greenspan Award from the Philadelphia Psychiatric Society (PPS). This award is presented to a "psychiatrist who has been out of training for up to seven years and has established a private practice, who has excelled in preserving, protecting, and defending the practice of psychiatry in Pennsylvania or has made a substantial contribution to the Philadelphia Psychiatric Society and/or organized psychiatry." Dr. Ascher, Clinical Associate in Psychiatry in the Department of Psychiatry, is clinically focused on addictive behaviors, harm reduction, and family-inclusive treatment. His research interests include the psychotherapy and pharmacology of addiction. Dr. Ascher's books include *The Behavioral Addictions* (Washington: American Psychiatric Publishing, 2015), *Couples and Family Therapy in Clinical Practice, Fifth Edition* (London: Wiley-Blackwell, 2015), and *Psychiatry Made Ridiculously Simple* (Miami: MedMaster Publishing, 2015). Dr. Ascher is scheduled to receive the

Greenspan Award at the PPS' annual Benjamin Rush Event on November 6, 2015.

**Department of Psychiatry Grand Rounds**

Department of Psychiatry Grand Rounds are held from 12:00 noon to 1:00 pm on the designated dates in the designated locations. The next lectures are listed below. For more information about Grand Rounds and the 2015-16 schedule, please visit - <http://www.med.upenn.edu/psych/rounds.html>

October 8, 2015**Behavioral Sleep Medicine – "Energy Balance"****Speaker: Matthew R. Hayes, PhD**

Assistant Professor of Nutritional Neuroscience in Psychiatry
Translational Neuroscience Program
Department of Psychiatry
University of Pennsylvania Perelman School of Medicine

Location: Smilow Center for Translational Research Auditorium

October 22, 2015**Behavioral Sleep Medicine****Speaker: Mathias Basner, MD, PhD**

Associate Professor of Sleep and Chronobiology in Psychiatry
Unit for Experimental Psychiatry
Division of Sleep and Chronobiology in Psychiatry
Department of Psychiatry
University of Pennsylvania Perelman School of Medicine

Location: Smilow Center for Translational Research Auditorium

