### Department of Psychiatry's Clinical Research Scholars Program

In 2003, the Institute of Medicine published a report on "Research Training in Psychiatry Residency: Strategies for Reform." The report concluded that "the number of psychiatrist-researchers does not appear to be keeping pace with the unparalleled needs that currently exist in clinical brain and behavioral medicine." The report went on to say that the research electives offered by most residency programs are "too little and too late" to stimulate many residents to enter academic psychiatry, and recommended increasing opportunities for intensive, mentored research training during residency.

Our Department is one of the few in the country that already provides this kind of research training experience for psychiatry residents — the Clinical Research Scholars Program (CRSP). The CRSP permits residents to spend an increasing proportion of their time working under the mentorship of senior research faculty on research projects. The program also includes a weekly seminar on research design, statistics, research assessment tools and skills, critical understanding of scientific literature, and current psychiatry research topics. Originally funded in 1999 by the National Institute of Mental Health (NIMH), under the leadership of Dwight L. Evans, MD (Chair) and Anthony Rostain, MD (Director of Education) the CRSP was one of a handful of programs selected for funding to help our field meet the need for more clinical research investigators. Douglas Levinson, MD (Associate Professor) joined the program leadership in 2001. This fall, CRSP received an additional five years of funding in a highly competitive NIMH review process.



CRSP Members: Douglas Levinson, MD; Falk Lohoff, MD; Matthew Hurford, MD; Louis Parrott, MD; Anthony Rostain, MD; Mahendra Bhati, MD; & Claire Pouncey, MD

The major purpose of CRSP funding is to support the time that CRSP scholars spend on their research work -- two months in the PGY-2, 30 percent in the PGY-3, and 50 percent in the PGY-4 year, as well as partial support for PGY-5 research fellowship training. Some residents join the program later than the PGY-2 year - the program is flexible enough to accommodate the needs of individual residents. Traditional programs do not permit such a large percentage of time to be spent on research. The CRSP funds allow residents to meet all of their clinical training requirements while they have time to learn about research and to jumpstart their research careers. The NIMH funds also support some faculty teaching time, research design and statistical consultation for scholars, travel to conferences to present data, and research-related expenses for scholars' projects.

Continued on Page 3...

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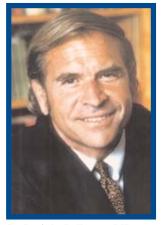
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### PPP

### <u>Chairman s Report</u>

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Dear Reader,



In the seven years I've been Chair, increasing the representation of women and minority faculty in the Department, and encouraging their movement into leadership positions, have been among the Department's highest priorities. I am proud of the progress we have made so far, but we have more work to do.

Expanding the number of women and minority faculty has been a major goal of both the University and School of Medicine, and the Department is deeply committed to this end. Trying to achieve fairness and equity in faculty composition has been a major impetus, too. And including those who have been left out too long expands the faculty candidate pool to include very talented people who make the Department better.

It is important to recognize the entire Department's contribution to these efforts. As Chair, I am ultimately responsible for recruitment to the Department. However, the initial suggestions and much of the work for new faculty hires - and promotions - come from the faculty directors who lead the Department's multiple programs. Increasing the number of women and minority faculty - and their departmental roles - is a Department-wide endeavor.

Ruth Meltzer Professor and Chairman
Professor of Psychiatry, Medicine and Neuroscience

The numbers tell where we've been, where we are, and where we need to go. From FY1997 to FY2004, the number of women in the Standing Faculty

nearly doubled from 12 to 21, a 75 percent increase and double the increase (38 percent) of male faculty. During the same period, the number of minority Standing Faculty in the Department held steady at 5. At the end of FY2004, women faculty comprised 23 percent and minority faculty 6 percent of the Standing Faculty of the Department.

Two historic milestones were achieved. James W. Cornish, MD was the first African American man and E. Cabrina Campbell, MD the first African American woman in the Department to receive promotion in the Standing Faculty, to the rank of Associate Professor in the Clinician-Educator Track. Improvement has also been made in the Tenure Track. In FY1997, 1 of 9 Tenure Track Professors were women (11 percent); by FY2004, 4 of 18 (22 percent) were. In addition, two of the six Department faculty members who hold endowed chairs are women - Raquel E. Gur, MD, PhD., Karl and Linda Rickels Professor, and Caryn Lerman, PhD, Mary C. Calkins Professor at the Annenberg School for Communications.

Women and minority faculty have assumed important leadership positions in the Department. Though the list is longer than can be included here, I would like to mention a few. Dr. Gur, Director of the Department's Neuropsychiatry Program, is also Vice Chair for Research Development. Dr. Lerman is Director of the Transdisciplinary Tobacco Use Research Center. Edna B. Foa, PhD is Director of the Center for the Treatment and Study of Anxiety. Jody J. Foster, MD, MBA is Chair of the Department of Psychiatry at Pennsylvania Hospital. Moira Rynn, MD is Medical Director of the Mood and Anxiety Disorders Section. Sarah G. DeMichele, MD is Associate Medical Director of the Outpatient Psychiatry Center. And two African-American women have also assumed important responsibilities within the Department: Dr. Campbell, Associate Director for Medical Student Education in the Department's Office of Education, and Tami Benton, M.D, Director of the Department's Clinical Program in Child and Adolescent Psychiatry at Children's Hospital.

The increased presence of women and minority faculty in the Department has also led to special programs and research projects focused on issues related to women and minority populations. Among many examples, Chanita Ann Hughes-Halbert, PhD investigates cancer prevention and control behaviors among members of diverse ethnic groups, Dr. Gur has received funding to study the genetic basis of schizophrenia among African Americans, and the Center for Studies of Addiction, directed by Charles P. O'Brien, MD, PhD, has instituted two major training programs specifically for minority medical students, undergraduates, and high school students.

The recent progress made by the Department in recruiting, retaining, and rewarding exceptional women and minority faculty has been noteworthy - and unfinished, particularly with respect to the recruitment of minority faculty. As Chair, I intend to redouble our efforts in this vital enterprise to the ultimate benefit of the Department, the School, the University - and our profession.

Just L. Eraf

Sincerely,

Dwight L. Evans, MD

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In the Works

#### Department of Psychiatry's Clinical Research Scholars Program

...Continued from cover page

Since 1999, 22 residents have participated in the CRSP. Graduates include current faculty members Steven Siegel, MD, PhD, Christos Ballas, MD, John Listerud, MD, PhD, Benoit Dubé, MD, Deborah Kim, MD and Steve Snyderman, MD. Most CRSP PGY-4 participants have gone on to a full-time PGY-5 research fellowship training experience – a five-fold increase since the four years before CRSP was started.

The heart of the CRSP experience is the relationship between the scholar and the senior faculty mentor. Our faculty have been remarkably interested and involved in providing mentorship for CRSP residents. During the PGY-1 year, CRSP applicants are helped to identify an area of research interest and a faculty mentor in that area. Our Department is ideal for the program because of our many strong and diverse research programs – it would be difficult for a scholar NOT to find a faculty mentor in an area of interest. Scholars are selected based on a written research and training proposal developed with the mentor.

During the PGY-2 year, the scholar spends two months in the mentor's research program, learning methods, exploring pilot data, perhaps working on a review article or a research protocol to begin collecting pilot data. Most CRSP scholars initiate a research project and collect their own data during the PGY-3 and PGY-4 years, leading to formal publications and/or presentations. The mentor's job is to supervise this entire process, guiding the scholar to the selection of an initial project that is interesting and important as well as feasible, and helping the scholar to overcome the many obstacles that come up in any research project. Many members of each mentor's research group typically provide important guidance and training.

The expected culmination of the CRSP experience is participation in one or two years of full-time post-residency research training. There are numerous fellowship programs at Penn that have permitted interested CRSP scholars to pursue their research more intensively -- in schizophrenia, geriatric and addiction research, as well as in psychopharmacology and the VA fellowship program, just to name the ones in our own Department.

We are fortunate to be able to offer this program at Penn and to have the opportunity to work with these young psychiatrists as they explore the possibilities of a research career. We look forward to seeing their future progress and contributions to our field.

#### **Research Development News**

The Department is well positioned to advance its scientific goals, which are closely aligned with the NIH's Roadmap plan and the PENN Medicine strategic plan for research. Using both human and animal studies, Department investigators are continuously striving to advance our understanding of the pathophysiology of major psychiatric diseases by applying genetic strategies and neurobehavioral and neuropharmacological probes. Our diverse research programs, employing creative research methodologies, are truly "translational" – using the insights gained in the laboratory for the benefit of patients, with the ultimate goal of developing new treatments for challenging disorders.

While we are well funded both through peer reviewed and industry grants, there is much potential for growth through enhanced integration among basic and clinical research programs. Penn provides a fertile ground for collaboration with scientists across campus and our plans are to deepen our roots in the academic community through research collaborations. As we execute our strategic plan, we will have the opportunity to exchange ideas on future investigative directions.

# Relocation of Pennsylvania Hospital's Psychiatry & Behavioral Outpatient Clinic

The Department of Psychiatry &
The Behavioral Health Outpatient Clinic
at Pennsylvania Hospital
(formerly located at 210 West Washington Square
Mezzanine Level)

has relocated to the main campus of Pennsylvania Hospital: 245 South 8th Street

**Entrance located on Manning Street** 

(Manning Street is situated between Locust & Spruce just off 8th Street)

The telephone numbers have remained the same

Clinic Office 215-829-7332 Main Office 215-829-7316

We continue to provide a high standard of care for adults, adolescents, and children in individual, couples, and family therapy. We provide both long-term treatment and brief interventions through the Employee Assistance Program.

### **Awards & Honors**

The Albert Stunkard Faculty Recognition Award is given annually to four faculty members who are outstanding teachers and mentors. The graduating resident class selects award winners who have significantly influenced their education and training. Named for Albert J. Stunkard, MD, Emeritus Professor of Psychiatry, and former Chairman of the Department of Psychiatry, this award recognizes Dr. Stunkard's enormous contribution to the education, training, and support of Department housestaff. Our Psychiatry Faculty awarded this honor in 2004 were Claudia Baldassano, MD, Sarah DeMichele, MD, Alexandra McLean, MD and Jeffrey Staab, MD.

The 2004 PGY-3 & 4 Teaching Award was awarded to Claudia Baldassano, MD. This award was created to honor those individuals who the residents believe were the most effective teachers of this academic year. The winner of this award has been exemplary in shaping the overall education of the PGY-3 & 4 residents.

Peter B. Bloom, MD was awarded the Benjamin Franklin Gold Medal by the International Society of Hypnosis (ISH) at its October meeting in Singapore. The inscription reads: "Benjamin Franklin Gold Medal to Peter Brower Bloom, MD Distinguished leader, creative clinician, and respected teacher. In honor of your leadership and unwavering support of international friendship and exchange of scientific thought and clinical experience. Singapore 2004."

The National Alliance for Research on Schizophrenia and Depression (NARSAD) has awarded \$260,000 to three researchers at the University of Pennsylvania School of Medicine to study causes and treatments for mental illness. NARSAD is the largest donor-supported organization in the world devoted exclusively to funding scientific research on psychiatric disorders. Wade Berrettini, MD, PhD, Professor of Psychiatry and Irwin Lucki, PhD, Professor of Psychiatry - were each honored with a one-year, \$100,000 Distinguished Investigator Award that provides support for experienced investigators. Monica Gonzalez, PhD, a Research Associate in the Department of Psychiatry, earned a two-year, \$60,000 Young Investigator Award - which is given to the most promising young scientists conducting research in the area of psychiatric brain disorders.

Paul Crits-Christoph, PhD received the 2004 Cathleen Mary Burns Award for Contributions to Clinical Psychology from Immaculata University.

Judith Coche, PhD has been named a 2004 Woman of Distinction by the Philadelphia Business Journal and the National Association of Women Business Owners. Dr. Coche is one of 25 females to be recognized before 800 business colleagues at a Dec. 8 awards banquet in Philadelphia. She joins such past winners as Dr. Judith Rodin, past president of the University of Pennsylvania.

**David F. Dinges, PhD**, has been reappointed for 4 additional years as Team Leader for the "Neurobehavioral

and Psychosocial Factors Team" of the National Space Biomedical Research Institute (NSBRI). The NSBRI is funded by NASA to find ways to enhance human survival, health, safety, and mission success during long-duration manned space flight, such as the planned mission to Mars.

**Dwight L. Evans, MD** has earned the 2004 Award for Research in Mood Disorders from the American College of Psychiatrists. This award - which honors an individual or individual whose group has made major contributions to the understanding and treatment of mood disorders - is presented annually. Dr. Evans was chosen from among those scholars and scientific investigators who have displayed excellence in research and who are devoted to assisting people suffering from mood disorders.

Edna B. Foa, PhD has received an honorary doctorate from the University of Basel in Switzerland. She was honored for contributions to the understanding of the psychopathology and treatment of anxiety disorders with an emphasis on obsessive compulsive disorder and posttraumatic stress disorder. Dr. Foa was invited to participate in an international conference in Bangkok that will focus on setting up plans for training local professionals and leaders in delivering psychiatric and psychological interventions to the Tsunami victims. Dr. Foa conducted two 5-day intensive workshops in Israel during the month of December to train therapists in delivering treatment for PTSD. Participants in the first workshop were school counselors who work with children and adolescents in areas which are highly exposed to terrorists attacks. Participants in the second workshop were psychiatrists, psychologists, and social workers who treat adult trauma victims with PTSD related to combat and terrorists attacks.

In November 2004, Martin Franklin, PhD was a member of a select panel of scientists to participate in a conference entitled, Scientific Advances in Trichotillomania and Related Body-Focused Repetitive Behaviors. The goal of the meeting was to identify promising approaches and opportunities applicable to clinical research in trichotillomania and to highlight avenues that require further development. The conference was held in Potomac, MD, and was co-sponsored by NIMH and by the Trichotillomania Learning Center, a California-based organization devoted to promoting improved scientific understanding of these conditions and to increasing access to current knowledge and effective treatment for sufferers and their families.

**Rollin Gallagher, MD** has been awarded the 2005 Distinguished Service Award by the American Academy of Pain Medicine for his outstanding and dedicated service.

Matthew Hurford, MD, PGY-4 Resident, was awarded both the APA/Bristol-Myers Squibb Fellowship in Public Psychiatry and the Emory University Psychiatry Residents' Symposium Award. He has also been named a member of the APA Council on Social Issues and Public Psychiatry.

Continued on page 5...

### **Awards & Honors**

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Continued from page 4...

**Kyle Kampman, MD**, received the Medical Professional Award - Physician, from the Caron Foundation. This prestigious, peer-nominated prize consists of a certificate and plaque. Dr. Kampman was honored for his dedication to addiction research, specifically his work with cocaine addiction and withdrawal.

Michael Kowitt, PhD received the 2004 Teacher of the Year Award from the Psychoanalytic Center of Philadelphia. Dr. Kowitt was also awarded the 2005 Edith Sabshin Award for Excellence in the Teaching of Non-Candidate Students from the American Psychoanalytic Association.

The Joseph W. Cullen Memorial Award was presented to Caryn Lerman, PhD, for her work in tobacco treatment research. This awardee is chosen annually by the membership of the American Society of Preventive Oncology's (ASPO's) Tobacco Study Group. Dr. Joseph Cullen was a long-time member of ASPO whose commitment to smoking cessation programs and national tobacco control efforts served as inspiration to researchers involved in the fight against tobacco and tobacco-related disease. His exemplary efforts inspired many until his untimely death in 1991 and laid the foundation for researchers who carry on tobacco control research today. Dr. Lerman gave the award lecture at the national meeting.

Douglas F. Levinson, MD has been selected to serve as a member of the Behavioral Genetics and Epidemiology Study Section, Center for Scientific Review for the National Institutes of Health (NIH). 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 scientific activities, achievements, and honors. Dr. Levinson's term has already started and will continue through June 30, 2007.

The Edward Lawlor Award is presented for public service and political action. Richard F. Limoges, MD, DLFAPA, FASAM, maintains a private practice in psychiatry, specializing in addiction and forensic psychiatry, with particular emphasis on problems concerning addicted physicians, both in matters of clinical care and related legal difficulties. He is a member of the active staff of the Pennsylvania Hospital and is Clinical Assistant Professor of Psychiatry (voluntary faculty) at the University of Pennsylvania and Drexel University.

Falk W. Lohoff, MD, PGY-4 Resident, received the American Medical Association Foundation Seed Grant Award for his research project titled: "Variations in the IMPA2 Gene and Susceptibility to Bipolar Disorder". This is a highly competitive grant for medical students, residents and fellows of all medical specialties in the US. In 2004 there were only 29 winners. 9 winners were in the "Neurological Disorder" category. Dr. Lohoff's proposal was the only psychiatric research project selected.

Cory Newman, PhD was the 2004 recipient of the Earl Bond Award. Initiated by the efforts of Dr. Peltz, this annual award is given to a Department member who has distinguished himself/herself for teaching at the medical student, resident and/or graduate level.

The Academisch Medisch Centrum (Academic Medical Center) and the University of Amsterdam have invited **Charles O'Brien, MD, PhD** to present the annual lecture, named "The Anatomy Lesson." This is a tradition dating back to the 16th century and in modern times has consisted of a presentation by an internationally prominent scientist of a subject on the cutting edge of science to an educated lay audience, the people of Amsterdam.

Daniel Ragland, PhD, was named a Hofmann Trust Investigator based on his current Independent Investigator Award from the National Alliance for Research on Schizophrenia and Depression (NARSAD). The title of the project is, "Delay and Trace Conditioning During fMRI: A Probe of Hippocampal Function in Schizophrenia". The project involves developing a fear conditioning paradigm to be used in human and mouse fMRI studies of hippocampal function.

John O'Reardon, MD was awarded the 2004 Martin P. Szuba Award for Excellence in Clinical Teaching and Research. This award is presented annually to a Department of Psychiatry faculty member with outstanding teaching abilities, ongoing clinical research, and a focus on translating research concepts into clinically useful teaching, all of which Dr. Szuba embodied in his work.

Anthony Rostain, MD was selected as one of the recipients of the first annual Bland Award for Excellence in Teaching Residents. This award is given on behalf of the American Psychiatric Association (APA) and its Council on Medical Education and Lifelong Learning. This award recognizes Dr. Rostain's outstanding and sustaining contributions made as a faculty member at Penn. It was established in honor of Irma Bland, MD and serves as a tribute to her unique and creative contributions to psychiatric education.

The 2004 PGY-1 & 2 Teaching Award was awarded to **James Stinnett**, **MD**. This award was created to honor those individuals who the residents believe were the most effective teachers of this academic year. The winner of this award has been exemplary in shaping the overall education of the PGY-1 & 2 residents.

**Albert J. Stunkard, MD** has been selected by the Institute of Medicine (IOM), to receive the 2004 Rhoda and Bernard Sarnat International Prize. The award recognizes the international scope and significance of Dr. Stunkard's many contributions to psychiatry and mental health, and takes the form of a Gold Medal and \$20,000.



# Penn Psychiatry - National & Regional Leader

The Hospital of the University of Pennsylvania has been listed in the "Honor Roll" of best hospitals in America by *U.S. News & World Report* for the eighth consecutive year in its July 12, 2004 issue. This annual ranking of hospitals lists the Hospital of the University of Pennsylvania as one of only 14 hospitals in the nation - and the only one between New York and Baltimore -to be recognized as an "Honor Roll" hospital for its exceptional performance in many specialty areas.

The standards for this publication's annual ranking of "Best Hospitals" are rigorous. Of all 6,012 U.S. medical centers (military and veterans' hospitals are not included), only 177, or fewer than 1 in 30, were of high-enough quality to be ranked in even a single specialty in 2004. Only 14 hospitals made the Honor Roll, a list reserved for centers with very high rankings in at least six specialties.

In total, HUP's expertise was noted in 15 of 17 medical specialties: Cancer; Digestive Disorders; Ear, Nose & Throat; Geriatrics; Gynecology; Heart & Heart Surgery; Hormonal Disorders; Kidney Disease; Neurology/Neurosurgery; Ophthalmology; **Psychiatry** (moved up four spots from 2003 to 2004); Rehabilitation; Respiratory Disorders; Rheumatology; and Urology. HUP's demonstrated excellence in these specialty areas is a result of the comprehensive care that has been provided by the hospital, over generations, to the residents of Philadelphia and beyond.

#### 2004 Consumer Tracking Annual Report Results

The Division of Market Research and Analysis at the University of Pennsylvania Health System completed its FY 2004 Consumer Tracking Study. The Consumer Tracking Annual Report is a study that began in October 1992 that examines consumer awareness and perceptions of hospitals in the Greater Philadelphia area. Consumers (age 18 years or older) who had primary responsibility for health care decisions within their household were interviewed to determine their assessment of the "best" and "preferred" hospitals in the Greater Philadelphia area. In Pennsylvania and in New Jersey, the Hospital of the University of Pennsylvania ranked 1st for best and preferred **Psychiatry**.

For this study, 5,102 interviews were conducted in FY 2004 in the geographic area consisting of the following counties: Pennsylvania - Bucks, Chester, Delaware, Montgomery, Philadelphia; New Jersey - Camden, Burlington, Mercer, Atlantic, Ocean, Cape May, Cumberland, Gloucester, Salem; and Delaware - New Castle. Interviews were conducted monthly to track the image of area hospitals among consumers. This methodology allowed the impact of various marketing activities to be tracked throughout the year. "Best" hospital was defined as the hospital the consumer felt was the top hospital in the area overall and for specified specialties. "Preferred" hospital was defined as the hospital the consumer would have chosen to go to overall and for specified specialties.

## Best Doctors 2004 Philadelphia Metro

In the United States and Canada, Best Doctors commission an exhaustive, annual peer review survey of the medical profession that contacts more than 35,000 doctors. Best Doctors' surveys are designed to mimic the informal peer-peer referral process that doctors themselves use to determine appropriate specialists for individual cases. This process is internationally recognized and accepted as the gold standard for identifying top-quality doctors. In addition, Best Doctors' surveys bring together the insights and experiences of tens of thousands leading specialists and covers more than 400 subspecialties in medicine.

Congratulations to the following members of the Department of Psychiatry included in the 2004 Best Doctors:
Jay D. Amsterdam, Wade H. Berrettini, Joseph N. DiGiacomo, Dwight L. Evans, Newell Fischer, Ruth S. Fischer, Laszlo Gyulai,
Kyle M. Kampman, Douglas F. Levinson, Charles P. O'Brien, Moira Ann Rynn, Robert L. Sadoff, James L. Stinnett, Joel E. Streim,
Howard S. Sudak, Robert M. Toborowsky, Joseph R. Volpicelli, Robert M. Weinrieb, Elizabeth B. Weller, George E. Woody.

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### **Research Highlights**

The following sponsored research funding was received by departmental investigators during the period April 1, 2004 through December 31, 2004...

#### **NEW GRANTS**

#### NIH

| Name                       | Sponsor Description | Project Title  |
|----------------------------|---------------------|--|
| Alterman, Arthur           | NIH                 | Does Psychological Wellness Predict Treatment Response?  |
| Audrain-McGovern, Janet    | NIH                 | Longitudinal Patterns and Predictors of Smoking Behavior |
| Beck, Aaron T.             | NIH                 | Cognitive Therapy For The Prevention of Suicide          |
| Brown, Gregory             | NIH                 | Drug Abuse, Psychological Variables and Suicide Attempts |
| Collins, Bradley N.        | NIH                 | SHS Treatment For Postpartum African American Smokers    |
| Cook, Joan M.              | NIH                 | Dissemination Of Empirically-Supported Psychotherapies   |
| Chits-Christoph, Paul F.   | NIH                 | The Process Of Group Therapy For Cocaine Dependence      |
| Dackis, Charles            | NIH                 | Modafinil Treatment For Cocaine                          |
| Faith, Myles               | NIH                 | Climical And Experimental Studies of Obesity             |
| Forman, Robert F.          | NIH                 | Group Drug Counseling Toolkit                            |
| Hughes-Halbert, Chanita A. | NIH                 | W eight Gain In African American Breast Cancer Survivors |
| Kampman, Kyle N.           | NIH                 | Topiramate For Alcohol And Cocaine Dependence            |
| Salzer, Mark S.            | NIH                 | Internet Peer Support For Breast Cancer                  |
| Sarwer, David              | NIH                 | Postoperative Dietary Counseling After Bariatric Surgery |
| Turetsky, Bruce I.         | NIH                 | Improved Multimodal Acquisition And Processing System    |
| W oody, George E.          | NIH                 | Dissemination Of Empirically-Supported Psychotherapies   |

#### **OTHER FEDERAL AGENCIES**

| Name             | Sponsor Description  | Project Title   |
|------------------|--|---|
| Coyne, James C.  | Department Of Defense  | Using The Internet To Collaborate With Consumers In Redefining A<br>Psychological Agenda For Families With Hereditary Breast Cancer |
| Dinges, David F. | National Space Biomedical<br>Research Institute                                | National Space Biomedical Research Institute - Team Leader<br>Administrative Support B  |
| Dinges, David F. | Transportation Security<br>Administration & Federal Aviation<br>Administration | Prediction Of Fatigue And Its Effects On Vigilance And Target Detection   |
| Dinges, David F. | National Space Biomedical<br>Research Institute                                | Countermeasures To Neuro Behavioral Deficits From Cumulative Sleep<br>Deprivation During Space Flight                               |
| Dinges, David F. | National Space Biomedical<br>Research Institute                                | Optical Computer Recognition Of Behavioral Stress During Performance  |
| Dinges, David F. | National Space Biomedical<br>Research Institute                                | Speech Monitoring Of Cognitive Deficits And Stress  |
| Van Dongen, Hans | Department Of The Army   | State And Trait Estimation In Performance Modeling  |

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### **Research Highlights**

Continued from page 7...

#### **OTHER AGENCIES**

#### **NEW GRANTS**

| Name                | Sponsor Description   | Project Title   |
|---------------------|---|---|
| Aston-Jones, Gary   | National Alliance for Research on<br>Schizophrenia and Depression | Decreased Nordrenergic And Seroteoninergic Of Frontal Cortex After<br>Prolonged Light         |
| Berrettini, Wade H. | National Alliance for Research on<br>Schizophrenia and Depression | Chromosome 18P11.2 And Bipolar Susceptibility   |
| Brodkin, Edward     | Children s Hospital of<br>Philadelphia                            | Developing A Mouse Model Of An Autism Endophenotype (Mental Retardation<br>Research Center)   |
| Dinges, David F.    | Masterfoods   | Relationship Of Subjective Quality Of Sleep To Sleep Physiology In Healthy<br>Adults          |
| Dinges, David F.    | Motor Freight Carriers<br>Association                             | Truck Driver Fatigue Management Survey  |
| Foster, Gary        | George Washington<br>University                                   | School Based Prevention Of Type 2 Diabetes In Children  |
| Lerman, Caryn       | Cancer Research<br>Foundation of America                          | Effect Of Nicotine Level On Smoking Topography & Carbon Monoxide Exposure                     |
| Lucki, Irwin        | National Alliance for Research on<br>Schizophrenia and Depression | Behavioral Effects Of Neurotrophins In Models Of Stress And Depression                        |
| Metzger, David S.   | Children s Hospital of<br>Philadelphia                            | Drug Abuse, Substance P,And HIV   |
| Overall, Karen      | Morris Animal Foundation  | Assessment Of Olfactory Function: An Integrated Approach To Assess Cognition<br>In Aging Dogs |
| Ragland, John D.    | National Alliance for Research on<br>Schizophrenia and Depression | Delay On Trace Conditioning During fMRI: A Probe Of Hippocampal<br>Function In Schizophrenia  |

#### **RENEWALS**

| Name              | Sponsor Description | Project Title  |
|-------------------|---------------------|--|
| Dinges, David F.  | NIH                 | Neurobehavioral Effects Of Partial Sleep Deprivation |
| Evans, Dwight L.  | NIH                 | Clinical Research Scholars Program In Psychiatry     |
| Lerman, Caryn     | NIH                 | Transdisciplinary Tobacco Use Research Centers       |
| Levinson, Douglas | NIH                 | Multicenter Genetics Studies Of Schizophrenia        |
| McKay, James R.   | NIH                 | Studies Of Aftercare For Substance Abusers           |

#### **CLINICAL TRIALS**

| Name         | Sponsor Description | Project Title  |
|--------------|---------------------|--|
| Faith, Myles | Bassett Healthcare  | Behavioral Predictors Of Overweight In Early Childhood   |
| Faith, Myles | Quaker              | Comparison Of The Statiating Efficiency Of Breakfast Foods In Children - A<br>Controlled Feeding Study |
| Foster, Gary | Transneuronix, Inc. | SHAPE: Screened Health Assessment And Pacer Evaluation   |
| Foster, Cary | Healthetech, Inc.   | The Effect Of Measuring And Monitoring RMRON Weight Loss   |

Continued on page 9...

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### **Research Highlights**

Continued from page 8..

#### **CLINICAL TRIALS**

|                    |   | HIMIOME IKIMED   |
|--------------------|---|--|
| Name               | Sponsor Description                             | Project Title  |
| Gyulai, Iaszlo     | GlaxoSmithKline                                 | Mixed Pattern-Mixture Model Data Analysis - SCAB2003   |
| Gyulai, Iaszlo     | Abbott Laboratories                             | Efficacy, Safety, And Tolerability of Depakote ER (250 MG Formulation) In<br>The Short Term Treatment Of Older Patients With Bipolar Disorder  |
| Katz, Ira R.       | ONO Pharmaceutical Cb., LTD.                    | CLTR: A Double-Blind Phase II Safety And Efficacy Evaluation Of ONO-<br>25066PO In Patients With Mild To Moderate Alzheimers Disease   |
| Lucki, Irwin       | Forest Laboratories, Inc.                       | Effects Of Escitalopram On Social Competition Behavior and Neurogenesis  |
| Overall, Karen     | W yeth-Ayerst Research                          | Hereditary Fear, Panic, And Lactate Response In Canines  |
| Pettinati, Helen   | Bristol-Myers Squibb<br>Pharmaceutical Research | A Randomized, Multicenter, Double-Blind, Placebo-Controlled Study Of The Efficacy And Safety Of Ariparipoprazole And Alcoholism  |
| Pettinati, Helen   | Ortho McNeil<br>Pharmaceutical                  | A Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Flexible Dose<br>Study To Assess The Safety And Efficacy Of Topiramate In The Treatment Of<br>Alcohol Dependence   |
| Rickels, Karl      | Bristol-Myers Squibb<br>Pharmaceutical Research | A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study Of The<br>Safety And Efficacy Of Aripiprazole As Adjunctive Therapy In The Treatment<br>Of Ratients With Major Depressive Disorder   |
| Rickels, Karl      | Indiana University                              | A Randomized Double-Blind Comparison Of Sertraline With Early Alprazolam<br>XR co-administration Vs Sertraline/Placebo For Primary Care Panic Disorder<br>Patients   |
| Rickels, Karl      | Cephalon  | A 10 Week, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Flexible-Dosage Study To Evaluate The Efficacy And Safety Of Gabitril (Up To 16MG/Day) In The Treatment Of Adults With Generalized Anxiety Disorders  |
| Rynn, Moira        | Eli Lilly And Company                           | Duloxetine Hydrochloride Once Daily Versus Placebo In The Treatment Of<br>Generalized Anxiety Disorder   |
| Rynn, Moira        | Astrazeneca                                     | A 3-Week, Multicenter, Randomized, Double-Blind, Parallel-Group, Placebo-<br>Controlled, Phase III Study Of The Efficacy And Safety Of Quetiapine<br>Fumarate (Seroquel) Immediate-Release Tablets In Daily Doses Of 400 MG<br>And 600 MG Compared With Placebo In The Treatment Of Children And<br>Adolescents With Bipolar I Mania |
| Sarwer, David      | Plastic Surgery Educational                     | Psychological Factors In Cosmetic Breast Augmentation  |
| Turetsky, Bruce I. | Human Bionics LLC                               | Improved Multimodal Acquisition And Processing System  |
| Volpiælli, Jægh    | Bristol-Myers Squibb<br>Pharmaceutical Research | CLIR: A Randomized Multicenter, Double-Blind, Placebo-Controlled Study Of<br>The Efficacy And Safety Of Aripiprazole In The Maintenance Of Abstinence<br>From Alcohol In Subjects With Alcoholism  |
| Wadden, Thomas A.  | Johnson & Johnson                               | CLTR: A Randomized, Double-Blind, Placebo-Controlled, Multicenter,<br>Parallel-Group Study To Assess The Efficacy And Safety Of Topiramate<br>OROS Controlled-Release In The Treatment Of Obese, Type 2 Diabetic<br>Subjects Managed With Diet Or Metformin  |
| Wadden, Thomas A.  | Sanofi-Synthelabo, Inc.                         | CLTR: A Randomized Double-Blind Placebo Controlled Parallel-Group Fixed<br>Dose Multicenter Study To Assess Efficacy And Safety Of Rimbonabant 20<br>MG Versus Placebo On Weight Loss And Frequency Of Binge Episodes In<br>Obese Patients With Food Carvings  |
|                    |   |  |



#### Cornerstones

In recognition of the significant contributions that our faculty & staff make to the Department Mission, Cornerstones is dedicated to highlighting their achievements and activities.



We would like to extend our thanks to the following employees from the Department of Psychiatry who were honored by the University of Pennsylvania with service awards in 2004 for their long-term commitment:

Kyle Kampman, MD, Associate Professor of Psychiatry, Clinician-Educator, Treatment Research Center

Kathleen Meyers, PhD, Research Associate, Treatment Research Center

Winston Smith, Clerk, Treatment Research Center

Maryanne Giampapa, Business Administrator, Depression Research Unit

David Oslin, MD, Assistant Professor of Psychiatry, Geriatric Psychiatry

Eri Kuno, PhD, Research Assistant Professor of Psychiatry, Center for Mental Health Policy and Services Research

Monique Martin, Research Coordinator, Center for Mental Health Policy and Services Research

Christian Kohler, MD, Assistant Professor of Psychiatry, Clinician-Educator, Neuropsychiatry

Smadar Auerbach- Barber, PhD, Counseling Psychologist, Outpatient Psychiatry Center

Mary Beth Gibbons, PhD, Assistant Professor of Psychiatry, Clinician-Educator, Center for Psychotherapy Research

Michelle Richardson, Administrative Assistant, Center for Psychotherapy Research

Cabrina Campbell, MD, Associate Professor of Psychiatry, Clinician-Educator, Associate Director for Medical Students

Muriel Gracie, Administrative Coordinator, Treatment Research Center

Renee Zawacki, Accountant, Treatment Research Center

Patricia Oglesby, Administrative Coordinator, HIV Prevention Research

Ava Plotnick, Manager, Faculty Affairs, Department Business Office

Bobbie Pugh, Manager, Credentialing & Network Development, PENN Behavioral Health Corporate Services

#### 20 Years

Arthur Alterman, PhD, Research Professor of Psychiatry, Treatment Research Center

Ronald Ehrman, PhD, Clinical Associate Professor of Psychiatry, Treatment Research Center

Richard Summers, MD, Clinical Associate Professor, Associate Director of Education for Residency Training

Rosellen Taraborrelli, Chief Financial and Administrative Officer & Executive Director of PENN Behavioral Health Corporate Services

Paul Crits-Christoph, PhD, Professor of Psychiatry & Director, Center for Psychotherapy Research

Stanley Caroff, MD, Professor of Psychiatry, Clinician-Educator, Veterans Affairs Medical Center

Anna Rose Childress, PhD, Research Associate Professor of Psychiatry, Treatment Research Center

Irwin Lucki, PhD, Professor of Psychology in Psychiatry and Pharmacology, Director of Behavioral Psychopharmacology Laboratory

Debra Toogood, Clinical Research Coordinator, Mood & Anxiety Disorders Program

Emily Carota Orne, Co-Director, Unit for Experimental Psychiatry

Raquel Gur, MD, PhD, Karl and Linda Rickels Professor Vice Chair for Research Development & Director, Neuropsychiatry

Ruben Gur, PhD, Professor of Psychology in Psychiatry & Director, Neuropsychology

#### You Are Welcome to the 10th Annual...Piano Recital Featuring: Cory F. Newman, PhD, pianist

The Program ...
will include short pieces by Scriabin, Rachmaninov, Rave & entire solo of Gershwirds Rhapsody in Blue

Where: Dunlop Auditorium,

Stemmler Hall

(Hamilton Walk, east of 36th St. walk)

When: Tuesday, June 14, 2005

12:15pm to 1:00pm

#### Critics rave...

"Newman rocks! All hail the new king of classical grunge." --- Rolling Stone Magazine

"Newman creates the sound of three hands playing."

--- Buddhist Archives of Abnormal Musical Orthopedics

"This Bud's for you, Mr. Way Too Many Sharps and Flats!" --- Budweiser, 'Real Men of Genius'

Just bring your lunch and bring your good taste!

This recital is Free!

### **An Employee Snapshot**

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Rita Ryan, PhD

Rita Ryan, PhD came to the University of Pennsylvania in 1992 to work for the Center for Psychotherapy Research as an Intake coordinator. Her objective then was to learn as much as she could about research and to put her children through college. "It has always been a goal of mine to be productive in a way that allows others to benefit," Rita says. This aspiration has been exemplified by Rita Ryan with her family, her colleagues at work, and the patients she collaborates with. This month we are highlighting Dr. Rita Ryan who is well known to many of us in the Department because of her contributions to the administration over the years and her personal accomplishments which have benefited our psychiatry residents who receive supervision from her and our patients whom she has counseled.

In 1995 Rita became the Manager of the Triage Referral Service which she helped the Department to build and worked as a staff psychologist for the

Center for Cognitive Therapy. The great exodus from 3600 Market Street to 3535 Market Street was managed by Rita in 1996 under her leadership as a Space Coordinator. She was also a Project Leader of the "Joint Commission on Accreditation of Healthcare Organizations" (JCAHO) for the accreditation process for the Department of Psychiatry and was successful with both ventures. Rita was Manager of Clinical Services for the Department's General Ambulatory Care Unit from 1996 through 1998. From 1998 through 2000 she was the Associate Director of Operations for the Department of Psychiatry. While working and contributing to the many successes of the Department, Rita received her PhD in Clinical Psychology in 2001 from The Union Institute & University and completed her Post-doctoral Fellowship in 2003 with The Center for Cognitive Therapy, University of Pennsylvania.

Throughout her years with our Department, Rita has worked hard, accepted more responsibilities along the way, and continued her personal and professional growth through continued learning. Rita believes strongly in education and has used every avenue - school, work, and her family - to learn how to contribute, get along, and thrive in this world.

Rita continues her schooling through her work and her supervision of our residents. Her philosophy on Psychotherapy epitomizes her commitment to making a difference:

Psychotherapy is a shared process of discovery, experienced by the individual in therapy and the therapist. It is sustained by mutual respect and collaboration. It is a way for individuals to overcome specific problems or to stimulate overall emotional growth and healing. This respect and collaboration fosters change in individuals, while allowing them to become all they can be. The most important aspect of psychotherapy is the therapeutic alliance. The therapeutic relationship allows two people to work together to improve the quality of life. I am extremely fortunate to play a part in the wonderful process of change in my clients' lives. It is an honor and a privilege to be entrusted with the most intimate details and private thoughts of my clients, and worthy of my utmost respect.

Please write to let us know about staff awards, initiatives or committee work that may not be captured in other areas of the newsletter: rorynn@mail.med.upenn.edu

#### "Name Our Newsletter" Contest Winner



Teresa Hinton

Over 100 entries were submitted for our Department's "Name Our Newsletter" contest. Teresa Hinton, Administrative Coordinator for the Mood and Anxiety Disorders Program, submitted the winning name for our newsletter, "Penn Psychiatry Perspective" and will receive a one-hundred dollar gift certificate from Penn's Bookstore.

When Teresa was informed that she had won and asked how she came up with her name suggestion she said, "I was totally surprised and thrilled that I won. When I first read the Psychiatry newsletter, I was impressed with the many facets of the Department that were captured in the stories -- from research collaborations to staff accomplishments to residents' views. I like that this newsletter is for everyone who contributes to the success of the Department of Psychiatry and that the articles provide these many different 'perspectives'."



#### ARLENE PARSONS BENNETT, M.D. - PROFILE OF A MEMBER OF THE DEPARTMENT'S VOLUNTARY FACULTY

The Department greatly profits from the significant contributions of its 201 voluntary faculty. Although voluntary faculty are part-time and do not receive monetary compensation from the Department or Health System, their participation in the Department's education, research, and clinical programs provides its own non-financial rewards, and the Department and its programs are the grateful beneficiaries.

The voluntary faculty consist of several categories, including Clinical Faculty (104), Adjunct Faculty (29), and Emeritus Faculty (11), each defined differently with distinct qualifications and responsibilities. Members of these groups can each attain the basic professional ranks - assistant, associate, and full professor. Clinical associates (55) comprise an additional component of the voluntary faculty, primarily contributing to the Department's teaching mission.

This issue will profile a distinguished Clinical Associate of the Department. In the future, other members of the voluntary faculty will be featured, each notable for his or her career achievements and exceptional service to the Department.

Arlene Parsons Bennett, MD personifies the strength of the Department's Clinical Associates group. Born in Philadelphia, she knew from the age of nine that she wanted to be a doctor and set out with a clear plan to reach that goal. Following graduation from academically intense Girls High in Philadelphia, Dr. Bennett later joined the Air Force, becoming an airborne radio mechanic in the 58th Fighter Interceptor Squadron, the only woman in a 200-person unit. Her primary motivation was to qualify for college tuition available through the G.I. Bill and to save additional dollars for college.

With financial support for college secure, Dr. Bennett majored in zoology and chemistry at the University of Pennsylvania, and received a B.S. in Education. Making the Dean's List paved the way for a scholarship to medical school and, in the fall of 1960 at the age of 26, she entered the University of Pennsylvania School of Medicine to pursue her lifelong dream, one of only six women in her class. She received her MD in 1964, becoming the first African American woman to graduate from Penn's medical school.

Dr. Bennett remembers her medical school years as a "very good, positive experience" during which she "worked very hard." She characterizes the environment as friendly, marked by substantial camaraderie, and free of overt discrimination. Coming from a diverse environment at Girls High, she was comfortable in her new surroundings, and her professors were fair. "If you were admitted to the medical school," she says, "you were expected to graduate and the institution provided the support to make that happen." Dr. Bennett fondly recalls many mentors, high among them Dr. Mickey Stunkard in the Department of Psychiatry and Dr. John Bevilacqua in the Department of Neurology.

Following medical school, Dr. Bennett became a pediatrician for ten years. Her interaction with anxious and distressed parents, who were not receiving adequate attention, revealed an unmet need and stirred an interest in psychiatry. As she puts it, "I got tired of treating parents indirectly - no one was tending to the adults." Upon completing a three-year residency at Eastern Pennsylvania Psychiatric Institute, she opened her private psychiatric practice in July 1977 and, in November, joined the staff of Pennsylvania Hospital as an Assistant Psychiatrist and the Department of Psychiatry at HUP as a Clinical Associate.

As a general psychiatrist, Dr. Bennett has concentrated on patients with depression, bipolar disorders, anxiety disorders, and schizophrenia. "Seasoned psychiatrists can make an especially significant difference to patients with schizophrenia," Dr. Bennett emphasizes, "particularly if they have the opportunity to treat the patients over an extended period of time." Her private practice allows for this longitudinal perspective, one that is also encouraged in her work at the Hall-Mercer Community Mental Health and Mental Retardation Center at Pennsylvania Hospital.

Dr. Bennett focuses on the long-time quality of life of her patients. Her ultimate clinical goals are "to lessen patients' symptoms, take care of their emotional homework, and help them develop more adaptive skills so they can begin to use their potential."

Dr. Bennett, a frequent guest on local television and radio programs, maintains a large, culturally and socioeconomically diverse private practice, and sees patients at Pennsylvania Hospital on an outpatient basis. As a Clinical Associate, she consults with other psychiatrists at Pennsylvania Hospital about specific cases, attends continuing medical education conferences there, and "really enjoys participating" in the Penn medical school's doctoring program, which helps students learn about disease from the patient's point-of-view.

For most of the last fifty years, Dr. Bennett has had an active relationship with Penn, and has been a Clinical Associate of the Department for almost 25 years. Thinking back to her medical education at Penn in the early 1960s, Dr. Bennett describes the institution as "unique" - without any stretch, the same can be said of her.

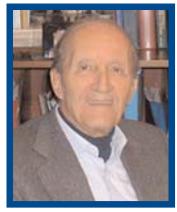


Arlene Parsons Bennett, MD

# Faculty Spotlig

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#### A Pioneer in Psychopharmacology



Karl Rickels, MD

Karl Rickels, MD, Stuart and Emily B.H. Mudd Professor of Human Behavior and Reproduction and Professor of Psychiatry, has just celebrated 50 years in psychiatry, coinciding with his 50 years in America. By his own account, the choice of the profession to which he has contributed so much was largely serendipitous. By anyone's account, his life's journey has been nothing short of amazing.

Following the Second World War, Dr. Rickels earned an MD from the Medical School of Muenster University in his native Germany. He spent two years in clinical pathology before immigrating to the United States in 1954, having previously been to the U.S. as a German prisoner of war from 1943 to 1946. His survival during the war may well have been ensured by his father, who advised him to enlist in the African Signal Corps to assure capture by the allied forces and not the Russians. Dr. Rickels' positive experience as a prisoner of war in the U.S. later led to his decision to return to America through a one year work sponsorship from the Mental Health Institute in Iowa. In this way, Dr. Rickels was introduced to psychiatry.

Dr. Rickels made his way from Cherokee, Iowa to Philadelphia, Pennsylvania to train at the Hospital of the University of Pennsylvania completing his residency in 1957. Dr. Kenneth E. Appel, the chair of the Department of Psychiatry at the time, encouraged Dr.

Rickels to enter the new field of psychopharmacology rather than pursue psychoanalytic training, which was en vogue at the time. So began a remarkable body of investigative work. Dr. Rickels' research has been continuously funded by the National Institute of Mental Health (NIMH) since 1959. One of his grants – "Early drug evaluation in neurotic patients (MH 08957)" – was successively funded for 32 years. His most recent grant – "Long-term versus short-term treatment of Generalized Anxiety Disorder (MH 65963)" – will continue until December, 2008.

Dr. Rickels' lifetime interest in the study of non-specific and psychological factors and their effect on treatment outcomes reflects his strong beliefs that the patient's care should include the whole person. "Drugs are not given in a vacuum but are given within a therapeutic relationship," he asserts, and he has based his work on this conviction.

In many areas of his life, Dr. Rickels has proven to be a pioneer. His advent to America provided him with a new homeland and opportunities to create a legacy. This was accomplished in the field of psychopharmacology where he played a leadership role in the first NIMH-sponsored multicenter study focusing on the treatment of anxious outpatients. Dr. Rickels and his group were the first in the U.S. to move their outcomes clinical research into the private practice of family physicians and private psychiatrists. They also contributed significantly to the methodology of clinical drug trials, and have probably studied almost all anxiolytics and antidepressants presently marketed in the U.S. His group has attained an international reputation not only for the assessment of positive medication effects but also for defining and studying negative effects produced by psychiatric medication, with particular focus on the positive and negative aspects of benzodiazepine therapy.

Dr. Rickels' many firsts have established him as a world authority on anxiety disorders. For his contributions to the field, he received the Benjamin Rush Lifetime Achievement Award from the Philadelphia Psychiatric Society in the Fall of 2003. Dr. Rickels was honored by this recognition and is thankful for his roots in the Department of Psychiatry at Penn which he feels contributed to his success. "The eclectic approach of the Department in accepting and supporting various methods of psychiatric theory and practice and the many friends I have made here at Penn have provided a collegial foundation for me to practice, research, teach, and, most importantly, continue to learn."

To thank Penn for all it has done for him, Dr. Rickels established two endowed chairs in the Department of Psychiatry, which are currently held by Dr. Wade Berrettini and Dr. Raquel Gur.



Karl Rickels, MD, early in his career in the 1960s at the University of Pennsylvania



## **PROGRAM**

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#### CENTER FOR NEUROBIOLOGY AND BEHAVIOR

Psychiatry departments in schools of medicine are considered to be clinical departments. Befitting the overall goals of medical schools, their faculties see patients and train the next generation of clinicians. Faculty in most psychiatry departments in academic medical centers also conduct research studies directly relating to their clinical work with patients, and educate future investigators. A very select number of psychiatry departments do all of these things, and also successfully carry out research at the cellular and molecular levels – known as basic science or fundamental research. Penn's Department of Psychiatry is a member of this elite group.

The Department's #2 ranking in NIH research support, a good measure of its research capability, places it at the highest echelon. In FY2003, Department faculty received \$48.2 million in NIH support, roughly one-fifth of that going to basic science research. A major reason for this impressive result has been the Center for Neurobiology and Behavior (CNB), the focal point for the Department's fundamental research programs.

The CNB was established in 1996 to consolidate and give clear identity to existing basic science programs within the Department and to link them with similar activities across campus. Directed by Wade H. Berrettini, MD, PhD, the CNB has grown to include some 25 faculty throughout the Department and University, with strong links to the Departments of Genetics, Medicine, Neuroscience, and Pharmacology in the School of Medicine and Biology in the School of Arts and Sciences.

The CNB promotes interdisciplinary research and training in the basic neural and molecular mechanisms underlying complex behavior. Influenced by being in a clinical department with patient care responsibilities, it has shaped many of its basic science inquiries to shed light on clinical issues – an approach called translational research, in which the discoveries in the laboratory are "translated" into therapies and treatments for patients. The CNB has "encouraged scientists to conduct translational research through parallel studies in mice and humans," says Dr. Berrettini, citing one scientific approach CNB scientists have adopted. This capacity will be expanded in the future, as the CNB is investing heavily in studies of mouse behavior as a model for studying human behavioral disorders. With the CNB's planned move to the Translational Research Laboratory (TRL) building in the spring, the murine behavioral testing core facility will be enlarged and improved. Just one tangible illustration of the CNB's translational research orientation is the on-going collaboration between Dr. Berrettini and Caryn Lerman, PhD, Director of the Transdisciplinary Tobacco Use Research Center. Focusing on nicotine addiction, the leading cause of addiction in the United States, their work has resulted in the identification of a DNA sequence variation which helps predict the response of nicotine-addicted patients to drug therapy.

The CNB also plays a key role in supporting the educational mission of the Department, School, and University by encouraging the recruitment of outstanding MD, PhD, and MD/PhD. laboratory scientists working at the interface of neurobiology and mental illness research. In addition, the Center provides a cohesive home for graduate and post-graduate studies in behavioral neurobiology at the medical school, and its faculty teach in the Biological Basis of Behavior program for University undergraduates.

The basic science and interdisciplinary focus of the CNB has had synergistic benefits for participating faculty. "The CNB," says Dr. Berrettini, "has tremendous scientific diversity and expertise which prompts innovation." He "is quite proud of the success of the CNB in helping scientists who didn't personally use genetic tools in their research to do so." He noted that the work of Irwin Lucki, PhD, head of the Behavioral Psychopharmacology Laboratory, has benefited in this way, and that his own collaboration with Dr. Lucki is "very encouraging."



Wade H. Berrettini, MD, PhD

Over the next several issues, the *Penn Psychiatry Perspective* will feature the major programs and laboratories in the CNB to provide brief overviews of what each is doing and has accomplished, as well as future directions. This issue focuses on the Psychiatric Genetics and Behavioral Psychopharmacology Laboratories. Descriptions of the other CNB components will follow: Behavioral Genetics, Cellular and Molecular Neuropathology, Functional Genomics and Behavior, Sleep and Chronobiology, Neurobehavioral Genetic Disease and Imprinting, Neuromodulation and Behavior, and Psychiatric Genetics Studies.

#### THE PSYCHIATRIC GENETICS LABORATORY

The Psychiatric Genetics Laboratory seeks an answer to a simple question – do the genes of some individuals make them prone to certain behavioral disorders? True to the CNB's commitment to translational research, the program carries out both human studies and genetic investigations using animal models to advance our understanding of genetic influences on human behavior.

In recent years, the Laboratory has achieved several important breakthroughs. Director Dr. Berrettini and his colleagues identified a novel gene on Chromosome 18 (18p11.2) which may increase the risk for two devastating illnesses, bipolar disorder and schizophrenia. Penn has filed a patent to protect this discovery, for which Dr. Berrettini is the inventor. AstraZeneca scientists are now collaborating with Dr. Berrettini's group to uncover the role of this DNA sequence in the genetic origins of bipolar disorder and/or schizophrenia.

\*\*continued on page 15...\*\*

### HIGHLIGHTS...

### Penn Psychiatry Perspective

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### DOING BASIC SCIENCE RESEARCH IN A CLINICAL DEPARTMENT

continued from page 14...

The Psychiatric Genetics Laboratory has also ventured into an exciting new field. Pharmacogenetics is the study of genetic differences among people which may cause them to respond dissimilarly to the same medicine. Work in this area has so far focused on addictive behaviors, a research strength of the Department. Investigators David Oslin, MD and Charles P. O'Brien, MD, PhD have identified a simple DNA change which predicts the response of individuals addicted to alcohol to naltrexone, used to treat patients for alcoholism. And Drs. Berrettini and Caryn Lerman have discovered a DNA sequence variation which predicts the response of people addicted to nicotine to drug therapy.

Future studies in the Laboratory are moving in equally promising directions. Dr. Berrettini and Thomas N. Ferraro, PhD are creating new mouse models to evaluate genetic susceptibility to epilepsy. Maja Bucan, PhD in the Department of Genetics is studying selected genes -- whose expression is regulated by a day-night cycle - as candidate genes for susceptibility to bipolar disorder. Drs. Lerman and Berrettini are continuing their collaboration by examining potential new treatments to reduce nicotine dependence. And, in a clever approach, Dr. Berrettini and R. Arlen Price, PhD are searching for genes which cause obesity by comparing DNA from patients with anorexia nervosa with DNA from obese individuals.

#### BEHAVIORAL PSYCHOPHARMACOLOGY LABORATORY

Interdisciplinary research is the hallmark of the CNB, and none of its components better exemplifies this approach than the Behavioral Psychopharmacology Laboratory. Directed by Irwin Lucki, PhD, the Laboratory blends psychology, psychiatry, neurobiology, neuropharmacology, and neurochemistry to investigate how genes and drug therapies affect biology, behavior, and psychiatric disease.

Laboratory researchers have honed in on how specific neurotransmitters are impacted by antidepressant and anxiolytic drugs and how the drugs, in turn, affect behavior. Neurotransmitters, such as serotonin (5-HT) and norepinephrine, are chemical messengers in the nervous system that play critical roles in many important physiological functions and in the pharmacological actions of drugs important in psychiatric medicine. Abnormalities in 5-HT neurotransmission, for example, are believed to cause diverse psychiatric disorders, such as depression, anxiety, and schizophrenia. As is common in the CNB, laboratory scientists use an animal model – i.e., rats or mice – to discover the potential efficacy of different neurotransmitter and peptide receptors in clinical therapy. How do antidepressants affect the neurotransmitters 5-HT and norepinephrine, are other neurotransmitters or peptides targets for novel antidepressants, and what is the supportive neural circuitry that explains their intricate interactions? These are just some of the questions Dr. Lucki and his team — Brian Hoshaw, PhD, graduate student Owen Howard, and collaborator Rita Valentino, PhD (Children's Hospital of Philadelphia) — are exploring.

In another ongoing project, Anita Bechtholt, PhD, Michelle Jones, PhD, graduate students Olivia O'Leary and James Crowley, and collaborators Rene Hen, PhD (Columbia University), Sheryl Beck, PhD (Children's Hospital of Philadelphia), Steven Thomas, MD, and Julie Blendy, PhD are using different inbred mouse strains – known as "knockout mice" – to examine genetic factors associated with complex behaviors and the behavioral effects of psychotherapeutic medications. By altering the genetic structure of mice in the laboratory – experimentation not possible with humans – and learning how these genetic changes affect how specific drugs work in the body, investigators are discovering how receptors for serotonin and norepinephrine influence the neurobiology of depression and anxiety. Ultimately, the hope is that these findings in mice can teach us more about how humans respond to drugs and the genetic factors that may predict responses to specific drugs the project of the services.

A recent new direction in the laboratory is to study the relationship between neurogenesis – the process by which neurons are produced – and stress and depression. It has only been recently appreciated that specialized areas of the brain generate new neurons throughout our lifespan. However, stress reduces the capacity to generate new neurons, an effect that is reversed by chronic antidepressant treatments. In a newly-formed NIH-supported National Cooperative Drug Discovery Group, investigators led by Drs. Lucki and Julie Blendy are collaborating with Wyeth Neuroscience Research to discover new antidepressant drugs based on their ability to influence neurogenesis and stress.

It is reassuring to know that the Laboratory is also building a cadre of scientists who will carry on the work far into the future. This melding of science and education, a strong emphasis of the CNB, is well illustrated in the NIH-supported Training Program in Neuropsychopharmacology directed by Dr. Lucki. Now in its 28th year, the grant is the longest continuing training program at the National Institute of Mental Health.



Irwin Lucki, PhD

Providing laboratory research training for MD and PhD trainees – both pre- and post-docs – the program involves 30 training faculty from various departments at the University and helps ensure that the Laboratory's inquiries into the complex interactions of genes, drugs, biology, and behavior will continue.

**PROGRAM** 

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### HUMAN SLEEP NEED AND BIOLOGICAL RHYTHM RESEARCH AT THE UNIT FOR EXPERIMENTAL PSYCHIATRY

Did you wonder why last night's sleep wasn't restful? Most likely, the Unit for Experimental Psychiatry (UEP) is already working on it, and a host of other sleep-related problems experienced by some 70 million Americans. As part of the Department's Division of Sleep and Chronobiology, the UEP is a multi-disciplinary group of investigators focused on establishing the nature of the physiological and neurobehavioral changes engendered by sleep loss and circadian rhythmicity. Basic human translational and clinical research within the laboratory seeks to characterize the relationship between sleep and the endogenous circadian pacemaker to define the effects of this interaction on wakefulness and neurobehavioral functioning (e.g., subjective sleepiness, physiological alertness, attention, cognitive performance, fatigue, mood, neuroendocrine and neuroimmune responses, and health), and to assess effective interventions for and countermeasures to these changes. The Unit also explores human functioning in response to stress, memory enhancement and distortion, and various pathologies of sleep and wakefulness such as circadian sleep disorders, hypersomnolence syndromes, insomnias, and insufficient sleep syndromes.

The UEP's offices are located on 10 Blockley in the School of Medicine, while its Sleep and Chronobiology Laboratory (SCL) is located on 11 Founders in the Hospital of the University of Pennsylvania. The SCL is also a satellite of HUP's NIH-funded General Clinical Research Center. UEP research protocols are conducted in both the SCL and the GCRC on 1 Dulles in HUP.

The UEP was founded by Martin T. Orne, MD, PhD in 1964, who was succeeded by David F. Dinges, PhD as director of the laboratory in 1995. Dr. Dinges is also Professor of Psychology in Psychiatry, and Associate Director of Penn's Center for Sleep and Respiratory Neurobiology. He is internationally recognized for his research on the neurocognitive and physiological effects of sleep disturbance and deprivation.

A leader in his field of scientific study, Dr. Dinges has been President of the U.S. Sleep Research Society and served on the Board of Directors of the American Academy of Sleep Medicine and the National Sleep Foundation. He currently serves as President of the World Federation of Sleep Research and Sleep Medicine Societies. He has been the recipient of numerous awards for teaching and research, including the 2002 Senator Mark O. Hatfield Public Policy Award and the 2004 William C. Dement Academic Achievement from the American Academy of Sleep Medicine; as well as the first annual 2004 Decade of

Behavior Research Award from the American Psychological Association in recognition of his dedication and commitment to the advancement of behavioral research that influences health policy and safety.

The UEP performs a wide range of experiments involving intensive prolonged physiological and behavioral monitoring of humans undergoing perturbations during sleep and circadian neurobiology in temporal isolation. This research has made contributions to Sleep Disorders Medicine, including to the study of hypersomnolence syndromes such as obstructive sleep apnea and shift work sleep disorder. Among the practical scientific contributions is the development of the psychomotor vigilance task, which is one of the most widely used scientific measures of sleepiness. The laboratory is currently supported by grants from the National Institutes of Health, National Aeronautics and Space Administration (NASA) and National Space Biomedical Research Institute (NSBRI), Department of Defense, Department of Transportation, and Department of Homeland Security, as well as other public and private organizations.

The UEP's NIH-funded studies on the neurobehavioral effects of sleep deprivation represent its most important work. In a paper published last year in the journal Sleep, Unit investigators were the first to systematically document the effects of chronic sleep restriction on brain function and mental acuity. As Dr. Dinges summarizes it, "When sleep is restricted to 6 hours or less per 24 hours, cognitive performance deficits equivalent to up to 2 nights of total sleep deprivation are apparent. Even relatively moderate sleep restriction can seriously impair waking neurobehavioral functions in healthy adults." Worse yet, subjects in the studies "were largely unaware of these increasing cognitive deficits," suggesting that humans continue in their everyday life without recognizing the damage. This paper was recently selected as the October 2004 fast breaking paper in the field of neuroscience and behavior, by Thompson ISI, the electronic citation index.

Dr. Dinges also leads the NASA-supported NSBRI Neurobehavioral and Psychosocial Factors Team. The UEP is conducting research on countermeasures to chronic sleep restriction and stress during long-duration space flight. UEP research for the U.S. Department of Transportation focuses on technological approaches to detecting drowsy driving in commercial truck drivers, and identifying effective fatigue management strategies. Dr. Dinges also directs a center of excellence for research for sleep loss and jet lag for the Air Force Office of Scientific

Continued on Page 17...

### HIGHLIGHTS...

### Penn Psychiatry Perspective

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### RESEARCH AT THE UNIT FOR EXPERIMENTAL PSYCHIATRY

continued from page 16...

Research, which includes investigators at Harvard and Stanford Universities working on pharmacological countermeasures and mathematical modeling of human neurobehavioral functions.



David F. Dinges, PhD & Hans P.A. Van Dongen, PhD

Work at the UEP crosses disciplines with ease, and pulls in collaborators from around the University, the nation, and the world, from academia to government to industry. Remarkably, given its topical and geographic reach, only two Department of Psychiatry faculty anchor the Unit-Dr. Dinges and Hans P.A. Van Dongen, PhD They work with an extraordinary staff, headed by Michele Carlin and Linda Mangino, who manage the Unit's numerous protocols. Over 1000 24-hour protocols are carried out annually, with about 5 experiments on-going at any one time. Despite the heavy and demanding workload, staff members are extremely committed to the effort - many have worked with Dr. Dinges for over 20 years, critical for maintaining study quality.

The UEP also places strong emphasis on educating and training the next generation of investigators. At any one time, between 30 and 50 University of Pennsylvania undergraduates work in the Unit's laboratory, helping with the protocols. Over the years, Dr. Dinges estimates that "hundreds of the undergraduates have gone on to graduate or medical schools." The Unit also provides training opportunities for post-doctoral fellows, graduate students, medical students and post-baccalaureate research assistants.

# Social Skills Seminar for Adults with Autistic Spectrum / Social Learning Disorders

Recent clinical advances and new research in the area of developmental disabilities has afforded exciting new opportunities to study and treat social developmental disorders in adults. Heretofore a neglected area of general psychiatry, the population of adults with autistic-spectrum disorders is gaining increasing recognition among clinicians, researchers and the general public as deserving greater services and inclusion in new clinical and basic research programs. The major new conceptual advance in recent years has been the reclassification of social dyspraxia as a critical aspect of autism and autistic-like conditions that are increasingly seen as existing on a continuum from severe autism (pervasive developmental disorder) to milder forms such as Asperger's Syndrome, Schizoid Personality Disorder, Nonverbal Learning Disability, and atypical Obsessive Compulsive Disorder with Social Phobia.

The Penn Social Learning Disorders Program was founded in 2003 with a commitment to excellence in both clinical service and research in the area of social learning disorders in adults. The core faculty of the SLDP includes Drs. Tony Rostain, Ted Brodkin, Mary Riggs Cohen, John Listerud and Russ Ramsay. Since it began, the program has provided assessment and clinical services to dozens of patients with SLD and has offered social skills seminars on a continuous basis to this population. The seminar was featured in the April, 2004. New York Times article on adult social disorders and treatments. This course teaches basic social skills including verbal and nonverbal communication, job interview skills and interpersonal relationship skills including dating. Specific objectives include developing basic skills in conversation and recognizing nonverbal aspects of communication (facial expression, body language) situations. The classroom provides practice and observation opportunities using a oneway mirror for transferring skills to real life situations.

For more information, call 215-573-1159.

#### We Want to Hear From You...

If you have any comments on the newsletter or suggestions for future stories or items of interest...

Please contact:

Rosealeen Rynn at (215) 898-0602, or by email at rorynn@mail.med.upenn.edu.



#### Resident Teaching Initiatives & Activities

#### **Addictions Rotation**

A new PGY-3 rotation has been officially added to the curriculum! Residents are seeing patients with addictions diagnoses at the VA Medical Center for a six-month period. John Listerud, MD is supervising the regular clinical encounters and physicians from the Addictions Recovery Unit, the Treatment Research Center, and the Methadone Maintenance Program are also involved. Any faculty interested in participating, please contact Wendy Baer.

Contact Phone #: (215) 573-4837 Email: wendy\_baer@med.unc.edu

#### **Psychiatric Emergency Evaluation Center (PEEC) Curriculum**

The Psychiatric Emergency Evaluation Center (PEEC) has a new curriculum for residents rotating there at the Hospital of the University of Pennsylvania (HUP). It was implemented in August and residents have given a lot of positive feedback so far. The curriculum aims to have Chief Residents: Wendy Baer, MD, Lisa Seufert, MD, residents learn about all major topics in emergency psychiatry, such as interviewing skills, substance abuse, depression, and safety issues. Contact Lisa Seufert if you have any questions.



& David Taylor, MD

Contact Phone #: (215) 746-7239 Email: seufert@mail.med.upenn.edu

#### **Psychotherapy Track**

A new elective track, focusing on the range of current psychotherapies, has been developed. PGY-3 and 4 residents who enroll in this elective will see more psychotherapy cases, receive additional supervision, attend a weekly didactic session to review psychotherapy cases and issues in depth, and develop an academic project in the PGY-4 about psychotherapy. Richard Summers, MD is leading the way with this elective, so please contact him if you are interested.

Contact Phone #: (215) 746-7213 Email: summersr@mail.med.upenn.edu

#### **Community Psychiatry Track**

This is the second year of the community psychiatry track for residents. The track consists of monthly dinners with various professionals and consumers in the mental health community. In addition, individual mentoring about careers in academic community psychiatry enrich the experience. All residents are welcome to attend! Contact Wendy Baer if you would like to participate.

Contact Phone #: (215) 573-4837 Email: wendy\_baer@med.unc.edu

#### Journal Club

Evidence-based practice is a reality in this day and age. In order to learn more about the evidence and how to interpret it, residents are meeting monthly with a faculty member to review key articles in the psychiatric literature. Contact David Taylor with suggestions for articles to review.

Contact Phone #: (215) 746-7230 Email: lihitraot@yahoo.com

#### Movie Club

Residents are gathering on a monthly basis for dinner and a movie! Each month a different faculty member attends to participate in the lively review of a movie selected because of its relevance to clinical psychiatry. This year Pace Duckett is organizing the movie list, so if you have an addition, please contact him.

Contact Phone #: (215) 746-7228 Email: duckettc@uphs.upenn.edu

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### **Introducing The Class of 2008...**

This current class of interns in psychiatry was chosen from approximately 450 applicants of whom only 75 were actually ranked. These 10 individuals are extremely talented young doctors who were in the top of their medical school classes and who demonstrated a strong commitment to the field as well as great leadership potential. They have already shown themselves to be very fine house officers, eager to learn and dedicated to providing outstanding clinical care to their patients.

This year's recruitment efforts have been going extremely well so far. Interviews are now completed and a rank list will be submitted on Feb. 23 with results available on March 17.



Pilar Cristancho Pimiento, MD
Universidad Industrial de
Santander-Columbia



Glenda Davis, MD Jefferson Medical College



Juliette Galbraith, MD University of Pennsylvania



Michelle Goldsmith, MD
Drexel University



Seth Hammerman, MD
University of Vermont



Jin Hui Joo, MD
University of Pittsburgh



**Lauren Kofod, MD** University of Pennsylvania



Jessica Kovach, MD University of Medicine and Dentistry of New Jersey -Piscataway



John Mitchell, MD Jefferson Medical College



Shanthi Trettin, MD University of Pittsburgh

### Pennsy Psychology Interns...

Pennsylvania Hospital's pre-doctoral internship and post-doctoral fellowship programs started in 1981 at the Institute of Pennsylvania Hospital. Trainees rotate through outpatient and inpatient psychiatry services, palliative care cancer treatment, and C/L psychiatry in the general medical service. Didactic offerings include in-house seminars at Pennsylvania Hospital, shared seminars with UPHS psychiatry residents, and case conferences with faculty of the Psychoanalytic Center of Philadelphia. Clinical supervision is provided by members of the UPHS and Pennsylvania Hospital Professional Staffs. The program attracts between 100-150 applicants/year and is approved for training by the American Psychological Association.

The training director is Michael Kowitt, PhD and the Administrative Coordinator is Lorraine Amato. Along with the Pennsylvania Hospital Department of Psychiatry, the program recently relocated to new space in the Hall-Mercer CMHC building.



Susan Moslow, MEd, Janet Miller Stier, MA, Kelly L. Gilrain, MA, Jennifer Babcock, EdM., MA, Debra Kress, MSW, LSW, Soo Hyun Sung, MA

### **Finding Voices**

Mahendra Bhati, MD

Fourth-year resident, Psychiatry & member of the Clinical Research Scholars Program (CRSP)

I remember well my first visit to Penn for a psychiatry residency interview. The program impressed me, and early in the interview I recognized and appreciated the breadth, history, and intellectual depth of the Department. World-renowned psychiatrists, psychologists, therapists, social scientists, and neuroscientists seemed to work in concert, often wearing different coats, treating patients and studying everything from molecules to social systems and dreams. I remember at the end of the interview feeling inspired by the research possibilities at Penn. I left with the belief I would become a well-trained psychiatrist at Penn and be able to develop my own unique research interests. Aspiring psychiatrists I met at other interviews would repeatedly mention Penn as one of the best residencies in the country. I understand why.

One of the many things attracting me to Penn as a psychiatry resident was the NIMH-funded, Clinical Research Scholars Program, otherwise known as CRSP (or "crisp" as some of us call it). Very few programs in the country provide such a unique research training opportunity starting early in residency. I had some research experience coming into residency, but with a new medical degree on my wall and "MD" embroidered on my white coat, I wanted to become a clinical psychiatrist and establish and pursue my own research interests. I learned invaluable information in my medical training and recognized the need to use this information to create better and more innovative treatments. I became a doctor to explore, question, learn, create, discover, and deliver. Psychiatry, Penn, and CRSP seemed a perfect fit for me.

With this agenda, I next faced the challenge of deciding what to study since the field of psychiatry is so broad and complex. I recognized the many research possibilities at Penn -- people are developing innovative and effective psychotherapies, using the most state-of-the-art technologies to understand the mind, finding genes associated with psychiatric illness, and creating new medicines. Effective treatments are being established, and research is changing public policy and health. Climbing up the steep learning curve of my training and sorting through research options, it was during my inpatient clinical experience, evaluating and treating patients with schizophrenia, where I found my inspiration. It came from an intimate and eye-opening view of the crippling symptoms of psychosis, specifically, the mysterious phenomenon of auditory hallucinations.



Mahendra Bhati, MD

I realize in science as much as in art and medicine the true test of integrity is whether a certain belief, understanding, practice, or representation stands the test of time. With neuropsychiatric illnesses such as schizophrenia, it is only through hard work and research, not solely conjecture or interpretation, that the treatments we offer our patients will stand the test of time.

Hallucinations are common - 75 percent of the 3 million patients with schizophrenia in the U.S. and 10-15 percent of the general population without a psychiatric illness will experience them. Despite this, a scientific understanding of hallucinations evades both physicians and neuroscientists -- little is precisely known about what happens in the brain to cause auditory hallucinations. It is easy to imagine auditory hallucinations as the false perception of others talking or hearing a dream-like conversation. We all know what it is like to think in words (you are actually doing so by reading this). How does this happen, and what goes wrong in the minds of patients with schizophrenia to cause the hallucinations they suffer from? Might the two be related? There is no objective measure or diagnostic test such as a lab value or an electrocardiogram to check for the presence (or absence) of hallucinations. As such, the decision to place patients on powerful and expensive antipsychotic medications is often based on a subjective report of this symptom since no test is available to guide treatment. This is the current standard of care, and I had no objections to this approach -- many patients clearly needed medications and improved on them. However, some did not, and my blind trust in patients who reported hallucinations was overturned when a homeless patient told me, "Doc, I made it all up to get into the hospital."

...continued on page 21

### **Perspective**

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#### ...continued from page 20

It then dawned on me the difficult position psychiatrists often find themselves in -- first to decide whether a patient has a bona fide problem and is telling the truth about having auditory hallucinations and, if so, next determining whether the subjective experience of hearing voices warrants treatment. Are all patients' claims that they are hearing voices something that can and should be treated with medications? I believe no. However, it is clear that those who suffer from a major psychiatric illness such as schizophrenia need treatment. A review of the psychiatric literature will find it replete with studies claiming to treat hallucinations. Ironically, few studies questioned or determined the nature and basis of what they treated. This and the desperate need for treatments, partly explain why patients with schizophrenia have been exposed in the past to harmful and ineffective therapies such as trepanation and insulin shock therapy.

My clinical experiences, the problematic reliance on subjective reporting of hallucinations, and my desire to find a treatment that would shed light on the causes of auditory hallucinations led me to develop my current clinical research project. I went to some of the Department's experts in schizophrenia -- Bruce Turetsky, MD, Stephen Kanes, MD, PhD, and Raquel Gur MD, PhD They introduced me to the fascinating field of modern brain research and to a procedure called repetitive transcranial magnetic stimulation (rTMS). Applying magnetic pulses to the brain in the form of rTMS shows promise in treating several psychiatric illnesses such as major depression, and several studies claimed to reduce the severity of auditory hallucinations with slow rTMS. I became interested in this technology and treatment and learned the procedure while immersing myself in finding a way to combine it with recording the electrical activity of the brain. With the additional mentorship of Penn's rTMS experts, Martin Szuba, MD and John O'Reardon, MD, I developed a research protocol to analyze how the electrical activity and performance of the brain changes when rTMS is used to treat auditory hallucinations in schizophrenia.

This is a unique approach since I seek to use an investigational procedure to both treat and objectively understand the physiology underlying the symptom of auditory hallucinations. My clinical research study involves inhibiting, with slow rTMS, a focal area of the left-brain responsible for hearing and language in those with schizophrenia who suffer from auditory hallucinations. Research suggests this and other areas of the brain responsible for hearing, language, attention, and memory have abnormal connections and malfunction in patients with schizophrenia. The electrical activity in the brains of patients with schizophrenia show abnormal responses to sound patterns and words. Thus, my working hypothesis is that, by inhibiting an area of the left-brain responsible for

hearing and language, rTMS will reduce the severity of auditory hallucinations and show objective, physiological changes in electrical activity of the brain in response to patterns of sounds and words. I currently am in the recruiting stage of this study and eager to find patients to offer them a potential, new treatment that will lead to a better understanding of their illness and symptoms.

It is the excitement of what the results will show and how they will shed light into the function of the brain that gives me enjoyment in my research. I cannot say this pursuit is without challenge and hard work. However, being a part of the CRSP has provided me with the time, training, and resources to pursue this opportunity. I now understand the satisfaction (and frustration) of clinical psychiatry research since it is a creative process attempting to paint a picture of the mind and provide hope for patients. With this I feel valued as a physician and humbled in the face of my patients' altruism. The future of psychiatry is exciting yet the mind is not simple. Fortunately, at Penn I found established and respected mentors to help guide and support me.

I realize in science as much as in art and medicine the true test of integrity is whether a certain belief, understanding, practice, or representation stands the test of time. With neuropsychiatric illnesses such as schizophrenia, it is only through hard work and research, not solely conjecture or interpretation, that the treatments we offer our patients will stand the test of time. Penn has a solid and long history of research success, and four years after my first visit and interview I feel I have just begun my journey. Nonetheless, I continue to feel inspired and privileged to be a part of Penn psychiatry.



Exploded Head by Salvador Dali



### Portrait Fund: James L. Stinnett, MD

Dear Friends and Colleagues,

James L. Stinnett MD (Jim) has served as the Director of Consultation/Liaison Psychiatry at PENN from 1978 through 2005. He is planning to retire in June and become an Emeritus Professor.

We have been fortunate to have worked with Jim as students, residents and faculty colleagues, have grown from his unique knowledge of complex medical psychiatric illness, human personality and medical ethics. Jim is the rare, wise, graceful physician-scholar who will step in and provide a thoughtful second opinion or a helping hand in a trying moment. Jim has devoted a great deal of time to various leadership roles in the Medical Center including serving as acting Executive Director of CPUP, Chairman of the Medical Board, and as Interim Vice-Dean of Clinical Affairs. Jim's love of teaching and dedication to patients is apparent in all his professional interactions, and has been recognized by numerous awards including being named as a "Top Doc" by Philadelphia Magazine consistently since the designation began. In 2000, he was named "Practitioner of the Year" by the Philadelphia Psychiatric Society. In 2001, he was honored with the I.S. Ravdin Master Clinician Award by the University of Pennsylvania Health System.

Please join us in demonstrating our heartfelt appreciation for Jim's many contributions to teaching psychiatry to students, residents and faculty colleagues, as well as being a "doctor's doctor" whose clinical skills and knowledge have been highly valued. All members of the portrait committee below have pledged to make personal contributions of \$100-\$1,000 to the portrait fund.

Please add your generous contribution with a tax-deductible check payable to the "Trustees of the University of Pennsylvania," noting "Stinnett Portrait Fund" on it. Please send it to: Ms. Abby DiPietro, 3 Blockley Hall, Department of Psychiatry, Philadelphia, PA 19104-6021. Please return your contribution as soon as possible but no later than April 4, 2005. This timing will enable recognition at a ceremony in June.

Thank you for helping us to honor our revered and beloved colleague.

Sincerely Yours,

Dwight L. Evans, MD

Ruth Meltzer Professor and Chairman

Distal Eraf

Professor of Psychiatry, Medicine and Neuroscience

#### James Stinnett, M.D. Portrait Committee:

Mary F. Morrison, MD, MS; Committee chair; Adjunct Associate Professor of Psychiatry

Wendy Baer, MD; Chief Resident, Department of Psychiatry

Henry Bleier, MD; Clinical Professor of Psychiatry

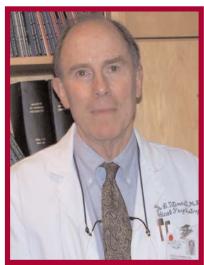
Sarah DeMichele, MD; Assistant Clinical Professor of Psychiatry

Joseph DiGiacomo, MD; Clinical Professor of Psychiatry

Stanley Goldfarb, MD; Professor of Medicine and Senior Vice Chair

Charles O'Brien, MD, PhD; Professor of Psychiatry

Mickey Stunkard, MD; Emeritus Professor of Psychiatry



James L. Stinnett, MD

#### **Events Schedule: Save These Dates...**

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February

#### **February**

Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium.

David Metzger, PhD, Director, HIV Prevention Research Division Center for the Studies of Addiction, Department of Psychiatry, UPENN. Title of Talk: "HIV Risk, Psychiatric Symptoms, and Survival: A 13 Year Follow-Up of Opiate Dependant Injectors".

28 Women's Mental Health Conference - 12:00 pm - 1:00 pm at 3535 Market Street, Room 4123. Hillary Bodner, MD, Department of Family Medicine. Title of Talk: "Depression as a Risk Factor for Cardiovascular Disease in Women".

#### March

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22

Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium.

Andrew Newberg, MD, Assistant Professor of Radiology and Psychiatry, UPENN, Department of Radiology, Division of Nuclear Medicine. Title of Talk: "Neuroimaging, Psychiatry, and God".

#### Match Day

Medical students across the country, including about 150 at Penn, learn where they have been accepted for residencies.

CNB Seminar Series from 10:00 am - 12:00 pm, in the CRB, Room 302, Howard Hughes Conference Room. Lawrence Tecott, MD, PhD, University of California at San Francisco. Title of Talk: "Genetic Dissection of Serotonergic Influences on Mouse 'Lifestyles' and Energy Balance".

Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium. 24

> Yvette I. Sheline, MD, Associate Professor of Psychiatry, Radiology, and Neurology; Director, Center for Depression and Neuroimaging, Department of Psychiatry, Washington University School of Medicine, St. Louis, Missouri. Title of Talk: "Hippocampal Abnormalities in Major Depression: 3D, MRI, and PET Studies".

#### April

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Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium. Manuel Tancer, MD, Professor and Chair, Department of Psychiatry and Behavioral Neurosciences, Professor of Pharmacology, Wayne State University School of Medicine, Detroit, Michigan. Title of Talk: "Human Laboratory Studies of MDMA".

Women's Mental Health Conference - 12:00 pm - 1:00 pm at 3535 Market Street, Room 4123. Serdar Ural, MD, Obstetrics & Gynecology. Title of Talk: "Depression and Pregnancy". CNB Seminar Series from 10:00 am - Noon, in the CRB, Room 302.

Robert Levenson, PhD, Professor of Pharmacology, Penn State College of Medicine

Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium.

Douglas F. Levinson, MD, Associate Professor of Psychiatry, Department of Psychiatry, UPENN. Title of Talk: "Genetics of Major Depression".

Month of May (1 - 31) Mental Health Month

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#### Children's Mental Health Week

National Anxiety Screening Day: Throughout the month of May, the Mood and Anxiety Disorders Program will be offering free anxiety and depression screening for children & adults. An informational table will be displayed on May 4 in the lobby of 3535 Market St. Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium.

Carol Tamminga, MD, Professor of Psychiatry, Communities of Texas Chair in Brain Science Chief of Translational Neuroscience Research, University of Texas Southwestern Medical School, Dallas, Texas. Title of Talk: "Cognition in Schizophrenia".

CNB Seminar Series from 10:00 am - Noon, in the CRB, Room 302.

Jacqueline Crawley, PhD, Laboratory of Behavioral Neuroscience. Title of Talk: "Mouse Behavioral Phenotyping: Designing Tasks to Model the Symptoms of Autism". Women's Mental Health Conference - 12:00 pm - 1:00 pm at 3535 Market Street, Room 4123. Ian Bennett, MD, Department of Family Medicine. Title of Talk: "The Connection Between Low Literacy and Maternal Depression".

June

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Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium. Robert Robinson, MD, The Paul Penningroth Professor and Head, Department of Psychiatry, University of Iowa College of Medicine, Iowa City, Iowa. Title of Talk: "New

Findings in Post-Stroke Depression".

Psychiatry Residency Graduation Ceremony at 6:00 pm, location TBA.

First Day for new Psychiatry Residency Interns, Welcome Class of 2009!

Grand Rounds - 12:00 pm - 1:00 pm in the BRB II/III Auditorium.

Pedro Delgado, MD, Douglas Danford Bond Professor and Chairman, Department of Psychiatry, University Hospitals of Cleveland and Case Western Reserve University School of Medicine, Cleveland, Ohio. Title of Talk: TBA.

CNB Seminar Series from 10:00 am - Noon, in the CRB, Room 302.

Andres Buonanno, PhD, Section on Molecular Neurobiology, Chief, NIH. Title of Talk: TBA.



### **PENN Behavioral Health**

Please call us at 1-866-301-4PBH or visit our website: pennhealth.com/pbh

Some of the conditions we provide guidance & assistance for include:

- ♦ Agoraphobia
- Bipolar Disorder
- ♦ Depression
- ♦ Generalized Anxiety Disorder
- ♦ Panic Disorders
- Schizophrenia

- Anxiety Disorders
- Dementia
- Family & relational issues
- Obsessive Compulsive Disorder
- Schizo affective Disorders
- Substance Abuse



The PENN Behavioral Health Contact Center is staffed with highly trained masters' level professionals who assess your needs and direct you to the appropriate providers and the appropriate levels of care. They will also help you with accessing mental health information, resources, current research programs, and local and regional counselors for specific needs.



Editor

Rosellen Taraborrelli

Co-Editor & Design
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