

InPsych

Fall, 2012



Global Mental Health: An Idea Whose Time Has Come

There is nothing more powerful than an idea whose time has come, said Victor Hugo. According to Dr. Kathleen Pike, Executive Director and Scientific Co-Director of the Global Mental Health Program (GMHP)@Columbia, making mental health an essential and integrated component of the global health agenda is such an idea. "We now have good research that clearly documents the profound impact that mental illness has on the global burden of disease. We also know there is an abyss between need and capacity, and it is urgent that we garner the



resources to advance research, training, education, policy and outreach focused on mental health globally. Making mental health matter will save millions of lives and transform the quality of life for hundreds of millions more."

And this is where Columbia University Department of Psychiatry comes in.

As Dr. Pike notes, Columbia Psychiatry has experts leading important initiatives that advance mental health around the globe. By establishing the GMHP@Columbia, Dr. Pike believes we have the opportunity to expand our reach by creating a platform that takes advantage of synergistic and intersecting efforts so that we are positioned to make an even greater impact.

Dr. Pike returned to Columbia in 2011 after nearly 12 years in Japan where she continued her

(continued on page 5)

In This Issue

- 2..... Message from the Chairman & Director
Jeffrey A. Lieberman, MD
- 3..... Awards & Recognitions & New Division
- 4..... New Appointments & New Clinical Location
- 5..... Clinical News
- 6-7..Development & Special Events
- 8-9..Research News & New Grants
- 10... Education & Alumni News
- 11... Research Studies
- 12... In Memoriam & Departmental Reading List

InPsych Editorial Office:
Leigh Ann Brienza, David Hellerstein,
Dacia Morris, Ray Smith,
Eve Vagg, Rachel Yarmolinsky

Questions or comments to
yarmoli@nyspi.columbia.edu
Columbia University
Department of Psychiatry

New York State
Psychiatric Institute

"Fast-Fail" Initiative Takes Aim at Psychosis



New Experimental Medicine Studies: Fast-Fail Trials in Psychotic Spectrum Disorders (FAST-PS)

As pharma retreats from developing new drugs for mental disorders, a new Columbia/New York State Psychiatric Institute (NYSPI) initiative is stepping in to fill this gap.

With pharma's interest in developing drugs for mental disorders waning, CUMC and NYSPI researchers are initiating a new "fast-fail" strategy to identify novel treatments for psychosis.

The word "fail" in the strategy may sound odd. But the approach is designed to quickly weed out ineffective compounds at an earlier stage in clinical testing before much money and time have been spent and, at the same time, quickly identify compounds with more potential.

"The knowledge we've gained about psychosis in the last decade, combined with new technology, is now making it possible to determine earlier than before if new compounds have potential," says Jeffrey Lieberman MD, chairman of Psychiatry

at Columbia and director of the New York State Psychiatric Institute, who will lead the new initiative funded by the National Institute of Mental Health.

For all diseases, the development of new drugs is a story of thousands of failures and only a few successes. Of the compounds that enter phase I testing, only a small percentage are eventually approved by the FDA. For psychiatric and nervous system disorders, the success rate is even lower and compounds tend to fail late in development after hundreds of millions of dollars have already been spent.

"Progress has varied across different disease areas, but psychiatric disorders pose additional obstacles," Lieberman says. "The disturbances are uniquely human and that makes animal models harder to develop and difficult to validate. You can create heart disease in an animal, but for schizophrenia or depression, it's much harder."

(continued on page 2)



Message from the Chairman & Director Jeffrey A. Lieberman, MD

[Back to Main Page](#)

The Intersection of Local and Global

Global weather patterns had a local impact a few weeks ago as Hurricane Sandy traveled up the eastern seaboard of the United States. The record-breaking storm surges resulted in unprecedented damage along the low lying and densely populated coastal neighborhoods in our tri-state area, and high winds damaged homes and led to weeks without power for many residents unaffected by flooding.

Columbia and PI were very fortunate. We were fortunate to be spared the damage of storm surge flooding and the loss of essential utilities. And we are fortunate indeed in having such a dedicated and caring staff, many of whom put our patients first and found a way to come in to care for them and for the facility.

The extraordinary efforts and teamwork both in the preparations for and response to the storm itself allowed us to weather the storm with very little damage to our facility, seamless care for our patients and only minor disruptions to our research and educational missions.

I am enormously proud of and grateful to the many individuals who gave so generously of their time and effort and demonstrated their dedication to this institution during the hurricane.

Hurricane Sandy was a humbling reminder of how global forces impact on local areas. Before the storm I had intended to focus this message on the many ways that NYSPI and Columbia Psychiatry make a global impact from our base in New York City and New York State. In reading through this issue I am particularly struck by how our efforts to help relieve the burdens of mental health in many countries around the world inform and enrich our efforts on behalf of our local constituencies in our city and state, and around our nation.

One such effort is the **Global Mental Health Program @ Columbia** which, after years of planning, has become a reality under the leadership of Executive Director

and Scientific Co-Director **Kathleen Pike**, PhD, who rejoined our faculty last year after nearly 12 years abroad (*cover story*). Another very special mission was carried out by **Katherine Shear**, PhD, and her team, who were invited to Japan to give workshops to mental health providers on coping with the terrible grief brought about by the devastating loss of life following the earthquake and tsunami of March, 2011 (*page 9*). The latest addition to the many international commissions on which our faculty serve, is the invitation to **Heino Meyer-Balburg**, Dr.rer.nat., to serve on the Scientific Advisory Board for DSD-Life, an international registry for intersexuality funded by the European Union (*page 2*). Our *Resident's Corner* highlights **Ye Beverly Du**, MD, MPH, a fourth year resident at PI, whose compelling story and concentration on global mental health began with her immigration to the United States from China at the age of five.

Columbia Psychiatry and NYSPI are deeply imbedded in NY City and State, our care for our community is evident in projects such as the **Promise Program** (*page 5*) and new research from **Dev Devanand**, MD with significant findings for those suffering from Alzheimer's (*page 8*). But even as research and programs such as these give us the knowledge and tools to reach out to the global community, so too will the lessons learned in communities around the world contribute to the wealth of knowledge and experience that Columbia Psychiatry and NYSPI bring to bear on reducing the burdens of mental illness internationally and at home.

“Fast-Fail” Initiative Takes Aim at Psychosis *(continued from cover)*

That's left few options for people with schizophrenia. All drugs for schizophrenia – from haloperidol in the 1960s to today's clozapine – act on the same target, the brain's dopamine pathways. The drugs don't work for everyone. And when they do work, they only act on some of the disorder's disabling symptoms.

The new initiative at Columbia will take aim at other brain systems and new molecular regions that are important in schizophrenia but have never been successfully targeted. The glutamate system in the brain, for example, has been associated not only with schizophrenia's hallucinatory and delusional symptoms, but also with the disorder's impact on cognition.

New technology now makes it possible to rapidly determine if a drug candidate affects the glutamate system and binds to targets. “In traditional trials, we often didn't even know if the drug was hitting the target,” Lieberman says. “We now have an array of imaging techniques that can determine if the compound gets into the brain in the right amount, activates the right parts of the brain, and has an effect on symptoms.”

Ultimately the idea is to find early proof that a compound – or a similar molecule – could work and then submit the compounds to pharma. “It's a new paradigm for drug development,” Lieberman says, “one that we hope will identify new promising compounds so pharma companies can be more confident taking them forward.”

For more information about the initiative, including collaborating institutions, click here [<http://columbiapsychiatry.org/news/new-initiative-developing-novel-treatments-psychosis-and-other-mental-disorders>]

- Susan Conova



COLUMBIA PSYCHIATRY

WWW.COLUMBIAPSYCHIATRY.ORG



Find us on Facebook, Follow us on Twitter

Facebook.com/ColumbiaPsychiatry

Twitter.com/ColumbiaPsych

To find out more about participating in research, please call our research referral line at 212-305-6001 or visit us on the web at ColumbiaPsychiatry.org.



Heino Meyer-Bahlburg, Dr. rer.nat (Gender, Sexuality and Health) was invited to serve on the international Scientific Advisory Board of DSD-Life, a major interdisciplinary registry and outcome project on patients age 16-30 years with somatic disorders of sex development (also known as intersexuality), in 6 European countries, funded by the European Union. In that role he attended the start-up meeting in Berlin, Germany, October 17-19, 2012.



In September, The American Academy of Cerebral Palsy and Developmental Medicine named **Kathleen Friel, PhD** (Experimental Therapeutics), their 2012 recipient of the Gayle G. Arnold Award for her work in an animal model of cerebral palsy. In her animal work, she is testing the efficacy of motor skill training in helping restore motor function and brain-spinal cord connections.



David Kahn, MD has been appointed the Diane Goldman Kemper Family Professor of Psychiatry in recognition of his outstanding performance as a clinician and teacher, particularly in the area of mood disorders.

Deborah Cabaniss, MD, (Graduate Medical Education) was appointed Director of the Virginia Apgar Academy at P&S in January 2012. Named for a renowned maternal fetal medicine pioneer, who developed the APGAR test to assess the health of newborns, the Academy will recognize teaching excellence among P&S faculty.



Mindy Fullilove, MD, (Social Psychiatry) received the great honor of being elected a public member of the Board of Directors of the American Institute of Architects. The distinction is largely based on her research and her book on the traumatic stress endured after the loss of one's "emotional ecosystem." Her book is called *Root Shock*. Her term starts in December, 2012.



Frances Levin, MD (Substance Abuse) was recognized for Honorable Mention in the first ever Mentor of the Year Award at CUMC, sponsored by the Irving Institute in collaboration with The CUMC Office of Academic Affairs. The award recognizes the tremendous support given to young faculty academically, clinically, professionally and personally.



This year's Physician of the Year award was given to **Lourdes Dominguez, MD**, Chief of Service for Psychiatry at Allen Hospital. The award is given by the nursing department of the hospital. Dr. Dominguez is only the second psychiatrist to receive this honor.



In appreciation of her integral role in shaping new initiatives in Faculty Affairs, **Abby Fyer, MD**, (Clinical Therapeutics) has assumed the title, Associate Director for Faculty Development. She will continue her research activities, the focus of which is familial and genetic aspects of anxiety disorders, including panic disorder, social and specific phobia.



Alice Medalia, PhD, is a recipient of the Brain & Behavior Research Foundation's 5th annual Productive Lives Award. The Brain & Behavior Research Foundation proudly recognizes remarkable human

beings who have risen to the top of their respective professions and who have devoted their energy and formidable talents to helping those living with mental illness.

Dr. Medalia is an international leader in the field of psychiatric rehabilitation who directs the Lieber Recovery Clinic at Columbia Psychiatry.

The Division of HIV is now The Division of Gender, Sexuality, and Health

(...and the HIV Center Remains the HIV Center)

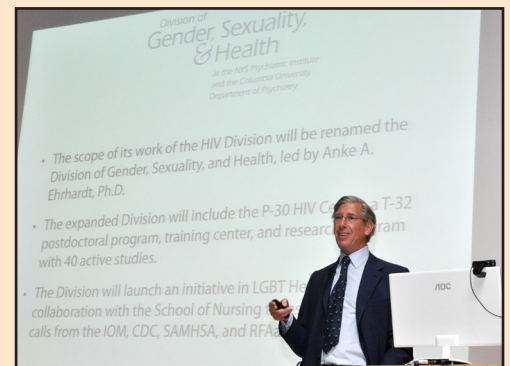
The Division of HIV at NYSPI, a longtime global leader in behavioral research into the causes and consequences of HIV infection, has always included a focus on gender, sexuality, and mental health. As its scope broadens still further in these areas, it has embraced this expansion with a reframed mission and a new identity.

Leadership at the newly named Division of Gender, Sexuality, and Health will continue under the outstanding direction of Director Anke Ehrhardt, PhD, who notes that, "The HIV Center for Clinical and Behavioral Studies will remain a key element of the Division, and HIV studies will remain a critical component of the Division. The expansion and reframing of the Division of Gender, Sexuality, and Health provides an opportunity for NYSPI and Columbia Psychiatry to take a major new step into an arena of health promotion in the context of gender and sexuality that includes the HIV epidemic but also extends far beyond."

The reframed Division will launch several important new programs, including a major "Initiative for LGBT Health" that comprises re-

search, clinical care, education, and policy as related to the physical and mental health needs of the lesbian, gay, bisexual, and transgender (LGBT) population. Dr. Walter Bockting recently joined the Division as Co-Director of the Initiative (see *New Faculty*).

The Division of Gender, Sexuality, and Health will also serve as a much-needed coordinating mechanism for all Columbia Psychiatry faculty engaged with the study of gender and sexuality, while providing critically needed training support to residents, graduate students, postdoctoral fellows, professional staff, and community members.



Dr. Jeffrey Lieberman announcing the establishment of the Division of Gender, Sexuality, and Health at the Department of Psychiatry 2012 Annual Meeting



Walter Bockting, PhD

Walter Bockting, PhD, has been nominated Professor of Medical Psychology (in Psychiatry and Nursing) at Columbia University College of Physicians and Surgeons and The School of Nursing. A native of the Netherlands, Dr. Bockting is a clinical psychologist and an internationally known sexuality researcher. Among

his many accomplishments, he was the first to assess and address the HIV prevention needs of the transgender community, developing a model HIV prevention workshop; to affirm a spectrum of gender diversity in the delivery of transgender care; and to conduct a national study of the U.S. transgender population.

In October, 2012, Dr. Bockting joined the Department of Psychiatry and the New York State Psychiatric Institute (NYSPI) in the Division of Gender, Sexuality, and Health as Co-director (with Dr. Anke Ehrhardt) of the Division's new Initiative for LGBT Health, which is being carried out in close collaboration with the School of Nursing. The Initiative focuses on research, clinical care, education, and public policy analysis with regard to the health of lesbian, gay, bisexual, and transgender populations.

Dr. Bockting received his doctoral degree in psychology from the Vrije Universiteit, Amsterdam, The Netherlands, and for the last 20 years directed transgender health services at the Program in Human Sexuality at the University of Minnesota.



Amy Friedman, MS, RD

Amy Friedman, MS, RD, joined the department as Director of Clinical Services Administration on October 15, 2012.

She comes to us from NewYork-Presbyterian Hospital where she spent the past seven years, most recently as the Practice Administrator for Pediatric Psychiatry.

She received a Master's of Science degree in Nutrition and Food Science from the University of Vermont, and her Bachelor of Science degree from Plattsburgh State University.

In her new position, Ms. Friedman will oversee the administrative and supervisory matters pertaining to all facets of the Columbia psychiatry clinical services, including our department-based clinical and practice management operations. She will be the operational point person

to the Columbia Doctors faculty practice organization, and will be a liaison to our hospital-based practices within NewYork-Presbyterian Hospital.

Avalon Lance, BSN, MHA



On September 1, 2012 Avalon Lance, BSN, MHA, assumed her new role as the Vice Chair for Administration and Finance. She was appointed after an extensive search process and received the endorsement of the New York State Office of Mental Health and the approval of Columbia and RFMH leadership. In her new capacity, Ms. Lance will oversee the finance and business administration of the Columbia University Department of Psychiatry, RFMH at NYSPI, and the psychiatric services of NYPH-CUMC.

She received a Bachelor of Science in Nursing degree from Seattle Pacific University and a Masters in Healthcare Administration from the University of Minnesota. She has worked in health care administration in various capacities including most recently 11 years at the University of Washington School of Medicine, primarily as Director of Finance and Administration for the Department of Surgery. Prior to her new appointment, Ms. Lance served as the Interim Columbia University Department Administrator.



Stephanie LeMelle, MD

Dr. Stephanie Le Melle has joined the core faculty of the Public Psychiatry Fellowship. Dr. LeMelle is the first new core faculty member since 1994, and the first graduate of the Public Psychiatry Fellowship to join the core faculty.

Dr. LeMelle will collaborate with Fellowship Director Jules Ranz, MD, on the development of the Program for Public Psychiatry Education (PPE). PPE's mission is to promote the principles and practices of public psychiatry education in psychiatry residency training programs here at Columbia, throughout New York City, and nationally.

Dr. LeMelle was the Associate Director of the Washington Heights Community Service, the clinical community program at New York State Psychiatric Institute, for 10 years. She held the title of Clinical Director of New York State Psychiatric Institute for 3 years and is an Associate Clinical Professor of Psychiatry at Columbia University.

NewClinicalLocation

We are eagerly anticipating the January 2013 opening of the new **ColumbiaDoctors™** Faculty Practice Center at 51 West 51st Street near Rockefeller Center in midtown Manhattan. Columbia Psychiatry programs from 15 East 60th Street will relocate to 51 W 51, settling into an attractive and expanded suite with views overlooking 51st street.

The Psychiatry programs relocating include the Lieber Recovery Clinic and the Day Treatment Program; please click here for more information on all our clinical programs moving to 51W51 (<http://columbiapsychiatry.org/clinicalservices/day-program-eastside>)



New St ColumbiaDoctors™ entrance at 51W51



Floorplan of the new ColumbiaDoctors™ Practice (Columbia Psychiatry Day Treatment Program offices circled)

Program Lives Up To Its Promise In Providing Care To Low-Income Children With Learning Disabilities

Limited resources and lack of knowledge about their rights as parents are two fundamental deterrents to accessing treatment for learning disabled children, noted Molly Algermissen, PhD. Dr. Algermissen is Clinical Director of The Promise Program, developed to provide low-income families with comprehensive, state-of-the-art neuropsychological evaluations that otherwise would be unobtainable for this population.

The program in the Division of Child and Adolescent Psychiatry at Columbia University Medical Center (CUMC) and NewYork-Presbyterian/Morgan Stanley Children's Hospital, provides an educational path for underserved children who struggle with learning disabilities.



Untreated learning disabilities (LD), which affect 1 in 10 school-age children, significantly interfere with a child's ability to learn and achieve in school. This can have a pervasive impact on many areas of functioning, and is associated with high rates of school drop out, unemployment, poor self esteem, and secondary psychiatric difficulties including behavioral problems, depression, anxiety and substance abuse. Clinicians are hoping to change this fate with the Promise Program.

Early intervention is important, said Dr. Algermissen, "especially in those early key academic years – 1st, 2nd and 3rd grades. These are

(continued on page 12)

Global Mental Health: An Idea Whose Time Has Come *(continued from cover)*

work on risk factors for eating disorders, training and dissemination of evidence-based treatments, and community efforts to increase capacity and reduce the stigma of mental illness. Since her return to Columbia, she has been working with colleagues in the department to propel a global mental health agenda forward.

Dr. Pike has established a scientific leadership team, including Drs. Harold Pincus, Sandro Galea and Ezra Susser, and a steering committee that includes colleagues from psychiatry, psychology, public health, nursing, social work, and the Earth Institute. The multidisciplinary initiative reflects the range and complexity of global mental health priorities, and is consistent with President Bollinger's commitment to building connections across departments and programs in the service of creating comprehensive strategies and solutions that address the complex problems of the 21st century.

The program brings together experts who are inarguably pioneers in their fields, including Dr. Anke Ehrhardt, in the area of HIV, Dr. Myrna Weissman in the area of depression, Dr. Christine Hoven in child mental health, Dr. Nabila elBassel in the area of substance use disorders, Dr. Lena Verdelli in the dissemination

of evidence-based psychotherapies, Drs. Sandro Galea and Ezra Susser in the area of severe mental illness, and others. Dr. Pike is working with a curriculum development team, including Drs. Fran Cournos, Claude Mellins, Richard Neugebauer, Lena Verdelli, and Milton Wainberg to establish a graduate level program in global mental health. Dr. Pike notes as well that Drs. Milton Wainberg and Maria Oquendo are PIs on a T32 Training Grant in Global Mental Health.

Dr. Pike continues to conduct research and clinical training in the area of eating disorders, problems that consistently increase in prevalence, along with obesity, in the context of emerging economies. In addition, in partnership with a group called Outside the Wire, she is actively engaged in developing community-based interventions that use theater and other media to reduce stigma of mental illness and increase community capacity to support and serve those with mental illness. *(See Dr. Pike speaking on stigma and mental illness on TEDxTOKYO)*

"There are profound and varied needs in many low and middle income communities (LMICs) that run the gamut from housing to employment to food supply and health care, so it's understandable that adding mental health to the global health agenda is often seen as a competing priority," said Dr. Pike.

"But I think the opportunity for global mental health is to articulate effectively that, in fact, by integrating mental health when addressing these other priorities, outcomes across the board will be better."

One of the exciting opportunities on the horizon for the GMHP@Columbia is a partnership with the World Health Organization (WHO). The WHO is working on the revision of the 10th edition of the International Classification of Diseases (ICD), the standard diagnostic system for mental disorders used around the globe. The GMHP@Columbia has been invited to serve as the research design and methodology center for the clinical field trials for the ICD-10. Dr. Pike is working with colleagues at the WHO to set up a center that will establish an academy of faculty from Columbia and from around the globe who will be responsible for the clinical field trials for the ICD. "The opportunity is not only to contribute to the historic work of the WHO on the ICD revisions but also to establish an enduring research consortium that will have the infrastructure to support ongoing research collaborations and capacity building in global mental health."

Employees engaged in global mental health activities who would like to get involved in GMHP@Columbia should contact Dr. Pike at kmp2@columbia.edu.



Dr. Jeffrey Lieberman, Dr. David Kahn

Dinner Celebrates New Professorship at Columbia Psychiatry

On October 25th, a dinner held at The Modern celebrated the establishment of the Diane Goldman Kemper Family Professorship of Psychiatry and the appointment of its first incumbent, David Kahn, MD. This event was co-hosted by Dean Lee Goldman, MD, and Columbia Psychiatry Chairman, Jeffrey A. Lieberman, MD, and highlighted the wonderful accomplishments of Dr. Kahn as well as the philanthropy of Ms. Diane Goldman Kemper in endowing this professorship. During the dinner,

Dean Goldman presented both Dr. Kahn and Ms. Goldman Kemper with medallions to commemorate their extraordinary contributions to Columbia University Medical Center's mission.



Dr. Lee Goldman, Dr. David Kahn, Diane Goldman Kemper

Hamptons Cocktail Reception Raises Awareness of Women's Mental Health Needs

On August 11th, Berthold and Betsy Frowein hosted a reception at their East Hampton home to support the Women's Program in the Department of Psychiatry. Over fifty guests gathered at the beautiful Frowein estate to converse with Columbia Psychiatry faculty, including Dr. Jeffrey Lieberman, Dr. Fred Kass, and the Director of the Women's Program, Dr. Betsy Fitelson. The Women's Program is devoted to addressing the mental health needs of women related to the female reproductive life cycle.



Berthold Frowein, Liz Lange, Betsy Frowein, Dr. Jeffrey Lieberman



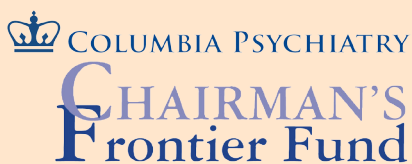
Dr. Frederic Kass



Myrna Daniels, Dr. Jeffrey Lieberman, John Daniels



The Women's Program Faculty: Dr. Lucy Hutner, Dr. Catherine Monk, Dr. John Sahs, Dr. Betsy Fitelson



The Chairman's Frontier Fund is the annual fund of Columbia Psychiatry, and provides critical support for our core mission. The name is inspired by the brain itself – one of the last true frontiers of exploration and discovery, and the focus of our vital research at Columbia Psychiatry. The Chairman's Frontier Fund helps support new initiatives, as well as ongoing projects that have a direct impact on the quality of the education, research, and services Columbia Psychiatry can provide.

Columbia Psychiatry is proud to be an international leader in the field of psychiatric medicine, and gifts to the Chairman's Frontier Fund make a significant difference in our work. We are extremely grateful to our dedicated supporters for their generosity.

To learn more about the Chairman's Frontier Fund or to make a gift, please contact Leigh Ann Brienza, Director of Development, at (212) 304-7227 or lab2213@columbia.edu.

Thank you for your support of Columbia Psychiatry!

Sander Markx, MD, Receives The Pisetsky Award



Dr. Lieberman, Dr. Oquendo, and past recipients of the Pisetsky Award attended the luncheon to thank Dr. Bender and congratulate Dr. Markx. (Pictured left to right: Dr. Scott Schobel, Dr. Carolyn Rodriguez, Dr. Estelle Bender, Dr. Cheryl Corcoran, Dr. Sander Markx, Dr. Maria Oquendo, Dr. Jeffrey Lieberman)

Sander Markx, MD, received the 2012 Pisetsky Award and was honored on July 19th at a luncheon attended by the award's founder and benefactor, Estelle Bender, MD (P&S '68), and past recipients of the prize. The Pisetsky Award supports young investigators conducting pilot clinical research in serious mental illness in adults including psychotic disorders, mood disorders, eating disorders, and obsessive-compulsive disorder.

An Italian Feast Supports Research On Brain Trauma And Stress Disorders

On October 22nd, the celebrated Italian restaurant Sistina in New York's Upper East Side served as the backdrop to a fundraising dinner to support brain trauma and stress disorders in US military veterans. Sistina owner Giuseppe Bruno generously offered to host the event in the hopes that it would raise greater awareness of this serious consequence of military combat. He co-hosted the dinner with Ambassador Paul W. Speltz, who for four years represented the US as the Executive Director and Ambassador to the Asian Development Bank.

"Our veterans deserve our support and admiration for their selfless dedication," said Dr. Jeffrey Lieberman. "In view of the devastating effects that brain injury and PTSD are having on our soldiers, we must redouble our efforts to better diagnose and treat these debilitating conditions. The physicians and scientists at CUMC pledge to do so and appreciate the support of citizens like Giuseppe Bruno and Ambassador Speltz."



Dr. Scott Small, Sergeant Ryan Weemer, Sergeant Matt Colvin, Colonel David Sutherland, Dr. Jeffrey Lieberman, Ambassador Paul W. Speltz



E. John Rosenwald Jr., Pat Rosenwald, Dr. Jeffrey Lieberman, Rosemarie Lieberman



Colonel David Sutherland



Marianne Mebane, John Yarosz, Jane Rice



Ambassador Paul W. Speltz, Dr. Sidney LaPook, Giuseppe Bruno, Dr. Jeffrey Lieberman



Bill Ramonas, Pat Ramonas, Steve Rosenfeld



Dr. Jeffrey Lieberman, Dr. Ronni Lee Seltzer, Dr. Harold Selman

Discontinuation of Antipsychotic Treatment Poses Significant Risk of Relapse in Alzheimer's Patients with Psychosis or Agitation

Discontinuing antipsychotic treatment is associated with a high risk for relapse in Alzheimer's disease patients with psychosis or agitation or aggression, according to a new study in the October 18th issue of the *New England Journal of Medicine*. After clinical response to the antipsychotic medication risperidone, there was an increased risk of recurrence (relapse) of patients' problematic symptoms of psychosis or agitation-aggression after risperidone was discontinued in patients who had maintained improvement for 4 to 8 months.

Millions of older Americans suffer from Alzheimer's disease and during the course of illness a large proportion develop psychosis and agitation or aggression. These symptoms make them difficult to manage at home and often lead to nursing home admission and increase their risk of dying from the disease. These symptoms are often treated with antipsychotic medications. In nursing homes, federal regulations strongly urge discontinuation of antipsychotic medications three to six months after initiating treatment. Until now evidence from controlled studies in support of these long-standing regulations has been very limited.

DP Devanand, MD, lead study author and Director of the Division of Geriatric Psychiatry, conducted a study across 8 US centers to evaluate the risk of recurrence of symptoms after discontinuation of the antipsychotic medication risperidone in outpatients and nursing home patients with Alzheimer's disease whose symptoms of psychosis or agitation-aggression had responded to treatment with risperidone.

Funding for the study was provided by the National Institutes of Health (R01 AG021488 and R01 AG17761) and the Department of Veterans Affairs.

The study recruited 180 patients ranging in age from 50 to 95 years from memory clinics and nursing homes as well as from Veterans Affairs medical centers and physicians' offices. These patients received risperidone for 16 weeks in the first phase of the study. In the second phase, 110 patients who had responded to risperidone were randomly assigned in a double-blind fashion (neither the patient nor the doctor knew if the treatment was risperidone or placebo) to one of three treatment groups: (1) continued treatment with risperidone for 32 weeks, (2) risperidone for 16 weeks followed by placebo for 16 weeks or (3) placebo for 32 weeks.



In the first 16 weeks after randomization, patients switched from risperidone to placebo showed nearly double the risk of relapse compared to continuation risperidone (60% versus 33%). In the second 16 weeks after randomization, 48% of patients who were switched from risperidone to placebo relapsed compared to 15% of those who continued risperidone. Serious adverse events did not differ significantly among the groups.

Dr. Devanand noted that "A meta-analysis of studies has linked the use of antipsychotics to an increased risk of death which is 1.6 to 1.7 times greater with antipsychotics compared to placebo, a finding that led the FDA to issue a black box warning several years ago. However, antipsychotic medications are the only group of drugs previously shown to be more effective than placebo, although with low-to-moderate efficacy, in treating these problematic symptoms in patients with Alzheimer's disease. Antipsychotics are not approved by the FDA for this purpose," said Dr. Devanand. "This risperidone discontinuation trial used a study design consistent with clinical practice: treating with medication and then either continuing or discontinuing the medication in patients who had maintained improvement over an extended period of time. The findings show a significantly increased risk of relapse after antipsychotic discontinuation in patients who respond to the antipsychotic, and this increased risk of worsening in symptoms needs to be weighed against the risk of adverse effects with continued antipsychotic treatment. These findings also provide new scientific evidence to help inform current regulations that govern clinical practice, which may need reconsideration."

Janssen Pharmaceuticals provided the active drug medication as well as placebo for this research study but was otherwise uninvolved in the research. The authors report financial activities with other pharmaceutical companies unrelated to this research.

NewGrants

(continued on page 9)

An R21 was awarded to **Jimmy Choi, PsyD** (Cognitive Neuroscience) to fund his study, "Cognitive Training for Memory Deficits Associated with Electroconvulsive Therapy." The two-year grant award totals \$454,522.

The NIMH awarded **Andrew Dwork, MD** (MIND) an R01 to fund his study, "Building Schizophrenia Research in Macedonia." The award totals \$2,266,995 over five years.

Deborah Hasin, PhD (Substance Abuse) received an R01 from NIDA in support of her study, "State Medical Marijuana Laws and MTF Teen Marijuana Use and Attitudes Since 1991." The five-year grant comes to \$2,229,089.

NIDA awarded **John Mariani, MD** (Substance Abuse) an R01 to support his research study, "Quetiapine Pharmacotherapy for Cannabis Dependence." The four year grant totals \$1,750,365.

Alice Medalia, PhD (Psychiatric Rehabilitation) was awarded an R21 from NIMH to support her study, "Cognitive Skills Training to Improve Vocational Outcome in Homeless Youth." The two-year award totals \$454,628.

Frederick John Muench, PhD (Substance Abuse) received a National Institute on Alcohol Abuse and Alcoholism grant in the amount of \$689,139. The three-year award is to

support his study, "Tailored Mobile Text Messaging to Reduce Problem Drinking."

The National Institute for Occupational Safety and Health awarded **Ping Wu, PhD** (Child and Adolescent Psychiatry) a two-year grant in the amount of \$477,283. The title of his study is "Mental Health Service Need and Use Among Youth Exposed to the WTC Attack."

NARSAD Young Investigator Award 2012 Recipients

Of the more than 1,000 applications submitted to the Brain & Behavior Research Foundation Scientific Council, 202 were awarded a \$60,000

NARSAD grant. Below are the Columbia Psychiatry investigators whose innovative research will be supported this year.

Susanne E. Ahmari, MD, PhD (Integrative Neuroscience). Deep brain stimulation (DBS) shows promise for treating OCD, but optimal targets for stimulation have not been determined. Dr. Ahmari's goal is to optimize target selection for DBS use in humans so as to maximize symptom reduction and minimize side effects.

Alex Dranovsky, MD, PhD (Integrative Neuroscience). Neurons born in adulthood in the hippocampus can affect the neuroendocrine response to stress and alter behavior. Dr.

A Year After the Tsunami, Sendai, Japan Hosts Complicated Grief Experts



Five years ago after attending a workshop on complicated grief in the US, a group of clinical researchers at the Japanese National Institute of Mental Health in Tokyo extended an invitation to Katherine Shear, MD to provide consultation. Four years later, the tsunami and earthquake that devastated coastal towns in northeast Japan in March 2011 tested the mettle of mental health providers there. Communities were ravaged by grief and in Sendai, Japan, where Dr. Shear and Nancy Turret, LCSW, visited in June 2012 to lead workshops, the loss was palpable.

One report out of Onagawa on the impact of the disaster noted that “One cannot absorb the meaning of 1,000 dead for a town with a population of only 12-13,000 until one speaks to the survivors.” But clinicians preparing to respond to the anticipated mental health needs that would surface after other more immediate concerns were addressed had other challenges.

“In addition to the stigma related to mental health problems, generally, and mental health

treatment, there is also a very strong feeling in Japan, as there is in many places including here [in the US] that grief should never be considered pathology,” said Dr. Shear. In fact, discussions about adding complicated grief to the next volume of the DSM, psychiatry’s manual of mental disorders, had stirred up strong feelings among clinicians and patients on both sides of the argument in the US.

Some of the symptoms of complicated grief are: persistent, intense yearning and longing and despairing sadness; preoccupation with thoughts and memories of the deceased person, to the exclusion of any other meaningful interests. While grief is a universal response to loss and mourning rituals vary, symptoms of complicated grief have been found to be remarkably consistent across cultures.

Working with survivors and mental health clinicians in Japan required an acute attention to cultural values that placed the needs of the community ahead of those of the individual. Gaman (“enduring the seemingly unbearable with patience and dignity”) and Ganbaru (“a dogged persistence”) are the defining concepts in Japanese culture that probably figured more prominently in the traditional, self-contained population in Sendai.

Residents’ stoicism may have helped to mask the extent of the psychological damage endured but signs of trouble soon became evident. Mental health providers in the area found growing rates of alcoholism and suicide, particularly among men. Other problems that

later emerged, pointed out Dr. Shear, were aggression/violence, problems at work, marital problems and homelessness. One of the underlying causes of these “observable problems,” is complicated grief.

During the workshop, which focused on providing an overview of the framework for understanding loss and grief, defining complicated grief, and demonstrating some of the techniques used in treatment, Dr. Shear’s staff saw a gradual shift. The initial skepticism about whether the treatment could be applied to the setting diminished for the most part and participants expressed interest in learning how to deliver treatment to their communities.



Currently, members of the Complicated Grief Program are providing consultation to clinicians in Japan. Future initiatives include developing a public health intervention with colleagues in Tokyo and Sendai.

For those interested in learning more about complicated grief symptoms and treatment, please visit www.complicatedgrief.org.

New Grants *(continued from page 8)*

Dranovsky will generate genetically modified animals in which adult-born hippocampal neurons do not effectively integrate into pre-existing hippocampal circuits. Through behavioral tests to model anxiety and depressive behaviors, he will compare behavior at the baseline with behavior following exposure to stress.

Caline Karam, PhD (Molecular Therapeutics). Many studies support that altered presynaptic dopamine levels play a central role in schizophrenia. In an effort to uncover the signaling pathways that modulate presynaptic dopamine stores, Dr. Karam will use a genetic screen to identify novel regulators of presynaptic dopamine accumulation and release.

Atila Losonczy, MD, PhD (Neuroscience). Dr. Losonczy aims to determine the activity patterns of distinct classes of hippocampal inhibitory interneuron and pyramidal cell populations in vivo during spatial behaviors and their potential alterations in animal models of schizophrenia.

Caitlin McOmish, PhD (Developmental Neuroscience). Dr. McOmish’s research aims to elucidate the manner by which hallucinations, a core symptom of schizophrenia, are produced.

Susana Mingote, PhD (Molecular Therapeutics). Dr. Mingote seeks to elucidate the role of glutamate co-transmission in the development of amphetamine induced behaviors,

thereby revealing processes involved in the transition to addiction.

Sebastien Parnaudeau, PhD (Neuroscience). Dr. Parnaudeau’s research aim is to increase understanding of the circuits involved in cognitive deficits in schizophrenia.

Alexandre Saez, PhD (Neuroscience). Dr. Saez’s research will elucidate how prefrontal input can regulate the responsivity of the amygdala, a key mechanism in maintaining normal adaptive emotional responses that likely becomes dysfunctional in many patients with psychiatric disorders.

Benjamin Samuels, PhD (Integrative Neuroscience). Dr. Samuels seeks to determine the mechanisms underlying the neurogenesis-dependence of the antidepressant response.

Ardesheer Talati, PhD (Clinical Therapeutics). Using functional MRI, Dr. Talati will examine the effects of smoking during pregnancy on offspring’s brain function. He will examine whether exposed offspring have different brain responses than those not exposed to smoking and if these differences explain why those exposed to smoking go on to have behavioral problems.

Xiaoyan Xu, PhD (Translational Imaging). Dr. Xu’s research aims to elucidate the essential link between dopamine receptor mutations, the affected neuronal circuits in substance abuse and the corresponding learning deficits.

Residents' Corner: Ye Beverly Du, MD, MPH



A trip to rural China in the summer of 2005 to study Chinese herbal medicine smacked of “indulgence” said Dr. Ye Beverly Du when she came face-to-face with the staggering poverty there and the profound degree of untreated psychiatric illness.

“My parents spent a lot of time in rural China on the communes during the Cultural Revolution and they would talk about that period of time a lot,” said Dr. Du, who is in her fourth year of residency. Her going to China just after beginning medical school, she said, was her way of “chasing after these stories” she had heard growing up. It was a way to bridge the gap between her American experience and the deeply-rooted Chinese identity of her parents’ generation. “But what I found was something that was so much less romantic and really compelling in terms of the need.”

Upon her return to medical school, Dr. Du’s focus became global mental health. She soon set out for Indonesia, where she interviewed displaced parents and children about how they were affected by prolonged stays in “temporary” barracks after the Tsunami in 2007. She found that in Indonesia, psychiatry gained newfound prominence as the word “trauma” became a ubiquitous thread in

discussions among NGO’s and other agency workers following the disaster. However, two years later after “funding had dried up” the story took a turn for the worse: “We found that the kids, who still lived in these places [temporary barracks] were three times as likely to report Tsunami-related fears,” Dr. Du said. “We interpreted it as a sign that these children were persistently reminded of how their families, for whatever reason, have been unable to recover from the tsunami.”

But while she had decided upon a career in psychiatry in medical school, Dr. Du pursued her MPH at Harvard’s School of Public Health; she struggled with whether a public health or medical perspective would prove more effective in making a difference in the lives of people in low resource settings.

“One of the reasons I went into psychiatry was that I felt that people who suffered from psychiatric problems often end up at the bottom-most rung of society in a lot of places.” She shared a story of a prominent professor at a prestigious university in China whose son was diagnosed with schizophrenia and whose aunt had refused to bring him food due to the stigma of being in close contact with someone who is mentally ill. “In tears she told me that beyond people with HIV [and] people with missing limbs, people with mental illness [in China] have the least amount of support and resources. So crippling is the shame associated with mental illness there.

Her family’s move to the US from Beijing when she was five sowed the seeds for her interest in the immigrant experience. Her current research at NYSPI is a review of the literature on the impact of immigration on children’s and adolescents’ mental health. She’s working with Milton Wainberg, MD, to look at how factors like the host country and country of origin, reasons for immigration, socio-economic status before and after migrating contribute to the mental health of immigrant children compared with US-born children. Dr. Du is also working with Dr. Wainberg on HIV prevention and intervention for adolescents in Brazil. A goal in both projects is to understand the role of culture to inform resilience, needs and problems; how to assess these; and how to intervene consonant with the cultural values.

Dr. Du’s fourth year of residency has been productive not only in terms of her research endeavors but also in terms of the leadership roles she has embraced. She is founder of the NYC Global Mental Health Forum, which met for the first time in April of this year. “The field of global mental health is sort of this wild west; we’re all cowboys and we’re just doing our own thing and we’re setting up our own camp and nobody knows what the other person is doing...,” she said. “There are so many people doing amazing things in New York but people don’t really know about each other and if we could somehow work with each other...our work could go so much further.”

AlumniNews

Are you a Columbia Department of Psychiatry alumni? We’d like to hear from you! Let us know how you’re doing so we can share the news with your fellow classmates. Please send your news (including year of graduation) to morrisd@nyspi.columbia.edu.

1950s

Class of 1959 graduate, **Laurence T. Beahan, MD**, published in July *Inside Allegany*, a two volume book on the history of Allegany State Park. He writes: “Allegany at 60,000 acres is the largest Park in the NY State Park System. It is located on the Pennsylvania New York border 70 miles south of Buffalo. Working with the Sierra and Adirondack Mountain Clubs, I was active in the fight that successfully completed a Master Plan for the Park, which designates it a NY State Park Preserve and protects it from lumber and gas extraction.”

1980s

Jeffrey Kahn, MD (Class of 1983) has a new book on the shelves. *Angst: Origins of Anxiety and Depression* was published by Oxford University Press in October 2012. He describes his book as a non-fiction work “that presents a novel theory of evolutionary psychopathology. Basically, our ancient ancestors were herd-like creatures who obeyed five specific sociobiological instincts.”

Dr. Kahn is Clinical Associate Professor of Psychiatry at Cornell.

1990s

Class of 1998 graduate, **Petros Levounis, MD, MA**, wants to share the news of his latest book, *The LGBT Casebook*. “While The LGBT Casebook is the ideal general overview and roadmap for the clinician new to treating LGBT patients, it also provides new pearls of wisdom and insights for psychiatrists, residents, medical students, nurses, and clinical social workers who are already familiar with working with the LGBT community.”

He is Director of the Addiction Institute of New York.

Participating in a Research Study

Participants in research studies help others by contributing to medical research. They also can play an active role in their own health care, gain access to new research treatments and, at Columbia Psychiatry and New York State Psychiatric Institute, receive the highest quality care provided at no-cost.

Call 212-305-6001 to find out more about research and see if participating in a research study is the right choice for you.

In the story below, we hear from a participant and from one of the doctors in a research study that is investigating how to scientifically select the correct treatment for each individual patient with depression, without trial and error, by seeking the individual biological markers in each patient that can help personalize their treatment.

A Participant's Perspective

A tweet about an intriguing new research study turned out to be an incredibly significant communication after Shauna (not her real name) got laid off from her job as a lawyer. The 28 year old, who moved to New York after law school, had been doing well; she'd met the man she wanted to marry and had found fulfillment in doing important and satisfying work for a non-profit. But for a month she tried to find a therapist knowing that, as the last to be hired, she may very well be the first casualty from a company facing the onslaught of a tough economy.

When she learned she was being let go, Shauna's mood took a turn for the worse: "I could not leave my bed. I cried all day long." Not only had she lost her income, but she was denied unemployment and she was unable to contribute some of the money for her own wedding.

A Researcher's Perspective

Is personalized medicine science fiction or can researchers really hope to individualize each patient's depression treatment to finally do away with treatment by trial-and-error?

An innovative new NIMH-funded research study to identify the best treatment based in a person's unique biology is recruiting patients at four sites nationwide. Depression Evaluation Service (DES) Co-Director Patrick J. McGrath, MD, is a Principal Investigator of a study, Establishing Moderators and Biosignatures of Antidepressant Response for Clinical Care (EMBARC) here at Columbia Psychiatry and is excited about the study's promise.

"Can we find a way to scientifically select the correct treatment for our patients with depression, without trial and error?" asks Dr. McGrath. For the first 8 weeks of the 16-week study participants will be randomly assigned to receive either an SSRI (Zoloft) or a placebo (sugar pill). After 8 weeks, patients who have

After a screening she was enrolled in the EMBARC study. She's now at the half-way point. But in the early part of the study she realized after talking with the research therapist that she may have had low levels of depression throughout her life. Bouts of depression had surfaced at a very early age. Shauna noted that "The earliest depression I can remember is when I was six and I tried to kill myself." She added, "Thankfully, six year olds don't know how to do that very well."

Unable to articulate what was wrong exactly, Shauna had told her parents she thought she

needed to go to a doctor but her concerns weren't taken seriously.

Still, she did well in school and life was fairly uneventful until she developed panic attacks about seven years ago. "I was on medication twice for short amounts of time and I remember them telling me we have no way of knowing which drug will work best for you," she said. Still her experience with treatment went well, a far cry from what she's witnessed happen to a close friend whose treatment for depression went virtually untreated for a decade as he bounced from one medication to the next without improvement.

Shauna is doing well today and looking forward to her wedding day. Of EMBARC, she said: "It's a really neat study and the idea of what it could do and how it could revolutionize treatment makes me very hopeful for the future."

Ramin Parsey, MD, PhD, formerly of our department and now Chairman of Psychiatry at Stony Brook University; and Maria Oquendo, MD, Columbia Psychiatry's Vice Dean for Education and an active mood disorder researcher.

The results will be eagerly anticipated not only by researchers but patients who have tried multiple medications but found the side effects intolerable or found improvement only after months and months of trial-and-error.

To learn more about the EMBARC study and other studies of depression treatment, call the Depression Evaluation service at 212-543-5734, go online to [depression-nyc.org](http://www.depression-nyc.org), or see a video on EMBARC at http://www.youtube.com/watch?v=4nhF_IYPb0A&list=UU1dhrG68RjvI9CZAL-c6nVg&index=10&feature=plcp

To volunteer for a research study at Columbia Psychiatry, call 212-305-6001.



not improved on the Zoloft are switched to Wellbutrin for an additional 8 weeks, and those who have not improved on placebo will be switched to Zoloft. Prior to the medication, each participant will do MRI and psychological testing and an EEG, which records electrical signals in the brain. Both the MRI and EEG are done to assess brain function. Blood samples will also be collected for genetic analysis.

"This isn't the first study to use some of these technologies to look at physiologic differences in people with depression, but it is the first to incorporate a whole battery of them in a single randomized research study of this size," said Dr. McGrath. Collaborators on the study include Myrna Weissman, PhD, a leading Columbia epidemiologist studying depression;

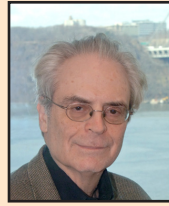


Ethel Spector Person, MD, died on Tuesday, October 16, 2012 of complications of Alzheimer's Disease. She was 77 years old.

Dr. Person, who was widely recognized as a master clinician, psychoanalytic scholar, and thought leader, completed her psychiatric residency at PI in 1964, and was a member

of the Department of Psychiatry ever since, starting as a Lecturer in 1965 and then as a Professor of Clinical Psychiatry since 1985.

As a faculty member (since 1967), a supervising and training analyst (since 1973) and Director (1981-91), Dr. Person was an integral part of the Columbia Center for Psychoanalytic Training and Research for the last forty years. As an early female leader in medicine, psychiatry, and psychoanalysis, she was also a role model for several generations of women in the field. Her vast contributions to the literature and to our understanding of our patients will continue to inform and inspire us for years to come.



Edward Smith, PhD, Director of the Division of Cognitive Neuroscience at the New York State Psychiatric Institute, died on August 17, 2012, at the age of 72 after a valiant fight against cancer.

Dr. Smith was the William B. Ransford Professor of Psychology and the William B. Ransford Professor of Psychology (in Psychiatry) at Columbia University.

Dr. Smith received his Bachelors Degree from Brooklyn College in 1961 and his PhD from the University of Michigan in 1966. After many years at Stanford University and the University of Michigan, he returned to New York to join the faculty at Columbia in 2004.

Dr. Smith was a leader in the fields of cognitive psychology and cognitive neuroscience. He conducted seminal research on working memory, semantic memory, word perception, and the neural basis of cognition. Dr. Smith's research impact extends into clinical, social, developmental, personality, and educational psychology as well as psycholinguistics. He will be sorely missed by his colleagues at Columbia Psychiatry and around the world.

Program Lives Up to Its Promise in Providing Care to Low-Income Children with Learning Disabilities

(continued from page 5)

critical times for children to be able to access the curriculum." A child who reaches the 10th grade not having learned to read because of an LD will have a significant hurdle to overcome.

"Children with a learning disability aren't dumb. They aren't lazy. Their brains process information differently, and that way of learning differently can follow them throughout their academic career despite their capacity to learn," added Dr. Algermissen, who supervises four post doctoral fellows who carry out a rigorous assessment of each child admitted to the Program. She noted that children with mild LD, who are diagnosed early and treated can often be integrated back into regular classrooms whereas those with more severe cases require more ongoing intensive intervention.

Since its launch in July 2011, the Program has seen approximately 80 families from mostly Washington Heights, Harlem and the Bronx. The Program's success has reached families beyond its original catchment area, those from the outer boroughs whose children are referred by pediatricians, school administrators and sometimes children's advocacy groups. Groups like Advocacy for Children work

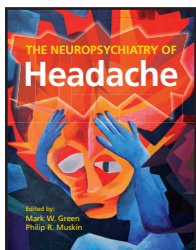
closely with the Promise Program and provide legal services to families, who may find that the treatment recommendations provided by Promise is challenged by the Department of Education [DOE].

"If you have a child with a learning disability," said Dr. Algermissen, "every family can request an evaluation from the DOE...That is their right." But not every family knows that it is within their rights to demand an evaluation, which is precisely why the Program's Education Coordinator is a valued asset. Her job is to educate parents about how they can be effective advocates for their children and how to navigate a bureaucratic system, which can be daunting even for parents with ample resources.

Parents interested in learning more about the Program should contact the Education Coordinator, Samantha Berg, at 212-305-4360.

The Promise Program at CUMC is funded by the PROMISE PROJECT, a tax-exempt, nonprofit partner project of the Fund for the City of New York that was founded by Dana Buchman. For more about PROMISE PROJECT, go to www.promise-project.org

Department Reading List

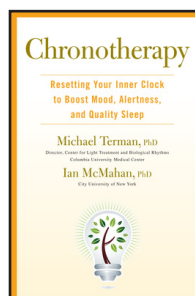


The Neuropsychiatry of Headache

Authors: Mark Green, Philip Muskin

Cambridge University Press, April 2012

The Neuropsychiatry of Headache details the current concepts of various headache conditions and the psychiatric syndromes; topics covered include migraine, mood disorders, medication overuse and personality disorders. Headache specialists, neurologists, psychiatrists, neuropsychiatrists and neuropsychologists will find this an invaluable resource for understanding and co-managing these conditions.



Chronotherapy: Resetting Your Inner Clock to Boost Mood, Alertness, and Quality Sleep

Authors: Michael Terman, PhD, Ian McMahan, PhD
Avery, October 2012

Sleep problems and depressed mood often go hand in hand, forming a frustrating cycle. Michael Terman, PhD, has devoted his career to studying the brain functions that feed these disorders. His discoveries in chronotherapy have been widely recognized. In *Chronotherapy*, Drs. Terman and McMahan reveal the heart of his findings, a powerful program that recalibrates our internal clocks—our exquisitely designed, natural sensitivity to the timing and brightness of light exposure.