



MINDSCAPES

MASS GENERAL DEPARTMENT OF PSYCHIATRY NEWSLETTER FOR FRIENDS AND SUPPORTERS • SUMMER 2019

Precision Psychiatry, Tailored Treatment

Matching treatments to an individual can be a trial and error process that delays benefit and extends suffering. The key is finding which treatment, or combination of treatments, work best for a patient's unique set of risk factors, biology, life experiences and comorbidities.

PM has already proved beneficial in treating cancers and cardiovascular disease. In oncology, precise treatments have been developed based on genetic mutations in certain types of cancer. In cardiology, learning how specific genetic variations affect cholesterol levels has led to new drug discoveries.



Roy H. Perlis, MD; Joshua L. Roffman, MD, and Jordan W. Smoller, MD, ScD

Mass General researchers are leading the field in adapting Precision Medicine to psychiatry, especially to identify people early in the course of illness or at risk. The longer illness goes undiagnosed or untreated, the more difficult it is to treat and the worse the outcome. Precision Psychiatry, it is hoped, will make possible targeted treatments and transformative tools for clinical risk prediction.

"Precision Psychiatry is an emerging concept," says Jordan W. Smoller, MD, ScD, director of the Psychiatric and Neurodevelopmental Genetics Unit in the MGH Center for Genomic Medicine. "There are tremendous opportunities. The challenges are great, the need is great, and advances in diagnoses, treatment and prevention would have a huge impact."

"Mass General's strengths as a clinical care center, boasting a rigorous scientific environment and a dream team of investigators, will ensure its pivotal role in fulfilling the promise of Precision Psychiatry."

"I've been a psychiatrist for 20 years," says Roy Perlis, MD, director of the Center for Quantitative Health at Mass General, which is also developing predictors of treatment response and novel therapeutics based on cellular models of brain disease. "I'm tired of trial and error. It's not good enough."

Precisely.

Precision Medicine (PM) is the future of medicine. PM considers the uniqueness of a patient's singular set of factors including genetics, environmental exposures, diet and lifestyle. PM uses all available information – with the help of new tools such as big data analytics, artificial intelligence and machine learning – to tailor a more individualized approach to intervention and prevention.

One major unsolved problem is suicide prevention. The suicide rate in the U.S. increased 33 percent between 1999 and 2017, according to the Centers for Disease Control and Prevention. Yet clinicians lack tools to predict imminent risk; many who died by suicide had seen a clinician in the months prior to their suicide.

There is data to mine in the Electronic Health Record (EHR), the digital version of the patient's paper chart. Through the Precision Psychiatry approach, Dr. Smoller and his research team are using EHR data and machine learning methods to develop a risk prediction algorithm. A branch of artificial intelligence, machine learning is a method of data analysis that gives computers the capability to learn without being programmed.

Dr. Smoller's risk prediction algorithm identified about 45 percent of suicide attempts – with 90 percent specificity – an average of two to three years in advance. But more research, including a clinical trial, is needed to refine the risk prediction tool, he notes.

(Continued on page 7)

From the Chief



I arrived at Massachusetts General Hospital 45 years ago for residency.

The last 45 years have been beyond what I ever could have imagined. Back then, Mass General Psychiatry was a small but collegial department. That culture and its architect, then chief, Tom Hackett, MD, distracted me from my longtime goal of returning to Connecticut to open a community practice. I am so proud of this remarkable Department of Psychiatry that has evolved

so magnificently over the decades. In my 19 years as chief, we have accomplished so much together: 22 endowed chairs, where before there were none; new clinical and research centers, including those for bipolar disorder, women's mental health, obsessive compulsive disorder as well as close to \$290 million in philanthropic support.

I have reached a chronological age that I long ago determined would be the right time for a successor with a new vision and energy to take this great department to the next level of possibility. Therefore, I will step down as Chief of Psychiatry once a replacement is named, most likely before the next issue of *Mindscapes*.

This issue of *Mindscapes* includes a primer on Precision Medicine and how it can be applied to psychiatry. We need to recognize that psychiatric disorders are complex and the answer to treating the patient *is* the patient. Each person is unique, and as such, the most effective treatment is a highly individualized approach. Using new tools such as artificial intelligence, genetics and big data sets, our department's visionary and gifted researchers are working on ways to reduce our reliance on trial and error. I believe Precision Psychiatry, with your support, will lead to exciting breakthroughs in the future.

In closing, I want you to know that I will continue at Mass General as director of the Center for Anxiety and Traumatic Stress Disorders, as a co-chair of philanthropy, as a supervisor of resident clinical work and to help launch some innovative research. Knowing the candidates under consideration as the next chief, I have no doubt that the department's culture of collegiality and dedication to advancing the field for the benefit of those who suffer will not just be sustained but will be deepened and extended.

Jerrold F. Rosenbaum, MD
Chief of Psychiatry,
Massachusetts General Hospital
Stanley Cobb Professor of Psychiatry,
Harvard Medical School

A Leader Retires

A remarkable leader and inspiring mentor, Carol W. Taylor, completed a 15-year tenure with the Massachusetts General Hospital Development Office. In her most recent role as the Executive Director of Development, she managed the hospital's overall philanthropic efforts and led fundraising teams assigned to the Department of Psychiatry, Lurie Center for Autism, Cancer Center and Mass General Hospital for Children.

In 2003, working with the Psychiatry Department's then-new chief, Jerrold F. Rosenbaum, MD, Carol created a philanthropy program from scratch. A brilliant strategist, she built relationships with the faculty and engaged their collaboration to recruit lay volunteers as ambassadors and to form councils, primarily of grateful patients and family members. In 2007, in partnership with two prominent lay volunteers, she created the Leadership Council for Psychiatry to increase awareness of mental illness, diminish its stigma and advance research and clinical care through philanthropy, advocacy and education.

When Carol began the philanthropy program in Psychiatry people thought, "it couldn't be done." Conventional wisdom held that no one wanted to commemorate a mental illness with a gift. Carol turned this notion on its head and established a robust program that is a model for the Mass General Development Office as well as for other hospital psychiatry departments. Tireless and determined, thoughtful and compassionate, Carol cultivated an environment that facilitated deep relationships with donors and inspired meaningful giving across all areas of the hospital's mission. The most enduring aspect of her tenure was the addition to the department's endowment of 12 MGH chairs and eight Harvard professorships.

Prior to working at Mass General, Carol led capital campaigns at the Boys and Girls Clubs of Boston and directed development programs for several healthcare non-profits, including The Skin Cancer Foundation in New York and Roxbury Comprehensive Community Health Center in Boston. She also held management positions with publishing and corporate training companies.

Carol remains involved in the work of the department as a member of the Leadership Council and the Center for Law, Brain and Behavior (CLBB) Advisory Council. The Department of Psychiatry is grateful for Carol's service and will always consider her a cherished and devoted friend.



Carol W. Taylor

The 2019-2021 Louis V. Gerstner III Research Scholars

Two talented young Department of Psychiatry faculty dedicated to advancing the understanding of Attention-Deficit Hyperactivity Disorder (ADHD) and related psychiatric illnesses, Colin W. Burke, MD, and Alisha R. Pollastri, PhD, have been named Louis V. Gerstner III Research Scholars for 2019-2021.

Dr. Burke will study the prevalence of, and the relationship between, ADHD and substance use disorders among homeless youth. He has been interested in the public health challenges facing homeless and marginalized populations since high school, organizing student visits to Boston-area homeless shelters. During his psychiatry residency, he witnessed the far-reaching impacts of ADHD on children and teens and formed connections with Boston Health Care for the Homeless and Bridge Over Troubled Waters, a Boston-based youth homeless services agency. He has decided on a career in the area of the psychopathology, neurocognitive development and substance use disorders among homeless youth.

Dr. Pollastri, a licensed psychologist, will study the neurocognitive mechanisms in youth with ADHD who are receiving the Collaborative Problem Solving (CPS) approach. Her research will build on her work at Think:Kids, a Mass General program that teaches CPS to help

children with behavioral challenges, promoting the understanding that these children lack the skill, not the will, to behave well. She and her Think:Kids colleagues have gathered preliminary evidence that CPS treatment improved children's executive functioning and related neurocognitive skills, but many questions remain unanswered. Longterm, she is committed to developing a clinical research program that helps youth with behavioral difficulties.

Supported by The Gerstner Family Foundation, the annual, competitive grant award program is geared to newly trained physicians and postdoctoral level faculty pursuing careers as clinician-researchers. Mentored by senior faculty, the scholars receive salary support and funding for materials and equipment. The program, named in memory of Louis V. Gerstner III, has supported 17 scholars since its launch in 2015.

A young philanthropist who served as president of the foundation until his untimely passing in 2013, Louis III was passionate about the work of the foundation: helping youth from disadvantaged and underserved communities. The outcomes of Drs. Burke and Pollastri's projects will be critically important to changing the trajectory of young lives.



Colin Burke, MD, and Alisha Pollastri, PhD

Faculty News



Dr. Beresin

Gene Beresin, MD, executive director of The Clay Center for Young Healthy Minds, has been elected second vice president of the American College of Psychiatrists. As a member of the Board of Regents, Beresin will provide strategic leadership and oversight for the programs and future direction of the college.



Dr. Earls

Felton James Earls, MD, professor of Social Medicine emeritus at Harvard Medical School and professor of Human Behavior and Development emeritus at the Harvard T.H. Chan School of Public Health, was awarded the annual Frances J. Bonner MD Award by the Department of Psychiatry's Center for Diversity. The award recognizes an individual who has overcome adversity and made significant contributions to the field of mental health and the care of minority communities.



Dr. Gatchel

Jennifer Gatchel, MD, PhD, a physician-scientist who is board certified in geriatric psychiatry and dually trained in medicine and neuroscience, was awarded the 2019 American Psychiatric Association Hartford-Jeste Award for Future Leaders in Geriatric Psychiatry at the annual meeting of the American Psychiatric Association.

Jake Holzer, MD, attending psychiatrist in the Massachusetts General Physicians Organization who works at MGH/McLean Geriatric Division and Spaulding hospitals, has received the 2019 Manfred S. Guttmacher Award from the American Psychiatric Association and the American Academy of Psychiatry and the Law. The award recognizes published works or professional presentations that contribute to the field of forensic psychiatry.



Dr. Holzer



Dr. Irwin

Kelly Irwin, MD, MPH, the founding director of the Collaborative Care and Community Engagement Program at the MGH Cancer Center received the 2019 Claffin Distinguished Scholar Award. This award, which provides research support to women scientists during their child-rearing years, was established at Mass General in honor of Jane D. Claffin, with a view to creating opportunities for women to advance to senior positions in academic medicine.



Madeline Smethurst

An estimated 1 percent of American females has a past or current history of anorexia nervosa; 1.5 percent of bulimia nervosa; and 3.5 percent of binge eating disorder. A further 5 percent of men and women struggle with aspects of these conditions, which can be equally impairing.

Eating disorders are often associated with significant medical and psychological impairment and, for some, they can be chronic illnesses or lead to premature death. Yet researchers in the Eating Disorders Clinical and Research Program (EDCRP) at Mass General have shown that in time, most people with eating disorders will fully recover. In the 22-year MGH Longitudinal Study of Anorexia and Bulimia Nervosa, the team found that by longterm follow-up, roughly two-thirds of individuals with anorexia or bulimia nervosa recovered.

The EDCRP provides care and consultation for patients and their families, advances scientific and clinical knowledge of eating disorders, trains the next generation of researchers and clinicians and promotes public awareness. The team is comprised of 11 staff members – psychiatrists, clinical psychologists, a dietician and clinical research coordinators who offer the latest evidence-based approaches, including cognitive-behavioral therapy, family-based treatment and psychopharmacology.

A Young Woman Comes to Terms with an Eating Disorder

Dr. Jennifer Thomas, co-director of the Eating Disorders Clinical and Research Program (EDCRP) at Mass General, says that staff at her clinic help patients sort out their feelings about eating disorders. While working to give up eating disorder behaviors, most patients come to realize these behaviors were at first serving an important, yet previously unacknowledged, purpose in their lives, Dr. Thomas explains. Sometimes during treatment we invite patients to write two letters to their eating disorder – one as a friend and the other as a foe – to honor their conflicting feelings about recovery and help them move toward actively fighting the eating disorder and recovering. EDCRP patient, Madeline Smethurst, who was diagnosed with anorexia nervosa at age 16, but who is now on the road to recovery and is a junior in college, has graciously agreed to share her letters.

FRIEND

Dear Eating Disorder, You were the perfect answer to the lurking anxiety that tormented me. You silenced everything and gave me one thing to focus on: weight loss. Calories in, calories out, all day, every day. I didn't have the time or the mind space to worry about anything else. You solved it all. I thank you for that. And with weight loss came compliments, admiration and a sense of identity that I lacked. If I wanted to feel good, if I wanted distraction from everything stressful, restriction was there, you were there. Every second with you seemed productive and worthwhile. You made me special. And I miss you a lot. Thank you.

“You robbed me of my high school experience. I will never get that back. I’ll be incredibly sad if I let you take away college.”

FOE

Dear Eating Disorder, Writing this to you is incredibly difficult for me. You have convinced me that I am fat, ugly, disgusting, lazy, boring, awkward and unlovable. You have convinced me that I will go nowhere; that you are the best I will ever get; that by letting you go, I am giving up my only chance of having anything.

But I know that is not true. By not letting you go, by continuing to live my life preoccupied by arbitrary numbers, I will never have the opportunity to see what life has to offer. You are a glamorized version of giving up and I can no longer fall for your tricks. I spent most of high school pleasing you. And, consequently, I sacrificed everything else. I had friends, but my mind never let me be present. I played sports, but all my effort went toward not fainting. I was numb, simply going through the motions. You robbed me of my high school experience. I will never get that back. I’ll be incredibly sad if I let you take away college. You took over my life. You put me in a constant state of waiting. Waiting for satisfaction in my body; waiting for confidence; waiting for happiness. It never came. I’m tired of waiting; it’s time to try something new.

Leadership Council for Psychiatry 13th Annual Seminar and Dinner



Howard Kessler, Michele Kessler, Lidia Rosenbaum, Jerrold Rosenbaum, MD



Donna Emma and Larry Davis



Maria Bayazid, Heidi Cox, Jay Seyfert, Martha Cox



Christopher and Christine Orthwein



O. Don and Mary Jo Chapoton; Laurie and James Carney, II



Naomi Judd, Michele Kessler and Carroll Carpenter

On Feb. 28, the MGH Leadership Council for Psychiatry held its 13th annual seminar, hosted by Michele and Howard Kessler in Palm Beach, Florida. The event included talks on Depression and Medical Illness by Jeff Huffman, MD; Disordered Sleep: Myths, Facts and Remedies by John Winkelman, MD, PhD; How Collaborative Problem Solving Changes Lives at Home, School and Work by Stuart Ablon, PhD; and a patient's "Story of Recovery." With 88 current members from 20 states, the council's mission is to expand awareness of mental illness, reduce stigma and advance research and clinical care through support of Mass General Psychiatry.



Tangley Lloyd and Maurizio Fava, MD



Peter L. Slavin, MD



Kelly and Maureen Hackett



Kerri Johnson, her daughter, Ali, her son, Jett, and husband John Rehm, with Janet Wozniak, MD



Hillie Mahoney and Peter L. Slavin, MD

Turning Tragedy into Awareness

In October, 2018, in a room full of positivity at B/Spoke studio in Wellesley, more than 50 riders pedaled their spinning cycles, raising awareness and funding for the Depression Clinical and Research Program (DCRP) at Massachusetts General Hospital.

The cyclists came together under the leadership of Wendy Tulman and her daughter, Rebecca, of Natick, Massachusetts, a duo that channel their energies into fundraising for depression treatment and research.



Participants in the charity ride (back row, left to right) Douglas Tulman, Justin Tulman, Wendy Tulman, Emily Katz, Kay Liscomb (front row, left to right) Rebecca Tulman, Maren Nyer, PhD, David Mischoulon, MD, PhD

When Wendy's father, Roger Goldstein, took his own life in 1999, she and her family were stunned. Along with her sister, husband and mother, Wendy knew little or nothing about depression, and she set out to learn about it. "My reaction was that I wanted to raise more awareness about depression immediately," she says.

Wendy has raised funds before to support the Mass General Department of Psychiatry. In 2007, she and her friend, Stacy Sweeney, co-chaired a gala art auction featuring works by local, national and international artists. The dinner and auction drew hundreds of guests and raised more than \$100,000 to support psychiatric research, clinical initiatives and professional and public education.

After taking a fundraising hiatus to raise her children, Wendy is happy to be supporting Mass General again. The charity ride drew more than 50 spinners to B/Spoke studio, which donated the use of its facility and spin instructor. So many people wanted to participate there was a wait list.

David Mischoulon, MD, PhD, director of the DCRP, and Maren Nyer, PhD, director of yoga studies at the DCRP, said the funds Mrs. Tulman helped raise will support a variety of initiatives, including research into the prevention of suicide and treatment of depression.

Researchers are currently studying different psychotherapies in distinct populations, like cognitive behavioral therapy for people with traumatic brain injuries. Other studies are under way on acupuncture and natural treatments, including omega-3 fatty acids, vitamins and probiotics.

"Philanthropy allows us to pursue higher-risk projects we couldn't get funding for through conventional channels," Dr. Mischoulon says.

Endowment for the Advancement of Psychotherapy Award Honors Sports Writing Icon

On Jan. 26, 2019, the MGH Endowment for the Advancement of Psychotherapy recognized sports journalist Jackie MacMullan for her leadership in bringing forward mental health issues in the National Basketball Association (NBA).

MacMullan's provocative five-part series of ESPN articles titled "Mental Health in the NBA," offers a glimpse behind the often-glamorized world of professional basketball. It illuminates the very real struggles athletes of color can have with mental illness and the ways it is – and isn't – being addressed within the league. MacMullan interviewed management, coaches, players, referees and mental health professionals.

Her work over time to win the trust of players has enabled her to give voice to their stories of struggles with depression, anxiety, panic disorder, anger, OCD and childhood trauma. In addition, she has documented these courageous players' accounts of the lifesaving help they received by participating in psychotherapy, and, sometimes, from taking medication. Her articles have helped to reduce the stigma of mental illness and highlighted the struggles of some of our most talented athletes.

"We are recognizing Jackie for her journalism surrounding mental health issues in the NBA. Her writing illuminates inspiring stories that illustrate how psychotherapy is a helpful treatment," says Laura Crain, MD. "We think her journalistic efforts are also important because they help to

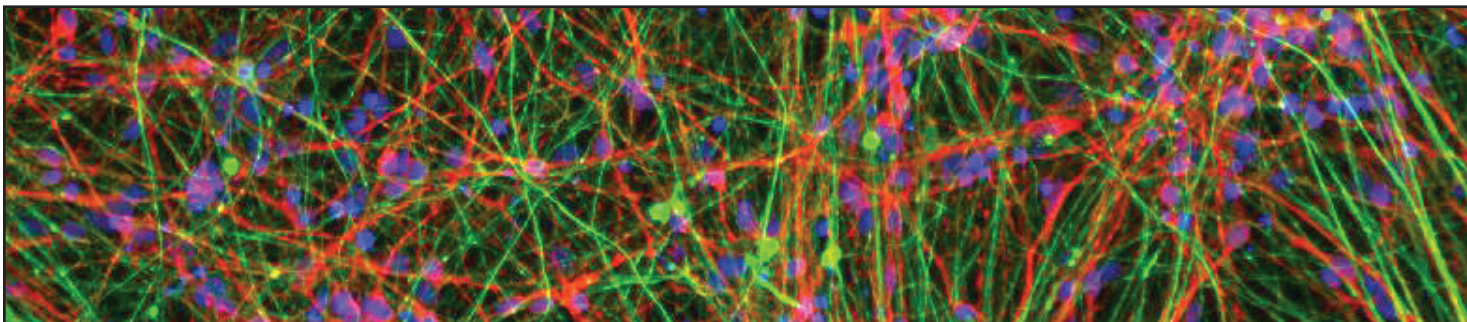
de-stigmatize mental illness," Dr. Crain adds.

MacMullan is a nationally recognized writer, and for more than 20 years was a columnist and editor for *The Boston Globe*. She has covered the World Series, Stanley Cup Finals and the Olympic Games. An accomplished author, her fifth book, *Basketball: A Love Story*, was released in September 2018.



Kathleen H. Ulman, PhD; Jackie MacMullan; and Laura D. Crain, MD

Founded by the late Dr. Anne Alonso, the Endowment for the Advancement of Psychotherapy's mission is to support and expand education, professional training and research in dynamic psychotherapy. It seeks to educate the public about the power of this treatment, where the doctor-patient relationship is central to the work itself.



Human iPSC-derived neurons studied in the lab of Dr. Roy Perlis. Human iPSCs (induced pluripotent cells) make it possible to derive and study human neurons, a previously inaccessible cell type, while retaining patient-specific genetic information, such as specific mutations, that may lead to neuropsychiatric disease.

—Precision Psychiatry

(Continued from Page 1)

Detailed data collection on a large scale is providing new insights on suicide risk. A rise in suicides among U.S. soldiers prompted the Army to commission a mental health risk and resilience study. A key finding, for Dr. Smoller: unit cohesion and measure of perceived social support were powerful protective factors against depression, even in the face of high genetic risk factors.

Precision Psychiatry has great potential in the realm of prevention, says psychiatric neuroscientist, Joshua L. Roffman, MD, director of the Brain Genomics Laboratory, co-director of the MGH Division of Psychiatric Neuroimaging, and of Mass General Neuroscience, a hospital-wide initiative launched in 2018.

Dr. Roffman's brain research has focused on pregnancy, when much of the risk for developing mental illness is determined. His study (published in *JAMA Psychiatry* in 2018) found that food fortified by folic acid during pregnancy may lower a child's psychosis risk after birth. The brain cortex of children exposed to fortified grains during pregnancy was thicker compared to unexposed children, a pattern also associated with reduced risk of psychotic symptoms.

Folic acid, he states, is the first of many protective factors in psychiatry. Early intervention might mitigate risk for psychosis, but also for autism, mood disorders and anxiety disorders. Pinpointing the right time to intervene, however, is the challenge and the promise of Precision Psychiatry. By analogy, in bone health, the amount of calcium intake during the teen years is vitally important to bone density and fracture risk later in life.

"You have to know the critical period," Dr. Roffman states. "We think the critical period for psychiatry is very early."

Dr. Roy Perlis and his team have developed a cellular biobank and are studying how brain cells develop and connect to teach each other. They are collecting live cells, reprogramming them back into stem cells, and growing those cells in cultures to see how they develop and to test the effectiveness of different medications. The longterm goal is to collect umbilical cords at birth and then grow those cells in the lab. Patterns detected in the dish cells may be predictive of what might happen to the baby as she grows. The hope is that

researchers could then develop highly individualized interventions.

For Dr. Perlis, a key focus is on finding the right treatment options. He wants to learn how patients will respond to specific medications and predict which patients will stop taking their medications. He is a proponent of what he calls "probabilistic medicine," combining data from EHRs and doctor's notes to make predictions about patient responses and behaviors, which will inform doctors and help them decide on personalized treatments.

Genetic tools also are being developed and refined. It has only been within the past decade that specific genetic variants influencing risk for psychiatric disorders have been identified. This breakthrough enables researchers to measure genetic loading for a psychiatric disorder, or what is called a genetic risk score. "That can be a first

step towards exploring whether we can identify people who are at greatest risk," Dr. Smoller says.

Mass General's strengths as a clinical care center boasting a rigorous scientific environment and a dream team of investigators will ensure its pivotal role in fulfilling the promise of Precision Psychiatry. The neuroscience

initiative seeks to build a longterm "learning" birth cohort, taking advantage of the hospital's 4,000 births per year, its leadership in women's mental health and perinatal psychiatry and network of community health centers. The study would collect ultrasounds, umbilical cords and blood samples from the mother, which contain fragments of the baby's DNA and umbilical cord blood to find ways to protect against mental illnesses.

As Dr. Roffman observes about Mass General, "we can leverage the whole spectrum of care in a unified setting to collect the data. We are uniquely well positioned to translate what we learn into improved outcomes, so that our patients are the first to benefit."

Patterns detected in the dish cells may be predictive of what might happen to the baby as she grows. The hope is that researchers could then develop highly individualized interventions.

WAYS TO GIVE

For information about how to support the clinical care, research, teaching and community health activities of the Mass General Department of Psychiatry either now or later through your estate, please contact Ellen Plapinger, managing director of development at 617-726-0402 or eplapinger@mgh.harvard.edu, or Lorraine Fanton, senior director of development, at 617-724-6439 or lfanton@mgh.harvard.edu.



MASSACHUSETTS
GENERAL HOSPITAL

Development Office
125 Nashua Street, Suite 540
Boston, MA 02114-2548

NONPROFIT ORG
U.S. POSTAGE
PAID
BOSTON, MA
PERMIT NO. 53825

MINDSCAPES • SUMMER 2019

Faculty Books



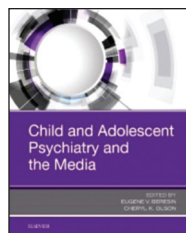
Susan J. Noonan (Author), Jerrold F. Rosenbaum (Foreword), Timothy J. Petersen (Foreword)

A Johns Hopkins Press Health Book, 1st Edition, Sept. 23, 2018

Some call it the blues or a storm in their head. William Styron referred to it as “darkness visible.” Whatever the description, depression is a disorder of the mind and body that affects millions of adults. In *Take Control of Your Depression*, Susan J. Noonan, MD, MPH, provides people experiencing depression with strategies to take stock of their mental state, chart a course toward emotional balance and track their progress on the journey to well-being.

Edited by Eugene V. Beresin and Cheryl K. Olson

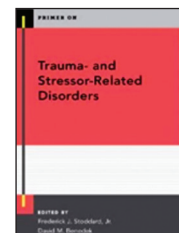
Published by Elsevier, 1st Edition, Aug. 28, 2018



Get a quick, expert overview of the important topic of technology and social media and its impact on children and adolescents. This practical resource presents a focused summary of current knowledge on topics of interest to psychiatrists, pediatricians and health professionals working with children and adolescents. It provides relevant information on a wide variety of media-related topics as they relate to child and adolescent health and mental illness, making it a one-stop resource for staying up to date in this critical area.

Frederick J. Stoddard (Editor), David M. Benedek (Editor), Mohammed R. Milad (Editor), Robert J. Ursano (Editor)

Published by Oxford University Press, June 1, 2018



Trauma- and Stressor-Related Disorders is an in-depth, yet succinct, introduction to current clinical and research knowledge for trainees and for professionals including psychotherapeutic, psychopharmacological, public health and policy interventions. It addresses the level of evidence for best practices to target the disabling cognitive, emotional or behavioral symptoms for a specific patient or population. The book draws on the current literature and provides case scenarios from individuals and families exposed to psychological or physical traumas, including mass trauma events.

Book summaries based on publisher descriptions found at www.amazon.com and www.elsevier.com

MINDSCAPES

Summer 2019 Vol. 12, No. 1

CHIEF OF PSYCHIATRY
Jerrold F. Rosenbaum, MD

MANAGING DIRECTOR OF
DEVELOPMENT
Ellen H. Plapinger

PRODUCTION MANAGER
Aidan Parkinson

WRITING
Noah Brown
Kay Cahill
Mary Hurley

EDITING
Jennifer Bohonak
Aidan Parkinson

DESIGN
Arch MacInnes

PHOTOGRAPHY
MGH Photo Lab

Mindscapes is published for friends and supporters of the Massachusetts General Hospital Department of Psychiatry.

www.massgeneral.org/psychiatry

If you do not wish to receive certain or all fundraising communications from Massachusetts General Hospital, please call our toll-free number, 877.644.7733, or visit giving.massgeneral.org/com-pref.

Save these Dates:
Psychiatry Academy Patient and Family Education Series

**Saturday, September 28, 2019
Bipolar Education Day**

*Directed by Andrew A. Nierenberg, MD
Sponsored by the Dauten Family Center for
Bipolar Treatment Innovation*

**Saturday, November 9, 2019
Schizophrenia Education Day**

*Directed by Oliver Freudenreich, MD, and
Daphne Holt, MD, PhD
Sponsored by Anonymous Donor*

Sessions will be held at the Starr Center, Richard Simches Building, 185 Cambridge Street, Charles River Plaza, Boston. For more information and to register, please visit: www.massgeneral.org/psychiatry/about/patient-education