2023 INTERNATIONAL MENTAL HEALTH RESEARCH SYMPOSIUM VIRTUAL & IN-PERSON

Friday, October 27, 2023
9:30am–12:30pm EDT
Kaufman Music Center
New York, NY
Welcome

Today we will hear presentations from the Brain & Behavior Research Foundation’s 2023 Outstanding Achievement Prizewinners on topics that include: the role of social cognition in schizophrenia as well as the importance of self-knowledge and misperception in the same illness; the relationship between obesity and bipolar disorder; the impact of environmental adversity on brain development and mental health in childhood; and the impact of emotion and affect on cognition.

The Outstanding Achievement Prizewinners are selected by special committees of the BBRF Scientific Council, a volunteer group of 194 mental health experts across disciplines in brain and behavior research.

We are also pleased this year to also offer an informative presentation from Dr. Karoly Mirnics, a BBRF Scientific Council member who will be speaking on behalf of our 2023 Pardes Humanitarian Prize in Mental Health winner, Special Olympics International.

Since its inception, the BBRF Research Symposium has been moderated by Dr. Robert Hirschfeld. Known internationally for his research, he made major contributions to understanding the classification of depression and bipolar disorder and treatment with medication and psychotherapy. Dr. Hirschfeld developed the Mood Disorder Questionnaire (MDQ), one of the most widely used screening assessments for bipolar disorder in the world. Sadly, Dr. Hirschfeld passed away this past February. He will be missed, and we deeply appreciate his support for the important mission of BBRF.

It is a pleasure to welcome BBRF Scientific Council member Dr. Carol Tamminga to serve as our new Symposium Moderator.

Since 1987, the Foundation has awarded more than $450 million to fund more than 6,500 grants to more than 5,400 scientists around the world. These awards are made specifically to fund innovative research that may not be supported elsewhere but is vital for advancement in the fields of neuroscience and psychiatry. 100% of every dollar donated for research is invested in our research grants. Our operating expenses are covered by separate Foundation grants.

We hope the BBRF Symposium will inspire you. Thank you for joining us in our commitment to dramatically improve the lives of those with mental illness and ultimately enable more people to live full, happy, and productive lives.

Sincerely,

Jeffrey Borenstein, M.D.
President & CEO
Brain & Behavior Research Foundation
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Welcome

Jeffrey Borenstein, M.D.
President & CEO, BBRF

Jeffrey Borenstein, M.D., serves as the President & CEO of the Brain & Behavior Research Foundation, the largest private funder of mental health research grants. Dr. Borenstein developed the Emmy-nominated public television program Healthy Minds, and serves as host and executive producer of the series. The program, broadcast nationwide, is available online, and focuses on topics in psychiatry in order to educate the public, reduce stigma and offer a message of hope. Dr. Borenstein also serves as Editor-in-Chief of Psychiatric News, the newspaper of the American Psychiatric Association.

Dr. Borenstein is a Fellow of the New York Academy of Medicine and serves as the Chair of the Section of Psychiatry at the Academy. He also has served as the President of the New York State Psychiatric Association. Dr. Borenstein earned his undergraduate degree at Harvard and his medical degree at New York University.
Introduction

Carol A. Tamminga, M.D.

*Stanton Sharp Distinguished Chair in Psychiatry and Chair of Psychiatry*
*Chief, Translational Neuroscience Research in Schizophrenia*
*University of Texas Southwestern Medical School*

BBRF Scientific Council
2011 BBRF Lieber Prize for Outstanding Achievement in Schizophrenia Research
2010, 1988 BBRF Distinguished Investigator

Dr. Tamminga is a Professor, Chairman of Psychiatry and Chief of Translational Neuroscience Research in Schizophrenia at the University of Texas Southwestern Medical School. She holds the Stanton Sharp Distinguished Chair in Psychiatry. She directs clinical and preclinical research in schizophrenia focused on identifying disease mechanisms and on improving psychosis treatments.

The goal of Dr. Tamminga’s research is to examine and understand the mechanisms underlying schizophrenia, especially its most prominent symptoms, psychosis and memory dysfunction, in order to build rational treatments for the illness. She evaluates the function of the living human brain in individuals with and without schizophrenia using brain imaging and tissue techniques. Building on this knowledge, she uses human postmortem brain tissue to translate functional alterations from the living human patient into molecular observations of the illness. She is using case-specific neuronal cultures to address molecular and cellular questions. She leads a five-site Biomarker Consortium (BSNIP) studying psychosis. Her ultimate goal is to use the alterations in in vivo imaging, postmortem molecular changes, and cultured neuronal characteristics as biomarkers and targets for identifying animal models of disease and novel active pharmaceuticals for psychosis.
Self-knowledge in Schizophrenia: Importance, Characteristics, and Treatment

Philip D. Harvey, Ph.D.
Leonard M. Miller School of Medicine, University of Miami
VA Medical Center, Miami
BBRF Scientific Council
Dr. Harvey’s research has focused on reducing the disability associated with schizophrenia by trying to advance the assessment and treatment of cognitive impairments, functional skills, and negative symptoms. He leads a large-scale initiative to understand the genomic underpinnings of cognition and disability, in a collaborative study funded by the U.S. Department of Veterans Affairs. An additional focus of his recent research has been on challenges in self-assessment in schizophrenia.

In his presentation, Dr. Harvey will note that many of the symptoms of schizophrenia arise from misperception: hearing voices that are not actually there and believing things that cannot possibly be true. A critical related area is mis-estimation of cognitive and functional abilities. This domain of misperception has important implications for everyday functioning: those unable to judge their abilities can underestimate, concluding that things within their grasp are impossible, or overestimate, having extraordinary confidence in their skills and declining assistance. Both can lead to a mismatch between self-perceptions and real potential. This is not due to random responding, lack of motivation to accurately self-assess, or inability to remember, Dr. Harvey says. People with schizophrenia have an extraordinary ability to remember information that is self-generated, hence the tenacity of delusional beliefs. He will discuss his recently developed a smartphone application targeting self-assessment and an increased focus on strategies aimed at increasing both accuracy in self-assessment and better task performance.

“I am honored and thrilled to receive the Lieber Prize. Previous winners are legendary figures in schizophrenia research and I could not be happier to be compared to them. Connie and Steve Lieber are the most important philanthropic figures in the history of research on serious mental illness and I have been honored to support their efforts and to serve on the BBRF Scientific Council.”
Social Cognition and Social Difficulties in Schizophrenia

Amy E. Pinkham, Ph.D.
The University of Texas at Dallas
Most people with schizophrenia experience significant social difficulties. Dr. Pinkham’s work attempts to identify factors that contribute to these social problems, focusing on social cognition, or how we think about other people. Her work demonstrates that individuals with schizophrenia display deficits or biases in multiple domains of social cognition and that abnormal functioning of the brain networks that support social cognitive processing likely contribute to these deficits. Her work has consistently shown that social cognition is an independent contributor to social dysfunction in schizophrenia, validating it as a promising treatment target.

In her talk, Dr. Pinkham will explain that social cognition is a broad construct encompassing the ways in which individuals perceive, process, and use information about other people. She will define social cognition and review what we have learned about social cognitive impairments in schizophrenia spectrum illnesses. Emphasis will be placed on the evidence demonstrating that social cognition is a critical contributor to functional outcomes. Potential neural mechanisms of social cognitive impairment in schizophrenia will also be discussed.

“I am tremendously honored to be selected as this year’s recipient of the Maltz Prize and to join the list of amazing researchers who have previously received this award. I would like to thank BBRF for recognizing the contributions of schizophrenia researchers and specifically for validating work on social cognition that aims to improve the day-to-day lives of individuals with schizophrenia.”
Does Obesity Metastasize to the Brain: Implications for Clinical Care and Identifying the Causes and Cures for Persons Living with Bipolar Disorder

Roger S. McIntyre, M.D., FRCPC
University of Toronto
2007 BBRF Independent Investigator
Dr. McIntyre is involved in multiple research endeavors which primarily aim to characterize the phenomenology and neurobiology of mood disorders, and to develop novel therapeutics. He has been especially interested in identifying innovative, rapid acting psychotropic treatments. Dr. McIntyre’s research has also extended into public health and implementation research at the population-based level.

In his talk Dr. McIntyre will note that people who are living with bipolar disorder are more likely to be affected by Type II Diabetes, obesity, and heart disease when compared to persons in the general population. This happens for many reasons, including research suggesting that the underlying cause of bipolar disorder may overlap with the causes of these medical conditions. He will suggest that from a clinical perspective, it is important to prevent and treat these conditions as they are the single largest cause of loss of life in persons living with bipolar disorder. Research conducted during the past two decades suggests abnormalities in insulin signaling and inflammation, contributory to metabolic problems and heart disease, may also contribute to causation in bipolar disorder. Such findings may indicate a new way to treat and prevent bipolar disorder.

“Winning the Colvin Prize is incredibly humbling and a palpable and vivid reminder to me of the immeasurable privilege that has been given to me by people who live with bipolar disorder. Their stories have ignited in me the curiosity and inspiration to discover what causes bipolar disorder and what we can do as advocates and researchers to alleviate the suffering and give people their lives back.”
The Long Shadow of Childhood Adversity: Implications for Children’s Brain and Behavioral Development

Katie McLaughlin, Ph.D.
University of Oregon
2016 Klerman Prizewinner for Exceptional Clinical Research
2013 Young Investigator
Dr. McLaughlin is a clinical psychologist with interests in how environmental experience influences brain and behavioral development in children and adolescents. Her research examines how adverse environmental experiences shape emotional, cognitive, and neurobiological development throughout childhood and adolescence. Specifically, she seeks to understand how experiences of stress, trauma, and social disadvantage alter developmental processes in ways that increase risk for psychopathology.

In her presentation, Dr. McLaughlin will explain that children who have experienced environmental adversity—such as abuse, neglect, community violence, or chronic poverty—are at markedly elevated risk for developing mental health problems. What is less clear is how and why adverse early experiences exert such a profound influence on children’s mental health. This talk will summarize her program of research demonstrating that adversity can have a profound impact on brain development, particularly when these experiences occur during periods of heightened brain plasticity early in life when brain circuits are particularly likely to be sculpted by environmental experiences. She will also share recent findings suggesting that early-life adversity can accelerate the pace of biological aging across numerous bodily systems, contributing to elevated risk for a host of physical and mental health problems. She believes identifying developmental processes that are disrupted by adverse early environments is the key to developing better early interventions to prevent the onset of mental health problems in children who have experienced adversity.

“I am humbled and honored to receive this recognition and am incredibly grateful for BBRF’s support of my work on the consequences of childhood adversity.”
The Human Amygdala, Threat, and Anxiety: Translational Progress and Challenges

Elizabeth A. Phelps, Ph.D.
Harvard University
Dr. Phelps’ laboratory has earned acclaim for its groundbreaking research on the neurobiology of human emotion, critically extending animal models of threat learning to the neural systems of anxiety and related disorders. The primary inspiration behind their research is the observation that emotions color our lives, and even subtle, everyday variations in our emotional experience can alter our thoughts and actions. By uncovering the impact of emotion and affect on cognition, Dr. Phelps and colleagues aim to enhance our understanding of cognition broadly and provide insights into social processes and psychological disorders.

Studies of the neurobiology of threat processing in rodents have formed the basis of our understanding of fear and anxiety in the human brain, and much of this research has focused on the central role of the amygdala. Dr. Phelps’ talk will highlight successes and failures in translating these neurobiological findings from animal models to humans. First, she will present research examining if findings from simple, associative threat learning in rodents translate to the complex learning situations typical of everyday human experience. Then she will highlight efforts and challenges in using insights from this research to inform novel treatments for anxiety-related disorders. She will conclude by commenting on how we might more effectively build on neurobiological findings of threat processing in animal models to enhance the treatment of anxiety-related disorders.

“Dr. Goldman-Rakic was an inspiration to me when we overlapped at Yale University early in my career. Watching her expertly navigate the male-dominated world of neuroscience with her strength, talent, and grace provided a roadmap for me as a young scientist. For these reasons, and many more, I am especially honored by this award.”
Minds Matter: Mental Health and Intellectual Disabilities

Károly Mirnics, M.D., Ph.D.

Hattie B. Munroe Professor of Psychiatry, Biochemistry & Molecular Biology
University of Nebraska Medical Center
Director, Munroe-Meyer Institute
BBRF Scientific Council
2002 BBRF Young Investigator Member, Board of Directors, Special Olympics International
Dr. Mirnics earned his medical degree from the University of Novi Sad (Yugoslavia) School of Medicine in 1986 and his Ph.D. from Semmelweis University in Budapest, Hungary, in 2010. In 2010, he was named James G. Blakemore Professor of Psychiatry and served as the departmental vice chair for research and associate director of the Vanderbilt Kennedy Center, the oldest intellectual and developmental disabilities research center in the United States. In 2016, he joined the University of Nebraska Medical Center (UNMC) family, where he became the fourth director of the Munroe-Meyer Institute for Genetics and Rehabilitation. Dr. Mirnics has a broad background in molecular neurobiology of brain diseases. His research group is actively pursuing projects that include transcriptome changes across human brain diseases, animal models of neurodevelopmental and psychiatric disorders, effects of maternal immune activation and environment on gene expression, and neuroprotection by activity.

In his presentation Dr. Mirnics will note that individuals with intellectual disabilities have a higher prevalence of mental health conditions when compared to the general population. Often overlooked, their challenges are compounded by limited access to appropriate care and resources. He will suggest that activities by Special Olympics, especially through the Special Olympics Healthy Athletes program, are leading to improved mental health including, but not limited to, reduction in feelings of isolation, anxiety and depression.

Special Olympics International has had a profound and lasting humanitarian impact around the world through its dedication to providing year-round sports training and athletic competition for children and adults with intellectual disabilities. It is recognized for its global presence in making sports activities available to millions of children and adults worldwide.
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42 Chairs of Psychiatry & Neuroscience Departments
15 National Institute of Health Chiefs & Directors
7 Members of the National Academy of Sciences
3 Recipients of the National Medal of Science
2 Former Directors of the National Institute of Mental Health and the current Director
1 Nobel Prize Winner

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Dr. Herbert Pardes  Constance Lieber  Stephen Lieber

In recognition of Dr. Herbert Pardes, Constance and Stephen Lieber for their remarkable dedication and collaboration in the advancement of mental health research and Brain and Behavior Research Foundation.

VIP SPONSOR

Rogers Research Center
Helping Children & Adolescents with Emotional Problems
A Q&A with Daniel S. Pine, M.D.

Daniel S. Pine, M.D.
Chief, Emotion and Development Branch
Chief, Child and Adolescent Research in the Mood and Anxiety Disorders Program
National Institute of Mental Health (NIMH)

Thursday, November 30, 2023
7:00pm EDT, 4:00pm PDT via Zoom

Teachers, school counselors and other educational professionals are on the front line of dealing with kids with mental health issues and can often be among some of the first people to see that a child is struggling. Enhancing the potential for early intervention is important and because educational professionals have relationships with students and their families, they are often the people who guide students and their families to resources. As educational professionals learn more about mental health issues, their ability to make appropriate referrals for evaluation will improve for students and their families.

This conversation will share with parents and educators the key symptoms and attributes associated with pediatric mood and anxiety disorders. BBRF President & CEO, Dr. Jeffrey Borenstein and Dr. Daniel Pine will discuss novel insights for improving treatment and offer tools to help families and educators address how best to help children and teens with emotional issues. The webinar will also highlight particularly pressing questions in research on pediatric mood and anxiety disorders while outlining an agenda for future research.

Registration will be required for this FREE event.
REGISTER HERE: https://us02web.zoom.us/webinar/register/WN_eM3jSNilQK6Jl3hptW0sww

The program will be available on the BBRF website in early December for anyone who is unable to attend.
The group includes:

- 48 Members of the National Academy of Medicine
- 43 Chairs of Psychiatry & Neuroscience Departments
- 15 National Institutes of Health Chiefs & Directors
- 7 Members of the National Academy of Sciences
- 3 Recipients of the National Medal of Science
- 2 Directors of the National Institute of Mental Health
- 1 Nobel Prize Winner

BY THE NUMBERS SINCE 1987

AWARDED TO SCIENTISTS

$450+ MILLION

GRANTS

6,500

GRANTEEES

5,400

UNIVERSITIES & MEDICAL CENTERS

599

COUNTRIES, INCLUDING THE U.S.

41

194 ACTIVE SCIENTIFIC COUNCIL MEMBERS

The all-volunteer BBRF Scientific Council is composed of leading experts across disciplines in brain & behavior research who review grant applications and recommend the most promising ideas to fund.
We are happy to share the wonderful news that we have met the goal and achieved the $1 Million Challenge Match! Thank you to all of our generous donors for helping us meet this milestone.

In addition, we thank the same two family foundations that are so passionate about BBRF’s vital mission as they have generously offered TO INCREASE THEIR MATCH BY AN ADDITIONAL $1 MILLION to help accelerate brain research as further scientific advancements are still needed.

Contributions will be matched from:

- New donors
- Donors who have lapsed, but make a 2023 contribution
- Donors who increase their 2023 contribution
  (the increased amount is matched)
THE BRAIN & BEHAVIOR RESEARCH FOUNDATION
is committed to awarding research grants to develop improved
treatments, cures, and methods of prevention for mental illness.
Since 1987, the Foundation has awarded more than $450 million to
fund more than 5,400 leading scientists around the world, which
has led to over $4 billion in additional funding. 100% of every dollar
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