

Brain & Behavior Research Foundation

INTERNATIONAL AWARDS DINNER 2018

FRIDAY, OCTOBER 26th
The Pierre

Celebrating our
Pardes Humanitarian Prizewinners and
Outstanding Achievement Prizewinners

WELCOME



Welcome to our 2018 International Awards Dinner.

This year's Pardes Humanitarian Prize in Mental Health honors Judge Steven Leifman, an associate administrative judge in Miami-Dade County, who has been at the forefront of a public policy movement to reduce the number of people with mental illness in the criminal justice system. He is being honored for developing innovative approaches that offer treatment, support recovery, as well as enhance public safety.

The 2018 Honorary Pardes Humanitarian Prize in Mental Health is being awarded to Bob Wright and the late Suzanne Wright, the founders of Autism Speaks, for their unparalleled leadership in advancing autism research and increasing understanding and acceptance of people with autism spectrum disorder.

Bestowed annually since 2014, the Pardes Prize recognizes a person(s) or organization whose humanitarian work is transformative and of great magnitude, changing the lives and bringing the joy of living to those facing challenges to mental health. The Prize focuses public attention on the burden of mental illness on individuals and on society, and the urgent need to expand and enhance mental health services both in the developed world and in developing countries. The Prize was named in honor of Dr. Herbert Pardes, the first recipient of the award.

One of Dr. Pardes' many contributions to our field has been his founding and continued leadership of the Brain & Behavior Research Foundation's Scientific Council, a volunteer group of 181 pre-eminent mental health professionals across disciplines in brain and behavior research. Each year the Scientific Council is responsible for selecting the Foundation's Young Investigator, Independent Investigator and Distinguished Investigator Grantees. The Outstanding Achievement Prizewinners are selected by special committees of the Foundation's Scientific Council.

Tonight 10 innovative and exceptional scientists—many of them Foundation grantees—will also be honored for their contributions to the advancement of our understanding and treatment of anxiety, autism, bipolar disorder, psychosis, and schizophrenia. Their work is distinguished by their use of cutting-edge technology and a devotion to finding personalized therapies that will improve our care for those living with mental illness, as well as seeking preventive and diagnostic tools for the future.

We are delighted you are here to celebrate the progress being made in brain and behavior research. Our shared commitment to scientific advancement will change what it means to live with mental illness and will help pave the way for more people to live full, happy and productive lives.

Thank you for your ongoing support. Enjoy the evening!

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeff Borenstein'. The signature is fluid and cursive, with the first name 'Jeff' and last name 'Borenstein' clearly visible.

Jeffrey Borenstein, M.D.
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PARDES HUMANITARIAN PRIZE

IN MENTAL HEALTH



**DR. HERBERT
PARDES**

THIS INTERNATIONAL PRIZE RECOGNIZES

a physician, scientist, public citizen or organization whose extraordinary contribution has made a profound impact on advancing the understanding of mental health and providing hope and healing for people who are living with mental illness. Established in 2014 and awarded annually, the Pardes Humanitarian Prize is named in honor of Dr. Herbert Pardes, the first recipient of the award.

The recipient of the Prize is chosen by a distinguished international Selection Committee from nominations solicited worldwide and receives an honorarium. The Pardes Humanitarian Prize focuses public attention on the burden of mental illness on individuals and society and the urgent need to expand and enhance mental health services in the United States and globally.

No one has better described the goals of this international Prize than Dr. Pardes himself: "Mental illness is the largest single health challenge in the world. For many decades society has recognized major contributions in basic science, clinical research and clinical care in the non-psychiatric health fields. The Pardes Humanitarian Prize has been established to honor individuals who comprehensively care, teach, investigate, work, and passionately advocate for improving the mental health of society, and who have had a powerful impact on reducing the pain inflicted by psychiatric illness."

The Pardes Humanitarian Prize in Mental Health is sponsored in part by Janssen Research & Development, LLC, one of the Janssen Pharmaceutical Companies of Johnson & Johnson.

PARDES HUMANITARIAN PRIZE

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Rendering of The Pardes Humanitarian Prize medal
featuring Hygeia, Goddess of Health.

PARDES HUMANITARIAN PRIZE

IN MENTAL HEALTH



AWARDED TO
**JUDGE STEVEN
LEIFMAN**

JUDGE STEVEN LEIFMAN IS A NATIONAL

leader in solving the complex and costly problem of people with untreated mental illnesses involved in the criminal justice system. In 2000, he launched a pioneering initiative in Miami-Dade County called the Eleventh Judicial Circuit Criminal Mental Health Project, which steers people with mental illnesses who do not pose significant threats to public safety away from the criminal justice system and into community-based treatment. He also started a Crisis Intervention Team program in Miami-Dade which teaches law enforcement officials to recognize the signs and symptoms of mental illness, how to de-escalate potentially dangerous situations, and where to take individuals in crisis rather than arresting them.

As a result, arrests in the county decreased from 118,000 to 56,000 annually and recidivism dropped by almost 50 percent. The jail population plunged from 7,300 to 4,000 inmates, closing a jail and generating \$12 million in annual savings. Crime and burdens on taxpayers have been reduced and public health, safety, and recovery outcomes have improved.

Nationwide, according to a survey by the National Alliance on Mental Illness, 40 percent of people with serious mental illnesses have been arrested one or more times. An estimated 1.8 million people with serious mental illness are booked into jails annually, and on any given day 500,000 people with mental illnesses are incarcerated in jails and prisons.

Judge Leifman has been a passionate leader and unwavering agent of change in the shift away from the devastating and unproductive incarceration of people with mental illness. He has shown us how to use our resources to reverse the costly prison recidivism that strips people of their dignity and threatens public safety.

Judge Leifman is an extraordinary humanitarian, innovator, and transformative figure whose steadfast advocacy is changing the lives of people with mental illness and their families, and impacting our larger society.

For his extraordinary accomplishments, the depth of his compassion and the stunning power of his commitment to people suffering from the challenge of mental illness, we honor Judge Steven Leifman.

HONORARY PARDES HUMANITARIAN PRIZE IN MENTAL HEALTH

SUZANNE AND BOB WRIGHT HAVE BEEN

world leaders in autism advocacy. Their brave and tenacious leadership has created a rallying cry for concrete and larger-scale research, care, education, treatment and national and global awareness.

The couple co-founded Autism Speaks in 2005, inspired by their grandson, Christian, who was diagnosed with autism. Guided by the Wrights' leadership and vision, Autism Speaks has grown into the world's largest autism science and advocacy organization. The Wrights helped raise \$3 billion in funding for groundbreaking science, effective advocacy and extensive family services, which improve lives of people and families affected by autism both now and into the future.

The Centers for Disease Control and Prevention (CDC) estimates autism's prevalence is 1 in 59 children in the United States. This includes 1 in 37 boys and 1 in 151 girls.

The Wrights spearheaded such signature initiatives as new federal laws ensuring financial security for people with disabilities and insurance reform for autism care; a public service campaign credited with educating countless families about the early signs of autism; World Autism Awareness Day, sanctioned by the United Nations; and the Light It Up Blue awareness campaign, now involving more than 150 countries.

Their efforts earned international recognition, including a spot in the 2008 *Time* 100 "Heroes and Pioneers" for their commitment to global autism advocacy. At the time of Suzanne's death in 2016 of pancreatic cancer, the Wrights had been married for 48 years.



Thanks to the extraordinary vision of Bob and Suzanne Wright, scientists have been able to develop a better understanding of the structures of autism, which are leading to helpful interventions. There are evolving trends in research that point to the interconnectivity between autism and other medical conditions.

These and other research findings, as well as the growing public awareness of what autism is, and isn't, are directly attributable to their pioneering leadership as philanthropists, catalysts for change, and humanitarians.

For their unparalleled leadership in advancing autism research and increasing understanding and acceptance of people with autism spectrum disorder, we honor Bob and the late Suzanne Wright.

AWARDED TO
**SUZANNE AND
BOB WRIGHT**

OUTSTANDING ACHIEVEMENT PRIZES

FOR 2018

Tonight we celebrate the transformative power of neuroscience and psychiatric research to improve the lives of those living with mental illness. Ten exceptional scientists, selected by the Brain & Behavior Research Foundation's Scientific Council, will be honored for their outstanding lifetime achievements in brain and behavior science.

The Outstanding Achievement Prizes are awarded annually and include the:

Lieber Prize for Schizophrenia Research

Established in 1987 by Constance and Stephen Lieber to bring public recognition to the outstanding discoveries being made in schizophrenia research. This prize carries an award of \$50,000.

Maltz Prize for Innovative & Promising Schizophrenia Research

Established in 2004, the prize was formerly known as the Baer Prize and was renamed in 2016 in honor of Board Members Milton and Tamar Maltz. The Maltz Prize provides \$40,000 to an investigator who has undertaken innovative and promising research in schizophrenia. Winners of this prize are selected by the Lieber Prize recipient(s) of the same year.

Colvin Prize for Mood Disorders Research

Established in 1993, this prize was formerly known under the successive titles of the Selo Prize, Falcone Prize, and Bipolar Mood Disorders Prize. The prize was renamed in 2012 in honor of the late Oliver D. Colvin, Jr., a great benefactor of the Foundation who left the largest single contribution in the Foundation's history. This prize carries an award of \$50,000.

Ruane Prize for Childhood & Adolescent Psychiatric Research

This prize was initiated in 2000 by philanthropists Joy and William Ruane to recognize important advances in understanding and treatment of early-onset brain and behavior disorders. This prize carries an award of \$50,000.

Goldman-Rakic Prize for Cognitive Neuroscience

This prize was created by Constance and Stephen Lieber in memory of Patricia Goldman-Rakic, Ph.D., a distinguished neuroscientist renowned for discoveries about the brain's frontal lobe, after her tragic death in an automobile accident in 2003. The prize carries an award of \$40,000.

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LIEBER PRIZE

FOR OUTSTANDING ACHIEVEMENT IN SCHIZOPHRENIA RESEARCH



Anissa Abi-Dargham, M.D.

The Lourie Endowed Chair in Psychiatry
Professor of Psychiatry and Radiology
Director, Multi-Modal Translational Imaging Lab
Vice Chair for Research, Department of Psychiatry
Associate Dean for Clinical and Translational Science
Stony Brook University School of Medicine

- BBRF Scientific Council Member
- 1993, 1997 Young Investigator
- 2000 Independent Investigator
- 2002 Klerman Award Honorable Mention
- 2008 Distinguished Investigator

"Connie and Stephen Lieber have had a transformative impact on research in schizophrenia. Their vision and generosity allowed the work of many scientists, including my own, to be done. To win an award attached to their name is a very special honor. It means to me that I have contributed to our mission as a community of scientists, which is to elucidate the mystery of schizophrenia in order to one day achieve a cure. The Prize gives me renewed confidence and faith to continue our work hoping that this day is getting closer."

Anissa Abi-Dargham, M.D., is Professor of Psychiatry and Radiology, a recipient of The Lourie Endowed Chair in Psychiatry, Vice Chair for Research, and Associate Dean for Clinical and Translational Science at the Stony Brook University School of Medicine. She is also a member of the National Academy of Medicine and a Special Lecturer at Columbia University in New York, where she spent 22 years prior to her move to Stony Brook University in 2016.

Dr. Abi-Dargham is an internationally recognized leader in use of molecular imaging of the human brain to study schizophrenia and its comorbidity with addiction. This research has resulted in findings describing the complex alterations of dopamine transmission in schizophrenia and their relationship to clinical symptoms, cognition, and response to treatment, as well as their interrelatedness to glutamate dysfunction.

Dr. Abi-Dargham attended medical school at St. Joseph University in Beirut and was a psychiatric resident and chief resident at the University of Tennessee. A postdoctoral fellow in brain imaging at Yale University, she joined the Yale faculty as an assistant professor in 1992. In 1996 she joined the faculty at Columbia University and the New York State Psychiatric Institute and was named a professor of clinical psychiatry and radiology in 2003. Dr. Abi-Dargham has over 165 publications and is recognized internationally as an expert in the area of Imaging and Psychopharmacology. She is associate editor of *Neuropsychopharmacology* and deputy editor of *Biological Psychiatry*.

"Dr. Anissa Abi-Dargham has conducted pioneering research on the pathophysiology of schizophrenia. Her research is distinguished by the use of rigorous and validated imaging methods to test specific hypotheses. She has made seminal discoveries in the field of schizophrenia by uncovering alterations in dopamine transmission in specific areas of the brain and has demonstrated the fundamental impact of dopaminergic alterations on the neurocircuitry involving striatal connectivity to the rest of the brain."

—William E. Bunney, Jr., M.D., Chair of the Lieber Prize Selection Committee

LIEBER PRIZE

FOR OUTSTANDING ACHIEVEMENT IN SCHIZOPHRENIA RESEARCH



Schahram Akbarian, M.D., Ph.D.

Professor of Psychiatry and Neuroscience
Icahn School of Medicine at Mount Sinai

- BBRF Scientific Council Member
- 1993, 2000 Young Investigator
- 1997 Klerman Award Winner
- 2012 Distinguished Investigator

"I feel deeply honored by the Lieber award. I started my journey towards understanding genome organization and function in the human brain 25 years ago, and I am pleased to report that during all these years, whenever we as a field succeeded in pushing the frontier in human brain research, much of the early innovation (the 'seed') was made possible with the support from BBRF."

Schahram Akbarian, M.D., Ph.D., is Professor of Psychiatry and Neuroscience at the Icahn School of Medicine at Mount Sinai in New York, where he is Chief of the Division of Psychiatric Epigenomics. He studies genome organization and genome function, including gene expression, in brain cells. His laboratory is exploring epigenetic regulation of gene expression in order to identify epigenetic drug targets and novel treatment avenues for psychosis, depression and other psychiatric disease.

Dr. Akbarian is an authority on gene expression and epigenetic mechanisms in the context of major brain and behavior disorders. He has studied chemical modifications of histones, small proteins that are involved in packaging the DNA of our genome. Epigenetic modifications of histones have an impact on gene expression. By joining the PsychENCODE consortium sponsored by the National Institute of Mental Health, his team is now mapping on a genome-wide scale the epigenetic profiles of

prefrontal cortex neurons in brain specimens from several hundred subjects diagnosed with schizophrenia, which will be compared with those from specimens from controls.

Dr. Akbarian studied medicine and conducted his thesis work at the Freie Universität Berlin, Germany. He is a board certified psychiatrist and molecular neuroscientist who trained at the Massachusetts General Hospital in Boston, the Whitehead Institute for Biomedical Research in Cambridge, and the University of California at Irvine. In 2002, he joined the University of Massachusetts Medical School in Worcester where he established a research program in psychiatric epigenetics and served as the Director of the Brudnick Neuropsychiatric Research Institute. Presently, he heads the Division of Psychiatric Epigenomics in the Departments of Psychiatry and Neuroscience at Mount Sinai School of Medicine.

"Dr. Schahram Akbarian has led the field nationally and internationally in applying the most advanced state-of-the-art molecular tools to understanding abnormalities in the brains of schizophrenic patients. He has discovered dysregulated GABAergic gene expression, specific epigenetic marks, and developed cell type-specific higher order chromatin and spatial 3D genome mapping in schizophrenia. Dr. Akbarian's major innovative investigations continue to advance research in schizophrenia."

—William E. Bunney, Jr., M.D., Chair of the Lieber Prize Selection Committee

MALTZ PRIZE

FOR INNOVATIVE & PROMISING SCHIZOPHRENIA RESEARCH



Kristen Brennand, Ph.D.

Associate Professor
Departments of Genetics and Genomics,
Neuroscience, and Psychiatry
Icahn School of Medicine at Mount Sinai

- 2012 Young Investigator
- 2016 Independent Investigator

"This is a recognition not just of the work ongoing in my laboratory, but also a strong statement from the leading non-profit funders of psychiatric research, indicating a growing appreciation of the value of stem cell-based research in uncovering and understanding the complex interplay of genetic variants underlying risk for psychiatric disease."

Kristen Brennand, Ph.D., is a biologist who has pioneered stem cell studies in the field of schizophrenia research. She is an Associate Professor of Genetics and Genomics in the Neuroscience and Psychiatry department at the Icahn School of Medicine at Mount Sinai in New York. She trained in developmental and stem cell biology at Harvard University and in neurobiology during her post-doctoral research at the Salk Institute for Biological Studies. By combining expertise in stem cell biology and neurobiology, she has helped to pioneer a new approach in the study of psychiatric disease.

Due partly to the lack of live patient material for study, the cellular and molecular mechanisms in brain cells associated with the initiation and progression of schizophrenia remain unknown.

Postmortem studies of the brain tissue of deceased patients typically reveal defects in mature neurons, such as reduced neuronal size and reduced density of small features called dendritic spines that enable neurons to communicate. These abnormalities have

been observed in neurons of the prefrontal cortex and hippocampus, in addition to abnormalities of neuronal organization, particularly in the cortex. Yet the processes that result in these changes are not understood in the context of the living, developing brain.

Dr. Brennand has obtained skin samples from well-characterized cohorts of children and adults with schizophrenia as well as from healthy controls. Her team has reprogrammed these skin cells so that they revert to an earlier developmental state in which they acquire the ability of stem cells to develop into other cell types. Called human induced pluripotent stem cells (hiPSCs), they are directed to differentiate into neural cells and their progenitors. By identifying differences between healthy and diseased neurons, Dr. Brennand and colleagues hope to clarify the mechanisms that result in schizophrenia and to screen for new drugs with which to reverse the cellular defects contributing to disease.

"Dr. Brennand's work is critically deepening our mechanistic insights into how specific types of DNA mutations or sequence variants contribute to the neurobiology of schizophrenia. The long-term importance of such work can hardly be underestimated, given that schizophrenia is in genetic terms extremely heterogeneous and complex, while at the same time access to the diseased organ, the brain, is limited."

—Schahram Akbarian, M.D., Ph.D., 2018 recipient of the Lieber Prize

MALTZ PRIZE

FOR INNOVATIVE & PROMISING SCHIZOPHRENIA RESEARCH



Guillermo Horga, M.D., Ph.D.

Assistant Professor of Clinical Psychiatry
New York State Psychiatric Institute,
Columbia University Medical Center

"Receiving the 2018 Brain & Behavior Research Foundation Maltz Prize for Innovative and Promising Schizophrenia Research is a great honor for me. BBRF provides critical support to develop innovative and risky projects, which I believe are absolutely essential for advancing our understanding of mental illness. This support is particularly important for junior investigators to launch their research programs and push the field forward. In my case, the Maltz Prize represents an immensely gratifying validation of my research trajectory and provides me with invaluable support to continue my research into the neurocomputational mechanisms of psychosis."

Guillermo Horga, M.D., Ph.D., is an Assistant Professor of Clinical Psychiatry at the New York State Psychiatric Institute, Columbia University Medical Center. He received his M.D. degree from Miguel Hernandez University, Spain, and his Ph.D. in experimental neuroscience from the University of Barcelona, Spain. Following his residency training in Psychiatry, Dr. Horga completed a Postdoctoral Research Fellowship at Columbia University. He worked in the Division of Translational Imaging under the mentorship of Dr. Anissa Abi-Dargham, M.D., before starting his own laboratory in 2016.

Dr. Horga's research focuses on the neurobiological and computational mechanisms of psychotic symptoms in schizophrenia and of related cognitive functions in health, including sensory and reward-based learning and decision-making. To understand these neural mechanisms, he uses behavioral paradigms and computational tools in combination with a variety of functional, structural, and molecular in vivo neuroimaging techniques—mainly functional Magnetic Resonance Imaging [fMRI] and Positron

Emission Tomography [PET]—in healthy humans and patients with psychotic disorders.

His early research showed that voice-sensitive regions of the auditory cortex have increased activity while patients experience auditory hallucinations. This increase in neural activity was further associated with abnormal learning signals, suggesting that a learning dysfunction could lead to faulty sensory attenuation and hallucinatory percepts. Dr. Horga's research has also uncovered that abnormal functional connectivity between the striatum and associative cortical regions, including parts of the auditory cortex, relate to psychosis and to dopamine receptor density.

His current projects aim at describing the relationships between dopamine abnormalities and downstream cortical dysfunctions associated with specific symptoms of psychosis and to formalize these mechanisms in a computational model of psychosis. He also seeks to develop neuroimaging biomarkers that can be used to predict clinically relevant outcomes and guide clinical decision-making.

"The work of Dr. Horga is mechanistic and rigorous, bringing together multiple technologies to address important and clinically relevant questions. I have no doubt that he will have a major impact on the field in the coming few years."

—Anissa Abi-Dargham, M.D., 2018 recipient of the Lieber Prize

COLVIN PRIZE

FOR OUTSTANDING ACHIEVEMENT IN MOOD DISORDERS RESEARCH



**Benjamin I. Goldstein, M.D., Ph.D.,
F.R.C.P.C.**

Director, Centre for Youth Bipolar Disorder
Sunnybrook Health Sciences Centre

Professor of Psychiatry and Pharmacology
University of Toronto Faculty of Medicine

- 2007 Young Investigator
- 2014 Independent Investigator

"It is a tremendous honor to receive the Colvin Prize. This is a precious moment of validation—my team's effort is making an impact and the focus of our research is important. I have such great respect and admiration for the prior winners and am determined to be a positive ambassador for this prize. Sharing the Colvin Prize with my colleague Dr. Lakshmi Yatham provides an opportunity to reflect on how proud I am of Canada's research leadership in the area of bipolar disorder."

Dr. Benjamin I. Goldstein is Professor of Psychiatry and Pharmacology at the University of Toronto Faculty of Medicine, Adjunct Professor of Psychiatry at the University of Pittsburgh, and Director of the Centre for Youth Bipolar Disorder at Sunnybrook Health Sciences Centre in Toronto. He completed his undergraduate studies at the University of Pennsylvania, medical school at the University of Calgary, and Ph.D. and psychiatric training at the University of Toronto. He currently serves as Chair of the Pediatric Task Force and Chair of the Vascular Task Force of the International Society for Bipolar Disorders. Dr. Goldstein has authored over 150 scientific articles, and has received international awards for his research.

Dr. Goldstein's efforts focus on teenagers with bipolar disorder and those who carry familial risk for it. Bipolar disorder is the fourth most disabling medical

condition among adolescents worldwide. Adolescent-onset bipolar disorder can be a particularly severe variant of this illness, underscoring the need for early identification and treatment. Bipolar disorder is also associated with greatly increased risk of premature cardiovascular disease. Dr. Goldstein's research has helped pave the way to what may be a paradigm shift in the understanding of bipolar disorder as a systemic vascular disease. His research seeks to identify the shared biological factors underlying the links between bipolar disorder and cardiovascular disease, and to examine the impact of novel pharmacological and behavioral treatments on psychiatric and cardiovascular outcomes among youth with bipolar disorder. These lines of research offer hope of reduced stigma, earlier identification and improved outcomes for adolescents with bipolar disorder.

"Dr. Goldstein's devotion to improving the lives of young patients with bipolar disorder has fueled his desire to find answers for the underlying biological mechanisms that drive the illness and to find new and better clinical treatments. He has brought to the forefront the novel idea of a shared biology between early-onset bipolar disorder with cardiovascular disease. Dr. Goldstein's unique research on medical comorbidity and peripheral biomarkers strategically interweaves multiple disciplines and diverse investigative leaders."

—Robert M. Post, M.D., Chair of the Colvin Prize Selection Committee

COLVIN PRIZE

FOR OUTSTANDING ACHIEVEMENT IN MOOD DISORDERS RESEARCH



Lakshmi N. Yatham, M.B.B.S.,
F.R.C.P.C., M.R.C.Psych (UK), MBA (Exec)

Professor of Psychiatry and Director,
Institute of Mental Health
University of British Columbia

Regional Head, Department of Psychiatry
Regional Program Medical Director,
Mental Health and Addictions
Vancouver Coastal Health

- 1996 Young Investigator
- 1999, 2003 Independent Investigator

"The Young Investigator Award I received from BBRF in 1996 was instrumental in launching my research career. I am incredibly honored that the same organization has recognized my research contributions as worthy of the Colvin Prize, which I believe is the most prestigious award in mood disorders in the world. This will continue to fuel my passion for research in advancing neurobiology and the treatment of bipolar disorder."

Lakshmi N. Yatham is a professor in the Department of Psychiatry and Director of the Institute of Mental Health at the University of British Columbia in Vancouver. He is also Regional Head of Psychiatry and Regional Program Medical Director for Mental Health and Addictions at Vancouver Coastal Health and Providence Healthcare. He co-led the development of Canadian guidelines for treatment of bipolar disorder in 1997, which have been continuously revised and republished. He has chaired the bipolar group of the Canadian Network for Mood and Anxiety Treatments (CANMAT) and has held leadership positions in several national and international professional organizations.

Dr. Yatham's major areas of research interest include neurobiology and treatment of bipolar disorder (BD). His research has contributed to the identification of novel targets for treatment development. He has been a major contributor to international clinical trials that have led to the approval of several new treatments for BD over the last two decades. His

study demonstrating that continuation of atypical antipsychotic adjunctive therapy is beneficial in reducing relapse rates for 6 months after remission of mania, but not beyond, has helped reduce the adverse event burden for patients and saved health-care dollars.

Dr. Yatham has been a leader in neurocognition research in BD, spearheading the development of an International Society for Bipolar Disorders Neurocognitive Battery for assessing cognitive function in BD and developing innovative clinical trial methodology to test the efficacy of treatments for improving cognition. In a proof-of-concept trial, he has provided evidence for the efficacy of the psychotropic agent lurasidone in improving cognition in euthymic bipolar patients with pre-existing cognitive deficits. His program of research targeting first-episode mania has demonstrated the benefits of early intervention in improving clinical and cognitive outcomes and halting the progression of brain changes in BD.

"Through Dr. Yatham's research and diverse leadership roles, he has made many tremendous contributions to the field of bipolar disorder, including advancing understanding of the neurobiology, course, and outcome of the disease, improving treatments, promoting guideline-based clinical care, and creating research mentoring opportunities for younger researchers from around the world to facilitate their growth as future leaders."

—Robert M. Post, M.D., Chair of the Colvin Prize Selection Committee

RUANE PRIZE

FOR OUTSTANDING ACHIEVEMENT IN CHILD & ADOLESCENT PSYCHIATRIC RESEARCH



Ami Klin, Ph.D.

Director,
Marcus Autism Center at Children's Healthcare
of Atlanta

Georgia Research Alliance Eminent Scholar
Professor & Chief,
Division of Autism & Related Disabilities,
Department of Pediatrics
Emory University School of Medicine & Emory Center
for Translational Social Neuroscience

"It is an incredible honor to receive this prize, particularly given that Dr. Donald Cohen, a trail-blazing pioneer in autism research and a mentor, was a past recipient. The lives of children with autism inspired me to engage in studies of the emergence of social mind and brain. On my research journey, I am blessed with the intellectual partnership of Dr. Warren Jones. Our quest has been to find ways to afford children with autism the resources they need to fulfill their promise, a promise that could change the narrative of autism: from one of disability to one of diversity, uniqueness, and fulfillment."

Dr. Ami Klin is Director of the Marcus Autism Center at Children's Healthcare of Atlanta, and the Georgia Research Alliance Eminent Scholar Professor & Chief, Division of Autism & Related Disabilities, Department of Pediatrics, Emory University School of Medicine & Emory Center for Translational Social Neuroscience. Dr. Klin leads a program of clinical science with the overarching goal of leveraging science to address the needs of children with autism today, and to build a new future for the next generations of children with autism. His individual research interests focus on the emergence of social mind and brain, and on opportunities to optimize life outcomes of children born with genetic, medical, or environmental vulnerabilities.

The Marcus Autism Center is the largest center of clinical care for children with autism and their families, and is recognized as an NIH Autism Center of Excellence. One area of emphasis in Dr. Klin's

research is a longstanding collaboration with Dr. Warren Jones, in which eye-tracking technology is used to visualize and measure a child's social engagement. This research has recently focused on monitoring infants at increased risk for developmental disabilities, from birth, in order to detect the earliest quantitative markers of autism in infancy. This aims at lowering the age of detection and improving access to early treatment.

Born in Brazil to Holocaust survivors, Dr. Klin earned his bachelor's degree at Hebrew University in Jerusalem and his Ph.D. in Psychology at the University of London. He completed clinical and research post-doctoral fellowships at the Yale Child Study Center at the Yale University School of Medicine, where he went on to direct the Autism Program as the Harris Professor of Child Psychology & Psychiatry. He has authored over 180 publications, including a number of books on the subject of autism.

"Dr. Klin's work represents some of the most impactful cognitive neuroscience research on autism spectrum disorders. He has used sophisticated eye-tracking methodology to find signs of early risk as they relate to social attention."

—Daniel Pine, M.D., Chair of the Ruane Prize Selection Committee

RUANE PRIZE

FOR OUTSTANDING ACHIEVEMENT IN CHILD & ADOLESCENT PSYCHIATRIC RESEARCH



Joseph Piven, M.D.

Thomas E. Castelloe Distinguished Professor
of Psychiatry and Pediatrics
University of North Carolina (UNC), Chapel Hill

Director
Carolina Institute for Developmental Disabilities

"I am honored to receive this award. It is truly a reflection of the extraordinary team of research collaborators with whom I have been privileged to work in studying early brain development in autism. It is our hope that this work will have an impact on improving outcomes in this condition and that this award will encourage others to pursue a similar path of research on psychiatric disorders in children."

Joseph Piven, M.D., is the Thomas E. Castelloe Distinguished Professor of Psychiatry and Pediatrics at the University of North Carolina (UNC) at Chapel Hill and Director of the Carolina Institute for Developmental Disabilities, a comprehensive institute for services, research and training in neurodevelopmental disorders. He directs the federally funded UNC Intellectual and Developmental Disabilities Research Center and North Carolina University Center of Excellence in Developmental Disabilities, a National Institute of Health (NIH)-funded postdoctoral research training program in neurodevelopmental disorders. He is also the Principal Investigator of an NIH-funded Autism Center of Excellence Network study of brain development in infants at risk for autism. He is the founding Editor-in-Chief of the *Journal of Neurodevelopmental Disorders*.

Dr. Piven received his bachelor's and medical degrees from the University of Maryland. During the first part of his career he served on the faculty of the Department of Psychiatry at the University of

Iowa. He has been on the faculty at the University of North Carolina since 1999.

Dr. Piven has studied various aspects of the pathogenesis of autism and related neurodevelopmental disorders, conducting family behavioral, molecular-genetic, and neuroimaging studies, and more recently conducting research on the late-life manifestations of autism.

Over the past 12 years with colleagues across North America and as part of the Infant Brain Imaging Study (IBIS), Dr. Piven has examined manifestations of autism in the first two years of life—a period prior to the consolidation of the defining features of the disorder. This research has led to an appreciation of the cascade of brain-behavior changes leading to the emergence of autism in the second and third years of life and has demonstrated the ability of brain imaging to provide pre-symptomatic, predictive markers of autism in infancy that have the potential to enable pre-symptomatic preventative interventions for those at highest risk.

"Dr. Piven's work has been at the forefront of brain imaging in autism for more than two decades. His most recent findings suggest that dynamics of brain development in the first year of life may provide clues for early intervention before an autism spectrum disorder fully develops."

—Daniel Pine, M.D., Chair of the Ruane Prize Selection Committee

GOLDMAN-RAKIC PRIZE

FOR OUTSTANDING ACHIEVEMENT IN COGNITIVE NEUROSCIENCE



Jean-Pierre Changeux, Ph.D.
Professor
Collège de France & Institut Pasteur, France

"I was a close friend of Patricia for whom I had an immense admiration. This Goldman-Rakic Prize profoundly touches me, since it evokes in my mind, in addition to the vivid memories of her person, her extraordinary lucid views about cognition and the brain. This is a very moving moment of my scientific and personal life."

Widely acknowledged as one of the fathers of modern neurobiology and neuroscience, Jean-Pierre Changeux, Ph.D., has combined biochemical, physiological, and behavioral experimentation together with theoretical modeling to discover the mode of action of nicotine in the brain, its pharmacological receptors, and the molecular mechanism of its dual action: its therapeutic action as cognitive enhancer and its addictive properties as a drug of misuse.

Dr. Changeux's discovery of the acetylcholine receptor, a model membrane receptor, was ground-breaking, revealing one of the central regulatory mechanisms in biology and providing insight into the chemistry of the brain and ultimately the brain-mind relationship.

Dr. Changeux pursued his doctoral studies at the Pasteur Institute under the direction of two giants in the history of molecular biology, Jacques Monod and François Jacob. He went on to become a professor at the Pasteur Institute and the Collège de France.

He is the author of 685 scientific publications and of many books, including several that have bridged the gap between neuroscience and the humanities. Dr. Changeux has received numerous scientific prizes and international awards, and is known as a champion of the arts and ethical consideration of the implications of scientific discovery.

His first breakthrough led to the theory of allosteric transitions in proteins. This postulated that regulatory ligands control the activity of the active sites of enzymes when they bind to topologically distinct sites. Soon after, he proposed a similar concept to explain the behavior of synaptic receptors for neurotransmitters. He subsequently discovered the acetylcholine receptor. Currently, many pharmaceutical and biotechnology companies are developing allosteric modulators of receptors or other key proteins in human cells for use in neurological disorders and a host of other illnesses.

"Dr. Changeux brilliantly demonstrated that interactions between different sites underlie biological regulation of proteins. The work was extended through decades with discovery of the nicotinic acetylcholine binding sites, and many other aspects of cellular functioning. In the brain, it included cognitive behaviors. His great discoveries revolutionized medicine and the principles of drug discovery. In neuroscience, they are central to neural therapies for addiction, pain, myasthenia gravis, neurodegenerative diseases and schizophrenia."

—Jack D. Barchas, M.D., Chair of the Goldman-Rakic Prize Selection Committee

GOLDMAN-RAKIC PRIZE

FOR OUTSTANDING ACHIEVEMENT IN COGNITIVE NEUROSCIENCE



Xiao-Jing Wang, Ph.D.

Distinguished Global Professor of Neural Science
Director, Swartz Center for Theoretical
Neuroscience
New York University

"I am humbled to receive the Goldman-Rakic Prize, and deeply grateful to BBRF for its foresight and support of cutting-edge research bridging neuroscience and psychiatry. This award is a recognition of not only my group's work, but also Computational Psychiatry as a nascent field that uses quantitative tools and theory together with experiments to uncover the brain mechanisms of abnormal functions and behavioral deficits associated with mental illness."

Xiao-Jing Wang, Ph.D., is Global Professor of Neural Science, Director of the Swartz Center for Theoretical Neuroscience, and Adjunct Professor of Physics and Mathematics at New York University. Between 2012 and 2017, he served as the founding Provost and Vice President for Research at NYU Shanghai. Prior to joining NYU in the fall of 2012, Dr. Wang was a Professor of Neurobiology and Director of the Swartz Center for Theoretical Neuroscience at Yale University. He obtained his Ph.D. in Theoretical Physics from the Free University of Brussels switching to Computational Neuroscience in 1987.

Dr. Wang uses mathematical models, in close interplay with experiments, to investigate neural circuits dedicated to cognitive functions. He is a leader in theory and modeling of the prefrontal cortex, which has been called "the CEO of the brain." Recently, Dr. Wang pioneered large-scale circuit modeling of the primate brain, which can ultimately be used as a computational platform to explain the complex global brain mechanisms of cognition and flexible behavior as well as various brain disorders.

Among Dr. Wang's notable accomplishments are the development of a biologically-realistic "cognitive-type" neural circuit model capable of working memory and decision-making; demonstration of the critical role played by NMDA receptors in persistent neural activity underlying working memory representation; proposal of a disinhibitory circuit motif formed by three subtypes of inhibitory neurons; discovery of novel mechanisms of synchronous brain rhythms; and discovery of a hierarchy of temporal response windows in a large-scale primate cortical system.

Dr. Wang has applied modeling to provide insights into the brain mechanisms of cognitive deficits associated with schizophrenia and other disorders — the beginnings of a new field of Computational Psychiatry.

His numerous awards include the John Simon Guggenheim Memorial Foundation Fellowship and the Swartz Prize for Theoretical and Computational Neuroscience from the Society for Neuroscience.

"Professor Wang brilliantly applies computational methods to circuits in neural systems important for behavior, including thalamus and hippocampus. With exceptionally able colleagues, he is a leading figure in the emergence of "computational psychiatry" which uses computational approaches to investigate cortical circuit function and dysfunction relevant to drugs such as ketamine and psychiatric disorders exemplified by schizophrenia and PTSD."

—Jack D. Barchas, M.D., Chair of the Goldman-Rakic Prize Selection Committee

PREVIOUS OUTSTANDING ACHIEVEMENT PRIZEWINNERS

LIEBER PRIZE

1987 Benjamin S. Bunney, M.D. Yale University	1999 Salomon Z. Langer, Ph.D. Compugen, Israel	2010 Ming T. Tsuang, M.D., Ph.D., DSc. University of California, San Diego
1988 Philip Holzman, Ph.D. Harvard University	Richard Jed Wyatt, M.D. National Institute of Mental Health	2011 Carol A. Tamminga, M.D. University of Texas Southwestern Medical Center at Dallas
1989 Timothy Crow, M.D. Oxford University, UK	2000 Nancy C. Andreasen, M.D., Ph.D. University of Iowa	Joel E. Kleinman, M.D., Ph.D. National Institute of Mental Health
1990 Philip Seeman, M.D., Ph.D. University of Toronto, Canada	William T. Carpenter, Jr., M.D. University of Maryland	2012 Michael O'Donovan, M.D., Ph.D. Cardiff University, Wales
1991 Patricia Goldman-Rakic, Ph.D. Yale University	2001 Solomon H. Snyder, M.D. The Johns Hopkins University	Michael J. Owen, M.D., Ph.D. Cardiff University, Wales
1992 John M. Kane, M.D. Albert Einstein College of Medicine	2002 Francine M. Benes, M.D., Ph.D. Harvard University	2013 Marc G. Caron, Ph.D. Duke University Medical Center
Herbert Y. Meltzer, M.D. Vanderbilt University	2003 Robin Murray, M.D., D.Sc. King's College London, Institute of Psychiatry, UK	2014 David L. Braff, M.D. University of California, San Diego School of Medicine
1993 Daniel R. Weinberger, M.D. National Institute of Mental Health	2004 Joseph T. Coyle, M.D. Harvard University	Patrick F. Sullivan, M.D., FRANZCP Karolinska Institute, University of North Carolina, Chapel Hill
1994 Arvid Emil Carlsson, M.D.* University of Gothenburg, Sweden	2005 David A. Lewis, M.D. University of Pittsburgh	2015 Robert Freedman, M.D. University of Colorado, Denver
1995 Kenneth S. Kendler, M.D. Virginia Commonwealth University	2006 Jeffrey A. Lieberman, M.D. Columbia University	Patrick McGorry, M.D., Ph.D. FRCP, FRANZCP Orygen and University of Melbourne
1996 Paul Greengard, Ph.D.* The Rockefeller University	2007 Eve C. Johnstone, M.D. University of Edinburgh, Scotland	2016 Michael F. Green, Ph.D.
1997 Göran C. Sedvall, M.D., Ph.D. Karolinska Institutet, Sweden	2008 Irving I. Gottesman, Ph.D. University of Minnesota	Stephen R. Marder, M.D. University of California, Los Angeles
Lars Farde, M.D., Ph.D. Karolinska Institutet, Sweden	2009 Raquel E. Gur, M.D., Ph.D. University of Pennsylvania	2017 John M. Davis, M.D. University of Illinois at Chicago
1998 George K. Aghajanian, M.D. Yale University	Ruben C. Gur, Ph.D. University of Pennsylvania	
Sarnoff A. Mednick, Ph.D., Dr. Med. University of Southern California		

*Recipient of the 2000 Nobel Prize in Physiology or Medicine.

MALTZ PRIZE

BAER PRIZE

- 2004 Jonathan Picker, M.D., Ph.D.**
Harvard University
- 2005 Takanori Hashimoto, M.D., Ph.D.**
University of Pittsburgh
- 2006 Lorna W. Role, Ph.D.**
Columbia University
- 2007 Jeremy Hall, M.D., Ph.D.**
Edinburgh University, Scotland
- 2008 Angus W. MacDonald, III, Ph.D.**
University of Minnesota
- 2009 Daniel H. Wolf, M.D., Ph.D.**
University of Pennsylvania
- 2010 Stephen J. Glatt, Ph.D.**
State University of New York,
Upstate

- 2011 Elena I. Ivleva, M.D.**
University of Texas Southwest
Medical Center
- Amanda J. Law, Ph.D.**
National Institute of Mental Health
- 2012 James T. R. Walters, M.D., Ph.D.**
Cardiff University, Wales
- 2013 Kafui Dzirasa, M.D., Ph.D.**
Duke University
- Nikhil M. Urs, Ph.D.**
Duke University
- 2014 Gregory Light, Ph.D.**
University of California, San Diego/
San Diego Veterans Affairs
Department
- Stephan Ripke, M.D.**
Psychiatric Genomics Consortium

- 2015 M. Camille Hoffman, M.D., MSCS**
University of Colorado, Denver
- Barnaby Nelson, Ph.D.**
Orygen and University
of Melbourne

MALTZ PRIZE

- 2016 William P. Horan, Ph.D.**
- Amanda McCleery, Ph.D.**
University of California,
Los Angeles
- 2017 Deanna L. Kelly, PharmD., BCPP**
University of Maryland School
of Medicine

SELO PRIZE

- 1993 Robert M. Post, M.D.**
Pennsylvania State Hospital
- 1994 Jules Angst, M.D.**
Psychiatric University Hospital,
Zurich, Switzerland
- Myrna M. Weissman, Ph.D.**
New York State Psychiatric
Institute
- 1995 Claude de Montigny, M.D., Ph.D.**
McGill University, Canada
- 1996 Wade Berrettini, M.D., Ph.D.**
University of Pennsylvania
- Elliot S. Gershon, M.D.**
University of Chicago
- J. Raymond DePaulo, Jr., M.D.**
The Johns Hopkins University
- 1997 Arthur Prange, Jr., M.D.**
University of North Carolina-
Chapel Hill
- Charles B. Nemeroff, M.D., Ph.D.**
Emory University
- 1998 Martin B. Keller, M.D.**
Brown University
- Julien Mendlewicz, M.D., Ph.D.**
University of Brussels/
Erasmus Hospital, Belgium

FALCONE PRIZE

- 1999 Frederick K. Goodwin, M.D.**
George Washington University
- Husseini K. Manji, M.D.**
National Institute of Mental Health
- 2000 Kay Redfield Jamison, Ph.D.**
The Johns Hopkins University
- A. John Rush, Jr., M.D.**
University of Texas Southwestern .
Medical Center at Dallas
- Robert H. Belmaker, M.D.**
Ben-Gurion University, Israel
- 2001 Hagop S. Akiskal, M.D.**
University of California, San Diego
- William E. Bunney, Jr., M.D.**
University of California, Irvine

- 2002 Ronald Duman, Ph.D.**
Yale University

Paul Grof, M.D., Ph.D.
University of Ottawa, Canada

- 2003 Robert M. A. Hirschfeld, M.D.**
University of Texas Medical
Branch, at Galveston

Ross J. Baldessarini, M.D.
Harvard University

Leonardo Tondo, M.D., M.S.
Cagliari University, Italy

- 2004 Harold A. Sackeim, Ph.D.**
Columbia University

Joseph R. Calabrese, M.D.
Case University School of Medicine

- 2005 Jan A. Fawcett, M.D.**
University of New Mexico

Alan F. Schatzberg, M.D.
Stanford University

- 2006 Lori L. Altshuler, M.D.**
University of California,
Los Angeles

- 2007 Helen S. Mayberg, M.D.**
Emory University

- 2008 Charles L. Bowden, M.D.**
University of Texas Health Science
Center at San Antonio

Mark S. George, M.D.
Medical University of South
Carolina

- 2009 Lewis L. Judd, M.D., DSc (Hon.)**
University of California, San Diego

Eric J. Nestler, M.D., Ph.D.
Mount Sinai School of Medicine

BIPOLAR MOOD DISORDERS PRIZE

- 2010 Lars Vedel Kessing, M.D., D.M.Sc.**
Copenhagen University Hospital,
Rigshospitalet, in Denmark

- 2011 David J. Miklowitz, Ph.D.**
University of California,
Los Angeles

Carlos A. Zarate, M.D.
National Institute of Mental Health

COLVIN PRIZE

- 2012 Eduard Vieta, M.D., Ph.D.**
University of Barcelona, Spain

Karen Dineen Wagner, M.D., Ph.D.
University of Texas Medical Branch
at Galveston

- 2013 Boris Birmaher, M.D.**
University of Pittsburgh School
of Medicine

Andrew A. Nierenberg, M.D.
Harvard Medical School

- 2014 Wayne C. Drevets, M.D.**
Johnson & Johnson, Inc.

Fritz A. Henn, M.D., Ph.D.
Cold Spring Harbor Laboratory,
Ichan School of Medicine
at Mount Sinai

- 2015 Michael Berk, Ph.D., MBBCh,
MMed, FF(Psych)SA, FRANZCP**
Deakin University

**L. Trevor Young, M.D., Ph.D.,
FRCPC**
University of Toronto

- 2016 Francis J. McMahon, M.D.**
National Institute of Mental Health

Thomas G. Schulze, M.D.
Medical Center of the University
of Munich

Pamela Sklar, M.D., Ph.D.
Icahn School of Medicine
at Mount Sinai

- 2017 Hilary P. Blumberg, M.D.**
Yale University School of Medicine

Tadafumi Kato, M.D., Ph.D.
RIKEN Brain Science Institute

**Mary L. Phillips, M.D., M.D.
(CANTAB)**
University of Pittsburgh

RUANE PRIZE

2000	Professor Sir Michael L. Rutter King's College London, Institute of Psychiatry, UK	2007	James F. Leckman, M.D. Yale University	2013	Jay N. Giedd, M.D. National Institute of Mental Health
2001	Donald J. Cohen, M.D. Yale University	2008	Eric Andrew Taylor, M.D. King's College London, Institute of Psychiatry, UK	2014	Anita Thapar, M.D., Ph.D. Cardiff University School of Medicine
2002	Judith L. Rapoport, M.D. National Institute of Mental Health	2009	Adrian C. Angold, M.D. Duke University Medical Center	2015	BJ Casey, Ph.D. Weill Cornell Medical College
2003	Leon Eisenberg, M.D. Harvard Medical School		E. Jane Costello, Ph.D. Duke University Medical Center		Francisco Xavier Castellanos, M.D. Child Study Center at NYU Langone Medical Center
2004	Magda Campbell, M.D. New York University	2010	Terrie E. Moffitt, Ph.D. Duke University King's College London, Institute of Psychiatry, UK	2016	John L. R. Rubenstein, M.D., Ph.D. University of California, San Francisco
	C. Keith Conners, Ph.D. Duke University		Avshalom Caspi, Ph.D. Duke University King's College London, Institute of Psychiatry, UK	2017	Nathan A. Fox, Ph.D. University of Maryland, College Park
	Rachel G. Klein, Ph.D. New York University				Charles A. Nelson III, Ph.D. Harvard Medical School
2005	Allan L. Reiss, M.D. Stanford University	2011	Daniel S. Pine, M.D. National Institute of Mental Health		Charles H. Zeanah, Jr., M.D. Tulane University School of Medicine
2006	David A. Brent, M.D. University of Pittsburgh School of Medicine	2012	Daniel Geschwind, M.D., Ph.D. University of California, Los Angeles		
	David Shaffer, M.D. Columbia University		Matthew State, M.D., Ph.D. Yale University		

GOLDMAN-RAKIC PRIZE

2003	Solomon H. Snyder, M.D. The Johns Hopkins University	2009	Brenda Milner, CC, Ph.D. McGill University, Canada	2015	Amy F. T. Arnsten, Ph.D. Yale University
2004	Michael Posner, Ph.D. University of Oregon	2010	Robert C. Malenka, M.D., Ph.D. Stanford University	2016	Earl K. Miller, Ph.D. Massachusetts Institute of Technology
	Marcus Raichle, M.D. Washington University	2011	Michael E. Goldberg, M.D. Columbia University/ New York State Psychiatric Institute	2017	Trevor W. Robbins, Ph.D. University of Cambridge
2005	Bruce S. McEwen, Ph.D. The Rockefeller University	2012	Larry R. Squire, Ph.D. University of California, San Diego		
2006	Joaquin M. Fuster, M.D., Ph.D. University of California, Los Angeles	2013	Karl Deisseroth, Ph.D. Stanford University		
2007	Huda Akil, Ph.D. University of Michigan	2014	Richard L. Huganir, Ph.D. Johns Hopkins University School of Medicine		
2008	Eric J. Nestler, M.D., Ph.D. Mount Sinai School of Medicine				

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- 53** Members of the National Academy of Medicine
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- 13** Members of the National Academy of Sciences
- 4** Recipients of the National Medal of Science
- 2** Former Directors of the National Institute of Mental Health and the current Director
- 2** Nobel Prize Winners

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Peter F. Buckley, M.D.
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William E. Bunney, Jr., M.D.
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Tyrone D. Cannon, Ph.D.
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Marc G. Caron, Ph.D.
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Bruce M. Cohen, M.D., Ph.D.
Jonathan D. Cohen, M.D., Ph.D.
Peter Jeffrey Conn, Ph.D.
Edwin H. Cook, Jr. M.D.
Richard Coppola, D.Sc.

Rui M. Costa, D.V.M., Ph.D.
Joseph T. Coyle, M.D.
Jacqueline N. Crawley, Ph.D.
John G. Csernansky, M.D.
Z. Jeff Daskalakis, M.D., Ph.D.
Karl Deisseroth, M.D., Ph.D.
J. Raymond DePaulo, Jr., M.D.
Ariel Y. Deutch, Ph.D.
Ralph J. Dileone, Ph.D.
Wayne C. Drevets, M.D.
Ronald S. Duman, Ph.D.
Guoping Feng, Ph.D.
Stan B. Floresco, Ph.D.
Judith M. Ford, Ph.D.
Alan Frazer, Ph.D.
Robert R. Freedman, M.D.
Fred H. Gage, Ph.D.
Aurelio Galli, Ph.D.
Mark S. George, M.D.
Elliot S. Gershon, M.D.
Mark A. Geyer, Ph.D.
Jay N. Giedd, M.D.
Jay A. Gingrich, M.D., Ph.D.
James M. Gold, Ph.D.
David Goldman, M.D.
Joshua A. Gordon, M.D., Ph.D.
Elizabeth Gould, Ph.D.
Anthony A. Grace, Ph.D.
Paul Greengard, Ph.D.
Raquel E. Gur, M.D., Ph.D.
Suzanne N. Haber, Ph.D.
Philip D. Harvey, Ph.D.
Stephan Heckers, M.D.
René Hen, Ph.D.
Fritz A. Henn, M.D., Ph.D.
Takao Hensch, Ph.D.
Robert M.A. Hirschfeld, M.D.
Elliot Hong, M.D.
Steven E. Hyman, M.D.
Robert B. Innis, M.D., Ph.D.
Jonathan A. Javitch, M.D., Ph.D.
Daniel C. Javitt, M.D., Ph.D.
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I congratulate the
Outstanding Achievement Prizewinners
for their research accomplishments
and I join in admiration and gratitude for
the humanitarian achievements of
Judge Steven Leifman
and Bob & the late Suzanne Wright.



Steve Lieber

The Essel Foundation
Congratulates the Distinguished
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recipients, Bob & the late Suzanne Wright



In Honor of
Judge Steven Leifman
recipient of the 2018 Pardes Humanitarian Prize
in Mental Health



A resolute advocate for the mentally ill, you are at the forefront of a public policy movement in the criminal justice system to reduce the number of people with mental illness in prison, and to develop alternative approaches that offer treatment and support for recovery.

*You have inspired us all to use our knowledge
towards the greater good for all humanity.*



**With Deep Respect,
The Pardes Humanitarian Prize Committee**

An Honorary Tribute to
Bob and Suzanne Wright
World Leaders in Autism Advocacy



The brave and tenacious leadership of Bob and Suzanne Wright
has provided love and respect to people and families
dealing with autism.

For their extraordinary accomplishments, the depth of their
compassion and the stunning power of their commitment
to individuals with autism and their families,
we honor Bob and the late Suzanne Wright.



With Deep Respect and Gratitude,
The Pardes Humanitarian Prize Committee



Alpine Woods Capital Investors, LLC
Congratulates the 2018 Pardes
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Judge Steven Leifman,

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recipients Bob and Suzanne Wright,

and the distinguished scientists who are
the recipients of the Brain & Behavior
Research Foundation Outstanding
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Alpine



Congratulations to
2018 Pardes Humanitarian Prizewinner
Judge Steven Leifman
and to all the
2018 Outstanding Research Achievement Prizewinners.

We join in a well-deserved tribute of
Bob and the late Suzanne Wright
whose advocacy has changed the lives of many.



Milton and Tamar Maltz



Borrego Foundation
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Bob and the late Suzanne Wright,
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THE SUZANNE WRIGHT

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WE CONGRATULATE THE BRAIN AND BEHAVIOR
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GROUNDBREAKING RESEARCH.

WITH THANKS TO DR. HERB PARDES
FOR HIS LEADERSHIP OF THE AUTISM SPEAKS SCIENTIFIC
ADVISORY BOARD AND FOR HIS WORK ON BEHALF OF THE
AUTISM COMMUNITY.

WE JOIN BBRF IN HONORING SUZANNE AND BOB WRIGHT
FOR THEIR VISION TO IMPROVE THE LIVES AND FUTURES
OF THOSE AFFECTED BY AUTISM.

*"Every one of life's challenges provides us with an opportunity
to **make a difference.**" —Suzanne Wright*



Congratulations to the
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Judge Steven Leifman
and all the recipients of the
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Congratulations to our dear friends, The Wrights,
whose vision, passion and commitment
to autism awareness is truly inspirational



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to improving the lives of people with autism
and mental health concerns.



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extraordinary commitment in helping
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supporting scientific research.

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Warm congratulations to the
Pardes Humanitarian Prizewinners
and Outstanding Achievement Prizewinners.

Your continual dedication
and work mean much to us.

Bonnie & Alan Hammerschlag

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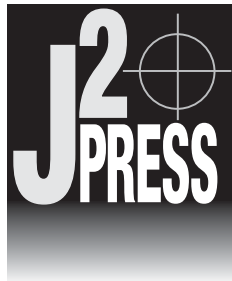
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Our congratulations to the
Pardes Humanitarian Prizewinner
Judge Steven Leifman
Pardes Humanitarian Honorary Tribute Recipients
Bob and Suzanne Wright
and the 2018 Outstanding Achievement Prizewinners.

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The Brain & Behavior Research Foundation
and the
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supports the important work of the
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We hope that through research,
advancements in treatment and
eventually cures will be found,
especially for Bipolar Disorder.



We extend our deep appreciation to the
Brain & Behavior Research Foundation
for over a quarter century of grants that lead to
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Congratulations to all the prizewinners
for their outstanding achievements.

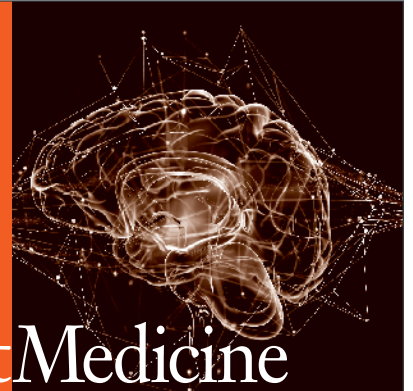
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