



# Baszucki Brain Research Fund Grant Awardees 2022

The Baszucki Brain Research Fund and the Milken Institute are pleased to announce the 45 teams from around the world who have been selected to receive funding for their research to advance understanding of bipolar disorder, therapeutic discovery, and translational efforts. Nine million dollars have been awarded across 35 distinct institutions, with 8 countries represented.

## Jorge Almeida, MD, PhD

University of Texas at Austin

*Oxygenating the brain with laser stimulation therapy to improve cognitive function in bipolar disorder*

## Ana Andreazza, PhD

University of Toronto

*Energy metabolism and bipolar disorder: From early detection to diagnosis and effective treatment*

## Paola Arlotta, PhD

Harvard University

*Using human brain organoids to understand the biology of response to lithium*

## Joanna Biernacka, PhD

Mayo Clinic

*Mood Stabilizer Genomics (MoStGen) Consortium: A study of anticonvulsant mood stabilizer (AMS) pharmacogenomics*

## Hilary Blumberg, MD

Yale School of Medicine

*A novel mitochondrial target as a therapeutic approach for bipolar disorder*

## Amanda Brown, PhD

Johns Hopkins University

*Using microglia-like cells to identify potential responders to L-type channel blockers*

## Katherine Burdick, PhD

Brigham and Women's Hospital

*Identifying modifiable risk factors for poor outcome in bipolar disorder: Therapeutic mechanistic targets*

## Paolo Cassano, MD, PhD

Massachusetts General Hospital

*Transcranial photobiomodulation with near-infrared light for impulsivity in hypomania*

## Susan Dymecki, MD, PhD

Harvard Medical School

*Affective disorders, seasonal photoperiod and adaptive neurotransmitter plasticity in a subtype of brain serotonergic neuron*

## Jess Fiedorowicz, PhD

Ottawa Hospital Research Institute

*A randomized control trial of the effectiveness of blue-blocking glasses for mania in inpatients with bipolar disorder*

**Benicio Frey, MD**

McMaster University

*Proof-of-concept study for intranasal delivery of MANF as a novel treatment approach for bipolar disorder*

**Gabriel Fries, PhD**

The University of Texas Health Science Center at Houston

*Targeting accelerated aging in bipolar disorder: Calorie restriction mimetics as a novel treatment strategy*

**Cynthia Fu, PhD**

University of East London

*Community-based transcranial direct current stimulation treatment for bipolar depression*

**Dr. Todd Gould, MD**

University of Maryland

*Effects of lithium in mesolimbic dysfunction in bipolar mania*

**Itay Hadas, PhD**

University of California San Diego

*Bipolar efficacy biomarkers for accelerated intermittent theta burst rTMS trial*

**Diego Hidalgo-Mazzei, MD, PhD**

Fundació Clínic per a la Recerca Biomèdica (FCRB)

*Identifying digital biomarkers of illness activity and treatment response in bipolar disorder*

**Damien Keating, PhD**

Flinders University

*The contribution of the gut to bipolar disorder*

**Beny Lafer, PhD**

University of São Paulo

*A randomized, double-blind, placebo-controlled study of probiotics as adjuvant therapy for bipolar depression: A proof-of-concept trial*

**Paulo Lizano, MD**

Beth Israel Deaconess Medical Center

*Causal lesion network guided treatment of bipolar mania with transcranial electrical stimulation*

**Rodrigo Machado-Vieira, MD, PhD**

The University of Texas Health Science Center at Houston

*A randomized, placebo controlled trial of the fatty acid amide hydrolase inhibitor palmitoylethanolamide in bipolar depression*

**Rodrigo Mansur, PhD**

University Health Network

*Brain insulin sensitivity and reward behavior in bipolar disorder*

**Cynthia Marie-Claire, PhD**

University of Paris

*DNA methylation markers in predicting response to lithium therapy in bipolar disorder*

**Colleen McClung, PhD**

University of Pittsburgh

*Identification of therapeutic targets of valproate (VPA) for the treatment of bipolar disorder*

**David Miklowitz, PhD**

University of California, Los Angeles

*A collaborative treatment network for youth with or at high risk for bipolar disorder*

**Ricardo Mouro Pinto, PhD**

Massachusetts General Hospital

*Investigation of a polymorphic DNA repeat at the CACNA1C gene in bipolar disorder*

**Niamh Mullins, PhD**

Icahn School of Medicine at Mount Sinai

*Statistical and functional fine-mapping of bipolar disorder genetic risk loci*

**Andrew Nierenberg, MD**

Massachusetts General Hospital

*Xenon for bipolar depression*

**Sue O'Shea, PhD**

University of Michigan

*Targeting exosome cargos in bipolar disorder*

**Harry Pantazopoulos, PhD**

University of Mississippi Medical Center

*CACNA1C Genotype: Correlation with brain and blood levels of CACNA1C and treatment responsiveness*

**Demitri Papolos, MD**

Juvenile Bipolar Research Foundation  
*Novel application of VNS therapy in the treatment of juvenile bipolar disorder*

**Krystal Parker, PhD**

University of Iowa  
*Cerebellar stimulation as a novel therapy for bipolar disorder*

**Mary Phillips, MD**

University of Pittsburgh  
*Establishing the effect of electroencephalography (EEG)-guided theta burst stimulation on reducing mania/hypomania-related affect and reward driven behavior in bipolar disorder*

**James Prisciandaro, PhD**

Medical University of South Carolina  
*Experimentally evaluating the hypothesized mechanism of action of N-acetylcysteine for bipolar disorder*

**Natalie Rasgon, MD, PhD**

Stanford University  
*Novel metabolic signatures in patients with bipolar disorder: Toward a specialized treatment paradigm*

**Philipp Ritter, PhD**

Technische Universität Dresden  
*Temporospatial lithium central nervous system kinetics in bipolar disorder using repeated 7Li-MRI brain imaging*

**Susan Rossell, PhD**

Swinburne University of Technology  
*The efficacy of adjunctive intranasal insulin for the treatment of neurocognitive dysfunction in bipolar disorder: A 12-week double blind, randomized, placebo controlled clinical trial*

**Bernardo Sabatini, MD, PhD**

Harvard Medical School  
*Uncovering the genetic programs and brain circuits that mediate mania*

**Kirti Saxena, MD**

Baylor College of Medicine  
*The Behavioral Health AVATAR (BHA) for automatic nonverbal behavioral analysis for personalizing treatment of bipolar disorder*

**Yvette Sheline, MD**

University of Pennsylvania  
*Intensive TMS for rapid relief of bipolar depression symptoms*

**Jair Soares, MD, PhD**

The University of Texas Health Science Center at Houston  
*Developing brain imaging analysis expertise for personalizing transcranial electric stimulation in anhedonia treatment of patients with bipolar depression*

**Paul Thompson, PhD**

University of Southern California  
*The ENIGMA Bipolar Medications Initiative: A global study of bipolar disorder medication associations in the brain*

**Ivy Tso, PhD**

University of Michigan  
*Enhancing neural synchrony and affective cognitive control in bipolar disorder using personalized transcranial alternating current stimulation (tACS)*

**Ken Walder, PhD**

Deakin University  
*Repurposing drugs to treat bipolar depression using stem cell technology*

**Janet Wozniak, MD**

Massachusetts General Hospital  
*Transcriptomic and functional characterization of cerebral organoids in pediatric bipolar disorder*

**Peter Zandi, PhD**

Johns Hopkins University  
*Leveraging a collaborative network to test a novel iTBS treatment for bipolar depression*

# Baszucki Brain Research Fund

## Previous Bipolar Grant Awardees

### 2019-2021

**Helen J. Burgess, PhD**

University of Michigan

*Sleep Across the Seasons (SASS) for bipolar disorder*

**Harry Campbell, MD, Iain Campbell, PhD and Daniel Smith, MD**

University of Edinburgh

*Phase 2 clinical trial and mechanistic study of ketogenic diet in bipolar disorder*

**Shebani Sethi Dalai, MD**

Stanford University

*Impact of a ketogenic diet on metabolic and psychiatric health in patients with schizophrenia or bipolar illness*

**Gregory Fonzo, PhD**

University of Texas

*Targeting neural structures in the amygdala to treat mood disorders*

**Mike Fox, MD, PhD, Shan Siddiqi, MD, and Joseph Taylor, MD, PhD**

Brigham and Women's Hospital

*Identifying transcranial magnetic stimulation targets for mood stabilization in bipolar disorder*

**Lilianne Mujica-Parodi, PhD**

Stony Brook University

*Neuroblox software: a data-driven platform for computational psychiatry*

**Emily Provost, PhD**

University of Michigan

*Predicting Individual Outcomes for Rapid Intervention (PRIORI) ambient emotion study*

**Natalie Rasgon, MD, PhD**

Stanford University

*Elucidation of clinical endophenotypes of persons with mood disorders*

**Zoltan Sarnyai, PhD and Carlo Longhitano, MD**

James Cook University

*Ketogenic diet in bipolar disorder and schizophrenia*

**Leanne Williams, PhD**

Stanford University

*PANLAB research fund*

**Nolan Williams, MD**

Stanford University

*Stanford Accelerated Intelligent Neuromodulation Therapy (SAINT) for treatment-resistant depression*

**Nolan Williams, MD**

Stanford University

*Electrophysiological biomarkers of mania and SAINT response in bipolar disorder*