THANK YOU to all of our sponsors for your support of the NNDC 14th Annual Conference!

GOLD LEVEL SPONSOR

genesight

SILVER LEVEL SPONSOR

Takeda

BRONZE LEVEL SPONSORS

Otsuka  Sage Therapeutics  Biogen
# Table of Contents

2  Acknowledgments

3  NNDC Team

4  NNDC Board of Directors

5  Welcome

6  Keynote Address

7  Plenary Talk

8  At-A-Glance Agenda

9  Hotel Floor Plan

10 Education Statement

11 Sessions

16 Travel Award Recipients

18 Posters

For your convenience, blank pages for notes are included at the back of this booklet.
We would like to thank all of our speakers and facilitators for their contributions both to this conference and their areas of study. We are proud to work with such highly respected and knowledgable clinicians, researchers, and advocates and hope to continue developing these and other relationships with some of the world’s brightest minds.

We would also like to thank the NNDC Conference Program Committee for putting together another engaging and innovative Annual Conference program.

**PROGRAM COMMITTEE**

- **Laura Cabrera, PhD**  
  Penn State University

- **J. Raymond DePaulo, Jr, MD**  
  Johns Hopkins University

- **Heather Flynn, PhD**  
  Florida State University

- **John F. Greden, MD**  
  University of Michigan

- **Erin McGlade, PhD**  
  University of Utah

- **Sagar Parikh, MD, FRCPC**  
  University of Michigan

- **Nicholas Trapp, MD**  
  University of Iowa Health Care

- **Jennifer Vande Voort, MD**  
  Mayo Clinic
Dane Larsen
Executive Director
dlarsen@nndc.org

Pat Rinvelt, MBA
Director, Strategic Initiatives
prinvelt@nndc.org

Diana Burnett, MS
Program Manager
dburnett@nndc.org

Jenny Taylor, PhD
Program Manager
jtaylor@nndc.org

Brad Hovermale
Operations Manager
bhovermale@nndc.org

Shilpa Kharecha
Events & Communications Manager
skharecha@nndc.org
NNDC BOARD OF DIRECTORS

EXECUTIVE COMMITTEE OF THE BOARD
Mark Frye, MD (President) • Mayo Clinic
Jair C. Soares, MD, PhD (Vice President) • University of Texas Health Science Center at Houston
Stephen Strakowski, MD (Treasurer) • Indiana University
Melissa DelBello, MD, MS (Secretary) • University of Cincinnati & Lindner Center of HOPE
John F. Greden, MD (Founding Chair) • University of Michigan Eisenberg Family Depression Center
J. Raymond DePaulo, Jr, MD (Immediate Past President) • The Johns Hopkins Mood Disorders Center
Olusola Ajilore, MD, PhD (Member-at-Large) • University of Illinois at Chicago
C. Neill Epperson, MD (Member-at-Large) • University of Colorado Anschutz Medical Campus
Faith Gunning, PhD (Member-at-Large) • Weill Cornell Medical College

BOARD MEMBERS
Caleb Adler, MD • University of Cincinnati & Lindner Center of HOPE
Jorge Almeida, MD, PhD • University of Texas Austin & The Center for Youth Mental Health
Katherine Burdick, PhD • Brigham & Women’s Hospital, Partners HealthCare - Harvard Medical School
Regina Bussing, MD • University of Florida
David Casey, MD • University of Louisville
Susan K. Conroy, MD, PhD • Indiana University
William Coryell, MD • University of Iowa
Joao de Quevedo, MD, PhD • University of Texas at Houston, McGovern Medical School
Marc Dubin, MD, PhD • Weill Cornell Medical College
Dwight L. Evans, MD • University of Pennsylvania
Jay Fournier, PhD • The Ohio State University
Adriana Hermida, MD • Emory University
Richard Holbert, MD • University of Florida
Kay Redfield Jamison, PhD • Johns Hopkins University Mood Disorders Center
Anand Kumar, MD, MHA • University of Illinois at Chicago
Brian Mickey, MD, PhD • University of Utah Huntsman Mental Health Institute
Jeffrey Newport, MD, MS • University of Texas Austin & The Center for Youth Mental Health
Sagar Parikh, MD, FRCPC • University of Michigan Eisenberg Family Depression Center
K. Luan Phan, MD • The Ohio State University
Mark Rapaport, MD • University of Utah Huntsman Mental Health Institute
Natalie L. Rasgon, MD, PhD • Stanford University
Scott L. Rauch, MD • McLean Hospital, Partners HealthCare - Harvard Medical School
Patricio Riva Posse, MD • Emory University
Anthony J. Rothschild, MD • Stanford University
Moira Rynn, MD • Duke University
Alan F. Schatzberg, MD • Stanford University
Christopher Schneck, MD • University of Colorado Anschutz Medical Campus
Michael Thase, MD • University of Pennsylvania
Carolyn Turvey, PhD • University of Iowa
Jennifer L. Vande Voort, MD • Mayo Clinic
Richard Weiner, MD, PhD • Duke University
Jesse H. Wright, MD, PhD • University of Louisville Depression Center
Kimberly Yonkers, MD • University of Massachusetts Chan School of Medicine

EX OFFICIO BOARD MEMBERS
Stuart Charney, RPH, JD (Board Advisor) • NNDC Advisory Council
Frank DeGruy, MD, MSFM (Board Advisor) • University of Colorado Anschutz Medical Campus
Sarah Lisanby, MD (Board Advisor) • National Institute of Mental Health
Welcome to the 2022 NNDC Annual Conference!

The theme of this year’s conference – Fostering Mood Innovations: Research and Clinical Networks at the NNDC 14th Annual Conference – was chosen to highlight the latest and greatest advances in mood disorders research and care delivery. By focusing on such cutting-edge research, we seek to accelerate the pace of treatment innovations in treating patients with depression and bipolar disorders. Special attention was given in this year’s program to highlighting the work of our Task Groups. Most of the topics in this program were directly inspired by our Task Groups - and more than a few of the talks will provide updates on what some of our groups are working on.

We are honored to welcome Dr. Vikram Patel, the Pershing Square Professor of Global Health at Harvard Medical School, as our keynote speaker this year. Dr. Patel’s work has focused on the burden of mental health problems across the life course, their association with social disadvantage, and the use of community resources for their prevention and treatment. In his keynote address, titled “Scaling Up Psychosocial Therapies to Reach the Last Mile: Lessons from the Global South”, Dr. Patel will explore the large unmet needs for care even in settings with significant mental health resources and the structural reasons for these unmet needs.

We are also pleased to welcome Dr. Jonathan Rottenberg, Professor of Psychology at the University of South Florida to present our second plenary lecture. His talk, titled “Thriving After Depression: Methods, Evidence, and Implications”, aims to present what we know about thriving after depression, focusing on methods to study psychological well-being as a proxy for thriving.

As it is every year, the NNDC 2022 Annual Conference is the perfect time to start thinking about how you can get more involved with the NNDC. We would love to discuss how your center’s experts and areas of interest might fit into the work our Task Groups are doing. Thank you for joining us, as always.

FROM THE NNDC TEAM

On behalf of the whole NNDC Team, we are pleased to welcome you to Ann Arbor for our 14th Annual Conference! Each year the conference program highlights the ways the NNDC is uniquely positioned to improve diagnosis and treatment of mood disorders by facilitating knowledge sharing across the nation and expediting large scale, multi-site research initiatives – and this year’s program is no exception. Our members are engaging in some of the most innovative and exciting research in the field, and the Annual Conference is a great way to show off some of that work, whether through main stage presentations, poster session discussions, or even casual conversation with your fellow attendees over the duration of the program.

Thank you for joining us as we resume the in-person conference after two years! We hope to see you again next year – we will be posting further updates on the website, social media, and in the newsletter once plans are confirmed. Stay tuned!

Sagar Parikh, MD, FRCPC
Medical Director, NNDC

Mark Frye, MD
President, NNDC

Dane Larsen
Executive Director, NNDC
Scaling Up Psychosocial Therapies to Reach the Last Mile: Lessons from the Global South

Dr. Vikram Patel is The Pershing Square Professor of Global Health in the Blavatnik Institute's Department of Global Health and Social Medicine at Harvard Medical School. He co-leads the Department’s Mental Health for All lab and co-leads the GlobalMentalHealth@Harvard initiative. His work has focused on the burden of mental health problems across the life course, their association with social disadvantage, and the use of community resources for their prevention and treatment. He is a co-founder of the Movement for Global Mental Health, the Centre for Global Mental Health (at the London School of Hygiene & Tropical Medicine), the Mental Health Innovations Network, and Sangath, an Indian NGO which won the WHO Public Health Champion of India prize. He is a Fellow of the UK's Academy of Medical Sciences and has served on the Committee which drafted India’s first National Mental Health Policy and the WHO High Level Independent Commission for NCDs. He has been awarded the Chalmers Medal (the Royal Society for Tropical Medicine and Hygiene, UK), the Sarnat Prize (the National Academy of Medicine, USA), the Pardes Humanitarian Prize (the Brain and Behaviour Research Foundation, USA), an Honorary OBE (the UK Government), the Posey Leadership Award (Austin College, USA) and the John Dirk Canada Gairdner Award in Global Health (the Canada Gairdner Foundation). He was listed in TIME Magazine's 100 most influential persons of the year in 2015.

Dr. Patel leads research that plays a central role in the emergence and development of the field of global mental health and that has galvanized policy, civil society, and donor action to address the large unmet need for care for people with mental disorders, both in low-and middle-income countries and in low resourced contexts of high-income countries.
Thriving After Depression: Methods, Evidence, and Implications

Dr. Jonathan Rottenberg is a Professor of Psychology at the University of South Florida, where he is Director of the Mood and Emotion Laboratory.

His research focuses primarily on emotional functioning in depression. His research has been funded by the National Institutes of Health, and his work has been covered extensively in Scientific American, The New York Times, The Wall Street Journal, The Economist, and Time. Rottenberg lives in Tampa, Florida. He is the author of “The Depths: The Evolutionary Origins of the Depression Epidemic.” In 2015, he founded Depression Army, an international social media campaign that is changing the conversation about depression.

Dr. Rottenberg relates his personal and professional experiences with mental health, stating, “I have been on many sides of depression. I struggled with severe and chronic episodes of depression for a number of years in the early 1990s. In response to this profound experience, I came to focus my research on the study of depression, receiving a PhD in Psychology in 2003, and joining the faculty at the University of South Florida. Most recently, I have continued to be an advocate for people who struggle with depression.”
## Tuesday, September 20th Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30-8:30am</td>
<td>Breakfast</td>
<td>Grande Ballroom</td>
</tr>
<tr>
<td>8:30-9:00am</td>
<td>Welcome Address from NNDC President and NNDC Administrative Update</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>9:00-9:30am</td>
<td>NNDC Task Group Updates: Research Highlights from Across the Network</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>9:30-10:30am</td>
<td>Bipolar Disorder Research: Spotlight on the NNDC Bipolar Task Group</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>10:30-11:00am</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11:00am-12:30pm</td>
<td>Child and Adolescent Mental Health: Addressing the Youth Mental Health Crisis in America</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>12:30-1:15pm</td>
<td>Lunch</td>
<td>Grande Ballroom</td>
</tr>
<tr>
<td>1:15-2:00pm</td>
<td>Poster Sessions (45 minutes)</td>
<td>Michigan Prefunction and Ballroom III-V</td>
</tr>
<tr>
<td>2:00-3:00pm</td>
<td>Neuromodulation: Advances in Targeted Treatments</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>3:00-3:30pm</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>3:30-4:30pm</td>
<td>Ketamine: Weighing the Risks and Rewards of Ketamine Treatment</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>4:30-5:30pm</td>
<td>Plenary Talk: <strong>Thriving After Depression: Methods, Evidence, and Implications</strong>&lt;br&gt;by Dr. Jonathan Rottenberg, Ph.D. (University of South Florida)</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>5:30-6:00pm</td>
<td>NNDC Networking Happy Hour</td>
<td>Michigan Prefunction</td>
</tr>
<tr>
<td>6:00-8:00pm</td>
<td>Dinner and Award Ceremony</td>
<td>Grande Ballroom</td>
</tr>
</tbody>
</table>

## Wednesday, September 21st Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30-8:15am</td>
<td>Breakfast</td>
<td>Grande Ballroom</td>
</tr>
<tr>
<td>8:15-8:30am</td>
<td>Day 2 Welcome</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>8:30-9:00am</td>
<td>Mood Outcomes Program: Findings from the 30,000+ NNDC Patient Registry</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>9:00-10:00am</td>
<td>Keynote Address: <strong>Scaling Up Psychosocial Therapies to Reach the Last Mile: Lessons from the Global South</strong>&lt;br&gt;by Dr. Vikram Patel, MBBS, Ph.D. (Harvard Medical School)</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>10:00-10:15am</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>10:15-11:15am</td>
<td>Artificial Intelligence in Mood Disorders: Progress and Ethics of AI Treatments</td>
<td>Michigan Ballroom I-II</td>
</tr>
<tr>
<td>11:15am-12:15pm</td>
<td>Hot Topics in Psychiatry: Emerging Research, Encouraging Treatments</td>
<td>Michigan Ballroom I-II</td>
</tr>
</tbody>
</table>
Sheraton Ann Arbor Hotel Floor Plan

**Michigan Prefunction**
- Registration
- Posters 1
- Sponsor Tables
- Networking Happy Hour
- Coffee/Tea Station

**Michigan Ballroom I, II**
- All Sessions

**Michigan Ballroom III, IV, V**
- Posters 2

**Grande Ballroom**
- Breakfast
- Lunch
- Dinner and Awards Ceremony

---

**NNDC CONFERENCE WI-FI**
**NAME:** Sheraton_Conference  
**PASSWORD:** NNDC2022
SATISFACTORY COMPLETION

Learners must complete an evaluation form to receive a certificate of completion. Your chosen sessions must be attended in entirety. Partial credit of individual sessions is not available. If you are seeking continuing education credit for a specialty not listed below, it is your responsibility to contact your licensing/certification board to determine course eligibility for your licensing/certification requirement.

PHYSICIANS

In support of improving patient care, this activity has been planned and implemented by Amedco LLC and National Network of Depression Centers. Amedco LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Credit Designation Statement – Amedco LLC designates this live activity for a maximum of 10.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

PSYCHOLOGISTS

This course is co-sponsored by Amedco and National Network of Depression Centers. Amedco is approved by the American Psychological Association to sponsor continuing education for psychologists. Amedco maintains responsibility for this program and its content. 10.75 hours.

SOCIAL WORKERS

As a Jointly Accredited Organization, Amedco is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved under this program. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. Amedco maintains responsibility for this course. Social Workers completing this course receive 10.75 GENERAL continuing education credits.

TO CLAIM YOUR CREDITS
1. Go to http://nndc.cmecertificateonline.com
2. Click on the “National Network of Depression Centers Annual Meeting 2022”
3. Complete the evaluation
4. Print all pages of the certificate for your records

QUESTIONS?
Contact Amedco at
Certificate@AmedcoEmail.com
TUESDAY, SEPTEMBER 20, 2022

9:00am  Task Group Overview

TREATMENT RESISTANT DEPRESSION TASK GROUP OVERVIEW
PRESENTED BY
SUSAN CONROY, MD, PHD
Assistant Professor of Psychiatry, Indiana University School of Medicine
LEARNING OBJECTIVES
1. To update the group progress of the Treatment Resistant Depression Task Group in developing consensus recommendations for TRD consultation programs

UPDATES FROM THE BIOMarkers TASK GROUP
PRESENTED BY
JENNIFER VANDE VOORT, MD
Associate Professor and Co-Chair, Division of Child and Adolescent Psychiatry and Psychology, Mayo Clinic
LEARNING OBJECTIVES
1. Understand the latest clinical outcomes and future biomarkers for the Bio-K Trial

AMPLIFYING PEER VOICES IN CARE MODELS TO SUPPORT OLDER ADULTS WITH DEPRESSION AND CHRONIC PHYSICAL HEALTH CONDITIONS
PRESENTED BY
SARA WEISENBACH, PHD, ABPP
Chief of Neuropsychology, McLean Hospital and Member of the Faculty, Harvard Medical School
LEARNING OBJECTIVES
1. Describe the process by which the relationships among DBSA, NNDC, and the Geriatric Mood Disorders Task Group developed
2. Summarize highlights from this convening and describe next steps

9:30am  Symposium: Bipolar Disorders

UPDATES FROM THE FIELD: A REPORT ON A NEW GROUNDBREAKING INITIATIVE IN BIPOLAR RESEARCH AND CARE
PRESENTED BY
CARA ALTimus, PHD
Senior Director, Milken Institute Center for Strategic Philanthropy
KATE BURDICK, PHD
Vice Chair for Research, Jonathan F Borus, MD Distinguished Chair, Department of Psychiatry Brigham & Women's Hospital
LEARNING OBJECTIVES
1. To inform researchers and clinicians about a new initiative that has the potential to change how we study and care for people with bipolar disorder

BIPOLAR TASK GROUP OVERVIEW
PRESENTED BY
JORGE ALMEIDA, MD, PHD
Director, Bipolar Disorder Center, UTHealth Austin
LEARNING OBJECTIVES
1. To update attendees on the latest research initiatives of the NNDC Bipolar Disorders Task Group
**SESSIONS**

**11:00am**  Youth Mood Disorders

**ETHICAL CHALLENGES IN THE PSYCHIATRIC TREATMENT OF COLLEGE STUDENTS**
PRESENTED BY

RACHEL CONRAD, MD  
Director, Young Adult Mental Health, Brigham and Women's Hospital  
Instructor, Harvard Medical School

LEARNING OBJECTIVES
1. Participants will understand epidemiology of psychiatric illness among college students and consider the barriers to mental health treatment in this population
2. Participants will be familiar with major cases relating to ethical challenges in the treatment of college students
3. Participants will identify ethical duties pertaining patients, university, and public safety
4. Participants will weigh ethical duties and navigate special considerations towards these cases

**AN UPDATE ON SUBSTANCE USE DISORDERS IN YOUTH: RECENT CONCERNS AND TREATMENT INNOVATIONS**
PRESENTED BY

LESLIE HULVERSHORN, MD  
Chair, Department of Psychiatry  
Director, Division of Child and Adolescent Psychiatry  
IU Health Scholar II of Psychiatry  
Indiana University School of Medicine

LEARNING OBJECTIVES
1. Orient the audience to recent epidemiological trends in US youth substance use and substance use disorders (SUDs)
2. Highlight innovations in SUD treatment such as machine learning-based fidelity monitoring tools for motivational interviewing

**2:00pm**  Mini-Symposium: Neuromodulation

**CONNECTOME-TARGETED NEUROMODULATION FOR MOOD DISORDERS**
PRESENTED BY

SHAN SIDDIQI, MD  
Instructor in Psychiatry, Harvard Medical School  
Neuropsychiatrist, Center for Brain Circuit Therapeutics, Brigham and Women's Hospital

**ATTITUDES AND ETHICAL CONCERNS TOWARD USE OF TMS IN DEPRESSED ADOLESCENTS: PRELIMINARY FINDINGS**
PRESENTED BY

LAURA CABRERA, PHD  
Dorothy Foehr Huck and J. Lloyd Huck Chair in Neuroethics  
Associate Professor of Engineering Science and Mechanics and Philosophy  
Senior Research Associate Rock Ethics Institute  
Pennsylvania State University

LEARNING OBJECTIVES
1. Recognize that attitudes and concerns of adolescents and their parents around TMS are important as they can influence the uptake of this intervention
2. Describe key themes around ethical concerns towards the use of TMS in depressed adolescents
3. Recognize that patients and their parents might have different concerns around the same intervention
3:30pm  Mini Symposium: Ketamine

**KETAMINE: WEIGHING THE RISKS AND REWARDS OF KETAMINE TREATMENT**

**PRESENTED BY**

MARK NICIU, MD, PHD  
Assistant Professor, University of Iowa Health Care

ROB MEISNER, MD  
Medical Director, Ketamine Service, Psychiatric Neurotherapeutics Program, McLean Hospital

**LEARNING OBJECTIVES**

1. Discuss the potential benefits and risks of esk/ketamine treatment for treatment-resistant major depressive disorder and MDD with acute suicidality or behavior

4:30pm  Plenary Talk

**THRIVING AFTER DEPRESSION: METHODS, EVIDENCE, AND IMPLICATIONS**

**PRESENTED BY**

JONATHAN ROTTENBERG, PHD  
Professor of Psychology, University of South Florida

**LEARNING OBJECTIVES**

1. The primary objective is to present what we know about thriving after depression, focusing on methods to study psychological-well being as a proxy for thriving
2. To present evidence regarding the prevalence of well-being after depression in national datasets
3. To consider the clinical and social implications of the data on prevalence of well-being after depression (and related conditions), as well as the next steps that should be taken in this research

WEDNESDAY, SEPTEMBER 21, 2022

8:30am  Mood Outcomes Update

**MOOD OUTCOMES STATUS & FUTURE GOALS**

**PRESENTED BY**

PETER ZANDI, PHD, MHS, MPH  
Professor of Psychiatry and Behavioral Sciences, Johns Hopkins Medicine

**LEARNING OBJECTIVES**

1. To provide a status update on the goals of the Mood Outcomes Program
2. To present descriptive analyses of data from the Mood Outcomes Program
3. To discuss future directions of the Mood Outcomes Program

**MOOD OUTCOME PROJECT: ANXIETY SYMPTOMS AND SUICIDE RISK - FINDINGS FROM NNDC PATIENT REGISTRY**

**PRESENTED BY**

SUDHAKAR SELVARAJ, MD PHD  
Associate Professor of Psychiatry, The University of Texas Health Science Center at Houston

**LEARNING OBJECTIVES**

1. Learn the association between anxiety symptoms and suicidal ideation in patients with mood disorders
9:00am  Keynote Address

SCALING UP PSYCHOSOCIAL THERAPIES TO REACH THE LAST MILE: LESSONS FROM THE GLOBAL SOUTH

PRESENTED BY
VIKRAM PATEL, PHD, MBBS
Pershing Square Professor of Global Health, Harvard Medical School

LEARNING OBJECTIVES
1. To be familiar with the large unmet needs for care even in settings with significant mental health resources and the structural reasons for these unmet needs
2. To describe the evidence on ‘task-sharing’ of mental health care by non-specialist providers
3. To explain the innovations to optimize access, acceptability and quality of the delivery of psychosocial interventions by non-specialist providers
4. To understand the process through which this evidence can be scaled-up, leveraging digital tools to build and support a community-based workforce

10:15am  Mini-Symposium: AI & Mood Disorders

AI-AUGMENTED PREDICTION OF ANTIDEPRESSANT RESPONSE: PROBABILISTIC GRAPHICAL MODELS AND OTHER APPROACHES

PRESENTED BY
WILLIAM BOBO, MD, MPH
Professor and Chair
Department of Psychiatry & Psychology
Cecilia and Dan Carmichael Family Associate Director for the Center for Individualized Medicine in Florida
Mayo Clinic Florida

ARJUN ATHREYA, PHD, MS
Mayo Clinic Florida

LEARNING OBJECTIVES
1. Discuss the motivation for AI in psychiatric research, focusing on depression
2. Describe an AI paradigm for individualizing care for depression
3. Present current efforts and challenges at translating AI-based discoveries to the bedside
4. Describe a vision of the future of digital and measurement-augmented psychiatric care

AI AND DEPRESSION: POTENTIAL PITFALLS OF AI

PRESENTED BY
RICHARD SHARP, PHD
Lloyd A. and Barbara A. Amundson Professorship in Biomedical Ethics Honoring Paul S. Mueller, Mayo Clinic

LEARNING OBJECTIVES
1. Discuss legal and ethical challenges to using artificial intelligence for mood disorders treatment
11:15am  Hot Topics

NEUROFLEX: A NEUROPLASTICITY-BASED DIGITAL INTERVENTION FOR TREATMENT RESISTANT LATE-LIFE DEPRESSION
PRESENTED BY
SARAH SHIZUKO MORIMOTO, PSYD
Associate Professor, Population Health Sciences, Division of Health System Innovation and Research
Adjunct Associate Professor, Psychiatry
Spencer Fox Eccles School of Medicine at the University of Utah
LEARNING OBJECTIVES
1. Participants will learn to identify the neuropsychological deficits that predict poor treatment response in late life depression
2. Participants will learn a step-by-step model for designing neuroplasticity-based digital interventions for psychiatric disorders
3. Participants will learn how to assess digital interventions for rigor, efficacy, and “fit” for their patients, or patient populations
4. Participants will learn how NeuroFlex induces change in the Cognitive Control Network, and thus, improves treatment response

PREVENTING SUICIDAL BEHAVIOR WITH DIVERSE HIGH-RISK YOUTH IN ACUTE CARE SETTINGS
PRESENTED BY
HOLLY WILCOX, PHD
Professor, Johns Hopkins School of Medicine
LEARNING OBJECTIVES
1. To describe the current youth mental health crisis
2. To discuss and compare interventions that could be conducted onsite in Pediatric Emergency Departments

EPIGENETIC GRIMAGE ACCELERATION AND HISTORY OF SUICIDE ATTEMPT IN BIPOLAR DISORDER
PRESENTED BY
GABRIEL FRIES, PHD, MBBS
Assistant Professor, The University of Texas Health Science Center at Houston
LEARNING OBJECTIVES
1. Discuss the concept of epigenetic aging and its application in clinical populations
2. Identify the association between epigenetic alterations and a history of suicide attempts in patients with bipolar disorder
Congratulations to the 2022 Emerging Scholar Travel Award Recipients! Check out the posters during the Annual Conference Poster Session at 1:15pm in Michigan Prefunction and Michigan Ballroom III, IV, V on Tuesday, September 20th.

**SARAH ANDREWS, MD**  
University of Florida  
Poster # 2  
**Predictors of Early Dropout from Residential Substance Use Treatment: Evaluating Relationships with Depression, Pain, and Age**

**RACHEL CONRAD, PHD**  
Brigham & Women’s Hospital  
Session: Tuesday, 9/20/22, 11:00AM  
**Main Stage Presentation**  
**Ethical Challenges in the Psychiatric Treatment of College Students**

**SAMUEL COOPER, PHD**  
University of Texas - Austin  
Poster # 8  
**Latent Depression and Anxiety Symptom Dimensions Predict Biased Acquisition and Extinction Learning in a Web-Based Causal Learning Task**

**CHESIKA CRUMP, MD**  
University of Louisville  
Poster # 10  
**Pimavanserin for Bipolar Disorder**

**JOSHUA CUNNINGHAM**  
Michigan State University  
Session: Tuesday, 9/20/22, 11:00AM  
**Main Stage Presentation**  
**Psychiatric Electroceutical Interventions (PEIs) and Clinical Treatment Guidelines: Results from a National Survey of Board-Certified Psychiatrists**

**GABRIEL FRIES, PHD**  
University of Texas - Austin  
Session: Wednesday, 9/21/22, 11:55AM  
**Main Stage Presentation**  
**EpiGenetic GrimAge Acceleration and History of Suicide Attempt in Bipolar Disorder**

**SUZANNE GONZALEZ, PHD**  
Penn State University  
**Do Pharmacogenetics Factors Influence Escitalopram-Induced Adverse Events or Treatment Failure in Youth at High-Risk for Bipolar Disorder?**

**DUNCAN HONEYCUTT, MS**  
University of Cincinnati  
Poster # 24  
**Cortical Thickness in the Right Anterior Cingulate Cortex and Non-Suicidal Self-Injury in Youth with Mood Disorders**

**REBEKAH HUBER, PHD**  
University of Utah  
Poster # 25  
**Ohio State University Comprehensive Psychotherapy Pathway for Depression: Implementation of a Stepped-Care Model Guided by Patient-Reported Outcomes in an Academic Medical Center**

**SOPHIE LAZARUS, PHD**  
Ohio State University  
Poster # 31  
**Functional and Structural Network Features of Apathy in Late-life Depression and Associations with Response to Escitalopram Treatment**

**ANDREW NOVICK, MD, PHD**  
University of Colorado  
**Depression Treatment for Children and Adolescents: Promising Results from a Collaborative Care Program**

**LAUREN OBERLIN, PHD**  
Weill Cornell  
Poster # 41  
**Characterizing Depression and Psychological Constructs Associated with Cardiovascular Disease: A Qualitative Analysis of the Literature from the Last Sixty Years**

**ALYSSA SMITH, MD**  
Indiana University  
Poster # 54  
**Affective Neural Circuits and Inflammatory Markers Linked to Depression and Anxiety Symptoms in Patients with Comorbid Obesity**

**LAURA SUAREZ, MD**  
Mayo Clinic  
Poster # 58  
**Antecedent Symptoms Associated with Onset of Major Depressive Episode in Pregnancy**

**PERRY TSAI, MD, PHD**  
University of Illinois at Chicago  
Poster # 60  
**Antecedent Symptoms Associated with Onset of Major Depressive Episode in Pregnancy**

**BENNETT WECHSLER, MD**  
University of Massachusetts  
Poster # 67  
**Antecedent Symptoms Associated with Onset of Major Depressive Episode in Pregnancy**
WANT TO BE FEATURED IN A NEWSLETTER, BLOG POST, OR SOCIAL MEDIA?

SHARE YOUR NEWS WITH US!

UPCOMING EVENTS

INCREASE VISIBILITY

AWARDS & HONORS

JOB LISTINGS

REACH A BROADER AUDIENCE

RESEARCH NEWS

ANNOUNCEMENTS

INFORM OTHERS

PROJECTS

Visit the NNDC website to complete the form, email skharecha@nndc.org for details or speak to NNDC staff at the conference.
The Relationship between Biological Rhythms and Mitochondrial Dysfunction in Bipolar I Disorder  
Sai Sruthi Amirtha Ganesh - Penn State Milton S. Hershey Medical Center

Predictors of Early Dropout from Residential Substance Use Treatment: Evaluating Relationships with Depression, Pain, and Age  
Sarah Andrews - University of Florida

Legislative Barriers to Electroconvulsive Therapy  
Emily Beydler - University of Florida

Evaluating Uptake e-Mental Health Tools in a Primary Care Collaborative Care Program  
Abigail Biehl - University of Michigan

Implementation of a Digital Tool for Monitoring Depressive Symptoms: A Case Series  
Scott Breitinger - Mayo Clinic

A metric of pharmacotherapy guideline concordance and its association with major depressive disorder symptom severity and patient functioning.  
Mason Breitzig - University of Michigan

Zebrafish as a Model for Studying Embryonic Development and Behavior in Bipolar Disorder  
Claire Cohen - Penn State Milton S. Hershey Medical Center

Latent Depression and Anxiety Symptom Dimensions Predict Biased Acquisition and Extinction Learning in a Web-Based Causal Learning Task  
Samuel Cooper - University of Texas at Austin

Psilocybin reverses stress-induced depression and anxiety-like behaviors and also promotes stress resilience in a wild type mouse model by mechanisms that are independent of 5HT2A and 5HT2C receptors  
Zachary Cordner - Johns Hopkins University

Pimavanserin for Bipolar Disorder  
Chesika Crump - University of Louisville

Psychiatric Electroceutical Interventions (PEIs) and Clinical Treatment Guidelines: Results from a National Survey of Board-Certified Psychiatrists  
Joshua Cunningham - Michigan State University & Pine Rest Christian Mental Health Services

Cardiovascular Disease Burden is Associated with Worsening Depression Trajectory  
Radha Dhingra - Penn State Milton S. Hershey Medical Center

Use of KIOS Smartphone App for Bipolar Patients in a General Medical Clinic  
Omar Elsayed - University of Louisville

Assessment Tools Used in Bipolar and Related Disorders Research: A Systematic Review of Studies from Turkey  
Mete Ercis - Mayo Clinic

Lumateperone as a treatment for bipolar depression: a scoping review  
David Farris - Michigan State University & Pine Rest Christian Mental Health Services

SafeUT: Short-Term Effectiveness of Mobile Crisis App Utilization in Adolescents  
Brian Farstead - University of Utah

Main Stage Presentation: Epigenetic GrimAge Acceleration and History of Suicide Attempt in Bipolar Disorder  
Gabriel Fries - University of Texas Health Science Center at Houston

Public Health Emergency-related Access to Telemedicine: A Bridge To Rural Mental Health?  
Mark Frye - Mayo Clinic
<table>
<thead>
<tr>
<th>Posters</th>
</tr>
</thead>
</table>
| **19** Race Mediates Healthcare Utilization During the Period Before the First Episode Mania and Schizophrenia  
Manuel Fuentes Salgado - Mayo Clinic |
| **20** Antidepressants that Increase Mitochondrial Energetics Elevate Risk of Treatment-Emergent Mania  
Manuel Gardea Resendez - Mayo Clinic |
| **21** Negative Affective Responsivity to Daily Stress is Exaggerated in College-Aged Adults with Depression  
Jody Greaney - The University of Texas at Arlington |
| **22** Similarities and differences in cannabis and cannabidiol related attitudes and behaviors between adolescents receiving mood disorder treatment in the US and their parents  
Christopher Hammond - Johns Hopkins University |
| **23** Maintenance ECT Considerations in a Post Covid-Induced Catatonia  
Ethan Holland - University of Florida |
| **24** Do pharmacogenetics factors influence escitalopram-induced adverse events or treatment failure in youth at high-risk for bipolar disorder?  
Duncan Honeycutt - University of Cincinnati & Lindner Center of HOPE |
| **25** Cortical Thickness in the Right Anterior Cingulate Cortex and Non-Suicidal Self-Injury in Youth with Mood Disorders  
Rebekah Huber - University of Utah |
| **26** Insula-cingulate brain network transcriptomes for lifetime mood disorders and longevity  
Mbemba Jabbi - University of Texas at Austin |
| **27** The Influences of COVID-19 as a Risk Factor for Admissions to An Inpatient Geriatric Psychiatry Unit  
Dora Juhasz - Michigan State University & Pine Rest Christian Mental Health Services |
| **28** Electroconvulsive Therapy Treatment Trial in Super Refractory Status Epilepticus: A Case Study  
Lauren Katzell - University of Florida |
| **29** Can an online mental-contrasting and implementation-intentions intervention increase help seeking initiation for individuals with depression?  
Amanda Keeler - Penn State Milton S. Hershey Medical Center |
| **30** Association Between Thyroid Stimulating Hormone And Depression: A Historical Cohort Study  
Rakesh Kumar - Mayo Clinic |
| **31** Ohio State University Comprehensive Psychotherapy Pathway for Depression: Implementation of a stepped-care model guided by patient-reported outcomes in an academic medical center  
Sophie Lazarus - The Ohio State University |
| **32** COMP360 Psilocybin Therapy in Treatment-Resistant Depression: Results of a Large Randomized Controlled Phase Ib/b Monotherapy Study and an Exploratory Uncontrolled Adjunctive Therapy Study  
Steven Levine - Compass Pathways, Inc |
| **33** The Use of Electronic Communication-based Automated Language Technologies to Augment Traditional Mental Health Care  
Tenzin Lhaksampa - Johns Hopkins University |
| **34** Racial Differences in the Major Clinical Symptom Domains of Bipolar Disorder  
Kevin Li - Johns Hopkins University |
| **35** No Association between Neutrophil-to-Lymphocyte Ratio and Suicidality: A study from large sample size  
Zehan Li - University of Texas Health Science Center at Houston |
| **36** Treatment-Resistant Mood Disorders Among LGBTQ People: Clinical Features and Response to ECT  
Brian Mickey - University of Utah |
Treating Attention and Mood Disorders in Collegiate Athletes: Developing a Best Practices Framework for Sports Psychiatrists  
James Moley - The Ohio State University

Efficacy and adverse effects of ketamine versus electroconvulsive therapy for major depressive disorder: a systematic review and meta-analysis  
Débora Moreira - University of Texas Health Science Center at Houston

Comorbid Conditions and Caution: A Case of Phentermine-Induced Mania with Psychotic Features  
Alyssa Nielsen - University of Florida

Delineating Anhedonia from Depressed Mood and Apathy: The Relationship Between Anhedonia, Cognition, Activity, and Social Support  
Zachary Nitsch - Penn State Milton S. Hershey Medical Center

Functional and Structural Network Features of Apathy in Late-life Depression and Associations with Response to Escitalopram Treatment  
Lauren Oberlin - Weill Cornell Medical College

Is there an impact of race on lifetime medication history of patients with bipolar disorder?  
Carolina Olmos - University of Texas Health Science Center at Houston

Using Natural Language Processing and Machine Learning to Predict School Violence in Youth  
Alexander Osborn - Cincinnati Children's Hospital Medical Center

KIOS: A Smart Phone App for Self-Monitoring for Patients with Bipolar Disorder  
Mehak Pahwa - University of Louisville

Depression Management in Psychiatry and Primary Care: The Impact of Online CME on Physician Knowledge, Competence, and Confidence Related to Pharmacogenetics  
Sagar Parikh - University of Michigan

Prevalence of Workplace Trauma and PTSD Symptoms Among Intern Physicians Training Before and During the COVID-19 Pandemic: A Repeated Annual Cohort Study  
Michelle Ptak - University of Michigan

Personalized characterization of the evolution of cognitive function in older adults with mood disorders  
Boyu Ren - McLean Hospital

Housing rats at moderate altitude increases depressive symptoms, causes systemic inflammation and alters cognitive behavior  
Perry Renshaw - University of Utah

Surge protected portable Ear EEG for Electroconvulsive Therapy  
Salih Selek - University of Texas Health Science Center at Houston

Neurocognitive Effects of Intravenous Ketamine Treatment in Treatment Resistant Depression  
Cortney Sera - University of Michigan

Female Sex and Pre-COVID Depressive Symptoms Associated with COVID-19 Binge Drinking  
Pravesh Sharma - Mayo Clinic

Impact of the National Suicide Hotline Number on Care of Outpatient Psychiatric Patients  
Priyanka Sheth - University of Louisville

Comparative Effectiveness Of Intravenous Ketamine And Intranasal Esketamine In Clinical Practice Among Patients With Treatment-Refractory Depression: An Observational Study  
Balwinder Singh - Mayo Clinic
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author(s)</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>Depression Treatment for Children and Adolescents: Promising Results from a Collaborative Care Program</td>
<td>Alyssa Smith</td>
<td>Indiana University</td>
</tr>
<tr>
<td>55</td>
<td>The temporal association and differential decrease of depression symptomatology between 10 Hz repetitive transcranial magnetic stimulation (rTMS) and intermittent theta burst stimulation (ITBS)</td>
<td>Nathen Spitz</td>
<td>University of Iowa</td>
</tr>
<tr>
<td>56</td>
<td>Examining Mental Health Links to Group-Based Multi-Trajectory Models of Stress Experience and Physiology in Current and Remitted Depression</td>
<td>David Steinberger</td>
<td>McLean Hospital</td>
</tr>
<tr>
<td>57</td>
<td>NNDC Mood Outcomes program: Where we are and where we are going.</td>
<td>Jason Straub</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>58</td>
<td>Characterizing Depression and Psychological Constructs Associated with Cardiovascular Disease: A Qualitative Analysis of the Literature from the Last Sixty Years</td>
<td>Laura Suarez</td>
<td>Mayo Clinic</td>
</tr>
<tr>
<td>59</td>
<td>Empathic Concern and Personal Distress: Exploring the Intricacies of Self and Other Oriented Empathy in Depression</td>
<td>Elizabeth Sullivan</td>
<td>The Nathan Kline Institute and NYU Langone</td>
</tr>
<tr>
<td>60</td>
<td>Affective neural circuits and inflammatory markers linked to depression and anxiety symptoms in patients with comorbid obesity</td>
<td>Perry Tsai</td>
<td>University of Illinois at Chicago</td>
</tr>
<tr>
<td>61</td>
<td>Clinical Outcomes in the Biomarkers of Ketamine (Bio-K) Study of Open-Label IV Ketamine for Refractory Depression</td>
<td>Erica Vest</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>62</td>
<td>A Case Study of Asymptomatic Hyperprolactinemia Secondary to Risperidone</td>
<td>Ekaterina Vlasova</td>
<td>University of Florida</td>
</tr>
<tr>
<td>63</td>
<td>Outcomes and Predictors of Response to Maintenance Ketamine in a Large Outpatient Cohort with Treatment-Resistant Depression</td>
<td>Yuji Wakimoto</td>
<td>University of Utah</td>
</tr>
<tr>
<td>64</td>
<td>Feasibility of Smartphone App MindLAMP in Developing Digital Phenotypes in Depression</td>
<td>Alex Walker</td>
<td>Johns Hopkins University</td>
</tr>
<tr>
<td>65</td>
<td>Higher Lactate and Pyruvate Levels and Lactate-to-Pyruvate Ratio Patients with Treatment Resistant Depression</td>
<td>Krista Wartchow</td>
<td>University of Texas Health Science Center at Houston</td>
</tr>
<tr>
<td>66</td>
<td>Moms &amp; Babies Feeling Better Together: Open Pilot Results of a Technology-Assisted, Entertaining Cognitive Behavioral Therapy Tailored for Rural WIC Clients with Perinatal Depression</td>
<td>Addie Weaver</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>67</td>
<td>Antecedent symptoms associated with onset of major depressive episode in pregnancy</td>
<td>Bennett Wechsler</td>
<td>University of Massachusetts</td>
</tr>
<tr>
<td>68</td>
<td>The Heinz C. Prechter Bipolar Research Program: A Snapshot of Longitudinal Data</td>
<td>Anastasia Yocum</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>69</td>
<td>A Randomized, Double-Blind, Placebo-Controlled Study of the Safety, Tolerability, and Efficacy of Zuranolone in Adults With Comorbid Major Depressive Disorder and Insomnia</td>
<td>Gary Zammit</td>
<td>Clinilabs Drug Development Corporation</td>
</tr>
</tbody>
</table>

Use this QR Code to view full abstracts
SUBSCRIBE TO THE NNDC MONTHLY NEWSLETTER!

- Conference and Events
- Latest Developments
- Network News
- Academic Research
- Job Listings
- and more!

Contact Shilpa Kharecha, NNDC Events & Communications Manager at skharecha@nndc.org to be added to the mailing list!
LOCAL RESOURCES

Urgent Care & Pharmacies

**Concentra Urgent Care**
8am - 6pm (Mo-Fr)
3131 S State Street
Ann Arbor, MI
(734) 213-6482

**CVS Pharmacy**
9am - 9pm (Mo-Fr)
10am - 6pm (Sa-Su)
1700 South Industrial Highway
Ann Arbor, MI
(734) 827-7980

**University of Michigan Hospital Emergency Room**
1500 E Medical Center Drive
Ann Arbor, MI
(734) 936-6666

Shopping & Convenience

**Briarwood Mall**
10am - 9pm (Mo-Sa)
11am - 6pm (Su)
100 Briarwood Circle
Ann Arbor, MI
(734) 769-9610

**Meijer**
Open 24 hrs
3145 Ann Arbor-Saline Road
Ann Arbor, MI
(734) 769-7800

**Speedway**
Open 24 hrs
4001 S State Street
Ann Arbor, MI
(734) 665-0513

**Target**
8am - 11pm (Mo-Sa)
8am - 10pm (Su)
2000 Waters Road
Ann Arbor, MI
(734) 996-0700

NNDC 2023

Stay tuned throughout the year for information about the NNDC 2023 Annual Conference as we plan more ways to expand our network and develop further resources for the latest developments in mental health research. We appreciate your collaboration, participation, and support. See you next year!