



A Steady Course

A Letter From Our Director

Melvin McInnis, M.D., FRCPsych

These days many of us find ourselves caught up in the unpredictability of the world around us. Whether it's the daily news cycle and the shifting priorities of our society, financial worries, or the broader pressures on the directions of health care, education, and research. I feel the stresses of unpredictability, as a professor and physician in a complex health care environment and as a neighbor navigating uncertain times.

Many institutions around the nation are facing uncertainty and change, yet the Heinz C. Prechter Bipolar Research Program continues to serve as a stable and forward-moving enterprise of discovery and collaboration. **As we look across the milestones of the past year, we are energized by what has been accomplished and motivated by the engagement of the community we serve. We are a team with a common vision.**

Our Program has met or exceeded several key research goals, including study recruitment targets, high-impact publications, and successful competitive grant awards. These achievements reflect the strength of our research infrastructure and the enduring relationships we've built with the individuals and families participating in our studies, with philanthropic partners, and with clinical and academic collaborators around the world.

The Prechter Program is widely recognized for its leadership in longitudinal research, its integration of clinical care and scientific discovery, and its ability to deliver consistent progress in a complex field. **What distinguishes our work is not only scientific rigor but continuity, and the capacity to stay focused over time, listen carefully to lived experience, and build a body of knowledge closely connected to real-world needs.**

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A Steady Course

A Letter From Our Director: Melvin McInnis, M.D., FRCPsych

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Our participant collaborators play a central role — they are team members. Many have been with us for years, contributing far more than data; they bring insights, feedback, and a shared commitment to improving the lives of others living with bipolar disorder. These relationships form the core of our research enterprise, guiding both the questions we ask and the models we develop.

Amid broader public conversations about institutional trust and the pace of change in academia, our Program remains grounded. We are not distracted by volatility. **Our energy stays centered on the individuals who join our Program, on the families who support them, and on the research teams dedicated to uncovering actionable knowledge.**

We are forward thinking. Our mission for the coming years is to expand our efforts to bring research and clinical care into closer alignment, develop personalized tools, improve data accessibility, and deepen collaboration across disciplines — especially our colleagues in primary care. We are committed to ensuring that the findings generated through our Program are not only scientifically sound, but useful to those who need them most.

To our participants, supporters, clinicians, and community partners: thank you. Your continued engagement has helped shape a research program that is innovative and enduring. There will continue to be noise, or distractions in the system — the sirens are beckoning. The Prechter Program knows and thrives on challenges — we are all hands on deck with a steady and solid vessel.

2025 Prechter Program By the Numbers

6,861

Citations of
Prechter Program publications

5

Rounds of the STAT Madness tournament of science
(michmed.org/Q9XWY)

Dr. Sarah Sperry's research looking at a new way to measure bipolar disorder made it to the Elite Eight.
(michmed.org/DQVW4)

8

Prechter Program research studies
looking for participants

Check out
page 14!

Data Manager Anastasia Yocum, Ph.D., received the **U-M Office of the Vice President for Research (OVPR) Data Management and Analysis Staff Recognition Award**
(michmed.org/GQkWZ)

Sarah Sperry, Ph.D., was a recipient of a **2024 American College of Neuropsychopharmacology (ACNP) senior level travel award** (michmed.org/zgnbX)

Sarah Sperry, Ph.D., is the recipient of the **Depression and Bipolar Support Alliance (DBSA) Gerald L. Klerman Awards 2025 Young Investigator Award**
(michmed.org/mDxbR)

6

Awards recognizing
outstanding research
and leadership from the
Prechter Program

EmoTe Lab and Prechter Program undergraduate honors student Lillie Birnie was awarded the **University of Michigan 2025 George Orley Student Mental Health Advocate Award**
(michmed.org/eQkDq)

Associate Program Manager Erica Vest, LMSW, received the **Sonya R. Jacobs Women's Leadership Impact Scholarship**

"Mood instability metrics to stratify individuals and measure outcomes in bipolar disorder," was selected by the Brain and Behavior Foundation for the **2024 Leading Research Achievements** (michmed.org/nVrb4)

CLOSING THE LOOP

Our groundbreaking research sets the Prechter Program apart — but what if we could more rapidly translate promising findings into clinical care and, in turn, learn from every clinic patient to improve our science? This virtuous cycle is at the heart of our vision to integrate research and clinical care into a unified, dynamic system. Such integration would not only improve treatment options for individuals with bipolar disorder, but also accelerate discovery by ensuring our research remains grounded in the realities of patient care.

Over the past year, we have initiated strategic conversations among researchers, clinicians, and stakeholders to define what a truly integrated system could look like. These discussions, inspired by learning health system models, have focused on identifying existing gaps, imagining an ideal state of research-clinical synergy, and building consensus around concrete next steps. We are leveraging the foundational work of our **Bipolar Disorder Learning Community** — a collaboration between clinicians, patients, researchers, and administrators — to ensure that lived experience and frontline clinical insight remain central to this process. *Learn more about the Bipolar Disorder Learning Community on page 11.*

We are currently developing mechanisms to link standardized patient-reported and clinician-reported outcomes collected during routine clinical visits with our longitudinal research data. This will enable real-time feedback loops: researchers can identify meaningful patterns in real-world care, and clinicians can apply emerging insights from our research directly to their practice. Additionally, we are exploring models for creating a streamlined assessment/intake workflow that would reduce burden on clinical providers and ensure that patients are provided with clinical and research opportunities that are most relevant to their individual needs and goals. Creating these infrastructures will take dedicated effort, and we are thrilled to have recently hired a clinical-research patient navigator who will lead these initiatives.

Ultimately, aligning research and care will help us achieve more personalized, effective, and timely treatment strategies. In complex conditions like bipolar disorder, where symptoms and their impact are wide-ranging, this integration is not just a desirable innovation — it is a necessary evolution. By fostering a culture of mutual learning between research and clinical care, we can improve outcomes, reduce impairment, and move closer to our goal of delivering the right care to the right person at the right time.



Brain Networks Study becomes the largest neuroimaging dataset on bipolar disorder

In 2022, the Sripada Lab, directed by Chandra Sripada, M.D., Ph.D., in collaboration with Melvin McInnis, M.D., director of the Prechter Bipolar Research Program, received a 5-year grant to study alterations in brain networks in bipolar disorder using functional magnetic resonance imaging (fMRI). Through the tireless work of Prechter Program lead research assistants Isabel Carley and Lauren Busuito, we have reached a key milestone: With over 140 people recruited, this project is now the largest neuroimaging study ever of bipolar disorder!

How Research is Made

From idea to publication



START

What do you want to study?

Come up with an idea for your research project.

Seek and find: Literature review

Review existing research.

Move ahead 1 space once you've read it all.

Plan your research study

Plan sample size, data collection, and analysis.

Research needs funding! Develop a proposal

Describe the impact, feasibility, and scientific merit of your idea.

Your team needs to review the protocol and manual. **Skip your next turn** while you await feedback.

Write the study protocol and manual
Explain objectives, organization, design, and methodology of your project.

REVISIONS NEEDED: Skip your next 3 turns. Research papers often go through multiple rounds of revision.

Congratulations!
Your paper was published. Move ahead 1 space to start sharing it with the world.

Share your research findings!
The Prechter Program shares our team's research by attending national and international conferences, hosting webinars, and posting to prechterprogram.org.

Proposal review complete.
Time to apply for research grants.

Your proposal was missing budget information.
Go back 2 spaces.

STOP!
Proposal needs regulatory review
Your proposal needs to be reviewed by U-M before you can apply for grants.

Funding awarded!
Congratulations!
Move ahead 1 space to start your research.

Did you know?
The Prechter Program research project PRIOR! was submitted 4 times before it received funding.

On average, the process from submitting a paper to getting it published takes around 16-18 months!

Grant application denied
Go back 1 space and try again with a different funder.

Funder needs to review your proposal.
Skip your next turn.

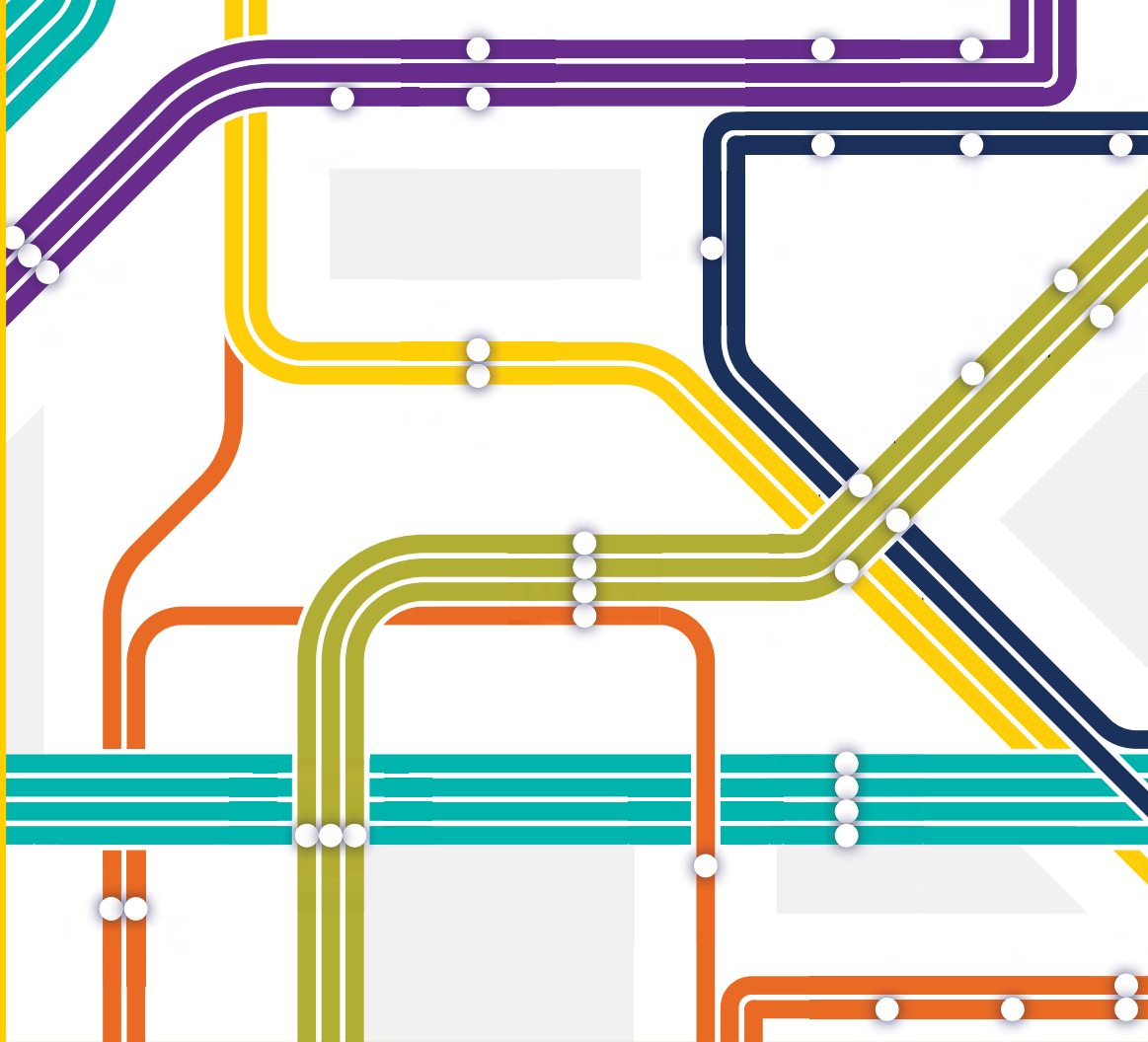
Go back to the START for your next idea!

Funding for research studies and programs, including the Prechter Program, comes from various sources. For example, researchers apply for highly-competitive grants through sponsors like the National Institutes of Health (NIH) which require comprehensive and detailed information on budgets, challenges, and outcomes.

Funding can also come from philanthropic support — the Prechter Program receives generous community support for our innovative and novel research. Whether from grants or philanthropy, funding also supports crucially important parts of research like space in cloud servers to properly store and archive data, utility bills in our lab space, maintaining the Prechter Longitudinal Study of Bipolar Disorder, ensuring we have administrative support from U-M, and even staff salaries.

The people who participate in Prechter Program research are and have been deeply engaged with our research — some six times a year for 18 years. We walk with our participants, becoming partners in their lives through good and difficult times.

Philanthropic support within the Prechter Program is deeply impactful — it keeps our participants' data safe, documents their lived experiences, and enhances the understanding of bipolar disorder. We share our immense gratitude for your investment in our work with individuals living with bipolar disorder, their families, and their communities.



Lines That Last

Partnership between the Prechter Program and New York Stem Cell Foundation

The Prechter Program is proud to announce that we are partnering with the New York Stem Cell Foundation (NYSCF) to preserve and distribute the stem cell lines generated by Sue O'Shea, Ph.D. The Prechter Program collaborated with Dr. O'Shea and her lab in the U-M Center for Pluripotent Stem Cell Research for over a decade. The O'Shea lab sampled skin tissue from Prechter Program research participants, turned the tissue into stem cells, and became the first in the world to grow brain cells from these stem cells. Dr. O'Shea retired in 2024 but her revolutionary work will continue to make an impact in research.

As part of this partnership, the Prechter Program is sending stem cells, or **fibroblasts**, from 29 patients (22 affected by bipolar disorder and 7 neurotypical controls) to establish a set of stem cell lines that will be distributed under the name of the Heinz C. Prechter Program. NYSCF has built a robotic system — known in the literature as the **NYSCF Global Stem Cell Array** — to create standardized, high-quality stem cell lines from blood or skin samples, and to certify the quality of existing stem cell lines. Certified cell lines are then stored at NYSCF under tightly controlled conditions and distributed to researchers who request them from all over the world. NYSCF's inventory management system ensures stocks are replenished once inventory runs low for any of the cell lines. The array is also used to genetically edit stem cell lines to study the genetic basis of disease, to convert stem cells into the types of cells affected in disease (e.g., brain, heart, pancreas), and to test drugs on diseased cells. Establishment of these lines will allow researchers from all over the world to advance our understanding of the cellular mechanisms of bipolar disorder.

Speech Solutions

PRIORI's Steps Toward Effortless Mood Tracking

Imagine technology that could predict your mood simply by listening to how you speak. The Prechter Program is working to make it easier to tell how severe an individual with bipolar disorder's mood symptoms are by listening to how they talk. Bipolar disorder involves shifts in mood from normal to either really high (mania) or really low (depression), which can significantly affect someone's life. Our goal is to spot these changes as they happen, without making people do anything extra.

Our technology exists as an Android application named **PRIORI** that securely runs in the background of participants' smartphones, periodically recording speech to perform mood prediction. PRIORI has experienced major improvements this year focused on creating a user-centric, transparent, and stable application. One key enhancement is the addition of a **disable timer**, allowing participants to easily turn off voice recording for selected periods when they prefer privacy.

Common challenges with new apps are technical issues that, for PRIORI, traditionally required our research coordinators to contact participants for troubleshooting. Our breakthrough solution was to develop a self-diagnostic feature that sends notifications directly to users when problems arise, providing simple, one-step solutions they can complete independently. This advancement gives participants greater transparency about how PRIORI operates and empowers them to resolve issues on their own, reducing interruptions to their daily routines.

Looking ahead, we have exciting developments in progress. A full-featured smartwatch version of PRIORI is currently in testing phases, and we're researching a standalone phone accessory version. These new platforms will provide more inclusive options for participants, eliminating the need for Android smartphones and reducing technical complexities.

Through these technological advances, we're not just collecting data — we're creating tools that could revolutionize how people with bipolar disorder monitor and manage their mental health, making mood tracking as natural as checking the time.



"I just finished my last interview for the PRIORI Ambient study and a friend asked me how I felt about that; I replied 'excited.'

"Living with mental illness and recovering from it (on and off) since 2002, I do have an understanding of what drives my behavior. In certain situations, my inner thoughts seem to provide answers that result in 'bad' actions. The questions this study was asking of me focus on those certain situations. This is very exciting to see. I have spent the majority of the last 24 years in therapy, and have not been asked questions like the ones I was asked over the last six months (while participating in the PRIORI Ambient study). You (the Prechter Program) are all onto something, and it's going to help a lot of people who need your help. Here's my favorite example:

"Since the last survey, it has been hard for me to resist acting on my feelings. This simple question proves that my mind has me exactly where it wants me. For the first two

months of this study, I was not able to understand what this sentence was asking me. I was answering it incorrectly. My mind KNOWS this and doesn't allow me to comprehend it in fear that I may just get better.

"Look, the results of being a bipolar alcoholic have been devastating to me. The failed friendships and awkward interpersonal relationships, homelessness, psychiatric wards, suicide attempts, alcohol rehabs — have just stripped every ounce of passion for life from me. I cannot motivate myself to become the person I feel is still inside of me. I want to resist my emotions that keep me down and be something, but I can't do it. By asking this question to me and others, it is going to help somebody else in the same situation and that makes me very happy. That is what excites me. Keep doing what you are doing, this study will help people."

—Steven Meengs, Prechter Program research participant in the PRIORI Ambient study



Podcast Alert: Michigan Medicine Presents ... Living with Bipolar Disorder

A 3-part podcast series featuring Prechter Program clinical, research, and lived experience experts

This spring, the Prechter Program released a three-part podcast series, "Michigan Medicine Presents ... Living with Bipolar Disorder." This podcast series is part of the Michigan Medicine Podcast Network, which explores wide-ranging topics spanning the field of medicine and takes a look at what is happening on the leading edge of research and innovation.

Tuning into "Living with Bipolar Disorder," you'll hear from Prechter Program experts who share their knowledge on topics like the science of bipolar disorder, the concept and meaning of wellness, and how to navigate everyday life experiences like medications, relationships, and the workplace when living with bipolar disorder.

Listen on Apple Podcasts, Spotify, or wherever you listen to your podcasts.



EPISODE 1: The Science of Bipolar Disorder

Bipolar disorder is more than just mood swings. It's a journey marked by the intense highs of mania and the debilitating lows of depression. Learn more about the science of bipolar disorder — diagnostics, genetics, and decision-making from Dr. Melvin McInnis, Dr. Paul Jenkins, and Dr. Chandra Sripada.

"I'm very optimistic about the future of research in bipolar disorder and that is really driven to a significant degree by the enthusiasm of the individuals that we are working with in our clinics and research programs and also the researchers (we work with) worldwide." — Melvin McInnis, M.D., FRCPsych



Dr. Melvin McInnis
Prechter Program director



Dr. Paul Jenkins
Prechter Program associate director, Pfizer Upjohn Research Professor of Molecular Pharmacology



Dr. Chandra Sripada
Prechter Program collaborator, Professor of Psychiatry and Philosophy

EPISODE 2: Exploring the Meaning of Wellness

Research into conditions like bipolar disorder cannot happen without the participation of hundreds of people who sign up for research studies. In this episode, we'll unpack wellness — how we define and measure it in health care and research settings. Listen to research and lived experience experts Dr. Alexandra Vinson, Stephanie Prechter, and Dr. Sarah Sperry.

"We've created a measure, implemented it, we've learned from it, and now we're back to putting something out into the world, and then we can test that again, we can make it better, and we can consistently learn, make the Prechter Program stronger and improve people's well-being. The possibilities kind of feel limitless." — Sarah Sperry, Ph.D.



Dr. Alexandra Vinson
assistant professor of Learning Health Sciences, Prechter Bipolar Disorder Learning Community co-lead



Stephanie Prechter, MFA
artist, philanthropist, Prechter Program research participant and board member



Dr. Sarah Sperry
Emotion and Temporal Dynamics Lab director, Prechter Program associate director, Richard Tam Early Career Professor of Translational Bipolar Research

EPISODE 3: Medication, Relationships, and Caretaking

Stigma can play a significant role in how people living with bipolar disorder receive treatment and care, navigate their education and careers, and manage many other aspects of daily life. Episode 3 explores topics like medications, relationships, the workplace, and how to support a loved one with Dr. Sagar Parikh, a psychiatrist in the Michigan Medicine Bipolar Disorder Clinic and Prechter Program collaborator, and Michelle Yang, writer, activist, marketing project manager, and research participant with the Prechter Program.

"When I was diagnosed and learned that it wasn't my fault, that there's a condition that lots of people share and that there's actually a treatment that can help, I jumped on it. I embraced it, right? I was not one to try to deny it. Even though it is hard."
— Michelle Yang, Prechter Program research participant



Dr. Sagar Parikh
psychiatrist in the Michigan Medicine Bipolar Disorder Clinic, John F. Greden Professor of Depression and Clinical Neuroscience, Professor of Psychiatry, Professor of Health Management and Policy, School of Public Health



Michelle Yang
writer, activist, marketing project manager, and Prechter Program research participant

Predicting Suicidal Thoughts through Network-Augmented Machine Learning

Artificial intelligence, or AI, may seem like just a buzzword in today's media landscape. But more and more, AI technologies are being explored in health care settings. The intent is not to replace doctors or nurses with computers, but to understand how these technologies can assist health care providers and researchers in developing interventions for patients — like suicide prevention.

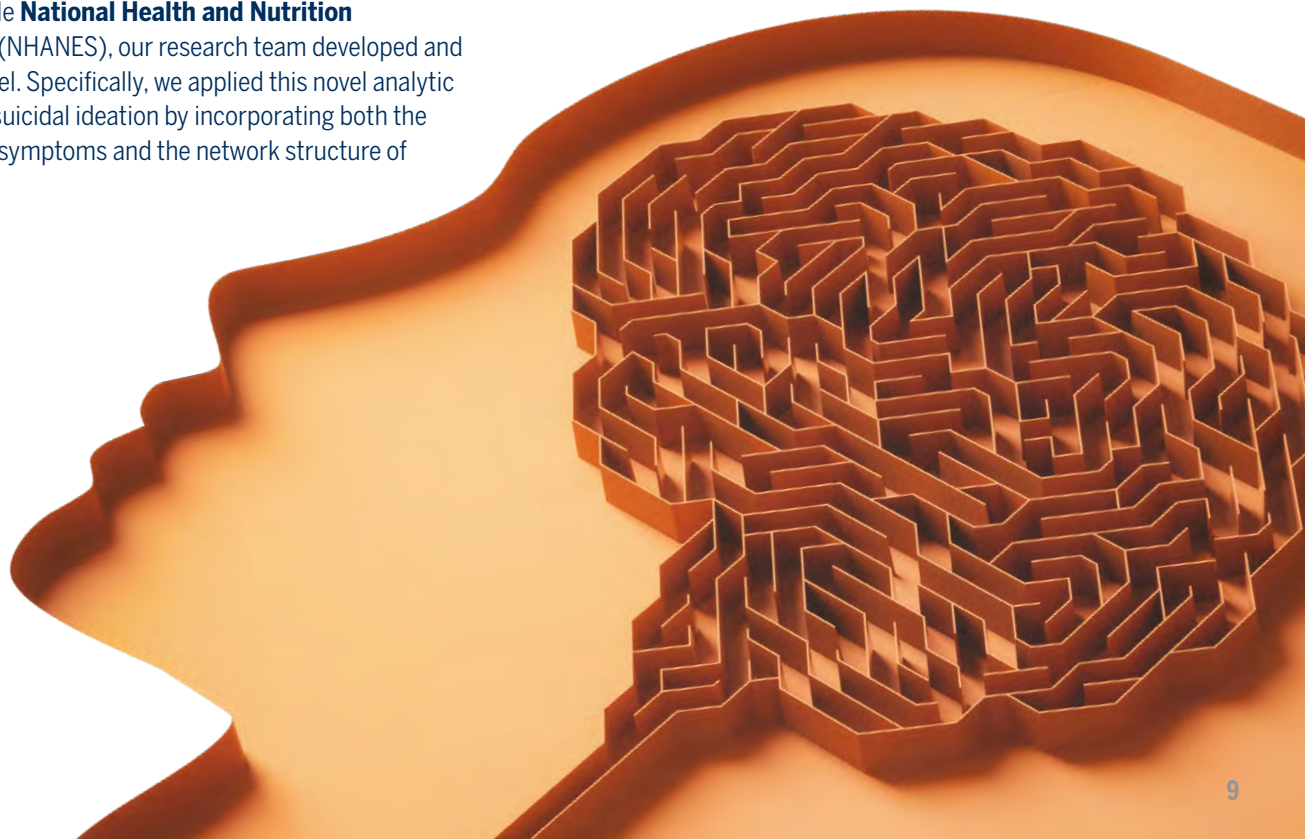
Early detection and intervention for suicidal thoughts remain critical public health priorities. **Machine learning**, a branch of AI focused on enabling computers and machines to imitate the way humans learn through experience and exposure to data, may be a useful tool in helping detect suicidal thoughts in patient populations. While recent advances in machine learning have enabled automatic identification of symptoms linked to suicidal thoughts, they offer little insight into why an individual may be at risk. The lack of the “why” poses a major limitation in clinical settings, where understanding how symptoms interact is essential for developing effective, targeted interventions. To address this challenge, Prechter Program research fellow **Hanjoo Kim, Ph.D.**, developed a novel framework called **NAMU** (Network-Augmented Machine Learning Utility), which looks at the relationship between symptoms with machine learning. Unlike traditional models that rely solely on individual symptoms or total scores from questionnaires assessing depression, anxiety, and risk for suicide, NAMU is a tool that helps us understand how different symptoms are related to each other and how strongly they affect one another. It uses this information to make better predictions, making it easier for us to understand the results.

Using data from the U.S. Centers for Disease Control and Prevention's large-scale **National Health and Nutrition Examination Survey** (NHANES), our research team developed and tested the NAMU model. Specifically, we applied this novel analytic framework to predict suicidal ideation by incorporating both the severity of depressive symptoms and the network structure of

their interconnections. NAMU significantly improved the model's interpretability of symptom interactions and consistently enhanced predictive accuracy. For example, when depressive mood and guilt were tightly interconnected with other depressive symptoms, the risk of suicidal ideation increased significantly. Rather than simply classifying risk, NAMU offers clinicians actionable insights into specific symptom constellations that may warrant focused intervention.

The model's performance has been robustly replicated across multiple large-scale, independent datasets, supporting its generalizability and potential for clinical use in suicide prevention. Our team is extending NAMU to individuals with bipolar disorder using longitudinal data from the Prechter Bipolar Research Program. By constructing depressive-symptom networks at each assessment, we are planning to develop a machine-learning model that predicts suicidal risk two weeks later. Given the disorder's exceptionally high suicide rates and pronounced mood variability, we expect this model to provide more precise, timely warnings and ultimately help save lives in this high-risk population.

Dr. Kim's study has been selected for an oral presentation at the 2025 Society for Research in Psychopathology (SRP) Conference this September and is currently being prepared for journal submission. A follow-up project applying NAMU to clinical populations has also been accepted at the Letter of Intent stage for the U-M Eisenberg Family Depression Center Impact Grant, with a full proposal now in development.



Network Connections

The Prechter Program is a key collaborator in the Breakthrough Discoveries for Thriving with Bipolar Disorder, or **BD² Integrated Network**, a groundbreaking national initiative designed to transform how we understand and treat bipolar disorder. In 2023, the Prechter Program joined forces with 10 other leading university medical centers across the country to solve the puzzle of bipolar disorder by sharing information and resources in ways never done before.

What Makes This Special

Currently, it takes an average of 17 years for scientific discoveries about bipolar disorder to benefit patients in real life. **The BD² Network aims to dramatically shrink this timeline by creating a system where research and patient care happen simultaneously.** Instead of waiting decades for lab discoveries to reach the doctor's office, this network integrates research directly into everyday clinical care, rather than conducting research and clinical care separately.

As one of the first six inaugural sites, the Prechter Program and the University of Michigan bring significant expertise to this national initiative. Our team includes experts in clinical practice, sleep and wearable digital devices, data analytics, neuropsychology, and learning health systems who are leading workgroups within this initiative.

Our work is supported by devoted research study coordinators and clinical raters, **Alexander Kingsley, Jack DiCarlantonio, Lauren Busuito, and Ahmad Abu-Mohammad, M.D.**, and is led by Principal Investigator **Kelly Ryan, Ph.D.**, and **Christine Grimm, N.P.**, who manage all aspects of study implementation from participant recruitment and enrollment to assessments and data quality. **Most importantly, nearly 100 individuals with lived experience are dedicating their time and invaluable personal insights, which form the foundation of this transformative research.**

“This study is so important to me and my family. Many of my siblings, cousins, and their children have been impacted by bipolar disorder. The study allowed me to recount my ongoing journey. I was able to describe treatments I've had and the results in a way that helped me realize how far I've come in understanding my mind, body, and spirit relationship with my bipolar disorder. The study team was extremely supportive and sensitive to some topics I've not shared with others. This research will be crucial in finding commonalities between study participants. I appreciate the work being done to find treatments for myself, my children, and generations to come.”

— Karen Eisel, Prechter Program research participant in the BD² Integrated Network study



What's New

Over the past year, the Prechter Program has enrolled 100 patients into this network. The BD² team recently published a research paper, led by **Dr. Alexandra Vinson**, describing the design and setup of the BD² Learning Health Network, which focuses on physical wellness for people with bipolar disorder. This focus has generated concrete **change ideas** — practical steps to help psychiatrists and psychologists better address the physical wellness of their patients by educating them about the relationship between mental health and heart and brain health. Future initiatives include adapting questionnaires and self-reflection tools to support conversations between clinicians and patients about physical wellness improvements like sleep rhythms, exercise, and alcohol use. If you are a BD² participant, you may be invited to participate in a change idea. Every change idea will include an opportunity to share your feedback with our team so that we can support you in living well!

Expected developments this year include peer support through partnership with the Depression and Bipolar Support Alliance, ensuring participants receive community touchpoints and wellness tools throughout their involvement.

Real-World Impact

Rather than conducting research in isolation, the network operates as a learning health system. This means that as researchers discover new insights about bipolar disorder, these findings immediately inform better care practices across all participating sites. Patients benefit from cutting-edge treatments while simultaneously contributing to research that will help future generations.

By combining the expertise of leading clinicians, researchers, and support organizations, the University of Michigan and BD² Integrated Network hopes to advance scientific discovery and patient care together, ultimately leading to better outcomes for everyone living with bipolar disorder.

The Prechter Program's BDLC Story: From Questions to Action

The Prechter Program started with a simple but powerful question: What if everyone touched by bipolar disorder — patients, families, caregivers, clinicians, and researchers — worked together as true partners to transform care at Michigan Medicine?

The Bipolar Disorder Learning Community (BDLC) began as a group of clinicians, researchers, individuals with lived experience, and family members who believed that health care could be better — not just for patients, but for the families, friends, providers, and caregivers who walk this journey with them.

In our first six months, something remarkable happened.

What started as monthly conversations about improving well-being grew into concrete action. We created a publicly accessible, bipolar-specific resource list (michmed.org/Y3GYJ) for the Michigan Medicine Bipolar Disorder Clinic to use, and we began to create a well-being measure that could help individuals track meaningful life activities and explore the relationship between their everyday activities and their well-being.

Our group activities expanded rapidly. We developed a page for the Bipolar Disorder Clinic on the Michigan Medicine Department of Psychiatry website that described the clinic and provided resources for bipolar disorder. We told our story about becoming a Learning Community at U-M seminars and international conferences. We began sharing updates via the Prechter Program's e-newsletter. We connected with innovators developing more empathic models of care, we became advisors on the development of exciting new tools for lithium monitoring, and celebrated advocacy and the nominations of our fellow members at the annual NAMI Michigan Gala.

We became partners in shaping the future. We participated in visioning conversations about future Prechter Program initiatives and dove deep into research processes like learning about the elements of a scientific manuscript and how it is submitted to a journal for peer review. We also participated in a hands-on qualitative research workshop where we identified topics and themes in narrative survey responses from our newly developed well-being measure. We then took our insights global, sharing what we learned about our well-being measure at international conferences, including the Society for Research in Psychopathology and the International Society for Bipolar Disorders.

What makes this story special isn't just what we accomplished — it's how we did it. In the three years since our initial meeting, we have demonstrated that collaborative engagement thrives when people who care about improving bipolar disorder care come together, forge common ground, and work together to improve outcomes. The basis of our work is the goal of forming a learning health system for the Prechter Program, a feedback loop that generates new insights about how to improve care and uses those insights to begin improving care right away.

Today, the BDLC represents a new model in which people with bipolar disorder and their families can actively shape research ideas and reimagine clinical care in a way that incorporates practical, real-world perspectives. We're building a future where lived experience is embraced as expertise.

This is just the beginning.



It Takes a Team

The Prechter Program is proud of the amazing team we've assembled. We could not accomplish all that we do without the dedication of the many individuals who are part of our lab. The Prechter lab includes researchers who lead our studies and publish findings; clinicians who interview research participants; a data team that builds applications, analyzes, and manages data; and of course our incredible team of study coordinators. The study coordinators are our "boots on the ground" — they are the team members who screen and enroll research participants; welcome and lead participants through in-person appointments; answer calls and emails; provide resources; and facilitate many other facets of our research operations. In addition, they pursue their own research projects and this year presented their projects at the annual U-M Department of Psychiatry Silverman Conference. Read more about what they studied:

Lauren Busuito, B.A.

It was an incredible opportunity to present at the Silverman Conference, and something that sets my experience as a research coordinator apart from peers at other institutions. For my research project this year, I wanted to further explore research topics that I'm particularly interested in: how brain conditions affect behavior, mood, and thinking skills. I compared Prechter research participants' opinions of their own cognitive functioning against their actual cognitive functioning on neuropsychological tests. While 65% of participants reported a high number of cognitive complaints, only 19% actually demonstrated cognitive deficits through testing. This gap prompted further investigation into what drives such differences in self-perception. Executive functioning, a set of skills that helps us plan ahead, organize, have self-awareness, manage/regulate emotions, and make decisions, plays a role. Participants with a high number of cognitive complaints who did well on cognitive testing had higher depression scores, higher IQs, and higher executive functioning scores. Participants who performed worse than they expected showed fewer depression symptoms, but had lower intellectual and executive functioning scores compared to those whose test results matched their predictions. This suggests that some individuals may have limited awareness of both their cognitive abilities and mood states. These findings highlight the importance of objective testing alongside self-reporting in clinical settings.

In the future, I hope to further explore how improving self-awareness might enhance treatment planning and help patients better understand their diagnoses, ultimately leading to more effective therapeutic outcomes. By applying to clinical psychology Ph.D. programs, I hope to work toward this goal and specialize in the field of clinical neuropsychology.

Jack DiCarlantonio, B.S.

My research project, "Age of Onset and Symptom Severity in Bipolar Disorder: A Longitudinal Cohort Study," looks into the intricate relationship between the timing of initial manic and depressive

episodes and the subsequent severity and variability of symptoms in individuals with bipolar disorder. Unlike prior studies that have concentrated primarily on the timing of diagnosis, my research highlights the critical role that the age of episode onset plays in the progression of bipolar disorder. To explore this further, I examined Prechter datasets of 767 participants tracked over a span of nine years. This investigation uniquely differentiates between manic and depressive episode onsets to provide a nuanced prediction of symptom severity.

The findings of this study indicate that individuals with bipolar I disorder who have an earlier onset of manic episodes tend to exhibit more severe and variable manic symptoms over time. Likewise, those with an earlier onset of depressive episodes face heightened severity in depressive symptoms throughout their lives. These insights highlight the pressing necessity of considering the age of onset as a pivotal factor in the diagnosis and treatment strategies for bipolar disorder. Identifying individuals who are at risk for severe and variable symptoms at an early stage could aid in developing more effective therapeutic interventions.

Eli Gordon, Undergraduate Research Assistant

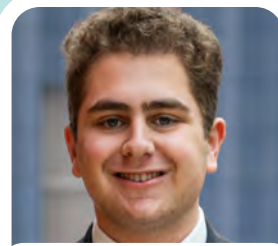
For my research project, we grouped 274 Longitudinal Study of Bipolar Disorder participants based on the length of time they had been taking lithium and compared their performances across different neuropsychological tests. Participants were placed into one of three groups: no lithium use, 1-2 years of lithium use, 2+ years of lithium use. While no significant differences were found between groups, there was a trend suggesting that those who have been on long-term lithium treatment performed worse on a section of the Wisconsin Card Sorting Task — a test that assesses abstract reasoning, executive function, and perseveration. Perseveration refers to the repetition of a particular response, like a word, phrase, or gesture, without the appropriate stimulus. This may indicate a possible negative association between long-term lithium use and cognitive flexibility, but more research is needed.



Lauren Busuito



Jack DiCarlantonio



Eli Gordon



Victoria Murphy



Gabi Skinner



Julia Smith



Gina Viviano

Lithium was chosen for this project due to its widespread use in treating bipolar disorder. Given how many people rely on lithium for daily functioning, it is critical we learn all that we can about the drug. In the future, I plan to expand this research by investigating other psychotropic medication, in addition to lithium, across longer periods of time.

Victoria Murphy, B.S., and Gabi Skinner, B.S.

In order to better inform and personalize clinical mental health care, researchers are exploring digital tools to track mood changes and unusual mood swings in people with bipolar disorder. One of these tools, ecological momentary assessments (EMA), is playing a large role in the digital health space. EMAs involve repeated sampling of an individual's current behaviors and experiences in real-time. For our research participants, this means that EMAs provide dynamic tools to analyze emotions in real-time, and in real world environments.

The digiBP (Gruichich et al., 2021) is an EMA self-report survey designed to assess depression and mania. For our research project, we analyzed a sample of digiBP responses from the PRIORI Ambient study and found that an individual's daily average of self-reported depression and mania correlated with a clinician's weekly rating of their mood. However, daily deviations from an individual's overall average level of depression and mania (i.e., how their mood on a given day differed from their study-wide average) was a stronger predictor of clinician-rated mood. We hope to continue looking at these initial findings. Our future work will examine parallel depression and mania in the digiBP and evaluate any correlations in clinical settings of those mixed features.

Julia Smith, B.A.

Those with bipolar disorders often face difficulties with emotional awareness — the ability to understand their emotions — along with emotion regulation — the ability to modulate and control their

emotions. These difficulties can lead to impulsive actions like harmful substance use or suicidality, and may be influenced by different social settings and contexts.

Using research from the Emotion-Based Impulsivity in Bipolar Disorder study (EBI-BD) led by Sarah Sperry, Ph.D., I wanted to examine the relationship between emotional awareness, emotion regulation, and impulsivity across social contexts in real-time. While there were no significant differences between situations when participants were alone or with others, when individuals felt like they had to regulate their emotions more, felt like their emotions were out of control, and lacked emotional clarity, they reported more emotion-based impulsivity. Across all locations, when individuals felt like they lacked emotional clarity, they reported more impulsivity at the home of friends or family. Dr. Sperry and her lab hope to continue to research these relationships in the full EBI-BD participant population, and explore these contexts with electroencephalogram (EEG) and Fitbit data.

Gina Viviano, B.A.

Examining symptom-level differences in bipolar disorders based on demographic factors like sex is critical for understanding symptom diversity and individual trajectories. My research project involved using bimonthly mood assessments from the Longitudinal Study of Bipolar Disorder and dynamic network analysis to examine differences in mood symptom profiles between sexes. In these networks, we found that core symptoms in depressive mood states differ based on sex, noting that self-esteem is dynamic. In females, self-esteem is a predictor of other symptoms, while in males, other symptoms predict self-esteem. This suggests that self-esteem plays a different role in depression between sexes. For the manic symptom networks, core central symptoms differed between sexes, with pressured speech being a core symptom for males. Considering these findings, care can be better curated for individuals by understanding additional influences and how symptoms interact with one another.

We can only do what we do because of you

Moving forward doesn't always mean moving fast. Research takes time, and a lot of it. It takes precision — to make revisions, change course, or edit a hypothesis. It takes learning from what didn't work before and what was successful for others. Most of all, it takes people. Yes, it's the researchers, the funders, the folks in the labs, the people making sure everything stays on track. But really, it's the people who volunteer their time, their lived experience, their personal stories — the highs, the lows, and everything in between. Research is studying and learning — but that can't happen without people who participate in studies. That's how we make change happen.



**Over 20 years of bipolar disorder research and so much more to learn.
Become a research participant today.**

Learn more about how you can be a part of change
contact our research team at BPResearch@med.umich.edu.

LETTER FROM THE PRECHTERS

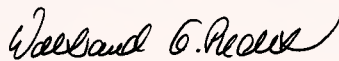
Heinz Prechter lived by the motto, “I want to make a difference in the lives of others.” This guiding belief shaped how he interacted with people from all backgrounds. His contributions touched our local community, the greater Detroit area, and our nation, and inspired the potential of dreamers on a global scale. His life was dedicated to service, with a lasting impact on various causes, including education, health care, the arts, culture, and his beloved automotive industry.

Heinz understood the true meaning of philanthropy. The word derives from the ancient Greek word philanthropia, meaning “to love people.” Thanks to the spirit of philanthropy and the precedent set by Heinz and others, the Prechter Program continues to thrive. The Program relies heavily on philanthropic efforts, mostly on individual giving and grants. Without your generosity, we would not be able to do this work.

Speaking of generosity, our study participants are an integral part of the giving! They offer their time and their story, their insight and lived experience. This is a form of philanthropy and it's one of our most treasured. We also appreciate those of you raising awareness, educating others, starting conversations, and connecting people with the Prechter Program. None of this goes unnoticed. It's all a part of philanthropy!

When you support our research, you are investing in the future of care for people with bipolar and a deeper understanding in terms of customized treatments and alternative modalities. We both know firsthand just how devastating it can be to watch a family member navigate bipolar or to be the one walking through it. That's what keeps us moving forward with this work! We have a lot of pieces in place, and we are grateful for the momentum, but there is so much more left to be done.

With gratitude,



Waltraud “Wally” Prechter

Founder, Heinz C. Prechter Bipolar Research Program
Prechter Advisory Board Chair

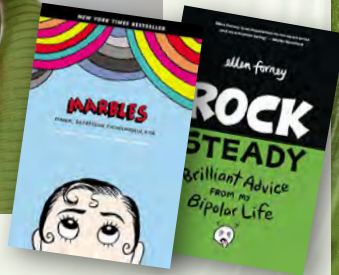


Stephanie Prechter, MFA

Prechter Advisory Board Member

19th Annual Prechter Lecture

Wednesday, October 22, 2025
6-9 p.m.



- FEATURED KEYNOTE SPEAKER:** **Ellen Forney**
Artist, cartoonist, speaker, mental health coach, and author of *New York Times* bestselling graphic memoir, *Marbles: Mania, Depression, Michelangelo, & Me*.
- FREE EVENT:** RSVP at michmed.org/PYGQR
- PANEL DISCUSSION:** Bipolar disorder research and Q&A with mental health experts
- RECEPTION:** Refreshments, community resources, and book signing. Books available for purchase in person through Literati.
- LOCATION:** **Michigan Union**
Rogel Ballroom, Second Floor
530 S. State Street, Ann Arbor, MI 48109

Photo: Winnifred Westergaard



HEINZ C. PRECHTER BIPOLAR RESEARCH PROGRAM
MICHIGAN MEDICINE

If you are interested in making a donation or a bequest to support the Prechter Bipolar Research Program, please email roseleah@med.umich.edu.

If you would like to talk with a lab specialist about taking part in research, please email BPREsearch@med.umich.edu.

OUR MISSION

The mission of the Heinz C. Prechter Bipolar Research Program is to discover the mechanisms that contribute to bipolar disorder, predict and improve outcomes, and develop effective, innovative treatments.

OUR VISION

We are building a future where personalized and evidence-based treatments for bipolar disorder will enable every individual with the illness to lead a healthy and productive life.

HEINZ C. PRECHTER BIPOLAR RESEARCH PROGRAM

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HELP IS AVAILABLE

In a mental health or substance use emergency, **call or text 988** to reach the national suicide and crisis lifeline.

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