Andrea Swain worried about the mental health of her staff in the months following the COVID-19 outbreak. “They would put on a brave face around the children, but you could see the stress and the exhaustion,” recalls Swain, executive director of the Yawkey Club of Roxbury, one of 11 Boys and Girls Clubs across Boston and Chelsea, MA. “People did discombobulate a little.”

Throughout the pandemic, Swain and her team provided services for club members before, during and after school. The impact on older teens was especially unsettling; the life they knew, with its familiar routines and anticipated rituals, was gone.

Swain’s growing concern prompted a call to Massachusetts General Hospital. She contacted Christyanna Egun, the hospital’s senior director of Boston Partnerships and Equity & Inclusion. They had worked together previously on a STEM curriculum program at the club designed to prepare students for eventual careers at Mass General.

“Christyanna heard the anxiety in my voice,” says Swain. “She said, ‘I am going to get you some help.’”

And she did: from the Child Resiliency Program (CRP), an initiative of the Division of Child and Adolescent Psychiatry.

“All kids would benefit from learning how to be resilient, to have the ability to overcome challenges of all kinds. Think of it; most kids struggle at some point in their lives with either mood or anxiety — and teaching them resilience will really help them manage better,” says Timothy Wilens, MD, chief of the division. “Our kids are in crisis right now because of the isolation, re-integration and all of the disruptions caused by the pandemic.”

A key component of the initiative is community outreach, drawing upon the expertise of faculty in the Child Cognitive Behavioral Therapy (CBT) Program and the Benson-Henry Institute for Mind Body Medicine (BHI). The outreach program includes training caregivers in resilience skill-building.

“The demands on staff and teachers at community centers during the pandemic have been unbelievable,” says Aude Henin, PhD, who serves as co-director of the Child CBT Program and clinical co-director of the CRP along with Dina Hirshfeld-Becker, PhD.
R
esilience is what we all need right now, as we prepare to return to schools and workplaces this fall. The world is opening up again — museums and ball parks and theaters — yet we face an uncertain future where change seems to be the only constant. We can’t help but wonder what is next.

Our kids, especially, need support during this time of adjustment. We are in a pediatric behavioral health crisis, as Dr. Tim Wilens, chief of child and adolescent psychiatry, has noted. As an example, we have seen substantial increases in outpatient referrals — 20 to 30 percent — since the start of the COVID-19 pandemic. The field of psychiatry in general continues to grapple with the challenge of not enough trained professionals to meet the increased demand for services. But we have good news to share — the department, as you will read in this issue, is answering the call in a variety of ways.

We are expanding our clinical care footprint — this month, three new child psychologists join the staff in the Child and Adolescent Outpatient Clinic, extending the capacity to provide therapy to children and their families, while participating in new services such as groups for parents and for teens. We are continuing our work to expand access to care through the training of paraprofessionals and the development of new digital technologies such as smartphone applications to monitor patient health. With philanthropic support, we hope to launch a Center for Digital Health. Telemedicine is here to stay, and right now, we estimate that between 60 and 80 percent of our patient visits will be virtual moving forward. We will continue to support efforts to expand telehealth through revised regulations.

We are bringing resiliency training to as many people as possible, and that includes elementary and middle school youth, teens at particular risk of developing mental health issues, and staff in schools and community centers. To help college-age youth with unmet mental health needs, our clinicians are training adult psychiatry residents. We welcomed a new group of 14 psychology interns in July who will be trained in new models of care delivery.

I hope you are as inspired as I am by our bold approaches; I enlist your support to ensure our success. In the meantime, let us look ahead and move forward, with resiliency and resolve — and hope.

MAURIZIO FAVA, MD
Psychiatrist-in-Chief

A Message from the Chief

T
e the MGH Leadership Council for Psychiatry’s two signature educational events, the Palm Beach Seminar in February and Visiting Day in June, were “virtual” successes this year. “These seminars continue to offer the opportunity to showcase the latest advances in research and clinical care, learning from the extraordinary Mass General Psychiatry faculty,” said Patty Ribakoff, co-chair of the Leadership Council. “Since the Council’s inception, the department has been invaluable in helping members navigate the landscape of mental health,” she noted.

Faculty members Archana Basu, PhD, David Mischoulon, MD, Felicia Smith, MD, and Sabine Wilhelm, PhD, presented at the 15th Annual Seminar on Feb. 25. The special members-only event held the night before featured a conversation between Chief of Psychiatry Maurizio Fava, MD, and special guest Richard Grinker, PhD, of George Washington University, who is also author of Nobody’s Normal: How Culture Created the Stigma of Mental Illness.

The 10th Annual Visiting Day on June 7 included talks by faculty members Ellen Braaten, PhD, J. Stuart Ablon, PhD, Jennifer J. Thomas, PhD, Paula K. Rauch, MD, and Yakeel Quiroz, PhD, followed by moderated question and answer sessions and a discussion led by Associate Chief for Philanthropy and Department Communications Lee Cohen, MD.

MGH Leadership Council for Psychiatry Showcases Faculty with Two Virtual Events

Yakeel Quiroz, PhD, discussed the topic, “Can Alzheimer’s Be Prevented?” with moderator Derri Shisael, MD, MPH, associate chief for public and community psychiatry at Virtual Visiting Day on June 7.

“Many of us know first-hand why these physicians and psychologists are so renowned,” Council Co-Chair Donna Emma told the Visiting Day gathering, “Mental illnesses are among the most common health conditions in this country. It is this reality that brings us all together and why the council’s motto, ‘No Family Goes Untouched,’ continues to ring true.”

To view the event recordings and to learn more about the Council, visit the Leadership Council’s web page: giving.massgeneral.org/psychiatry-leadership-council.
Harnessing technology to expand mental health services
If every psychologist in the U.S. saw patients 50 hours per week, it would only address 12 percent of the need.

“T is clear that our traditional approach, where one patient sees one provider, is never going to be able to address the access gap,” says Chief of Psychology Sabine Wilhelm, PhD, who often cites the above statistic to emphasize her point.

It is time, Dr. Wilhelm contends, for a paradigm shift in favor of digital technologies. “The pandemic has really accelerated the adoption of digital approaches,” she says. “I think we have a huge opportunity right now to roll out this type of work.”

Dr. Wilhelm and her colleagues are at the forefront of cutting-edge research on internet and smartphone-based treatments for Cognitive Behavioral Therapy, or CBT. Dr. Wilhelm, who is also director of the Center for Obsessive-Compulsive Disorders at Massachusetts General, continues to investigate the efficacy of a smartphone CBT app to reduce the severity of body dysmorphic disorder, an obsessive preoccupation with perceived physical flaws. She also works on app based treatments for OCD, depression and anxiety.

Smartphones, increasingly, are becoming an important tool for psychologists, who can use the phone’s sensors to make inferences about a patient’s mental state. They can track how socially connected a patient is. They will know if a patient has not left their home in many hours or is asleep or awake. “We can use that data to give them a little nudge, that it’s time to go for a walk or see a friend,” Dr. Wilhelm notes. Words and phrases that patients use on social media posts can give a sense of how depressed they are. “There is a lot of assessment data out there, and we can harness all that data for treatment.”

To coordinate effort and share information, Dr. Wilhelm launched a department-wide Digital Health Think Tank that now has nearly 80 members, including Psychiatrist-in-Chief Maurizio Fava. But Dr. Wilhelm envisions a Center for Digital Health to provide the necessary shared resources, such as data scientists, to accelerate technological research. “What’s missing is infrastructure funding,” she notes.

“We have developed some really good treatments that are not getting out there for the patients because we don’t have enough providers,” says Dr. Wilhelm. “We can reach people who otherwise wouldn’t get care, all over the world, and rural areas in this country. We need technology in order to do that.”

Training the Next Generation in New Models of Care

“I’ve always been focused on education and training,” says Susan Sprich, PhD, the new director of Psychology Training. “I just love working with the younger psychologists. You learn so much from them.”

The American Psychological Association recently lauded Dr. Sprich for her leadership in the development of training opportunities in evidence-based therapies. “Susan has had a huge impact in reducing the research-to-practice gap in psychology training,” said Chief of Psychology Sabine Wilhelm, PhD. As assistant director of the Psychology Internship Program and co-director of the Cognitive Behavioral Therapy (CBT) track, Dr. Sprich brought many outstanding interns to the hospital and is Mass General’s clinical lead for the internet-based CBT (iCBT) program.

In her new director role, Dr. Sprich welcomed a diverse class of 14 interns in July. “Our trainees are amazingly accomplished,” she says, noting that there were nearly 400 applicants. She also added two Assistant Directors of Psychology Training, Jonathan (JJ) Jenkins, PsyD, and Jonah Cohen, PhD, to the psychology training leadership team.

This year’s group of interns is likely to be one of the most innovative, as well. A major priority for Dr. Sprich is to implement new models of clinical care — and to include interns in the process. She supports new methods to assess patients faster and more efficiently, expanding access to care. Dr. Sprich and her colleagues plan to build on the department’s team-based care approach and start with less intensive, lower-cost treatments, such as skill-based group therapy and digital care such as iCBT.

“It really is a win to involve the trainees in the new models of care because these are important models that will be used in lots of places, not just MGH. It’s great for them to get that experience, to see what iCBT coaching looks like, what running groups is like, how to triage patients and how not to assume that every patient needs one-on-one therapy,” she says.

Her other priorities include retaining trainees with a clinical focus, creating a supportive environment for clinicians and researchers alike and increasing the diversity of training programs to result in a more diverse faculty downstream.

In addition to her other roles, Dr. Sprich serves as postgraduate psychology education director for the MGH Psychiatry Academy and co-clinical director of Psychology. As such, “I am in a good position to know what’s going on in different areas of the department and see how they can work together to improve training, move things forward, and help patients,” she says. “I feel there is synergy among a lot of the things I do.”
You can change your brain by practicing cognitive behavioral skills, says Luana Marques, PhD, director of Community Psychiatry PRIDE, or Program for Research in Implementation and Dissemination of Evidence-Based Treatments. Dr. Marques, president of the Anxiety and Depression Association of America and Phyllis and Jerome Lyle Rappaport MGH Research Scholar 2020-2025, launched the research center in 2014 to increase access to Cognitive Behavior Therapy (CBT) and other mental health treatments for low-income and ethnic-minority individuals. “The supply and demand will never match. And that has gotten only worse with COVID,” she says.

Heading into the uncertainty of the fall, Dr. Marques cautions that the effects of the pandemic will linger. Ten years after September 11, she notes, 10 to 12 percent of first responders still met criteria for post-traumatic stress disorder. “All of us are still struggling. It’s really important for us to give people resiliency skills, to help them have a shot of not developing emotional health problems.”

PRIDE continues to expand its community resiliency training and recently completed a comprehensive curriculum, TEB Skills, which is rooted in CBT and aims to build resiliency through skills that impact thoughts, emotions and behaviors. Psychologists have long recognized that these three experiences are closely connected in our everyday lives. Envisioned as a teaching tool, the goal is to equip paraprofessionals with a basic knowledge of TEB skills so they can practice them on their own and teach them to youth.

Clinic Helps Young Adults Cope

For young people in their late teens and early twenties, the road to adulthood can be a rocky path as they weigh career choices and education options while learning how to become self-sufficient and navigate healthy relationships.

Many mental health conditions also emerge between the ages of 15 and 24. “It’s a really important time to intervene and promote access to mental health care,” says Stephen Tourjee, MD, associate director of the Transitional Age Youth (TAY) Clinic at Mass General, which is directed by Yoshio Kaneko, MD.

One of the first of its kind in the country, the TAY Clinic was launched in 2014 to address the unmet mental health needs of young people. The majority of patients referred to the clinic are college students or residents in the Boston area experiencing difficulty with the transition to college or independent living. In particular, a number of patients suffer from “Failure to Launch” syndrome, struggling to function independently and to separate appropriately from their parents because of a range of mental health disorders, including ADHD, executive functioning issues, anxiety, depression and substance use.

“Even before the pandemic, this was a really vulnerable population, and it’s a population that has suffered uniquely during this time,” says Dr. Kaneko.

In the clinic, patients undergo diagnostic evaluations by post-graduate adult psychiatry residents under the close supervision of Dr. Kaneko and Dr. Tourjee. These typically include an interview with the patients and their parents, review of treatment records and consultation with outside providers when appropriate before formulating a diagnosis and treatment plan.

One of the missions of the clinic is to help broaden the pool of general psychiatrists who are trained to take care of this specific population, Dr. Kaneko explains, particularly given the ongoing shortage of child and adolescent psychiatrists.

The team is grateful for philanthropic support, including the ongoing commitment of the George Frederick Jewett Foundation East and the Joan & Leonard Engle Family Foundation.

Citing the tremendous demand for mental health services for this age group, Drs. Kaneko and Tourjee say more resources are needed for the clinic to increase access and add more clinicians, such as psychotherapists. Proposed initiatives include consultation outreach to local colleges, educational programs and curriculum development, expanded residency training, research studies and a family intervention component. Says Dr. Kaneko, “When a young adult is struggling in this way, the family as a whole is often struggling, too.”

“When a young adult is struggling in this way, the family as a whole is often struggling, too”

— YOSHIO KANEKO, MD
“The staff are burning out. Starting the training with them, to recharge their batteries, is really important.”

By January, the staff at the Yawkey Club was receiving practical, hands-on resiliency training in stress management, mindfulness and meditation. “I don’t know if we would have survived emotionally without the Mass General program, especially when people began to get COVID,” says Swain. Advice that seemed basic actually made a big difference, she notes: Take a deep breath. Drink water. Practice self-care.

This summer, program staff continued to teach resiliency skills to club members in middle and high school grades. On a sunny July afternoon, CRP instructor Linda Wells talked with a group of middle schoolers seated at small tables outside the club. “What can you do to manage your stress?” she asked.

Guided by Wells, the students practiced relaxation techniques and used the workbook developed by program staff. One technique is to imagine a special place. “Picture yourself walking to your special place. What are you doing in your special place? Stay in your special place as long as you like,” says Wells, who attended this club when she was in elementary school. Each student then paints their place on a small stone and uses it to meditate.

“For most kids, this new type of self-care builds upon their existing coping skills,” says Dr. Henin.

“There is so much demand for mental health care, and our clinics are being swamped with children who are already very symptomatic,” says Dr. Hirshfeld-Becker. “The idea of the resiliency program is to go upstream and get to the kids before they get so sick and teach them skills that will allow them to weather stressors without necessarily developing symptoms.”

“African-Americans and people of color who live in urban areas, we are born resilient,” Wells says after the session. “What this program is doing is giving these kids tangible tools.” Cognitive reframing — catching and re-approaching negative thoughts — is a later chapter in their workbook, and an important one, she notes. “Taking a deep breath before we say or do anything would make life a little easier for all of us.”

Wells has noticed that the summer has been a re-adjustment time for them. “Kids are getting used to being with people again. Sitting around is a little hard for them. And they aren’t able to retain the information they way they used to,” she says. “It’s a time of general uncertainty. We are still in a state of fear. We don’t know what comes next.”

Staff at the Yawkey Club also attended the summer sessions taught by Wells and CRP Director of Resilient Youth, Rana Chudnofsky. “Training the trainers” is necessary to expand access and deliver mental health services, and it is a priority of the Department of Psychiatry.

“The model is so important to us because it ensures sustainability,” says Swain. “It’s not ‘one and done.’”

“You shouldn’t need a PhD to be able to intervene,” is how Dr. Henin puts it.

In addition to the Yawkey Club, the program has expanded to two other Boys & Girls Clubs in Boston neighborhoods this year, with plans to start a fourth in the winter. The eventual goal is to launch CRP in all 11 Boston-area sites.

Another multi-week resiliency course for middle and high school youth — many of whom are students of color training to be community leaders — was launched this summer in partnership with the Boston Police Activities League, or Boston PAL. The program teaches stress management and resiliency skills and promotes healthy behaviors.

For the upcoming school year, the program plans to expand their youth and staff programming and launch a video course with readily accessible materials for parents, as well. The ultimate goal is to disseminate and replicate this model in Massachusetts communities and at the national level.

The program will continue to rely on philanthropy, which has been transformative from the start. Philanthropist Eleanor Spencer was instrumental in the launch of the program in 2016. She supported Dr. Hirshfeld-Becker’s research to understand whether it is possible to screen broadly for risk for clinical anxiety in toddlers, and whether family-based resiliency interventions work in toddlers as young as age two.

The team is grateful for the support of Lori and Gillis Cashman; John and Linda Henry and The John W. Henry Foundation; the Kelly Family Foundation and the Kelly family for providing infrastructure and clinical program support; and Carolyn Longacre and Michael Wilens.

At the Yawkey Club on that summer afternoon, the lively shouts of kids permeate the walls. “The laughter and the noise are the magic of the club,” Swain says. “Joy is very important. Mass General helped the staff find joy. And they also helped us bring joy to the kids.”
Navigating Uncertainty: Fall Re-Entry Advice for Young People, Parents and Families

Daphne Holt, MD, PhD, is director of the Resilience and Prevention Program, the Emotion and Social Neuroscience Lab, co-director of the Psychosis Clinical and Research Program and MGH Research Scholar 2018-2023.

"Kids may have some residual or persistent fears that need to be talked about and acknowledged. Some will need additional help to understand what has just happened and how to put it into some sort of context that will allow them to move forward. We are seeing that many parents are not fully aware of how their child is struggling. This is no fault of theirs, nor their children’s; it’s just a function of the fact that many kids do not often go to their parents for support once they reach adolescence. But this means parents should try to be more vigilant about checking in with their kids, perhaps offering support even when their children may not seek it out."

Timothy Wilens, MD, is chief of the Division of Child and Adolescent Psychiatry, director of the Child Resiliency Program, co-director of the Center for Addiction Medicine, and MGH Trustees Chair in Addiction Psychiatry.

"It is not the usual start of school. Discuss the transition and what it will look like with your kids, but also with other parents who are going through the same experience — and with their teachers, too. Having good communication with each other and making sure you are on the same page in navigating the move back to school will be a big step. Any transition time is when we need to be very mindful, but especially so this year with the ‘milestone’ transitions, such as going from middle school to high school."

Richard Liu, PhD, is director of suicide research in the Division of Child and Adolescent Psychiatry and director of Big Data Studies in the Depression Clinical and Research Program.

"For parents of kids who have been doing well, continue to keep an eye on them to see how they are doing. What we have seen is that kids who have been doing well may, all of a sudden, spin out. And for those kids who are showing more than a few small problems, I strongly recommend you get them in to see their pediatrician or a behavioral health expert. For young people, acknowledge what you are feeling. Let someone know — your parents, a co-worker, a friend. Take advantage of the number of resources available and people who can touch base with you, talk with you and help you. You won’t walk around feeling terrible forever. We have very effective treatments — they work."

Paula K. Rauch, MD, is founding director of the Marjorie E. Koff Parenting At a Challenging Time (PACT) Program and a consultation child psychiatrist specializing in the impact of medical illness on families and the emotional health and well-being of children.

"We have been building the skills for a lifetime of increased resilience during the pandemic. Resilience is about doing the best you can under the circumstances you’ve got and not giving up, not feeling helpless and alone and continuing to invest and engage in life. Imagination and conversation are powerful agents of resilience. Sharing honestly what we don’t know with our children supports their coping. We can imagine and wonder and make educated guesses together. Curiosity about your child’s perspective is empathy 2.0 — I’m listening to you and learning from you. Ask teens if they are worried about peers or others — it may be a way to back into a conversation about how they are doing. Prepare children that different settings and different families will have different rules the next months. Rather than criticizing another family’s choices, talk about how you make safety decisions and why."

Louisa Sylvia, PhD, is associate director at the Dauten Family Center for Bipolar Treatment Innovation and a researcher in resiliency and wellness programs for individuals with mood disorders.

"For young adults in particular — in college or just starting their careers — I recommend that they make a good schedule and follow a regular sleep, exercise and mealtime routine as well as start their day around the same time (e.g., first contact with someone). They are trying to find themselves in so many ways, and that includes finding a schedule that works for them. Ideally, their weekend and weekday schedules should be similar to avoid the ‘weekend lag.’ This lag can happen when their routine changes abruptly. For example, if they are staying up really late on Friday and Saturday, and then have to be up by 9 am on Monday, they may feel tired and fatigued for a few days. Establish a schedule, even if a bit shifted (e.g., in bed by 1 am and out of bed by 10 am) and try to stick to it."

Timothy Wilens, MD, is chief of the Division of Child and Adolescent Psychiatry, director of the Child Resiliency Program, co-director of the Center for Addiction Medicine, and MGH Trustees Chair in Addiction Psychiatry.

"For parents of kids who have been doing well, continue to keep an eye on them to see how they are doing. What we have seen is that kids who have been doing well may, all of a sudden, spin out. And for those kids who are showing more than a few small problems, I strongly recommend you get them in to see their pediatrician or a behavioral health expert. For young people, acknowledge what you are feeling. Let someone know — your parents, a co-worker, a friend. Take advantage of the number of resources available and people who can touch base with you, talk with you and help you. You won’t walk around feeling terrible forever. We have very effective treatments — they work."
Joshua Roffman, MD, MMSc, is leading a groundbreaking study to find ways to reduce risks before disease starts.

Psychiatrist and neuroscientist Joshua L. Roffman, MD, MMSc, aims to prevent psychiatric illness in children and teens through innovative brain research. As director of the Early Brain Initiative and co-director of Mass General Neuroscience, Dr. Roffman works closely with leaders in neurology, psychiatry and neurosurgery to find effective therapies for patients.

**Why are you interested in brain health before birth?**

In psychiatry, most known risk factors for mental illnesses are not “modifiable,” that is, they cannot be changed. In cardiology, for example, exercise, diet and quitting smoking are modifiable factors that can reduce the risk of heart disease.

To prevent mental illness, we need to discover “modifiable” factors. And they need to be harnessed before the disease begins to take hold in the brain, which for psychiatric conditions can be years before people develop symptoms. Recent studies show that our best chance for meaningful intervention may be before birth. Much of my team’s work is centered around a new pregnancy and birth cohort study called Brain health Begins Before Birth, or “B4.”

**How will B4 shed light on the prenatal brain and mental illness?**

We hope to discover protective factors that can reduce risk for mental illness. B4 will enroll at least 1,000 pregnant mothers and their babies and follow these children through at least the first few years of life.

Through survey data from each trimester, wearable devices that transmit data on stress, sleep and body temperature, and by integrating electronic health record data, we will follow key risk-conferring prenatal elements such as maternal stress and infection, as well as potential mitigators of risk — prenatal vitamins, maternal exercise, sleep and nutrition. We will also collect biological samples (DNA, cord blood, placenta) and conduct studies of “brain development in a dish” using cord blood cells.

**Tell us more about the “brain development in a dish.”**

Rakesh Karmacharya MD, PhD, our team’s co-director for Translational Neuroscience, creates organoids — complex brain models made from patient-derived stem cells. We expose those organoids at various developmental time points to potential risk factors, like pro-inflammatory agents, and to potential protective factors like folic acid, shown to reduce the risk of autism and prevent spina bifida, a devastating neurological birth defect. This helps us determine whether different prenatal exposures might result in different brain development outcomes for the same children, a process we call “twinning.”

**Why is collaboration such an important part of your work?**

If we are successful, the interventions won’t necessarily show up in psychiatry — they will show up in primary care, women’s health, obstetrics and pediatrics. We want to take what we learn from clinical studies back into the lab and that requires translational neuroscience. Our team includes expert investigators in each of those areas, something that is uniquely possible at Mass General — where there is no “gap” between basic science and clinical studies.

**How does philanthropy play a role in your research?**

Our studies are ambitious and groundbreaking in ways that are hard to fund through federal sources. Philanthropy is also essential to support for studies of specialized populations — such as moms exposed to COVID-19, obstetric complications, or substance use early in pregnancy. Studies of families with increased genetic risk also have the potential for dramatic results.

In a previous study, when moms with an older child with autism took folic acid early in pregnancy, the younger sibling’s risk of developing autism was half of what it otherwise would have been. We want to know if the same is true for other prenatal interventions, across a range of psychiatric disorders in childhood and adolescence, and racial, ethnic and socioeconomic backgrounds.

**Are you seeking participants to enroll in your studies?**

Yes, our B4 cohort is enrolling pregnant women early as the first prenatal visit. Mass General is home to about 3,800 births every year, and ultimately, we would like to include as many of these families as possible.

We are enrolling participants in our ACEND (Assessing COVID-19 Effects on Neural Development) Study, with an emphasis on Latinx populations because of their higher rate of COVID-19 hospitalizations. Of the kids who were exposed to COVID-19 and did well, what can we learn about these pregnancies that might suggest new protective interventions?
The Center for Precision Psychiatry, under the direction of Jordan Smoller, MD, ScD, hosts the first Annual Conference on Precision Psychiatry on Sept. 30 and Oct. 1. The virtual event will feature presentations by scientists, industry partners and health care leaders on the potential application of precision medicine to psychiatric research and clinical practice and on the progress being made to develop more targeted and effective approaches to diagnosis, treatment and prevention. Josh Denny, MD, MS, chief executive officer of the National Institutes of Health All of Us Research Program, and Josh Gordon, MD, director of the National Institute of Mental Health, will serve as keynote speakers.

Register or review the agenda at mghcme.org/precision-psychiatry. To learn more about the event or the center, please contact Lorraine Fanton, senior director of development, at lfanton@partners.org.