



Expanding Academic Consciousness

More Universities Step into Psychedelic Research

Ali McGhee, Ph.D.

As interest in psychedelic medicine grows across the U.S. and Canada, more academic institutions are venturing into research areas spanning the sciences and the humanities. Since 2018, nine new programs and centers, characterized by innovation, interdisciplinarity, and collaborations with other institutions and organizations, are attracting increasing numbers of hopeful students, faculty, and volunteers for studies. While the majority focus on the science of psychedelics, each center is distinguished by unique research interests. A handful approach psychedelics using other frameworks, including religious studies, theology, and journalism.

A vein of optimism runs through all programs. Psychedelics have ushered in breakthroughs that continue to reshape how we think about mental health, consciousness, and culture, and all of the researchers and scholars interviewed expressed excitement for the future of these plants and compounds. Decriminalization, and even legalization, of several of these substances at the federal level is widely anticipated, with MDMA-assisted therapy for PTSD expected to be evaluated by the FDA in 2023. As scientific journals publish more data showing the promise of psychedelics for mental illness, and as American culture has shifted towards acceptance of these substances, university leadership, once hesitant to broach the subject, have given their blessings to new initiatives to prepare their students and residents to meet increasing demand.

While attitudes continue to shift in support of psychedelics, securing long-term funding and working through the approval process for studies has been a consistent challenge for most programs, which all currently rely on philanthropic gifts and, in the case of centers engaged in scientific research, face regulatory hurdles. Most academic institutions see these challenges as temporary, and have their sights fixed on a future when psychedelic studies departments show up in many more course catalogs.

A Pioneer Gets a Permanent Home

Johns Hopkins University has been involved in psychedelic research since their first psilocybin studies commenced two decades ago. The university now houses the **Center for Psychedelic and Consciousness Research**, founded in October 2019. Dr. Matt Johnson, Acting Director, notes the Center was made possible by the gradual, organic acquisition of faculty and several major philanthropic gifts. It's

Once a taboo topic, psychedelics—and the centers built around them—are being celebrated and recognized by university directors and administrators as critical, both for preparing students for new realities of research and clinical work, and for drawing competitive students, residents, and faculty.

currently one of the most well-funded of the new programs, launching after a grant of nearly \$17 million from a group of private donors including the Steven & Alexandra Cohen Foundation, Tim Ferriss, Matt Mullenweg, Blake Mycoskie, and Craig Nerenberg. Several studies have been supported by the Heffter Research Institute.

Psilocybin remains a focus of current and future studies, including on smoking cessation, chronic pain, opioid use, and chronic Lyme disease. Faculty also completed the first double-blind study of salvinorin A, the active compound in *Salvia divinorum*. An LSD study is in development.

Johns Hopkins University had existing infrastructure to handle drug research prior to launching the Center, including an onsite pharmacy, nursing and medical staff, and other necessary components for administering medical studies. “We’re a part of a research unit that has studied human behavioral pharmacology for half a century,” says Johnson.

According to Johnson, the Center is distinguished from other programs “because of the focus on the experience. When you take people who are 60 years old, including spiritual seekers, and most of them say that their experience with psilocybin is one of the top five most meaningful spiritual experiences of their lives, and a third say it’s the most meaningful – that has so much therapeutic power.”

“That’s part of our contribution,” he adds. “It’s our legacy.”

Science Programs Target New and Established Populations

Psychopharmacology has been a focus of scientific research at **University of California, San Francisco (UCSF)** for 15 years, so they had facilities and the ability to give drugs when Director Joshua Wooley, M.D., talked with venture capitalist and philanthropist George Sarlo about his experiences with psychedelic-assisted therapy for post-traumatic stress disorder (PTSD).

The result was the **Translational Psychedelic Research Program (TrPR)**, which completed its first study, on effects of psilocybin on the demoralization of long term AIDS survivors, in 2020. TrPR was also a site for MAPS’ Phase 3 MDMA-assisted therapy for PTSD trials. TrPR is also collaborating with Filament Health on the first study of a botanically-sourced psilocybin, as well as a study on psilocin, the first of its kind in humans in four decades. Future studies are also planned for ketamine, as well as several novel psychedelics that are under wraps—for now.

TrPR’s focus on higher-risk populations differentiates it from other programs. Three psilocybin trials—on Parkinson’s, bipolar II disorder, and chronic low back pain—are currently active or in final stages of development. Wooley is also working



Roland Griffiths and Matthew Johnson of Johns Hopkins University

on an additional study of psilocybin’s effects on methamphetamine users. “Most other groups have been reluctant to work with patients diagnosed with Parkinson’s and bipolar disorder,” Wooley says. “We feel the field has matured to a place where we need to know the effects of these medicines, and we think the potential benefit outweighs the potential risk, which we do everything we can to mitigate.”

As with the other programs, the interest of prospective researchers and patients currently exceeds capacity. “It totally floored us,” says Assistant Director Ellen Bradley, M.D. “It’s more far-reaching than we expected—we’re physician-researchers who were looking to create a space that would jumpstart collaborations.”

“The enthusiasm from other clinical researchers and basic scientists interested in translational work is awesome,” she continues, “as is the number of patients who are excited to learn more about participating in our studies. But we also hear from clinicians who have many years of expertise in psychedelic work in the community and want to get involved in research, patients

and support groups with lived experience who have ideas for studies, start-ups with novel compounds they want to explore, and impressively motivated high school and college students who want to join the team.”

Massachusetts General’s Center for the Neuroscience of Psychedelics is focusing on “neurochemistry, neuroimaging, and neuroplasticity,” says Program Director Jerry Rosenbaum, M.D., who started the Center after he saw the changes in the brain that psychedelics initiated. Their first two studies, both with psilocybin, have focused on basic science. The team is currently raising funds to do a study of mindful self-compassion in treatment-resistant Gulf War veterans, which they will combine with neuroimaging. Rosenbaum hopes that future studies will research whether mindful-self compassion makes MDMA-assisted therapy sessions more durable. 5-MeO-DMT will also be a subject of future research.

The Center’s dual focus is on “innovation and the deep scientific understanding of the cascade of events in the brain that gives rise to changes in brain networks,” says Rosenbaum. “We’re looking at the window of opportunity to create change in the brain,” including during periods of neuroplasticity and shifts in brain connectivity. The Center is also developing an educational arm and will eventually offer training for therapists, including training in mindful self-compassion, in collaboration with Cambridge Hospital and California Institute of Integral Studies (CIIS).

University of Texas Austin’s Center for Psychedelic Research and Therapy at Dell Medical School is focused on neuroscience and brain imaging. Dr. Greg Fonzo, Co-Director of the Center, notes that “Our goal is understanding the mechanisms of psychedelics to design novel treatments with a rigorous scientific approach.” The Center will be a site in Compass Pathways’ Phase 3 trial on psilocybin therapy for treatment-resistant depression. Faculty are also interested in how psychedelics might improve neuromodulation techniques, like transcranial magnetic stimulation (TMS) and brain-focused ultrasound (FUS). “A window of plasticity is opened after the administration of psychedelics,” Fonzo says. “We’re currently using psychotherapy in that window, but our hypothesis is that neuromodulation could also be a kind of aftercare.”

The Center is especially interested in enrolling study participants with a history of childhood maltreatment and depression or PTSD diagnoses. It will also partner with the Heroic Hearts Project and The Mission Within, programs for veterans seeking psychedelic treatment options.

A Focus on Training and Education

Dr. Rachel Yehuda founded **Mount Sinai Medical School’s Center for Psychedelic Psychotherapy and Trauma Research** after completing the MAPS MDMA Therapy Training Program in 2019. She brought the protocol back to Mount Sinai to use in her work with veterans. “Once I realized how much was involved in launching a single study, it made a lot of sense in terms of economy of scale to put a center together,” she says. The Center is collaborating with MAPS on a current clinical trial comparing the efficacy of two versus three doses of MDMA for veterans with chronic PTSD.

Currently, the Center’s clinicians use the MAPS protocol, and they are highly focused on treatment-resistant PTSD and trauma. “We could not do without MAPS,” says Yehuda. The Center plans to offer trainings “to address questions for people that really don’t know that much about psychedelics,” she says. “A lot of people seeking formal training now may know about psychedelics, but the trainings we’re going to offer are designed for

people who really know a lot about PTSD—and can apply what they know about PTSD and other forms of therapy to this model.”

The Center, which is funded for five years, will offer its second training program this October free of charge. Research on psilocybin is planned, but Yehuda says that researchers will likely stay focused on MDMA and psilocybin, and will slowly expand study participants to non-veterans while maintaining a “veteran-centric perspective.”

Dr. Michael Mithoefer, MAPS Public Benefit Corporation (MAPS PBC) Senior Medical Director for Medical Affairs, Training and Supervision, has advised on the **Medical University of South Carolina’s new Psychedelic Research Center**. Mithoefer and his wife, Annie Mithoefer, B.S.N., were among the earliest collaborators with MAPS on MDMA trials, beginning in 2000, and helped develop the training protocol MAPS uses for MDMA-assisted psychotherapy.

The Center’s current focus is ketamine-assisted therapy for treatment-resistant major depression and substance abuse disorder, with plans to expand to include training with MDMA and psilocybin. Future studies will recruit for post-traumatic stress disorder (PTSD), major depressive disorder, and alcohol and substance use disorders.

The Center’s Acting Scientific Director, Dr. Jennifer Jones, traces three parts of the Center’s mission: “to deliver high-quality clinical care for treatment-resistant conditions, to develop



Dr. Rachel Yehuda

a diverse research portfolio that furthers understanding in psychedelic science, and to provide a comprehensive training program that expands the pipeline of clinicians trained in psychedelic assisted therapies.”

Jones explains that the Center primarily offers longitudinal training opportunities for resident-level trainees in psychiatry. Medical students will be able to enroll in research-based summer electives through the school’s Diversity in Research Training Program (DART). The program has also supported pre-doctoral trainee projects.

“The intention is to train psychologists and psychiatrists in this field,” says Michael Mithoefer, M.D. “If they choose the psychedelic track they’ll have the chance to be involved in research, and will get training working with psychedelics in the clinical trials they’re going to do.”

The program’s focus on therapy makes it unique amongst psychiatry residencies. “These days in psychiatry, there’s so much more emphasis on pharmacology and less emphasis on therapy than there used to be,” notes Mithoefer. “This combines therapy and pharmacology, and brings therapy back into a central role.”

The Rise of Interdisciplinarity

University of Ottawa’s Psychedelics and Spirituality Studies Initiative, housed in the Department of Psychology, is anchored in multiple disciplines, including psychology, religious studies, and consciousness studies. Dr. Anne Vallely, Director, is a professor of religious studies whose background in anthropology, specifically end-of-life and grief traditions in India, sparked her interest in psychedelics.

“I became interested in the potential of psychedelics to alleviate existential angst and depression, which are considered

normative in North America, at the end of life” she says. “Maybe this would allow us that sense of mystery and awesomeness around end-of-life. The dying process can be a learning process, with insight possible until the last minute.”

Now in its second year, the interfaculty graduate microprogram offers stackable courses in three streams: clinical, research, and spiritual care. Vallely, along with Dr. Monnica Williams, is developing a Master’s program in Psychedelics and Consciousness Studies that will build on the microprogram. Vallely is hopeful that the program will affiliate with Vancouver Island University, which has a graduate-level certificate program in psychedelic-assisted therapy, as well as St. Paul’s University in Ottawa, which will offer the courses for students in that school’s Counseling and Spirituality Master’s Program. “The way in which we are emphasizing the spiritual component of this makes it unique,” says Vallely of the initiative and planned Master’s. They also plan to work with MAPS so that students can go through the MDMA Therapy Training Program.

“The program is remarkable,” she adds. “It was greenlit all the way by the administration—they see the value and want the University of Ottawa to be the first university in Canada to launch the Master’s, so things have been really positive.” The initiative has received high interest and is actively seeking funding sources.

University of California, Berkeley’s Center for the Study of Psychedelics is also characterized by cross-departmental interdisciplinary. It began with a conversation between Michael Silver, M.D., the current Program Director, and fellow UC Berkeley faculty members Dr. Michael Pollan, Dr. Dacher Keltner, and Dr. Alison Gopnik. Together, they envisioned “a center of psychedelics focused on all aspects of psychedelics—science, journalism, public education, and training guides for psychedelic experiences.”



Michael Silver, M.D.

Ali McGhee has a Ph.D. in English Literature from the University of Rochester. She is the Culture and Team Development Leader for 6AM City, and is a core faculty member at the Enneagram School of Awakening, as well as an International Enneagram Association (IEA) Accredited Professional. Her journalism has been published in outlets including *Lucid News*, *Sallywag*, and *WNC* magazine, and her fiction has been published in *Dark Mountain*, *Slippery Elm Literary Journal*, and *Holler*. She lives in Asheville, N.C.

One current study at the Center examines how the brain processes visual information on low-dose psilocybin. But unlike many other programs, the focus is not on clinical trials. “There are wonderful applications that show the power of these medicines for healing,” says Silver, “but we are consciously not doing that kind of work. We aren’t a medical school and don’t have a hospital on campus.” The Center’s concentration is basic research on how psychedelics act in the brain and mind, and, Silver adds, “deeper, broader questions about psychedelics as tools for perturbing the brain and studying the consequences of that,” including looking at enduring effects and tailoring set and setting to produce the best possible outcomes.

Another distinction is the Center’s prioritization of public education. “There is so much misinformation in the world, and people are looking for trustworthy sources,” Silver says. The just-launched Ferriss-UC Berkeley Psychedelic Journalism Fellowship will award fifteen \$10,000 reporting grants “to journalists reporting on the science, policy, business and culture of this new era of psychedelics.”

The Center has established a training program in partnership with Graduate Theological Union tailored to religious and spiritual care professionals. The first cohort is moving through the program now, and current members will be a part of an ethnographic study. Program organizers will use the results to refine the training.

Silver and his team are also working to center Indigenous voices and perspectives, including increasing Indigenous participation at all levels and building Indigenous wisdom into educational offerings.

“Indigenous people have developed ceremonies and traditions over centuries and have a lot to offer in terms of how to make psychedelic experiences more effective,” Silver says. “We want to work with Indigenous groups in a mutually beneficial way, by helping them retain traditions that have often been under threat, and having them be a part of educational offerings.” He notes that the Center has just finished a strategic plan that keeps this goal “at the heart of everything we do.”

The program has received substantial funding so far, but Silver notes that more will be needed as it grows. “The initial rounds have been very successful,” he says, “and it’s lovely to see the resonance between things we want to do and the interests of prospective donors.”

Looking Ahead

As more universities, medical schools, and training programs step into psychedelic research, they shift the landscape of academia, much as psychedelics shift the landscape of the mind. Once a taboo topic, psychedelics—and the centers built around them—are being celebrated and recognized by university directors and administrators as critical, both for preparing students for new realities of research and clinical work, and for drawing competitive students, residents, and faculty.

Students moving through these centers will also help with scaling efforts to provide care for populations that might be helped by psychedelic-assisted therapy and support. Mithoefer, although speaking specifically about MDMA-assisted psychotherapy, details a challenge for all psychedelic interventions: scaling up training without losing quality.

Mithoefer notes that he has misgivings about scaling too fast, but that the entry of more universities into this work will support a deep, strong foundation. “It’s really important to have good training and good ethical grounding to do this work,” he says. “We have a strong motive to scale for public benefit, but we don’t want to sacrifice quality. People are in university programs for years with lots of supervision, especially in graduate school and residency.”

“In my mind, the collaborations we’ll be able to build are another exciting part of this,” he says. It’s a sentiment shared by all.