

PSYC 215B: Introduction to Psychedelic Medicine
Winter Quarter 2022
Stanford University

Location: Li Ka Shing Center, Room 130; virtual by zoom

Dates: January 3 - March 11

Time: Monday 5:30pm - 7pm

Course Facilitators:

Gianni Glick, MD, Resident Psychiatrist

Trisha Suppes, MD PhD, Professor of Psychiatry and Behavioral Sciences

Boris Heifets, MD PhD, Assistant Professor of Anesthesiology and Pain Medicine, and by courtesy, Psychiatry and Behavioral Sciences

Teaching Fellow: Corey Dansereau, PhD Candidate in Modern Thought and Literature

Course description

The re-emergence of psychedelics in the academic arena has yielded insights which may profoundly impact our understanding of brain, mind, and the treatment of mental illness. An early but growing body of evidence suggests psychedelic-assisted therapy may be capable of alleviating suffering in refractory psychiatric illness, and in addition to symptom reduction, reportedly facilitates a deepened capacity for connection, acceptance, and meaning. Psychedelic substances have emerged as a unique tool for neuroscientific study of mind and brain, as a window into ancient and indigenous healing practices, and as a powerful tool for investigating spiritual and mystical experience.

The field of psychedelic science and medicine is extensive, spanning decades, eras, and centuries, as well as disciplines and departments. Given the constraints of time, this will not be an exhaustive introduction to the field, but rather will survey the current range of clinical applications and scientific investigations of psychedelics, as well as touch on the historical, legal, and cultural aspects of psychedelic medicine. We will consider the limits of our current knowledge about the application of psychedelics in medicine and research, addressing issues of sample selection, expectancy, blinding, and other elements of clinical research. In guided discussion format, students will engage directly with the central questions facing clinicians, scientists, regulators, and patients today in the psychedelic arena.

Please note: neither Stanford nor any of the course facilitators condone illicit substance use; all discussion of psychedelics in this course will be in the context of sanctioned research and academic investigation

SCHEDULE

Monday 1/17 - MLK day - no class

Monday 2/21 - President's Day - no class

<p>Week 1 1/3/22 Monday 5:30pm</p>	<p>Course introduction and overview. Introduction to the field and the history of psychedelics. Survey of the present state of research.</p> <p><u>Suggested reading:</u></p> <ul style="list-style-type: none"> • <i>The Current Status of Psychedelics in Psychiatry</i>. Nutt and Carhart-Harris (2020). JAMA Psychiatry. • <u>Higher Wisdom</u>: Interviews with fourteen pioneers in psychedelic research. Pages 1-4. Walsh and Grob (2005).
<p>Week 2 1/10/22</p>	<p>Foundations of psychedelic medicine: therapy, phenomenology, context within psychiatry, medicine, and culture.</p> <p><u>Required reading:</u></p> <ul style="list-style-type: none"> • <i>Unifying Theories of Psychedelic Drug Effects</i>. Swanson (2018). Frontiers in Pharmacology <p><u>Suggested reading:</u></p> <ul style="list-style-type: none"> • <i>Set, Setting, and Matrix</i>. Eisner (1997). Journal of Psychoactive drugs • <i>Constructing Drug Effects: A history of set and setting</i>. Hartogsohn (2017). Drug Science, Policy, and Law
<p>Week 3 HOLIDAY - MLK Day 1/17/22</p>	<p>No class session</p> <p>Students are invited to participate in Stanford Psychedelic Science Group presentation:</p> <p>Dr. Peter Gasser: Lessons learned from doing therapy with LSD and MDMA</p> <p>Tuesday 1/18/22 at 11am (zoom)</p>

<p>Week 4 1/24/22</p>	<p>Clinical trial design: evidence, placebo, epistemology</p> <p><u>Required Reading:</u></p> <ul style="list-style-type: none"> • <i>Great Expectations: Recommendations for improving the methodological rigor of psychedelic clinical trials.</i> Aday and Heifets et al (2021).
<p>Week 5 1/31/22</p> <p><u>Guest Lecture:</u> Robin Carhart-Harris, PhD (Director, Psychedelics Division, Neuroscape, UCSF)</p>	<p>Neuroscience, philosophy, mechanism of action</p> <p><u>Required reading:</u></p> <ul style="list-style-type: none"> • <i>Trial of Psilocybin versus Escitalopram for Depression.</i> Carhart-Harris et al (2021). New England Journal of Medicine. <p><u>Suggested:</u></p> <ul style="list-style-type: none"> • <i>REBUS and the Anarchic Brain: Toward a Unified Model of the Brain Action of Psychedelics.</i> Carhart-Harris and Friston (2019). <i>Pharmacological Reviews</i>. • <i>Psychedelic drugs: neurobiology and potential for treatment of psychiatric disorders.</i> Vollenweider and Preller (2020). <i>Nature Reviews Neuroscience</i>.
<p>Week 6 2/7/22</p> <p><u>Guest Lecture:</u> Brian Anderson, MD, MSc (Assistant Clinical Professor at UCSF; clinical investigator at UC Berkeley Center for Psychedelic Science)</p>	<p>Safety, ethics, and psilocybin therapy</p> <p><u>Required reading:</u></p> <ul style="list-style-type: none"> • <i>Psychedelic Medicine: Safety and Ethical Concerns.</i> Anderson et al (2020). <i>The Lancet</i>. <p><u>Suggested:</u></p> <ul style="list-style-type: none"> • <i>Psilocybin-assisted group therapy for demoralized older long-term AIDS survivor men: An open-label safety and feasibility pilot study.</i> Anderson et al (2020). <i>The Lancet</i>.

<p>Week 7 2/14/22</p> <p><u>Guest Lecture:</u> Jennifer Mitchell, PhD (Associate Professor, Departments of Neurology and Psychiatry at UCSF; clinical investigator at MAPS and UC Berkeley Center for Psychedelic Science)</p>	<p>MDMA-assisted therapy for PTSD</p> <p><u>Required reading:</u></p> <ul style="list-style-type: none"> • <i>MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study.</i> Mitchell et al (2021). Nature Medicine. <p><u>Suggested:</u></p> <ul style="list-style-type: none"> • MDMA-Assisted Psychotherapy: How Different is it from Other Psychotherapy? Mithoefer (2013). MAPS Bulletin. • Podcast with Rachel Yehuda, PHD: https://www.ihmc.us/stemtalk/episode-101/ • Video: <i>Breakthrough for Psychedelic Medicine:</i> https://www.youtube.com/watch?v=6CIPE7ILqsc
<p>Week 8 HOLIDAY - President's Day 2/21/22</p> <p>Proposals due for student presentations and projects</p>	<p>No class session</p> <p>Students are invited to participate in Stanford Psychedelic Science Group presentation:</p> <p>Matthew Baggott, PhD: Commercialization, Ethics, Scalability</p> <p>Thursday 2/24/22 at 6pm (zoom)</p>
<p>Week 9 2/28/22</p> <p><i>*Discussion and student presentations*</i></p>	<p>Ketamine + possible guest speaker</p> <p>STUDENT PRESENTATIONS</p> <p><u>Suggested reading:</u></p> <ul style="list-style-type: none"> • <i>Ketamine Assisted Psychotherapy (KAP): Patient Demographics, Clinical Data and Outcomes in Three Large Practices Administering Ketamine with Psychotherapy.</i> Dore et al (2019). Journal of Psychoactive Drugs. • <i>A Single Ketamine Infusion Combined With Motivational Enhancement Therapy for Alcohol Use Disorder: A Randomized Midazolam-Controlled Pilot Trial.</i> Dakwar et al (2019). American Journal of Psychiatry

<p>Week 10 3/7/22</p> <p><i>*Discussion and student presentations*</i></p>	<p>Review of course themes</p> <p>STUDENT PRESENTATIONS</p> <p><u>Suggested reading:</u></p> <ul style="list-style-type: none"> • <i>Psychiatric Research with Hallucinogens: What have we learned?</i> Grob (1998). The Heffter Review of Psychedelic Research.
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Format

The course will consist of eight weekly evening sessions, most of which will be lectures followed by Q&A and guided discussions. Three guest lecturers will present on specific areas of expertise in weeks 4-6. The final two weeks will combine short lectures and a sequence of student presentations on selected topics.

Note: The independent Stanford Psychedelic Science Group (SPSG) will host a series of psychedelic-related presentations during the quarter; students are invited and encouraged to attend these events, however they will not be required for the course. They may at times be included in the suggested media for between-session learning about weekly topics.

Note on 1 versus 2 units:

Students taking the course for two units will be responsible for completing a course project on a topic of choice. In the final two weeks of the course, there will be space for 12-14 five-minute student presentations to be given to the class. Given the limited number of slots for presentations, interested students must apply with a short paragraph plan no later than 2/21/22. Presentations may be done individually, though students are encouraged to work in groups of up to three people.

Those not presenting in class may propose creative alternatives to a verbal presentation (for instance: production of a short video, writing a short focused literature review on a specific topic, designing a clinical trial, etc), to be discussed with course facilitators.

Note on in-person versus zoom:

To accommodate student interest, the course has been made into a hybrid format; section 1 will be in person and section 2 is a synchronous zoom version. Students taking the course virtually have the same requirements for attendance and may enroll in the 1- or 2-unit version of the course. Those taking the 2-unit virtual course will be responsible for a course project, as detailed above, excluding the in-person class presentation option. Virtual students will also have

access to an optional weekday evening office hour/discussion section to ensure adequate Q&A and discussion time.

Objectives

- 1) Develop a broad framework for understanding the interrelated aspects of psychedelic medicine and science
- 2) Interpret and appraise clinical psychedelic research and the present state of evidence for its use in the treatment of mental illness, including an understanding of limitations in our current knowledge base
- 3) Examine and compare the range of historical and cultural contexts of psychedelic medicine, from sacramental and ritual healing uses by indigenous cultures, to the inception of psychedelic research in western medicine, to the recent resurgence of research at academic institutions
- 4) Analyze how social, political, and legal factors may shape the potential integration of psychedelic medicine into the practical framework of evidence-based medicine in the next 5-10 years
- 5) Interpret and appraise clinical psychedelic research and the present state of evidence for its use in the treatment of mental illness
- 6) Critically evaluate the limitations of psychedelic-assisted treatment, the medical concerns associated with treatment, and the issues of safe use including consideration of contraindications, adverse effects, and harm reduction

Evaluation

Pass/fail based on 75% attendance. For students taking the course for two units, completion of presentation/project also required to pass. If attendance is a barrier, students may submit a graded make-up assignment, due within two weeks of the missed class.

Note to students: please be aware that this course will cover mental health topics including discussion of depression, suicide, trauma, and end of life, which may be distressing to some. Please reach out to us with any questions or concerns.

Suggested texts

- Handbook of Medical Hallucinogens. Grob, CS & Grigsby, J (2021). The Guilford Press.
- *Unifying Theories of Psychedelic Drug Effects*. Swanson (2018). Frontiers in Pharmacology
- Higher Wisdom: Interviews with fourteen pioneers in psychedelic research. Walsh and Grob (2005).
- *Psychedelics*. Nichols (2016). Pharmacological Reviews.
- *Human Hallucinogen Research: Guidelines for Safety*. Johnson, Richards, Griffiths (2008). Journal of Psychopharmacology.

- *The Therapeutic Potential of Psychedelic Drugs: Past, Present, and Future*. Carhart-Harris and Goodwin (2017). Neuropsychopharmacology.
- *Psychiatric Research with Hallucinogens: What have we learned?* Grob (1998). The Heffter Review of Psychedelic Research.
- *The psychedelic experience*. Savage, Stolaroff, Harman, & Fadiman (1963). Journal of Neuropsychiatry.
- The Doors of Perception, by Aldous Huxley (1954)

Additional references

- *A review of the clinical effects of psychotomimetic agents*. Osmond (1957). Annals of the New York Academy of Sciences.
- *Learning to Let Go: A Cognitive-Behavioral Model of How Psychedelic Therapy Promotes Acceptance*. Wolff et al (2021). Frontiers in Psychiatry.
- *Psychedelic agents in creative problem-solving: a pilot study*. Harman and Fadiman et al (1966). Psychological Reports.
- *A review of 3,4-methylenedioxymethamphetamine (MDMA)-Assisted Psychotherapy*. Sessa et al (2019). Frontiers in Psychiatry.
- Characterization and prediction of acute and sustained response to psychedelic psilocybin in a mindfulness group retreat. Smigielski et al (2019). Scientific Reports.
- *Lysergic Acid Diethylamide (LSD) for Alcoholism: Meta-Analysis of Randomized Controlled Trials*. Krebs and Johansen (2012). Journal of Psychopharmacology.
- Presentation by Roland Griffiths, PhD: *Psilocybin & Mystical Experience: Implications for Healthy Psychological Functioning & Spirituality*: https://www.youtube.com/watch?v=6g2PS_yp-nQ
- The Psychedelics and Group Therapy. Duncan Blewett (Pages 342 –348, especially middle of page 345 – 348)
- Handbook for the Therapeutic Use of Lysergic Acid Diethylamide-25: Individual and Group Procedures.

Examples of topics for self-directed projects:

Mini biographies: Maria Sabina, Timothy Leary, Betty Eisner, Sasha Shulgin, Humphry Osmond

Historical psychedelic treatment modalities: psycholytic therapy, hypnodelic therapy, anaclitic therapy, the “Roquet room”

Institutions, past and present: MAPS, Johns Hopkins, Heffter Research Institute; Spring Grove Clinic/Maryland Psychiatric Research Center, Saskatchewan Research Center

Emerging business and care models: 'software-assisted psychedelic therapy', peer/group therapy, couples therapy, PTSD care within VA

Safety or effects in specific patient populations: psychotic illness, children/adolescents, medically ill, autoimmune conditions, chronic pain

Plant/fungi medicines: psilocybin-containing mushrooms, Ayahuasca, morning glory seeds, ibogaine

Ethics: ayahuasca tourism, inclusion and diversity in therapists and study participants, ibogaine sustainability

Specific cultures of use: Santo Daime church, União do Vegetal, Native American Church

Phenomenology, novel analogues, media portrayal, magical thinking