PSYC 215: Introduction to Psychedelic Medicine
Survey of present research and clinical application
Winter Quarter 2019-2020

Thursday evenings: lecture 6PM – 7PM; discussion 7PM – 8PM
Location: Alway M106
Course facilitator: Giancarlo Glick, MD, Resident, Department of Psychiatry and Behavioral Sciences
Faculty Sponsor: Trisha Suppes, MD, PhD, Professor, Department of Psychiatry and Behavioral Sciences
Office hours: By appointment
Teaching Fellow: Vivian Ho, MS2
Faculty Advisors: Dr. Boris Heifets, Dr. Alan Louie

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. This course will survey the current range of clinical applications and scientific investigations of psychedelics, presented by the field's researchers and clinicians. Clinical, neuroscientific, and psychological perspectives will be discussed, as well as the historical, legal, and cultural aspects of psychedelic medicine. Students will practice close critical reading of primary literature and will have the opportunity to engage directly with research investigators and clinicians in the field.

Objectives
1) To interpret and appraise clinical psychedelic research and the present state of evidence for its use in the treatment of psychiatric illness

2) To examine and compare the range of historical and cultural contexts of psychedelic medicine, from original sacramental and ritual healing uses by indigenous cultures, to the inception of psychedelic research in western medicine in the 1950s, to the recent 'third wave' resurgence of research at academic institutions

3) To 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

4) To identify and predict which patient populations may benefit from these novel treatments

5) To 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

6) To be inspired to ask new questions about mechanisms, brain correlates, and therapeutic or research applications of psychedelic medicines

Format

The course will consist of ten two-hour evening sessions, with most sessions featuring presentations by physicians, researchers, or clinicians in the field of psychedelic medicine, interspersed with discussion sessions. For weeks with speaker presentations, the first hour will be a lecture, and the remaining hour time will be reserved for questions and group discussion. Topics to be covered will include the history and sociocultural context of psychedelic medicine, the variety of clinical applications of psychedelic-assisted treatment in psychiatry, the social and legal frameworks of research and future clinical use, and an exploration of the multidisciplinary frameworks used to understand the observed benefits of treatment.

Evaluation

Pass/fail based on 70% attendance. If this is not met, students may submit a graded make-up assignment, due within two weeks of the end of the course.

Students will also have an opportunity for a course project. Please discuss with course facilitators for details.

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

Students with Documented Disabilities

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty. For students who have disabilities that don't typically change appreciably over time, the letter from the OAE will be for the entire academic year; other letters will be for the current quarter only. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, URL: http://oae.stanford.edu).

Suggested texts (available online through Lane library)

- Higher Wisdom: Interviews with fourteen pioneers in psychedelic research. Walsh and Grob (2005).

- *Human Hallucinogen Research: Guidelines for Safety.* Johnson, Richards, Griffiths (2008). Journal of Psychopharmacology.
- *A review of the clinical effects of psychotomimetic agents.* Osmond (1957). Annals of the New York Academy of Sciences.
- *The Therapeutic Potential of Psychedelic Drugs: Past, Present, and Future.* Carhart-Harris and Goodwin (2017). Neuropsychopharmacology.
- *Novel psychopharmacological therapies for psychiatric disorders: psilocybin and MDMA*. Mithoefer et al (2016). The Lancet Psychiatry.
- *Psychiatric Research with Hallucinogens: What have we learned?* Grob (1998). The Heffter Review of Psychedelic Research.
- The Doors of Perception, by Aldous Huxley (1954)

CLASS SCHEDULE

Week 1 *1/9/20*	**Course overview. Introduction to the field and the history of psychedelics. Survey of the present state of research.** Reading: • Higher Wisdom: Interviews with fourteen pioneers in psychedelic research. Pages 1-18. Walsh and Grob (2005). • Interview with Roland Griffiths (2019). JAMA Network https://jamanetwork.com/journals/jama/fullarticle/2754080
Week 2 *1/16/20*	**MDMA: History, mechanism, research** Presentation: **Boris Heifets, MD, PhD, Stanford**: Disruptive Pharmacology: MDMA, social reward, and implications for the study and practice of psychedelic therapy Reading: • *Distinct neural mechanisms for the prosocial and rewarding properties of MDMA.* Heifets et al (2019). Science Translational Medicine. • *MDMA as a Probe and Treatment for Social Behaviors.* Heifets and Malenka (2016). Cell.
Week 3 *1/23/20*	**MDMA: PTSD, clinical studies, and MAPS** Presentation: **Alli Feduccia, PhD, Senior Clinical Data Scientist at MAPS PBC:** MDMA-assisted therapy for PTSD

	Reading: • *MDMA-Assisted Psychotherapy for Treatment of PTSD: Study Design and Rationale for Phase 3 Trials Based on Pooled Analysis of Six Phase 2 Randomized Controlled Trials.* Mithoefer et al (2019). Psychopharmacology. • *Breakthrough for Trauma Treatment: Safety and Efficacy of MDMA-Assisted Psychotherapy Compared to Paroxetine and Sertraline.* Feduccia et al (2019). Frontiers in Psychiatry.
Week 4 *1/30/20*	**Psilocybin: history and clinical application** Presentation: **Brian Anderson, MD, MSc, USCF**: Psilocybin-Assisted Group Therapy for Demoralization in Long-Term AIDS Survivors: An Open-Label Phase I Clinical Trial Reading: • *Psychedelics in the treatment of unipolar mood disorders: a systematic review*. Rucker et al (2016). Journal of Psychopharmacology. • *Therapeutic use of classic psychedelics to treat cancer-related psychiatric distress.* Ross (2018). International Review of Psychiatry.
Week 5 *2/6/20*	**MDMA-assisted therapy and potential uses beyond PTSD** Presentation: **Alicia Danforth, PhD:** MDMA-assisted Therapy for Social Anxiety in Autistic Adults Reading: • *Reduction in social anxiety after MDMA-assisted psychotherapy with autistic adults: a randomized, double-blind, placebo-controlled pilot study*. Danforth et al (2018). Psychopharmacology.
Week 6 *2/13/20*	**Psychedelic-assisted therapy: qualitative experience of psychedelic therapy and improvement beyond symptom reduction** Presentation: **Will Barone, PsyD:** Qualitative study of patient experience with psychedelic medicine in academic trials

	Reading: • *Perceived Benefits of MDMA-Assisted Psychotherapy beyond Symptom Reduction: Qualitative Follow-Up Study of a Clinical Trial for Individuals with Treatment-Resistant PTSD.* Barone et al (2019). Journal of Psychoactive Drugs. • Patients' Accounts of Increased "Connectedness" and "Acceptance" After Psilocybin for Treatment-Resistant Depression. Watts et al (2017). Journal of Humanistic Psychology. • *Psychedelic Therapy for Smoking Cessation: Qualitative Analysis of Participant Experience.* Noorani et al (2018). Journal of Psychopharmacology.
Week 7 *2/20/20*	**Psychedelics and neuroplasticity** Presentation: **David Olson, PhD:** Psychedelics as Inspiration for Plasticity-Promoting Neurotherapeutics Reading: • *Psychedelics Promote Structural and Functional Neural Plasticity*. Ly et al (2018). Cell Reports. • *REBUS and the Anarchic Brain: Toward a Unified Model of Brain Action of Psychedelics.* Carhart-Harris and Friston (2019). Pharmacological Reviews.
Week 8 *2/27/20*	**Ketamine: history, clinical application, use in psychotherapy** Presentation: **Raquel Bennett, PsyD:** Paradigms of ketamine treatment Reading: • *Paradigms of Ketamine Treatment.* Bennett (2019). MAPS Bulletin Spring 2019. • *Ketamine Assisted Psychotherapy (KAP): Patient Demographics, Clinical Data and Outcomes in Three Large Practices Administering Ketamine with Psychotherapy*. Dore et al (2019). Journal of Psychoactive Drugs. • *A Single Ketamine Infusion Combined With Mindfulness-Based Behavioral Modification to Treat Cocaine Dependence: A Randomized Clinical Trial.* Dakwar et al (2019). American Journal of Psychiatry.

Week 9 *3/5/20*	**Analyzing proposed mechanisms of psychedelic effects** Presentation: **Matthew Baggott, PhD:** Understanding the mechanisms of psychedelics and entactogens in people Reading: • *Unifying Theories of Psychedelic Drug Effects.* Swanson (2018). Frontiers in Pharmacology. • *Effects of 3,4-methylenedioxymethamphetamine on socioemotional feelings, authenticity, and autobiographical disclosure in healthy volunteers in a controlled setting.* Baggott et al (2016). Journal of Psychopharmacology (Oxford).
Week 10 *3/12/20*	**Course review, future directions, potential student presentations** **Guest speaker: James Fadiman, PhD:** The long view of psychedelic research at Stanford University and emerging microdosing research Reading: • Excerpts from Higher Wisdom: Interviews with fourteen pioneers in psychedelic research. Pages 25-45. Walsh and Grob (2005).

Additional references

- *Psychedelics.* Nichols (2016). Pharmacological Reviews.
- *A review of 3,4-methylenedioxymethamphetamine (MDMA)-Assisted Psychotherapy*. Sessa et al (2019). Frontiers in Psychiatry.
- *Psychedelics and Group Therapy.* Blewett (1970).
- *Lysergic Acid Diethylamide (LSD) for Alcoholism: Meta-Analysis of Randomized Controlled Trials*. Teri Krebs and Pål-Ørjan Johansen (2012). Journal of Psychopharmacology.
- *Turn on and tune in to evidence-based psychedelic research*. Sessa (2015). Lancet Psychiatry.
- Excerpts from: *Cognitive effects of MDMA in laboratory animals: a systematic review focusing on dose.* (Sections I, II, III and VII). Pantoni and Anagnostaras (2019). Pharmacological Reviews.
- *Psychedelics and the new behaviourism: considering the integration of third-wave behaviour therapies with psychedelic-assisted therapy.* Walsh and Thiessen (2018). International Review of Psychiatry.