



Ryan T. Ash MD, PhD

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My lab is interested in developing novel neuromodulation technologies to augment neuroplasticity and enhance the "unlearning" of maladaptive habitual ways of relating to the world. I have a K08 Career Development Award to measure how attention modulates neuroplasticity induced by repetitive transcranial magnetic stimulation, using EEG steady-state visual evoked potentials and visual attention psychophysics. I have a Brain Behavior Research Foundation Young Investigator Award to develop in-human applications of transcranial ultrasound stimulation in the subcortical visual system and fear regulation circuit. I have a Simons Foundation Bridge to independence Award to develop closed-loop ultrasound neuromodulation technologies to enhance behavioral flexibility in autism spectrum disorders. I work closely with mentors Anthony Norcia, Kim Butts Pauly, and Nolan Williams on these projects. I am interested in the neural basis of mindfulness, concentration, and compassion practices from Buddhist meditation, and I have more than a year of silent retreat experience in the Theravada Buddhist meditation tradition. I see patients in the Stanford Neuropsychiatry clinic with a specialization in Functional Neurological disorders and related psychosomatic and dissociative conditions. My therapeutic orientations include integrated psychodynamic- and mindfulness-based approaches and neuromodulation-assisted psychotherapy.