

Project descriptions – Clinician Scientist Training Program Trainee Research Awards

The Garvey Institute awarded the first round of funding of our new Trainee Research Awards in September 2023. These awards are part of the new Clinician Scientist Training Program (CSTP) directed by Jesse Fann, MD, MPH, that supports the development of clinician scientists.

Examining the cross-cultural applicability of the Spanish PMQ-9: a comparative validation study

Individuals with bipolar disorder often seek treatment in both primary care and specialized mental health settings. While depressive symptoms are routinely assessed using symptom measures, it's essential to recognize that individuals with bipolar disorder can experience both depressive and manic symptoms. Measurement-based care, a clinical strategy associated with improved outcomes, is recommended for bipolar disorder. But there's a lack of widely used patient-reported measures.

The purpose of this project is to enhance the usefulness and cultural relevance of the Spanish version of the PMQ-9, a questionnaire that assesses manic symptoms in individuals with bipolar disorder. *Primary mentor: Joseph Cerimele, MD, MPH*

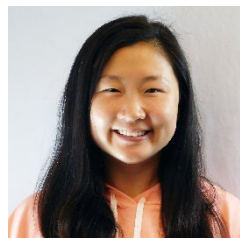


Project lead:
Alexis Carnduff, MD

Improving the implementation of smartphone-based contingency management in medical settings for the treatment of methamphetamine use disorder: a qualitative analysis of patient and clinician experiences

Medications for opioid use disorder have been useful for combatting the opioid epidemic, but there are no approved medications for methamphetamine use disorder. Contingency management is one of the most evidence-based behavioral treatments but access to contingency management is limited. Moreover, even where contingency management is available, additional barriers may make it difficult for patients to access those services in person.

This project will conduct qualitative analysis of patient and clinician experiences during a pilot study of mobile health delivered contingency management for the treatment of methamphetamine use disorder. The project will address perceived facilitators and reinforcing factors, barriers and limitations, and proposals for future improvements including specific recommendations regarding the intervention and its mode of delivery. *Primary mentor: Kevin Hallgren, PhD*



Project lead:
**Yanni Chang, MD,
MPH**



Project lead:
Adam Ketron, MD, PhD

A pilot trial on EMA habit formation behavioral strategies for improving engagement of digital mindfulness interventions among non-suicidal self-injury engagers.

Non-suicidal self-injury, the purposeful, direct damage of one's body without the intent to die, is a pervasive public health concern with clinically significant long-term consequences. Mindfulness skills are designed to target emotion dysregulation and rumination and may be particularly relevant due to the proliferation of digital mindfulness interventions in recent years. The goal of this study is to expand the use of ecological momentary assessment and to develop and evaluate a program of habit-formation strategies (e.g., SMART-goal setting, reinforcement scheduling) to boost user engagement and treatment effects of a digital mindfulness interventions. *Primary mentor: Katherine Anne Comtois, PhD, MPH*



Project lead:
Joey Cheung, MA

Immune changes with neuropsychiatric symptoms in dementia

More than 90% of people with dementia exhibit new psychiatric symptoms such as depression. It's now known that some types of depression have signs of increased inflammation and that some immune cells are tied to cells dying in Alzheimer's Disease. This project is investigating whether depression in dementia could be due to poor immune responses by measuring signs of increased inflammation using clinical data from nearly 3,000 dementia patients with and without depression. The ultimate goal is to use the peripheral immune system to improve diagnosis of psychiatric disease in dementia. Knowing the molecular causes of neuropsychiatric symptoms is an important step in creating new treatments. This project will create the preliminary data Dr. Fisher needs for his first federal grant. *Primary mentor: Michael Schrift, DO, MA, FANPA*



Project lead:
**Daniel W. Fisher, MD,
PhD**

Community resilience to late life depression among first generation Asian Indian immigrants in the greater Seattle area (The CREED Seattle Study)

Asian Indians (AI) are one of the fastest growing ethnic groups in the country, but there is limited information on the mental health of this community as most research tends to aggregate results of the Asian population. Aging and age-related mental health issues, especially late life depression in the community, in particular, has been understudied. As culture exerts a significant influence on psychiatric morbidity, it is likely that this population has unique drivers to late life syndromic and subsyndromal depression beyond what is known from typical studies. Additionally, migration related, as well as acculturative stress, may provide unique influences. However, immigrant Indian communities are known for community engagement, providing large social networks and support which may reduce risk for depression. As a result, it is possible that higher risk resulting from immigration related stress might be mitigated by social engagement.



Project lead:
**Mini Elizabeth Jacob,
MD**

This project will study older first-generation Asian Indians in the Greater Seattle Area to study the association between community engagement and depression symptoms. *Primary mentor: Stephen Thielke, MD*

Acceptability and feasibility of a single session + digital mental health intervention for people with psychosis on an acute psychiatric inpatient unit

People with psychosis are admitted more frequently to inpatient psychiatric units and have a longer length of stay once admitted compared to those with other psychiatric conditions. Cognitive Behavioral Therapy for psychosis (CBTp) reduces hospital admissions when delivered in outpatient settings and facilitates quicker symptom improvement when delivered in inpatient settings. Despite this, implementation of CBTp is exceedingly rare in practice. The purpose of this study is to test the feasibility and acceptability of a conjoint single-session CBTp intervention + FOCUS digital mental health intervention for people with psychosis admitted to inpatient psychiatry units.

Primary mentor: Kevin Hallgren, PhD



Project lead:
Adam Kuczynski, PhD

ERG as a potential biomarker of SSRI-responsive PTSD: a pilot study

Although serotonin selective reuptake inhibitors (SSRIs) are the only FDA approved medications for PTSD, evidence supporting their use in Veterans with PTSD remains conflicting and limited. As the only part of the central nervous system directly visible on physical exam, the retina offers a unique and underutilized window into neural signaling.

This clinical trial will pilot an electroretinogram biomarker for predicting treatment response to SSRIs in PTSD. The pilot data will be valuable as a feasibility study for assessing the practical application of electroretinogram in the setting of a mental health clinic. It will also serve as a foundation for a long-term goal of developing physiologic biomarkers to match Veterans to corresponding pharmacological treatments in PTSD and other mental health disorders. *Primary mentor: Rebecca Hendrickson, MD, PhD*



Project lead:
**Katharine Liang, MD,
PhD**

Debriefing adverse events using the RECover Framework

Trainees frequently experience adverse events in patient care and episodes of discrimination that impact their training experience and increase burnout. Debriefing is an effective tool to reduce burn out and improve trainee wellness.

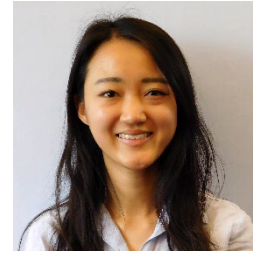
This project will evaluate the effect of a debriefing workshop on the knowledge, attitudes and practice of giving debriefs after adverse events among physicians and their trainees. *Primary mentor: Laurel Pellegrino, MD*



Project lead:
Hai-Uyen Nguyen, MD

Was it all a dream? Understanding sleep's role in mediating psychiatric management in a rural outpatient setting

Individuals with posttraumatic stress disorder (PTSD) commonly experience sleep disturbance. Such disturbances can have a bidirectional effect in those with PTSD – interrupted sleep due to hypervigilance and nightmares are common symptoms of PTSD, and poor sleep is associated with a worse course of PTSD. Assessment and treatment of sleep disturbance symptoms in those with PTSD is complicated due to 1) common co-occurrence of major depressive disorder and substance use that might negatively impact sleep; 2) few options for specific sleep disturbance treatment in those with PTSD; and 3) limited clinician knowledge and experience in sleep disturbance assessment. Furthermore, it is unknown to which extent sleep quality responds to specific PTSD treatments. This project will explore the effect of sleep quality on PTSD outcomes and assess the effect of treatment of PTSD on patient-reported sleep quality. *Primary mentor: Joseph Cerimele, MD, MPH*



**Project lead:
Nicola Park, MD**

Development of a task to measure the impact of PTSD symptoms on cognitive control and physiologic endpoints in response to interpersonal stressors

One of Dr. Tai's goals as a researcher is to strengthen the ways in which we examine interpersonal consequences of trauma so that we may understand how various treatments work to change them. Recently, her team found that Veterans with posttraumatic stress disorder (PTSD) report increased tendencies to perceive other people as hostile and experience reactivity in response to interpersonal cues, highlighting the importance of including measures of interpersonal reactivity in PTSD outcomes studies.

This project will develop a novel emotional task that will quantify physiologic reactivity to interpersonal cues, and characterize how performance on the task relates to symptom burden in a sample of Veterans with PTSD. *Primary mentor: Rebecca Hendrickson, MD, PhD*



**Project lead:
Marlene Tai, MD**