

# 2025 Approved Research to date: \$1,349,235



## **Dr. Adam Miller | \$200,000 | CHAAMP**

*Examining puberty timing on brain development and suicide risk in preteen girls*

This study will use brain scans and hormone data to explore how puberty timing impacts brain development, relationships, and suicide risk—helping identify vulnerable girls earlier.



## **Dr. Elizabeth Andersen | \$200,000 | Women's Mood Disorders**

*Studying hormone sensitivity and suicide risk in adolescent girls*

This project will experimentally stabilize ovarian hormones to determine the relationship between estradiol, changes in brain circuitry, and depressive symptoms in female adolescents at risk of suicide.



## **Dr. Zachary Feldman | \$199,624 | Anxiety**

*Using transcranial stimulation to treat Generalized Anxiety Disorder*

This study will test a novel, minimally invasive treatment using low-level electric current to treat anxiety in young adults while measuring changes in brain activity through EEG.



## **Dr. Guorong Wu | \$198,959 | Dementia**

*Understanding neurodevelopmental origin of Alzheimer's disease*

This project will reimagine Alzheimer's disease as a lifespan condition rather than an aging disorder and show how early life, environmental, and social factors may raise the risk of developing it later.



## **Natalie O'Brien, MS | \$99,600 | CHAAMP**

*Understanding how grief affects parents and children over time*

This study follows grieving parents and their children to understand how their mental health, parenting, and support needs evolve over time after the loss of a co-parent.



## **Dr. Robert Mealer | \$60,000 | Schizophrenia**

*Modeling genetic risk for schizophrenia on neuron pathways*

This project will use gene editing and human stem cell technology to model effects on the neuronal development function of genes that increase schizophrenia risk, with the goal of identifying new treatment targets for psychiatric disorder.

**Dr. Parisa Kaliush | \$59,999 | Women's Mood Disorders***Preventing suicide among pregnant and postpartum women*

This project will develop and test the first suicide prevention program designed specifically for pregnant and postpartum women experiencing high distress and suicide risk.

**Dr. Yoonmi Hong | \$59,102 | Autism***Predicting anxiety vulnerability in early childhood autism via MRI*

This study aims to develop a predictive computational model to decode anxiety risk in children with autism spectrum disorder using MRI, showing key brain regions affected and identifying early brain-behavior intervention opportunities.

**Dr. Rachel Presskreischer | \$58,756 | Eating Disorders***Understanding the functional impact of eating disorders to inform rehabilitation*

This study will examine the lived-experience impact of eating disorders on key functional domains such as education, work, and relationships through interviews and focus-groups with patients and family members to help improve quality of life and identify priority areas for targeted interventions.

**Dr. Ranran French | \$57,705 | Schizophrenia***Guiding antipsychotic selection using individual genetic information*

This project investigates how genetic variants in specific neuroreceptors affect antipsychotic response, laying the groundwork for a precision-medicine tool to guide schizophrenia treatment.

**Dr. Kelly Caravella | \$53,800 | Autism***Improving developmental outcomes for rural toddlers through family navigation*

This study investigates whether Family Navigation can expedite access to autism-specific treatments for rural toddlers, aiming to improve developmental outcomes and overcome barriers to care access for families.

**Dr. Roza Vlasova | \$51,690 | Autism***Mapping CSF patterns to improve early autism diagnosis and intervention*

This project uses MRI to investigate how cerebrospinal fluid (CSF) moves in the brains of infants who later develop autism, aiming to discover early biomarkers and potential treatment targets to improve early diagnosis and intervention.

**Dr. Christopher Sikes-Keilp | \$50,000 | Women's Mood Disorders***Exploring brain reward changes during premenstrual depression*

This study aims to identify how premenstrual hormone changes affect brain reward processing in women with depressive symptoms.