FEATURE

Psychiatry and Behavioral Sciences Research

The <u>UC Davis Department of Psychiatry and Behavioral Sciences</u> is engaged in a wide range of groundbreaking research across several key areas of mental health. Investigations span basic, translational, and clinical research, touching on everything from early psychosis and autism to aging and sleep disorders. This year, the department welcomed Aliza Wingo, an internationally recognized leader in the field of psychiatric genetics. Her innovative research has significantly contributed to our understanding of the genetic basis of mental health disorders.

Professor Aliza Wingo came to UC Davis from Emory University, where she built up an impressive portfolio of research dedicated to understanding the genetic and protein contributions to major psychiatric disorders and Alzheimer's disease. "With over \$10 million in federal funding and an H-index of 35 as an Associate Professor, Dr. Wingo is a highly respected and accomplished researcher," noted department chair Helen Kales upon her arrival in April. (Currently, Dr. Wingo's H-index is 39.)

Wingo shared that one of the factors motivating her move to UC Davis was the culture of her new department, the School of Medicine and regional resources. "An important factor was Drs. Kim Barrett's and Helen Kales' commitment to support my long-term research aspirations in pushing the boundary of early identification of psychiatric conditions and testing new prevention strategies for psychiatric disorders. Also appealing to me is the welcoming and supportive environment for research at the Northern California VA. Of course, the tremendous work of investigators at UC Davis who are leading important studies of mental health, aging, and the Alzheimer's Disease Research Center were important. The fact that these investigators have prioritized recruitment from diverse populations, which is essential to improving generalizability in research, let me know we have similar values."

At Emory, her work focused on the shared mechanisms for psychiatric and neurologic illnesses. She is continuing and expanding this work at UC Davis. "Identifying a shared risk is the first step," she explained. "The next step is to understand how that information could inform early detection, intervention, and novel therapeutics for common midlife psychiatric and late-life neurodegenerative diseases. The psychiatric disorders we study affect about 1 in 5 people and their onset age is typically in early or mid-life while Alzheimer's and related dementia commonly manifest in late life. Therefore, interventions that focus on the shared pathophysiology between those psychiatric conditions and Alzheimer's and related dementia have the potential to treat psychiatric disorders in early/midlife and simultaneously mitigate dementia risk in late life."

Beyond her research, Wingo is committed to providing outstanding patient care and research mentorship. She has mentored 21 trainees at all career stages. One of her long-term goals is to contribute to advancing novel prevention strategies and treatment approaches for psychiatric disorders and Alzheimer's dementia.



Aliza Wingo

In the longer term, Wingo's aspiration is to build a Center for Resilience in Brain Health focusing on:

- Early risk stratification for brain health:
 - Applying the latest advances in genetics, functional genomics, machine learning and artificial intelligence to develop and test models for risk stratification of brain health and illness using polygenic risk scores, biomarkers, family history, and environment risk factors.
- Preventive psychiatry:
 Investigating whether
 early intervention or
 treatment of psychiatric
 disorders in early or
 midlife can mitigate
 dementia risk. Testing
 whether interventions
 that enhance sense of life
 purpose or positive
 emotions can decrease
 risk for cognitive
 impairment.
- Personalized medicine:
 Development and testing of models that can predict which medications, medication combinations, or

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therapeutic modalities (cognitive behavioral therapy, TMS, ECT) are optimal based on the individual patient's specific genetic, medical comorbidity, and environmental risk profile to improve treatment outcomes

Aliza Wingo's work represents a significant advance in the field of psychiatric genetics. Through her pioneering research, she is shedding light on how genetic factors influence mental health. She is also paving the way for more personalized and effective treatments. Her ongoing efforts to include diverse populations in her research further emphasize her commitment to making psychiatric genetics relevant and beneficial for all segments of society.

RESEARCH IN THE NEWS

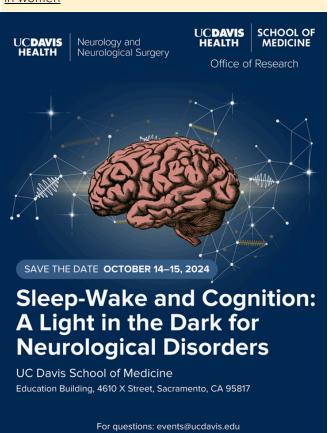
Headlines

Get the latest UC Davis Health research news at this link:

health.ucdavis.edu/news/topic/research

New trial produces excellent safety results for rare pulmonary condition

<u>Understanding how abdominal aortic aneurysms grow in women</u>



Upcoming research events

See all upcoming events here

Sept 24: SOM-SVM Research Day

Oct 14-16: Neurology and Neurological Surgery Symposium

Oct 17-18: Optimizing Primary Care to Recenter Relationships and Enhance Value in Health Care

Save the Date and Call for Posters!

UC Davis Impact Symposia: Optimizing Primary Care to Recenter Relationships and Enhance Value in Health Care.

UC Davis is hosting a national symposium and expert convening on October 17-18, 2024 on advancing primary care locally and nationally, with a focus on "increasing the spend" on primary care. Registration for the public sessions opens in August.

Call for Posters Open Now

You are invited to submit an abstract for the primary care research poster session. This poster session will highlight a range of critical research in primary care and will directly follow plenary sessions. **Abstract Deadline: July 31, 2024**. We accept ≤250 word abstracts that include background, methods, results, conclusions. <u>Submit now</u>.

More information

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