

Genetics and Genomics (G2) Seminar Series

Genetics Graduate Student Association (GGSA)



The Interdisciplinary Faculty of Genetics and Genomics

 TEXAS A&M UNIVERSITY
Interdisciplinary Graduate Program
in Genetics and Genomics

“Exploring Neural Circuit Mechanisms in Substance Use Disorders and Alzheimer’s Disease”

Dr. Jun Wang

Department of Neuroscience and Experimental Therapeutics

Texas A&M University

Dr. Jun Wang is an Associate Professor at the Department of Neuroscience and Experimental Therapeutics at Texas A&M University. He obtained an MD from Tongji Medical University, a PhD in 1999 from Shanghai Brain Research Institute, and was a Postdoctoral Fellow at the University of California, Berkeley.



Dr. Wang will discuss the neural circuits involved in substance use disorders (SUDs) and Alzheimer's disease (AD), focusing on how alcohol, opioids, and cocaine differently impact D1-MSNs and D2-MSNs in the dorsomedial striatum (DMS), leading to behaviors like alcohol-seeking, negative affect in opioid withdrawal, and cognitive inflexibility in cocaine use. Dr. Wang also explore the overlap with AD, where corticostriatal hyperactivity may impair cholinergic function, affecting cognitive flexibility. The presentation highlights the use of genetic tools, such as chemogenetics and optogenetics, to manipulate these circuits and explore therapeutic strategies.

Monday, September 16th, 2024

4:05 p.m.

Auditorium/Room 108

BCBP Building

Refreshments at 3:30 p.m. in the lobby.

Host: GGSA



TEXAS A&M UNIVERSITY

Interdisciplinary Graduate Program
in Genetics and Genomics

For more information, please contact us at genesec@tamu.edu