

Center for Research and Training in the Sciences (UTSA),  
Institute for Integration of Medicine & Science (UTHSA),  
Translational Science Graduate Program, &  
UTSA-UTHSA Joint Graduate Program in Biomedical Engineering  
invite you to attend

# STRECH

Seminars in Translational Research

## Presents

### *Harnessing astrocytes' unique potential to treat brain injuries*

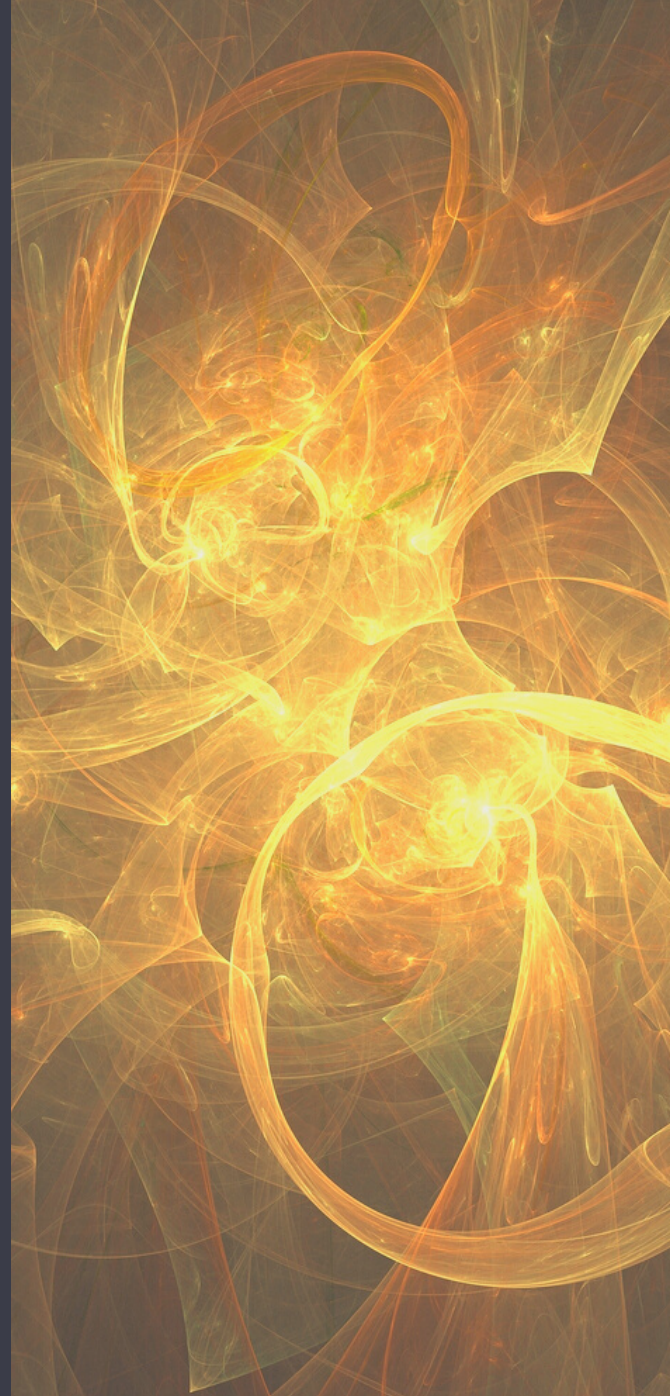
Our laboratory is interested in the molecular and cellular mechanisms of protection after traumatic brain injury (TBI), ischemic stress and age-associated neurodegenerative diseases.

A major focus of our work is to understand the role of astrocytes in these disease processes, which are known to play key roles in supporting and protecting neurons. We were the first lab to demonstrate the increased astrocyte mitochondrial ATP production significantly decreased brain injuries after stroke and TBI/CTE. We are currently investigating the impact of a new therapeutic, based on this work, to slow the onset and severity of Alzheimer's disease. Astrocyte Pharmaceuticals is a privately held pharmaceutical company, co-founded by me, developing and commercializing therapeutic approaches associated with our research. The first neuroprotective molecule AST-004 has successfully advanced through phase 1 clinical trials in humans with no significant adverse effects. Phase 2 efficacy trials in humans are planned for early 2024.



**James D. Lechleiter, PhD**

*Professor, Cell Systems and Anatomy  
Director, Optical Imaging Core Facility  
Co-Director, Center for Precision Medicine  
Co-Director, SABER, IRACDA K12 Program  
UT Health San Antonio*



**Friday, November 10, 2023**  
**Virtually from 9:00 AM - 10:00 AM**

For information on participating in the current monthly seminar, please head to <https://utsa.edu/crts/strech/> or scan the QR code below



✉ [STRECH@UTHSCSA.edu](mailto:STRECH@UTHSCSA.edu)

☎ (210) 562-IIMS