

Research Centers in Minority Institutions (UTSA)  
Institute for Integration of Medicine and Science (UTHSCSA)  
Cancer Therapy & Research Center (UTHSCSA) &  
UTSA-UTHSCSA Joint Graduate Program in Biomedical Engineering  
invite you to attend

## Seminars in Translational Research

*"Building the Capacity for Translational Research"*

### John H. Zhang, MD, PhD

Professor of Anesthesiology, Neurosurgery, Physiology  
Loma Linda University School of Medicine  
Loma Linda, CA

### Future Stroke Research: emphasizing recirculation

Stroke has been recognized for more than 2700 years and the current stroke pathophysiology is focused on recanalization and reperfusion or in one word emphasized on the arterial system. The passive co-operation of the venous system with the arterial system are believed and taken for granted over the last thousands of years. This concept has strong limitations if it is not totally wrong. The venous system participates in the acute arterial stroke and influences the outcomes and in some cases plays determining roles. Six potential factors that alter venous blood flow will be presented and discussed. For a complete stroke pathophysiology, a term Recirculation may be used instead of recanalization or reperfusion.

**Friday, January 16, 2015**

**9:00 AM — 10:00 AM**

**The University of Texas Health Science Center at San Antonio  
8403 Floyd Curl Drive, Greehey Children's Cancer Research Institute  
Auditorium Room 2.160**

**\*Refreshments will be served\***

For more information contact Cindy Russel, Institute for Integration of Medicine and Science [STRECH@uthscsa.edu](mailto:STRECH@uthscsa.edu) • 210-562-4010 • <http://utsa.edu/crts/strech>

