

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

## Seminars in Translational Research

*"Building the Capacity for Translational Research"*

### **Peter T. Fox, M.D.**

Director, Research Imaging Institute  
Vice Chair for Research & Research Education, Department of Radiology  
Malcolm Jones Professor Radiology  
Professor of Radiology, Neurology, Psychiatry and Physiology  
UTHSCSA

### **Network Modeling of Neural Systems and Disorders**

Neuroimaging methods have tremendous potential for explaining the function and structure of the healthy human brain as well as the pathophysiology of neuropsychiatric disorders. The most sophisticated approaches to interpreting neuroimaging data utilize neural network models. Network modeling conceptualizes the brain as a complex, modularly organized information processing system, composed of a large number semi-independent networks. Network models reveal a high degree of modularity in the resting brain which dynamically shifts during task performance. Network modeling characterizes disorders by alterations in "traffic" (covariance patterns) in specific networks, and can detect treatment-induced network normalizations including correlations with behavioral symptoms. The same non-invasive imaging and analysis techniques can be applied to animal models, providing an extraordinary opportunity for translational research.

**Friday, November 20, 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**

For more information contact Cindy Russel, Institute for Integration of Medicine and Science  
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**UTSA RCMi**  
Research Centers in Minority Institutions

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**UT HEALTH SCIENCE CENTER**  
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