

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

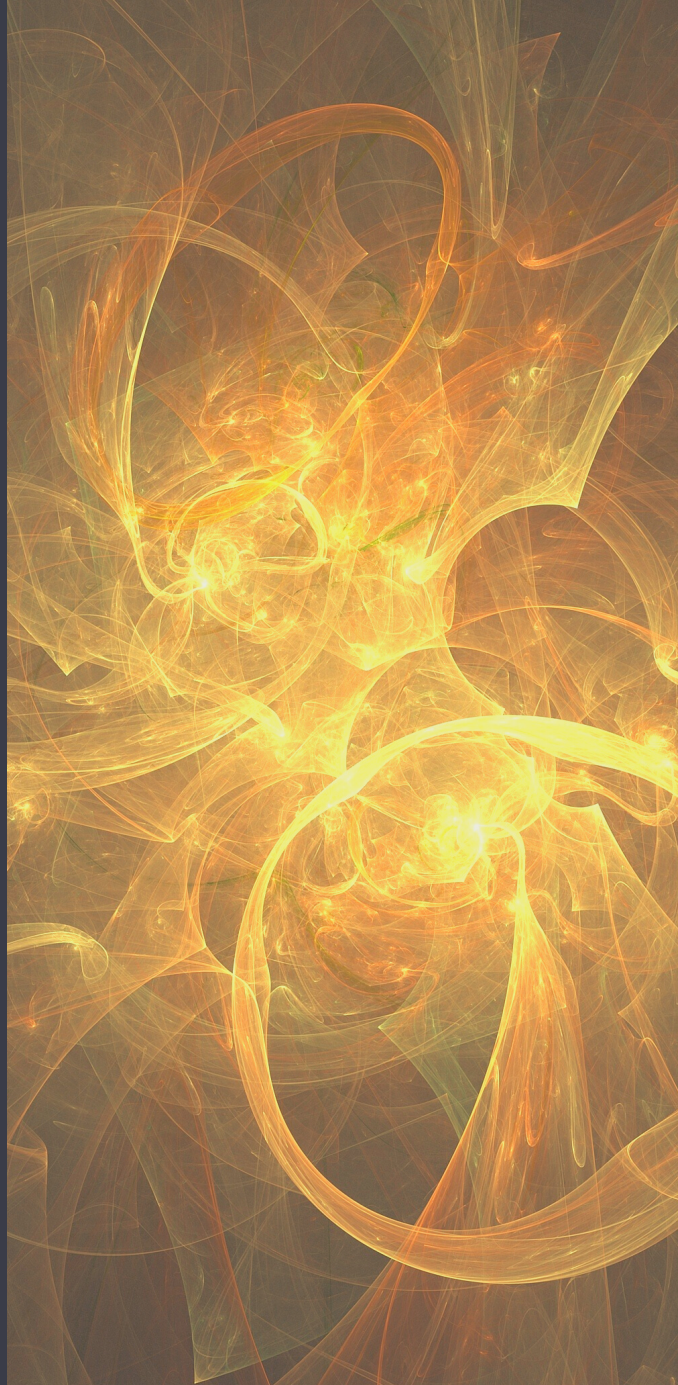
*"Design, Synthesis and Structure-Activity Relationships of Small Molecule ER- $\beta$  Agonists for Glioblastoma (GBM) Therapies"*

Although the incidence of glioblastoma (GBM) in the United States is only 4.7 per 100,000 the devastating nature of this disease cannot be overstated with 5-year prognosis approaching 5%. There are no agents with proven survival benefit in the recurrent setting with anti-angiogenic or further alkylating therapy often chosen in the absence of better drugs. At issue remains the selective permeability of the blood brain barrier (BBB) to pharmaceutical intervention, the heterogeneous and immunosuppressive nature of the glioma microenvironment, and the associated morbidity of tumors with central nervous system (CNS) involvement. Our teams preliminary studies suggested that GBM selectively express estrogen receptor  $\beta$  (ER $\beta$ ) and demonstrated that ER $\beta$  agonists exert tumor suppressive functions in GBM. Our results also demonstrated that ER $\beta$  knockout increases GBM GSC representation whereas overexpression results in loss of GSCs. Thus, the goal of this highly collaborative and multi-disciplinary program is to develop novel, potent, and CNS penetrant ER $\beta$  agonist with therapeutic potential and thus create a new paradigm of using ER $\beta$  specific agonist as novel therapy for curbing GBM progression. This seminar will focus on the development of structurally-novel ER $\beta$  specific agonists to help support translational studies and advance the program toward a viable clinical candidate.



**Stanton F. McHardy, PhD**

Associate Professor, Chemistry  
Director, Center for Innovative Drug Discovery  
University of Texas at San Antonio



**Friday, January 28, 2022  
9:00AM - 10:00AM**

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



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