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*Talk Title TBA*

Dr. Tsai received his M.D. degree from the National Taiwan University in 1988 and Ph.D. degree in Neuroscience from the Johns Hopkins University School of Medicine in 1996. He finished his Neurology residency training at The National Taiwan University Hospital in 1991 and Post-Doctoral training at National Institutes of Health in 2003. He is currently an Associate Professor at the Texas A&M University Health Science Center, Institute of Biosciences and Technology and has been a faculty member at Texas A&M since 2003. Dr. Tsai's research focuses on the discovery of new mechanisms driving stem cell self-renewal and the translation of this knowledge to medical applications that advance the management of tissue repair, premature aging, and tumor malignancy. His current research topics include: (1) delineating the molecular and cellular mechanism of nucleostemin that drives the self-renewal of normal and cancerous stem cells, with a special emphasis on how nucleostemin protects the integrity of genome against replication stress; (2) determining the roles of chromatin conformation and DNA methylation in liver regeneration, liver cancer progression, and liver aging; and (3) developing new screening models and novel therapeutic devices to predict and prevent cancer formation, with a special emphasis on oral squamous cell carcinoma and non-alcoholic fatty liver disease-related hepatocellular carcinoma. His work is funded by CPRIT and NIH and has led to a US patent and the establishment of a startup company, Post Oak Pharmaceuticals. Dr. Tsai has co-authored 45 peer-reviewed journal articles, 31 of which were published while he is at Texas A&M.