



The University of Texas System

The University of Texas Systemwide Brain Research Summit

AT&T Conference Center at the University of Texas
1900 University Avenue, Austin, TX, 78705

Poster Presentations

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| 1 | A Promising Neuromodulation Approach: Exploring rTMS as a First-Line Treatment for Depression | Austin Herrmann (UT Austin) |
| 2 | Aberrant Hippocampal Activity and Dopamine System Dysfunction in Rodent Models of Perimenopause & Menopause: Relevance to Psychosis | Stephanie Perez, PhD (UT Health San Antonio) |
| 3 | Advances in AI for Improving Traumatic Brain Injury Care in Texas | Christian Cruz (UT San Antonio) |
| 4 | Aged Maternal Gut Microbiome Impairs Offspring Behaviors and Exacerbates Stroke Outcome | Kristen Rebeles, BS (UT Health Houston) |
| 5 | Astrocyte TAAR1 Elicits Methamphetamine-induced Glutamate Toxicity in HIV-1 | Irma Cisneros, PhD (UT Medical Branch Galveston) |
| 6 | Brain Aging and Cellular Senescence are Accelerated in Young Mice and Humans during the Chronic Phase of Ischemic Stroke | Romeesa Khan, BS (UT Health Houston) |
| 7 | Characterizing Eye Gaze Patterns in Autistic Children during a Predictive Sensorimotor Task | Michael Vasko (UT San Antonio) |
| 8 | Closed-Loop Neuromodulation for Hippocampal Oscillatory in Humans Using Binary Noise Stimulation & Neural Network State | Ruchita Mahesh Kumar, MS (UT Southwestern) |
| 9 | DMH Glucagon-Like Peptide 1 Receptor Neurons are Required for the effect of GLP-1R Agonist induced weight loss | Eunsang Hwang, PhD (UT Southwestern) |
| 10 | Effectiveness of a Bilingual Problem-Solving Training for Care Partners of Adults with Dementia | Kristin Wilmoth, PhD (UT Southwestern) (see 11) |
| 11 | Emotional Factors Associated with Elevated Symptoms of Post-traumatic Stress during Recovery from Sports Related Concussion | Kristin Wilmoth, PhD (UT Southwestern) (see 10) |



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| 12 | Endothelial Piezo1 Contributes to Cerebral Blood Flow Regulation and its Loss Results in Brain Inflammation and Cognitive/Motor Deficits | Ting Wu (UT Health Houston) |
| 13 | Enhancer of Zeste Homolog 2 (EZH2) Inhibitor Improves Cognitive Behavior In Cerebral Amyloid Angiopathy | Zahid Iqbal, PhD (UT Health Houston) (see 47) |
| 14 | Escape of Kdm6a from X Chromosome is Detrimental to Ischemic Brains via IRF5 Signaling | Conelius Ngwa, PhD (UT Health Houston) |
| 15 | Diverse Effects of Dietary Selenium on Neurological Function and Microglial Activation in Aged Mice | Riya Patel (UT Austin) |
| 16 | Episodic Memory Sampling Biases Latent Contextual Inferences in Ambiguous Threat Contexts | John Leri, PhD (UT Austin) |
| 17 | Gut-Brain Axis Crosstalk - Fate of Microglia in AD Pathogenesis | Ghalya Alrousan, MS (UT Health Houston) |
| 18 | Investigating a Truncated Version of SAINT in Treatment-Naïve Adolescents with Depression: An Open Label Acceptability Trial | Sean O’Sullivan, MD, PhD (UT Austin) (see 51) |
| 19 | Impact of Aged Microbiome on Post-Pregnancy Health and Behavior in Mice | Yu-Ju Chen, PhD (UT Health Houston) |
| 20 | Impact of the Virtual Reality Adventure Training Exergaming (V-RATE) on Veterans' Brain and Mental Health—A feasibility Study | Caifang Wu (UT Arlington) |
| 21 | Inhibition of the Left Amygdala via Low-Intensity Focused Ultrasound Enhances the Encoding of Emotional and Neutral Episodic Memories | Manoj K Doss, PhD (UT Austin) |
| 22 | Intrafamilial vs. Extrafamilial Childhood Sexual Abuse: Comparing Characteristics and PTSD Risk | Keerthi Vemulapalli, MD (UT Austin) |
| 23 | Investigating Hispanic Ancestry as a Modifier of Neuroinflammatory Gene Expression in Single and Mixed Etiology Dementia | Elizabeth Ochoa, PhD (UT Health San Antonio) |
| 24 | Investigating The Detrimental Effects Of Gestational Diabetes In Dams and Offsprings Health Outcomes with age | Jennifer Mendoza (UT Health Houston) |
| 25 | Leptomeningeal blood vessel fibrosis in Cerebral Amyloid Angiopathy may be mediated through multimodal Osteopontin Signaling from CNS fibroblasts | Vasilia Kyriakopoulos (UT Health Houston) |
| 26 | MAPping Impulsivity: Cortical Architecture as a Biosignature for Relapse Vulnerability in Substance Use Disorders | Holly Chapman, MS (UT Medical Branch Galveston) |



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| 27 | MAVS Minor genotype and the development of HIV Associated Neurocognitive Disorders (HAND) in substance use | Maura Ortiz-Camacho, MD, PhD (UT Medical Branch Galveston) |
| 28 | Microglial Ifi2712a Regulates Neuroinflammation Following Stroke | Sodam Kim, PhD (UT Health Houston) |
| 29 | Neural Encoding of Acoustic Features Across Speech and Music in the Human Brain | Rajvi Agravat, BS (UT Austin) |
| 30 | NR5A1 in the VMH in Adults Regulates Food Intake | Lara Bideyan Hernandez, PhD (UT Southwestern) |
| 31 | Pilot Study of Acute Behavioral Effects of Pallidal Burst Stimulation in Parkinson's Disease | Saar Kariv, MD (UT Southwestern) |
| 32 | Python-Based Machine Learning for Three-Dimensional Human Brain Model Segmentation and Analysis | Morgan Smith, MS (UT Health San Antonio) |
| 33 | Research Pathways in US Psychiatry Residency Programs: A Website Analysis | Idris Altinisik, MD (UT Health Houston) |
| 34 | Repetitive Head-injury Exposure and Later-in-life Cognitive and Emotional Outcomes Among Former Collegiate Football Players: a CLEATS Investigation | Jeff Schaffert, PhD (UT Southwestern) |
| 35 | Selective Activation of Peritoneal TRPV1-Containing Vagal Afferents Promotes Sustained Mild Hypothermia and Neuroprotection Following Stroke | Alexander Andersohn (UT Health Houston) |
| 36 | Sex-Specific Polarization of Neutrophils Following Neonatal Hypoxic-Ischemic Brain Injury | Mario Carrera (UT Health Houston) |
| 37 | Simultaneous MEG and EEG Imaging Reveals Widespread Cortical Effects of Acute Transcranial Photobiomodulation in Healthy Adults | Tyrell Pruitt, PhD (UT Southwestern) |
| 38 | Small Hits with Big Impacts: The Implications of Repetitive Mild Traumatic Brain Injury in Adolescent Mice | Dylan Devonald (UT Health Houston) |
| 39 | Stimulation of Sensory or Motor Vagal Neurons Produces Opposite Effects on Glucose Homeostasis | Luis A. Leon-Mercado, PhD (UT Southwestern) |
| 40 | The Bonehead Model: A Novel Co-culture System for the Study of Skull-brain Interactions | Patrick Devlin, PhD (UT Health Houston) |
| 41 | The Detrimental Effects of Post-Stroke Social Isolation on Microglial Activation are Mediated by MicroRNAs | Anik Banerjee, PhD (UT Health Houston) |
| 42 | The Effects of Intermittent Fasting as a Post-Stroke Therapeutic Strategy in an Obese Murine Model | Ung Hyun Kim (UT Health Houston) |



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| 43 | The Effect of Social Isolation on Cerebral Amyloid Angiopathy | Danye Jiang, PhD (UT Health Houston) |
| 44 | The Effects of Social Isolation Stress on Murin Prefrontal Cortical Function and Transcriptome | Stephanie A Villalon (UT San Antonio) |
| 45 | The Link Between Depression and Bone Fractures in the Rio Grande Valley | Blake Martin (UT Rio Grande Valley) |
| 46 | The Role of Astrocyte TNFR2 in Experimental Autoimmune Encephalomyelitis, a Mouse Model of Multiple Sclerosis | Kyle Pressley, MS (UT San Antonio) |
| 47 | Transforming Growth Factor Beta Receptor 2 Knockdown Improves Cognitive Function and Breathing In Alzheimer's Disease Mice | Zahid Iqbal, PhD (UT Health Houston) (see 13) |
| 48 | Traumatic Brain Injury in Older Adults Arrived at Emergency Departments in Texas, 2018-2022: Incidences and Etiology | Karan P. Singh, PhD (UTHealth Tyler) |
| 49 | Traumatic Brain Injury in Children Treated in Emergency Departments in Texas: Incidence and Risk Factors. | Tuan D. Le, MD, MPH, DrPH (UT Health Tyler) |
| 50 | Triggering Receptor Expressed on Myeloid Cells 2 (TREM2) Regulates Microglial Phagocytosis in Gliomas | Mekenzie Peshoff, BS, BA (UT MD Anderson) |
| 51 | Truncated SAINT: Targeting Depression and Cognition in Treatment-Naive Adolescents | Sean O'Sullivan, MD, PhD (UT Austin) (see 18) |
| 52 | Unraveling The Role of Chitotriosidase (CHIT1) in Alzheimer's Disease | Swati Mohapatra, PhD (UT Health Houston) |
| 53 | Using Machine Learning to Predict Poor Mental Health Status in the Geriatric Population | Christopher Demetriades (UT Austin) |