

# TARCC 2025 Scientific Symposium – Advances in Alzheimer's Disease Science, Research, and Care

Thursday, January 23, 2025 8:00 am – 5:00 pm

AT&T Executive Education and Conference Center at UT Austin
1900 University Avenue
Austin, Texas 78705

http://www.txalzresearch.org/research/symposia/

#### Agenda

#### Thursday, January 23, 2025

8:00 am Welcome, State of the TARCC, and Symposium Introduction

Munro Cullum, PhD (UT Southwestern) TARCC Scientific Director- Steering Committee Chair

Amphitheater 204 (Level M2)

Facebook Live YouTube Live

8:20 am Data Blitz Session 1 from TARCC Scientists

Moderated by Rodrigo Morales, PhD (UT Health Houston) Vice Chair-TARCC Steering Committee

Amphitheater 204 (Level M2)

Facebook Live YouTube Live

1. Association of Baseline Blood-Based AD biomarkers with MRI AD-Signatures in a Mexican-American Population-Based Cohort

Shana Garza, BS (UT Health Rio Grande Valley)

2. Identification of gene expression pathways conferring resilience or susceptibility to AD progression

Chia-Hsuan Fu, PhD (Baylor College of Medicine)

3. Development of the COPE-ING Measure: Individualized Needs and Goals Assessment for Dementia Caregivers

Alyssa Aguirre, LCSW-S (UT Austin)

4. Computational Models Using Fitness Trackers for Prediction of Mild Cognitive Impairment Status

Assaf Gottlieb, PhD (UT Health Houston)

5. Data privacy concerns of older adults participating in a digital monitoring study and response to an educational intervention

Rachel Mis, PhD (UT Austin)

6. Brain Health Coaching to Address Risk Factors for Dementia Sarah Ross, DO (UNT Health Science Center)

7. Reserve and variability markers of cognitive health
Jenna Yentes, PhD (Texas A&M University Health Science Center)

8. Characterization and Comparison of Atrophy and Hypometabolism Patterns in Alzheimer's Disease

Annie Dang, MS (UT Health San Antonio)

9:30 am BREAK

#### 10:00 am Data Blitz Session 2 from TARCC Scientists

Moderated by Rodrigo Morales, PhD (UT Health Houston)

Amphitheater 204 (Level M2)

Facebook Live YouTube Live

- 9. Interventions to promote communication and quality of life in primary progressive aphasia Maya Henry, PhD (UT Austin)
- 10. Addressing neuropathic pain in Alzheimer's disease with Comorbid HIV Khalid Benamar, PhD (UT Health Rio Grande Valley)
- 11. Evaluating a Two-Step Cognitive Screening Process Using the Brief Dementia Screening Indicator and Cognitive Screening Tests

Hanna Hausman, PhD (UT Health San Antonio)

- 12. Harnessing norepinephrine to reduce epileptiform activity in AD Manuel Silva-Perez,PhD (Baylor College of Medicine)
- 13. Acquiring Real World Data in Lewy Body Disease Sarah Horn, MD (UT Health San Antonio)
- 14. Shift Work Schedules Alter Immune Cell Regulation and Accelerate Cognitive Impairment during Aging

Karienn de Souza, PhD (Texas A&M University Health Science Center)

- 15. Regional Sialylation Patterns in Cerebral Amyloid Angiopathy Caitlyn Fastenau, BS (UT Health San Antonio)
- 16. Multi-Cohort Association of Alcohol Use Disorder with Cognitive Impairment & Alzheimer's Disease

Mohammad Housini, MS (UNT Health Science Center)

17. Cellular basis of network abnormalities in Alzheimer's disease Keran Ma, PhD (UT Health Houston)

#### 11:15 am BREAK

12:00 pm Keynote Address:

Sponsored by UT Austin Oskar Fischer Lecture Series: *The Golden Age of Neuroscience* 

Walter J. Koroshetz, MD (Director of the National Institute of Neurological Disorders and Stroke)

Zlotnik Family Ballroom (Level M1)

Facebook Live YouTube Live

1:30 pm Poster Session

Grand Ballroom (Level M3)

3:00 pm TARCC Lecture: Measuring Daily Activities in the 21st Century and Beyond

Jared Benge, PhD (UT Austin)

Amphitheater 204 (Level M2)

Facebook Live

YouTube Live

3:40 pm TARCC Lecture: *Promoting cognitive resilience as a novel therapeutic concept* 

for AD and related dementia

Agenor Limon, PhD (UT Medical Branch at Galveston)

Amphitheater 204 (Level M2)

Facebook Live YouTube Live

4:20 pm Invited Address: Leveraging precision medicine, AI, and digital health to prevent

Alzheimer's disease: Is the future now or near?

Stephen Waring, PhD (Essentia Institute of Rural Health)

Amphitheater 204 (Level M2)
Facebook Live
YouTube Live

5:00 pm Poster Winner Announcements and Closing Statements

Amphitheater 204 (Level M2)
Facebook Live
YouTube Live

### Scientific Posters

#### Poster Theme Group A1. Development of New Models and Analysis Methods

**Poster # 1:** NANOSCALE STRUCTURAL CHARACTERIZATION OF AMYLOID BETA 1-42 OLIGOMERS AND FIBRILS GROWN IN THE PRESENCE OF FATTY ACIDS

Presenting author: Dmitry Kurouski (TAMU)

**Poster # 2:** IMPACT OF CIRCADIAN RHYTHM DYSREGULATION ON THE BRAIN-GUT-IMMUNE AXIS.

Presenting author: Emily Iglesias BS (TAMU)

**Poster # 3:** SHIFT WORK SCHEDULES ALTER IMMUNE CELL REGULATION AND ACCELERATE COGNITIVE IMPAIRMENT DURING AGING

Presenting author: Jocelin Reyes B.S (TAMU)

**Poster # 4:** UTILIZING ATN PLASMA BIOMARKERS AND MACHINE LEARNING MODELS TO PREDICT EARLY ALZHEIMER'S DISEASE AMONG HABS-HD COHORT

Presenting author: Stella Anagnos, BS (UNTHSC)

Poster # 5: THE MECHANISM BY WHICH THE NOVEL GENETIC RISK FACTOR SCULLY/HSD17₺10 CONTRIBUTES TO ADRD

Presenting author: Kyung-An Han (UTEP)

**Poster # 6:** DETECTION OF TAU AGGREGATES IN ALZHEIMER'S PATIENTS BY SEED AMPLIFICATION ASSAY AND ITS APPLICATION FOR IDENTIFICATION OF TAU SEEDING INHIBITORS

Presenting author: Haley Evans, B.S. (UTH Houston)

## Poster # 7: PHENOTYPIC ANALYSIS OF PLCΓ2 VARIANTS WITHIN NOVEL LATE-ONSET ALZHEIMER'S DISEASE MOUSE MODEL

Presenting author: Juliet Garcia Rogers, BS (UTH San Antonio)

**Poster # 8:** NOVEL TDP-43 ALS MODEL DRIVES MOTOR DYSFUNCTION AND PATHOLOGY IN MICE

Presenting author: Matthew Dopler, PhD (UTH San Antonio)

**Poster # 9:** P2RY12 AS A REGULATOR OF MICROGLIAL PHENOTYPES AND FUNCTION IN NEURODEGENERATION

Presenting author: Teniade Adetona, BS (UTH San Antonio)

**Poster # 10:** SCOPIOUS BRAIN WAVES IN RAT MODELS OF ALZHEIMER'S DISEASE

Presenting author: Nastaran Lotfi, PhD (UTHealth Houston)

#### **Poster Theme Group A2. Genetics**

Poster # 11: TOP ALZHEIMER'S DISEASE RISK ALLELE FREQUENCIES IN HABS-HD AFRICAN AMERICANS VS NON-HISPANIC WHITE AMERICANS Presenting author: Reem Ayoub OMS-II (TCOM - UNTHSC)

**Poster # 12:** ANALYSIS OF ACE2 SNPS AS EPISTATIC RISK FACTORS FOR AD OUTCOMES

Presenting author: Amanda Tucker, BS (UNTHSC)

**Poster # 13:** DETERMINING THE IMPACT OF TOMM40 SINGLE NUCLEOTIDE POLYMORPHISMS ON METABOLIC SYNDROME AND WHITE MATTER HYPERINTENSITY VOLUME IN AFRICAN AMERICANS.

Presenting author: Christopher Purvis BS (UNTHSC)

**Poster # 14:** CORRELATION BETWEEN DNA METHYLATION IN ALZHEIMER'S DISEASE AND DEPRESSION-RELATED GENES AND GERIATRIC DEPRESSION SCALE SCORES AMONG HISPANIC TARCC PARTICIPANTS

Presenting author: Damariza Barraza, MS (UNTHSC)

**Poster # 15:** INVESTIGATING GENETIC RELATIONSHIP BETWEEN CANCER AND ALZHEIMER'S DISEASE

Presenting author: Dipti Debnath, M.Pharm (UNTHSC)

**Poster # 16:** HISPANIC ANCESTRY AS A MODIFIER OF NEUROINFLAMMATORY GENE EXPRESSION IN SINGLE AND MIXED ETIOLOGY DEMENTIA

Presenting author: Elizabeth Ochoa Ph.D. (UTH San Antonio)

**Poster # 17:** THE IDENTIFICATION OF A DISTINCT ASTROCYTE SUBTYPE THAT DIMINISHES IN ALZHEIMER'S DISEASE

Presenting author: Haichao Wei PhD (UTHealth Houston)

## **Poster # 18:** APOE- RELEVANT TAU OLIGOMER POLYMORPHS DIFFERENTIALLY IMPAIR SYNAPTIC FUNCTIONING

Presenting author: Naomi Moreno, BS (UTMB)

**Poster # 19:** GENOTYPE-BY-ENVIRONMENT INTERACTION INFLUENCING WHITE MATTER HYPERINTENSITY: THE ROLE OF EDUCATION AND SEX Presenting author: Renee Hernandez, BS (UTRGV)

#### Poster Theme Group A3. Human Neuropathology

**Poster # 20:** EVALUATING DIGITAL PATHOLOGY SOFTWARE: PERFORMANCE COMPARISON BETWEEN QUPATH AND HALO IN TAU PATHOLOGY ASSESSMENT

Presenting author: Angelique D. Gonzalez, BS (UTH San Antonio)

**Poster # 21:** REGIONAL SIALYLATION PATTERNS IN CEREBRAL AMYLOID ANGIOPATHY

Presenting author: Caitlyn Fastenau, BS (UTH San Antonio)

**Poster # 22:** THE NUN STUDY: INSIGHTS FROM THIRTY YEARS OF AGING AND DEMENTIA RESEARCH.

Presenting author: Kyra M. Clarke, BS (UTH San Antonio)

**Poster # 23:** UNDERSTANDING THE FORMATION OF HETEROMERIC AMYLOIDS BETWEEN TAU AND MUSASHI PROTEINS IN ALZHEIMER'S DISEASE

Presenting author: Abbigael Aday, BS (UTMB)

**Poster # 24:** INVESTIGATING THE EFFECTS OF HUMAN BRAIN DERIVED TAU OLIGOMERS ON NEURAL STEM CELL DIFFERENTIATION

Presenting author: Adam Trupp BS (UTMB)

Poster # 25: EXPLORING THE ROLE OF NEURAL STEM CELL EXOSOMES IN MODULATING MICROGLIAL ACTIVATION IN ALZHEIMER'S DISEASE Presenting author: Madison Kidd (UTMB)

**Poster # 26:** AMYLOID B AND TAU OLIGOMERS DISRUPT BLOOD-BRAIN BARRIER IN A HUMAN BASED IN-VITRO MICROFLUIDIC NEUROVASCULAR UNIT MODEL

Presenting author: Zahra Kolahchi, MD (UTMB)

#### Poster Theme Group A4. Molecular and Cell Biology

**Poster # 27:** NEUROPROTECTIVE EFFECTS OF TRANSITION METAL DICHALCOGENIDE NANOFLOWERS IN NEURODEGENERATIVE DISEASE Presenting author: Harris Brown (TAMU)

**Poster # 28:** KCNIP1 AT THE CONVERGENCE OF NUTRITIONAL DEFICIENCY, ION CHANNEL DYSFUNCTION. AND ALZHEIMER'S DISEASE

Presenting author: MS, Nishtha Khanna (Texas Tech HSC)

**Poster # 29:** DIURNAL DIFFERENCES IN IMMUNE CELL TRAFFICKING THROUGH THE CENTRAL NERVOUS SYSTEM IN A 3XTG MOUSE MODEL OF ALZHEIMER'S DISEASE

Presenting author: Andrew Roarke Hynes, BS (UT Austin)

**Poster # 30:** TIME-RESTRICTED FEEDING AS A CIRCADIAN INTERVENTION AMELIORATES FEMALE-SPECIFIC COGNITIVE IMPAIRMENTS IN 3XTG-AD MICE

Presenting author: Brandy Routh, BS (UT Austin)

**Poster # 31:** UNDERSTANDING THE ROLE OF MICROGLIAL PPARB IN ALZHEIMER'S DISEASE

Presenting author: Abhijeet A Patil, MS (UTH Houston)

**Poster # 32:** CHARACTERIZATION OF CHI3L1, A BIOMARKER FOR ALZHEIMER'S DISEASE

Presenting author: Qiang Wang, PhD (UTH Houston)

**Poster # 33:** BIOGENESIS OF SOLUBLE AXL, A BIOMARKER FOR ALZHEIMER'S DISEASE

Presenting author: Sanming Li (UTH Houston)

**Poster # 34:** THE G-QUADRUPLEX HELICASE DHX36 REGULATES TRANSCRIPTION IN NEURONS

Presenting author: Vijay Kumar M J, PhD (UTH Houston)

**Poster # 35:** MODULATION OF NEUROTOXIC REACTIVE ASTROGLIOSIS BY LRP1

Presenting author: Meng Wang, BS (UTH San Antonio)

**Poster # 36:** EFFECTS OF CALCIUM ON AUTOPHAGY IN ALZHEIMER'S DISEASE

Presenting author: Rachael Cundey, BS (UTH San Antonio)

**Poster # 37:** NANO GOLD ACTS AS A KINETIC STABILIZER TO PREVENT LOSS OF FUNCTION OF UNDRUGGABLE TAU RELEVANT TO ALZHEIMER

Presenting author: Sanjib Bhattacharyya, PhD (UTHealth Houston)

**Poster # 38:** UNRAVELING THE ROLE OF CHITOTRIOSIDASE (CHIT1) IN ALZHEIMER'S DISEASE

Presenting author: Swati Mohapatra, PhD (UTHealth Houston)

**Poster # 39:** OSTEOPONTIN SIGNALING IN CNS FIBROBLASTS INDUCES PERIVASCULAR SPACE REMODELING LEADING TO CEREBRAL AMYLOID ANGIOPATHY

Presenting author: Vasilia E. Kyriakopoulos, MS (UTHealth Houston)

## **Poster # 40:** INVESTIGATING TDP-43 STRAIN VARIABILITY: IMPLICATIONS FOR TAU AGGREGATION AND NEUROTOXICITY

Presenting author: Alessia Sciortino, PhD (UTMB)

**Poster # 41:** NON-TOXIC TAU OLIGOMER POLYMORPH ISOLATED FROM NON-DEMENTED INDIVIDUALS WITH ALZHEIMER'S NEUROPATHOLOGY BRAINS.

Presenting author: Anna Fracassi PhD (UTMB)

**Poster # 42:** INTRINSIC DISORDER IN P53 AND ITS MUTANTS CAUSES AGGREGATION AND INACTIVATION OF DNA REPAIR

Presenting author: David Lynch PhD (UTMB)

Poster # 43: BRAIN-DERIVED TAU OLIGOMERS FROM AD, DLB, AND PSP INDUCE SENESCENCE IN MOUSE PRIMARY ASTROCYTE CELLS Presenting author: Fadhl Al Shaebi (UTMB)

Poster # 44: LOW-FREQUENCY ULTRASOUND THERAPY ALLEVIATES NEUROPATHOLOGY AND NEUROINFLAMMATION IN A TRANSGENIC MOUSE MODEL OF ALZHEIMER'S DISEASE NEUROPATHOLOGY Presenting author: Kafayat Oyejide, BS (UTMB)

**Poster # 45:** INVESTIGATING THE EFFECTS OF TAU OLIGOMER EXPOSURE AND LOW-LEVEL LASER THERAPY ON HIPPOCAMPAL NEURAL STEM CELLS.

Presenting author: Kevin Johnson (UTMB)

**Poster # 46:** LOSS OF ATAXIN-2 FUNCTION, BY DELETION OR POLYQ EXPANSION, PROMOTE DNA DAMAGE, TAU PATHOLOGY, AND TDP-43 MISLOCALIZATION IN NEURONS

Presenting author: Sagar Gaikwad, PhD (UTMB)

**Poster # 47:** UNRAVELING SYNAPTIC TAUOPATHY IN ALZHEIMER'S DISEASE: THE ROLE OF AB AND SELECTIVE NEURONAL VULNERABILITY IN TAU SPREADING AND SYNAPTIC DYSFUNCTION

Presenting author: Shrinath Kadamangudi (UTMB)

**Poster # 48:** CHROMATIN REMODELER BRG1 RECRUITS HUNTINGTIN TO REPAIR DNA DOUBLE-STRAND BREAKS IN NEURONS

Presenting author: Subrata Pradhan, PhD (UTMB)

**Poster # 49:** BRAIN-DERIVED TAU OLIGOMER POLYMORPHS: DISTINCT AGGREGATION AND STABILITY PROFILES AND DIFFERENTIAL BIOLOGICAL ACTIVITY

Presenting author: Suhyeorn Park PhD (UTMB)

**Poster # 50:** INVESTIGATING THE ROLE OF SMALL NON-CODING RNAS IN ALZHEIMER'S DISEASE USING HUMAN INDUCED PLURIPOTENT STEM CELLS -DERIVED CELLS

Presenting author: Xiaoyong Bao (UTMB)

## **Poster # 51:** TARGETING AGGREGATION-PRONE REGIONS OF TAF15 IN FTD: TOWARD THERAPEUTIC INHIBITION

Presenting author: Katerina Konstantoulea, PhD (UTSW)

#### Poster Theme Group B1. Biomarkers (non-neuroimaging)

**Poster # 52:** HEART RATE RESERVE, AGE, AND SEX ARE PREDICTIVE OF BIOLOGICAL SIGNATURES ASSOCIATED WITH ALZHEIMER'S DISEASE IN MIDDLE-AGED AND OLDER ADULTS

Presenting author: Jack Manning, M.S.Ed. (TAMU)

**Poster # 53:** WALKING SPEED RATHER THAN CARDIORESPIRATORY RESERVE IS PREDICTIVE OF PLASMA PTAU IN A PILOT SAMPLE OF MIDDLE-AGED AND OLDER ADULTS

Presenting author: Jenna Yentes, PhD (TAMU)

**Poster # 54:** TOWARDS UNDERSTANDING THE METABOLIC SHIFTS IN THE BIOFLUIDS FOR ALZHEIMER'S PATIENTS

Presenting author: Narendra Kumar (Texas A&M UHSC)

**Poster # 55:** RELATIONSHIPS BETWEEN THYROID AND COGNITIVE FUNCTION AMONGST OLDER RURAL WEST TEXANS: A PROJECT FRONTIER STUDY

Presenting author: Brennon Henderson BA (Texas Tech HSC)

**Poster # 56:** V-SET AND IMMUNOGLOBULIN DOMAIN CONTAINING 4 AS A POTENTIAL PREDICTOR OF ALZHEIMER'S DISEASE AND ADVANCED AGING Presenting author: Bowen Yang, BE (University of Houston)

**Poster # 57:** POPULATION-SPECIFIC EXTRACELLULAR VESICLE MICRORNA SIGNATURES IMPLICATED IN ALZHEIMER'S DISEASE

Presenting author: Kumudu Himali Subasinghe, MS (UNTHSC)

**Poster # 58:** ASSOCIATION BETWEEN INFLAMMATORY BLOOD BIOMARKERS AND CONVERSION TO ALL-CAUSE DEMENTIA IN A DIVERSE SAMPLE.

Presenting author: Juan Carlos Guerrero Garcia, M.D. (UTH San Antonio)

**Poster # 59:** CHARACTERIZING THE BIGGS BIOBANK: DEMOGRAPHICS, BIOSPECIMENS, AND BIOMARKERS IN A SOUTH TEXAS COHORT Presenting author: Samantha Gates, BA (UTH San Antonio)

**Poster # 60:** PLASMA P-TAU T217 LEVELS CORRELATE WITH NEURITIC PLAQUE DENSITY

Presenting author: Tiffany Kautz, PhD (UTH San Antonio)

Poster # 61: SERUM METABOLOME PROFILING IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT REVEALS SEX DIFFERENCES IN METABOLISM

Presenting author: Rocio Diaz Escarcega, PhD (UTHealth Houston)

## **Poster # 62:** EXPLORING BIOMARKERS IN BACTERIAL AND VIRAL SEPSIS: INSIGHTS AND PARALLELS WITH ALZHEIMER'S DISEASE

Presenting author: Tatiana barichello (UTHealth Houston)

**Poster # 63:** BRAIN-DERIVED TAU OLIGOMERS IN PLASMA BRAIN-DERIVED EXTRACELLULAR VESICLES: A POTENTIAL PREDICTIVE BIOMARKER FOR ALZHEIMER'S DISEASE.

Presenting author: Michela Marcatti, PhD (UTMB)

Poster # 64: ALZHEIMER'S DISEASE BLOOD BIOMARKERS AND APOE

GENOTYPE: PRODROMAL STAGING

Presenting author: Bilal Kahn, BS (UTSW)

#### Poster Theme Group B2. Neuroimaging

**Poster # 65:** CEREBELLO-CEREBRAL FUNCTIONAL CONNECTIVITY IN EARLY ALZHEIMER'S DISEASE

Presenting author: Chi-Ying (Roy) Lin, MD, MPH, FAAN (BCM)

**Poster # 66:** LINKING FUNCTIONAL CONNECTOMICS AND PROTEOMICS TO LEARNING AND MEMORY DEFICITS IN A MOUSE MODEL OF ALZHEIMER'S DISEASE

Presenting author: Elizabeth Hipskind, BS (BCM)

**Poster # 67:** MODELING STRUCTURAL AND FUNCTIONAL CONNECTOMICS WITH COGNITIVE DEFICITS AND SPATIAL TRANSCRIPTOMICS IN A MOUSE MODEL OF TAUOPATHY

Presenting author: Elizabeth Hipskind, BS (BCM)

**Poster # 68:** LEVERAGING MACHINE LEARNING AND FEATURE IMPORTANCE TECHNIQUES IN NEUROIMAGING TO IDENTIFY CRITICAL BRAIN REGIONS STRONGLY CORRELATED WITH ALZHEIMER'S DISEASE

Presenting author: Benjamin Black, BS (UNTHSC)

**Poster # 69:** AT[N] NEUROIMAGING OUTCOMES IN ALZHEIMER'S DISEASE: ANALYSIS OF MITOCHONDRIAL ANCESTRY IN A DIVERSE POPULATION Presenting author: Jiya Ghei, BA (UNTHSC)

**Poster # 70:** NEURAL OSCILLATIONS, THETA-GAMMA COUPLING, HIPPOCAMPO-CORTICAL NETWORKS, DISCRETE PADÉ TRANSFORM (DPT), COGNITIVE NEUROSCIENCE, FREQUENCY MODULATION (FM) IN BRAIN RHYTHMS

Presenting author: chandan kumar behera, PhD (UTHealth Houston)

**Poster #71:** HIGHER ALPHA7 NICOTINIC ACETYLCHOLINE RECEPTOR AVAILABILITY IN THE BRAINS OF OLDER, COGNITIVELY NORMAL INDIVIDUALS

Presenting author: Alejandra N. Woolsey, B.S. (UTSW)

#### Poster Theme Group C1. Neuropsychiatry and Behavioral Neurology

**Poster # 72:** PILOT SCREENING FOR PRODROMAL SYNUCLEINOPATHIES IN POST-9/11 VETERANS WITH PROBABLE REM SLEEP BEHAVIOR DISORDER Presenting author: Taryn White, BS; Dakota Broadway, MA (BCM)

**Poster # 73:** COGNITIVE COST OF LONG SLEEP DURATION AND DEPRESSION Presenting author: Vanessa Young, MS (UTH San Antonio)

**Poster # 74:** EVALUATION OF THE NEUROLOGICAL EFFECT OF YOUNG CSF ADMINISTRATION IN AGED RATS SUBJECTED TO THE ISCHEMIC STROKE MODEL

Presenting author: Victória Linden de Rezende (UTHealth Houston)

#### Poster Theme Group C2. Neuropsychology

**Poster # 75:** ACCULTURATION MODERATES THE RELATIONSHIP BETWEEN STRESS APPRAISAL AND MEMORY: RESULTS FROM THE HEALTH AND AGING BRAIN STUDY-HEALTH DISPARITIES STUDY (HABS-HD)

Presenting author: Jordana Breton, BA (UT Austin)

**Poster # 76:** AGE-RELATED DIFFERENCES IN MOOD AND MOTIVATION IN A COMMUNITY-BASED SAMPLE OF HEALTHY YOUNGER AND OLDER ADULTS.

Presenting author: Anika Bhatia BS (UT Dell)

**Poster # 77:** DATA PRIVACY CONCERNS OF OLDER ADULTS PARTICIPATING IN A DIGITAL MONITORING STUDY AND RESPONSE TO AN EDUCATIONAL INTERVENTION

Presenting author: Rachel E. Mis, PhD (UT Dell)

Poster # 78: ENHANCING COGNITIVE FUNCTION IN PRIMARY PROGRESSIVE APHASIA: A STUDY OF HD-TDCS EFFECTS ON PRE-SMA AND LIFG Presenting author: Paulina Devora, MS (UTD)

**Poster # 79:** EVALUATING A TWO-STEP COGNITIVE SCREENING PROCESS USING THE BRIEF DEMENTIA SCREENING INDICATOR AND COGNITIVE SCREENING TESTS

Presenting author: Hanna Hausman, PhD (UTH San Antonio)

**Poster # 80:** CORRELATION BETWEEN COGNITIVE IMPAIRMENT AND PAREIDOLIA IN OLDER ADULTS

Presenting author: Laureen Phelps, MS (UTH San Antonio)

**Poster # 81:** VARIATIONS IN COGNITIVE AND EVERYDAY FUNCTIONING ACROSS RACIAL/ETHNIC GROUPS WITH MILD COGNITIVE IMPAIRMENT Presenting author: Alyssa Kaser, BA (UTSW)

# **Poster # 82:** EXPLORING THE RELATIONSHIP BETWEEN TRAUMATIC BRAIN INJURY HISTORY AND COGNITIVE IMPAIRMENT IN A DIVERSE COMMUNITY-BASED SAMPLE

Presenting author: Diamond Lee, M.S (UTSW)

**Poster # 83:** MONTREAL COGNITIVE ASSESSMENT MEMORY SCORES AND ALZHEIMER'S DISEASE NEUROPATHOLOGICAL CHANGE

Presenting author: Oscar Kronenberger (UTSW)

Poster # 84: EVALUATION OF THE MONTREAL COGNITIVE ASSESSMENT MEMORY INDEX SCORE (MIS) FOR PREDICTING AMNESTIC MILD COGNITIVE IMPAIRMENT TO ALZHEIMER'S CLINICAL SYNDROME Presenting author: Oscar Kronenberger (UTSW)

**Poster # 85:** DEMOGRAPHIC EFFECTS ON THE MONTREAL COGNITIVE ASSESSMENT IN A COMMUNITY-BASED SAMPLE

Presenting author: William Goette, PhD (UTSW)

#### Poster Theme Group D1. Dementia Care Research (nonpharmacological)

**Poster # 86:** PRECISION HEALTH FOR DEMENTIA: THE HOUSTON COHORT ENROLLED

Presenting author: Fatima I. Chavez, MPH (BCM)

**Poster # 87:** RISK PROFILES OF ALZHEIMER'S DISEASE AND RELATED DEMENTIAS CARE PARTNERS: A LATENT PROFILE ANALYSIS TO INFORM INTERVENTION

Presenting author: Matthew Lee Smith, PhD, MPH, CHES (TAMU)

**Poster # 88:** CAIDE DEMENTIA SCORE AND COGNITION ASSOCIATION IN DEMENTIA-FREE HISPANICS FROM THE HABS-HD COHORT

Presenting author: Abigail Mendoza, Medical Student (UNTHSC)

**Poster # 89:** DEVELOPMENT OF AN EDUCATIONAL SUPPORT GROUP PROGRAM FOR CAREPARTNERS OF HISPANIC AND LATINO INDIVIDUALS WITH LANGUAGE-PROMINENT DEMENTIA

Presenting author: Giselle Yoshimoto (UT Austin)

**Poster # 90:** A MITOCHONDRIAL BASED INTERVENTION FOR MILD COGNITIVE IMPAIRMENT (MCI) USING PHOTOBIOMODULATION, METHYLENE BLUE, AND MEDIUM CHAIN TRIGLYCERIDES

Presenting author: Hunter Dutkiewicz, BS (UT Austin)

**Poster # 91:** EFFECTIVENESS OF CLOSED-LOOP THETA-BURST STIMULATION ON COGNITIVE CONTROL IN YOUNG ADULTS

Presenting author: Minsu Zhang, MS (UT Austin)

**Poster # 92:** ETHNORACIAL AND BILINGUAL DISPARITIES IN SPEECH-LANGUAGE INTERVENTION FOR PRIMARY PROGRESSIVE APHASIA

Presenting author: Rylee Manning, M.Sc., M.Phil. (UT Austin)

## **Poster # 93:** EXPLORING NEUROLOGISTS' PERSPECTIVES: BARRIERS AND FACILITATORS IN IMPLEMENTING COGNITIVE CARE PLANNING

Presenting author: Shaoqing Ge, PhD, MPH, RN (UT Austin)

**Poster # 94:** A SCOPING REVIEW OF AURICULAR POINT ACUPRESSURE EFFECTS IN PERSONS WITH COGNITIVE IMPAIRMENT AND DEMENTIA Presenting author: Bianca Shieu, PhD, RN (UTH San Antonio)

**Poster # 95:** CAREGIVER BURDEN IN ALZHEIMER'S DISEASE AND RELATED DEMENTIAS (ADRD) IN THE SOUTH TEXAS ADRC (STAC)

Presenting author: Natalia Monroy, BS (UTH San Antonio)

**Poster # 96:** PARTICIPANTS' PERSPECTIVES ABOUT THE EFFECTS OF PROBLEM-SOLVING TRAINING (PST) ON CAREGIVER BURDEN AND DEPRESSION AMONG ADRD CARE PARTNERS

Presenting author: Kristin Wilmoth, PhD (UTSW)

**Poster # 97:** ENGINEERING THERAPEUTICS BY DECODING FEATURES DRIVING AMYLOID ASSEMBLY IN ALZHEIMER'S DISEASE.

Presenting author: Nikolaos Louros, PhD (UTSW)

**Poster # 98:** NON-INVASIVE NEUROMODULATION USING TRANSCRANIAL PHOTOBIOMODULATION TO ENHANCE COGNITIVE FUNCTION IN HEALTHY ADULTS: MEG/EEG EVIDENCE

Presenting author: Tyrell Pruitt, PhD (UTSW)

#### Poster Theme Group D2. Psychosocial Factors and Environmental Design

**Poster # 99:** PRELIMINARY EVALUATION OF CHRONIC STRESSORS IN HISPANIC ADULTS AT RISK FOR NEURODEGENERATIVE DISEASE Presenting author: Valentina R. Garbarino, PhD (UTH San Antonio)

**Poster # 100:** IMPACTS OF IMAGEABILITY OF ARCHITECTURE ON BRAIN HEALTH: A SYSTEMATIC LITERATURE REVIEW

Presenting author: Cristian A. Maestre, BSArch (UTRGV)

#### Poster Theme Group E1. Dementia Care Practice (descriptive research)

**Poster # 101:** VIRTUAL CAREGIVER SUPPORT PROGRAM IS FEASIBLE AND ACCEPTABLE TO CAREGIVERS OF VETERANS WITH DEMENTIA DURING CARE TRANSITIONS

Presenting author: Molly Horstman, MD, MS (BCM)

**Poster # 102:** IMPLEMENTING A NEUROPLASTICITY CARE TOOL KIT WITH STAFF CARING FOR DEMENTIA PATIENTS WITH BPSD

Presenting author: Sandra Petersen, DNP, APRN, FNP/GNP-BC, PMHNP-BE, FAANP (UT Tyler)

#### Poster Theme Group F2. Nonhuman

**Poster # 105:** THE EFFECT OF TRAUMATIC BRAIN INJURY ON ALZHEIMER'S DISEASE PROGRESSION IN TGF344 RAT MODEL

Presenting author: Dr. Lubna Mahmoud (UTMB)

**Poster # 106:** PERINEURONAL NETS (PNN) IN NON-TRADITIONAL ANIMAL MODELS: RELEVANCE TO BRAIN HEALTH AND ALZHEIMER'S DISEASE AND RELATED DEMENTIAS

Presenting author: Esperanza Isabel Alaniz, MS (UTRGV)

**Poster # 107:** ALZHEIMER'S DISEASE AND HIV-1 COMORBIDITY Presenting author: Jose Rios, BS (UTRGV)

Poster # 108: THE INFLUENCE OF AGE AND BIOLOGICAL SEX ON SHORT-TERM MEMORY IN THE SYRIAN HAMSTER (MESOCRICETUS AURATUS) Presenting author: Laura Emma Garcia (UTRGV)

**Poster # 109:** DEVELOPING NOVEL THERAPEUTIC INHIBITOR PEPTIDES FOR ALZHEIMER AND RELATED DISEASES

Presenting author: Ayde Mendoza-Oliva, PhD (UTSW)

#### Poster Theme Group G1. Epidemiology

**Poster # 110:** HOUSEHOLD ENVIRONMENTS AND COGNITIVE DECLINE AMONG MIDDLE-AGED AND OLDER ADULTS IN CHINA: EXPLORING GENDER, AGE, AND RESIDENTIAL VARIATIONS

Presenting author: Xi Pan, Ph.D. (TXST)

**Poster # 111:** INTERACTION BETWEEN ALCOHOL USE AND APOE E4 AND ITS ASSOCIATION WITH FOUR COGNITIVE DOMAINS AMONG AMERICAN OLDER ADULTS FROM DIVERSE

Presenting author: Edna Patricia Mendoza, M.S. (UNTHSC)

**Poster # 112:** CAIDE DEMENTIA SCORE ASSOCIATION WITH MRI MEASURES OF NEURODEGENERATION IN HISPANICS FROM THE HABS-HD COHORT. Presenting author: Joshua Manning, BS (UNTHSC)

**Poster # 113:** SUBCLINICAL KIDNEY IMAGING ABNORMALITIES ON MRI ARE ASSOCIATED WITH POORER COGNITIVE FUNCTIONING IN COMMUNITY-BASED RACIALLY/ETHNICALLY DIVERSE OLDER ADULTS

Presenting author: Emily Powell BS (UT Austin)

Poster # 114: ASSESSING FOR HEALTHCARE DISPARITIES IN HISPANIC DEMENTIA PATIENTS WHO PRESENT TO A NEUROCOGNITIVE CLINIC Presenting author: Gabriela Cruz, BS (UT Houston)

## **Poster # 115:** ASSOCIATION OF HEARING LOSS TO INCIDENT-ALL CAUSE DEMENTIA IN THE FRAMINGHAM HEART STUDY

Presenting author: Dr. Francis Kolo (DVM, PhD) (UTH San Antonio)

**Poster # 116:** CHARACTERIZATION OF GUT MICROBIAL COMPOSITION IN ALZHEIMER'S DISEASE.

Presenting author: Jessica Valdez Ponce, MS, MB(ASCP) (UTH San Antonio)

**Poster # 117:** ENHANCED COGNITIVE RESERVE IN THE RIO GRANDE VALLEY LATINO POPULATION: THE IMPACT OF HIGH FAMILISM AND HEALTHY LIFESTYLE CHOICES

Presenting author: Chun Xu (MD, MSc, PhD) (UTRGV)

**Poster # 118:** ENVIRONMENTAL POLLUTANTS AND COGNITIVE DECLINE: EXPLORING BIOCHEMICAL MARKERS IN OLDER ADULTS. PRELIMINARY REPORT

Presenting author: Juan Carlos Lopez-Alvarenga. M.D., D.Sc. (UTRGV)

**Poster # 119:** CULTIVATING AWARENESS: AN OVERVIEW OF THE SOUTH TEXAS RIO GRANDE VALLEY ALZHEIMER'S DISEASE RESEARCH CENTER Presenting author: Tania Vargas (UTRGV-SOM)

#### Poster Theme Group G2. Health Services Research

**Poster # 120:** OFF-LABEL ANTIPSYCHOTIC USE AMONG PERSONS WITH ALZHEIMER'S DISEASE AND ALZHEIMER'S RELATED DEMENTIAS Presenting author: Youngran Kim, PhD (UTHealth Houston)

#### Poster Theme Group G3. Prevention (nonpharmacological)

Poster # 121: SOCIAL-EMOTIONAL AND LIFESTYLE RISK FACTORS ASSOCIATED WITH SUBJECTIVE MEMORY PROBLEMS AMONG NON-HISPANIC BLACK AND HISPANIC MEN WITH CHRONIC CONDITIONS Presenting author: Matthew Lee Smith, PhD, MPH, CHES (TAMU)

**Poster # 122:** RELATIONSHIPS BETWEEN VITAMIN B12 DEFICIENCY, GERIATRIC DEPRESSION, AND HISPANIC ETHNICITY: A PROJECT FRONTIER STUDY

Presenting author: Hamza Hashmi (Texas Tech HSC)

Poster # 123: EFFECTS OF TRANSCRANIAL INFRARED LASER STIMULATION ON BRAIN RHYTHMIC ELECTRICAL ACTIVITY AND COGNITIVE AGING Presenting author: Jay Rose (UT Austin)

**Poster # 124:** ORAL HEALTH BEHAVIORS, HEALTHCARE UTILIZATION, AND ALZHEIMER'S DISEASE: A CASE-CONTROL STUDY

Presenting author: Zarna Lalwani, BDS (UT Houston)

# **Poster # 125:** THE FEASIBILITY OF REMOTELY DELIVERED BLOOD FLOW RESTRICTION TRAINING IN CAREGIVERS OF ADULTS WITH ALZHEIMER DISEASE OR OTHER DEMENTIAS

Presenting author: Prof. Dr. Murat Karabulut, PhD (UTRGV)

#### Poster Theme Group H. Novel Statistical Methods

**Poster # 126:** MULTI-STUDY TRANSCRIPTOMIC ANALYSIS OF ALZHEIMER'S BRAIN TISSUE

Presenting author: Fernando Koiti Tsurukawa (Texas Tech HSC)

**Poster # 127:** CHARACTERIZATION AND COMPARISON OF ATROPHY AND HYPOMETABOLISM PATTERNS IN ALZHEIMER'S DISEASE

Presenting author: Annie Dang, MS (UTH San Antonio)

**Poster # 128:** PSYCHOMETRIC DETERMINATION OF BIOMARKER RESILIENCE Presenting author: Donald R. Royall, MD (UTH San Antonio)

**Poster # 129:** PYTHON-BASED MACHINE LEARNING FOR THREE-DIMENSIONAL HUMAN BRAIN MODEL SEGMENTATION AND ANALYSIS Presenting author: Morgan Mekale Smith, MS (UTH San Antonio)























