UTSA Brain Health Consortium

1st Investigator's Workshop – Loeffler Room, BSB 3.03.02

Tuesday, January 8, 2019

8:30-9:00am   Breakfast

Session 1: Precision Medicine *(Chair – Jenny Hsieh)*

9:00-9:15   **Jenny Hsieh/Chris Navara** *(Biology, COS) Precision models of brain development and disease*

9:15-9:30   **Asif Maroof** *(Biology, COS) Neurodegenerative disease modeling using differentiated human pluripotent stem cells*

9:30-9:45   **John McCarrey** *(Biology, COS) Epigenetics: the good, the bad, and the ugly*

9:45-10:00   **Brian Hermann** *(Biology, COS) Using single cell genomics to uncover heterogeneity and reveal cell state trajectories*

10:00-10:15   **Doug Frantz** *(Chemistry, COS) Chemical biology approaches to probe brain disorders*

10:15-10:30   **Stan McHardy** *(Chemistry, COS) Modern medicinal chemistry/drug development methods and strategies for CNS diseases*

10:30-10:45   *Coffee break*

Session 2: Neuroscience *(Chair – Isabel Muzzio)*

10:45-11:00   **Isabel Muzzio** *(Biology, COS) Variables affecting spatial representations and memory in young and old animals*

11:00-11:15   **Fidel Santamaria** *(Biology, COS) Convergent computational and experimental studies of cerebellar function in health and disease*

11:15-11:30   **Lindsey MacPherson** *(Biology, COS) Gut-brain signaling in health and disease*

11:30-11:45   **Charlie Wilson** *(Biology, COS) Oscillations, resonance, and the activity of neurons*

11:45-12:00   **Hyoung-gon Lee** *(Biology, COS) Pathogenic mechanisms of Alzheimer's disease*

12:00-12:15   **Astrid Cardona** *(Biology, COS) Neuroprotective effects of fractalkine in CNS inflammation via regulation of microglia activation*

12:15-1:15   *Lunch*

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Session 3: Neuroengineering *(Chair – Amina Qutub)*

1:15-1:30   **Amina Qutub** *(BME, COE) Digitizing brain health: form neurogenesis to models of daily behavior*

1:30-1:45   **Yufei Huang** *(ECE, COE) Intelligent brain health research: when brain health meets AI*

1:45-2:00   **Taposh Banerjee** *(ECE, COE) Sequential inference and change point detection*

2:00-2:15   **Gabriela Uribe** *(BME, COE) Wireless magnetothermal excitation and inhibition of neural activity*

2:15-2:30   **JingYong Ye** *(BME, COE) Imaging and biosensing techniques for brain research*

2:30-2:45   **Marcelo Marucho** *(Physics, COS) Bionanowire properties of cytoskeleton filaments and their role in information processing*

2:45-3:00   *Coffee break*

Session 4: Psychology & Behavior *(Chair – Sandra Morissette)*

3:00-3:15   **Sandra Morissette** *(Psychology, COLFA) Military brain health and disease*

3:15-3:30   **Alicia Swan** *(Psychology, COLFA) Assessment of physical and mental health outcomes to guide improved health and longevity*

3:30-3:45   **Ed Golob** *(Psychology, COLFA) Brain-computer interface*

3:45-4:00   **Nicole Wicha** *(Biology, COS) Using EEG to understand the brain-basis of human behavior*

4:00-4:15   **Lee Mason/Alonzo Andrews** *(Interdisciplinary Learning and Teaching, COEHD) Analyzing the functional language of individuals with autism*

4:15-4:30   **John Quarles** *(Computer Science, COS) The effects of cybersickness in virtual reality on the brain*

4:30-5:30   *Happy Hour - networking and refreshments*

Thanks to the COS Dean's support for catering and refreshments

UTSA. IRM
INSTITUTE OF REGENERATIVE MEDICINE

UTSA. Brain Health Consortium

Synergizing Research Capabilities at UTSA

The UTSA Institute of Regenerative Medicine and UTSA Brain Health Consortium jointly present a one day workshop featuring presentations by UTSA researchers from multiple departments and colleges highlighting unique research approaches, resources and methodologies relevant to studies of regenerative medicine and brain health. Please plan to join us at this event designed to promote new collaborative interactions by leveraging research expertise resident on the UTSA campus.

UTSA researchers will present short (15-20 minute) summaries of specialized research capabilities they routinely utilize in their own labs in a format that will exemplify how others might adapt those capabilities for use in their research programs. A question and answer period will follow each presentation.

📍 **UTSA H-E-B Student Union Travis & Harris Rooms 2nd Floor, 2.202**

Friday, February 3, 2023
9:00am – 5:00pm

Networking Reception to follow

Scan or click on the QR Code to Register

UTSA Faculty Only Lunch, beverages & snacks provided