

## Brain Health Dream Project Workshop

January 26, 2024, 9am-3pm, HEB SU Travis Room

9:00-10:00AM	<b>Coffee and Welcome</b> ( <i>Interim Vice President for Research JoAnn Browning; Professor; Chair of Neuroscience, Developmental and Regenerative Biology, and BHC Director Jenny Hsieh; and Director of Federal Relations Michelle Atchison</i> )
10:00-10:40AM	<b>Breakout Conversation #1:</b> If money and timeframe were no object, what “dream projects” would we be collectively pursuing? ( <i>Breakout from 10:05 to 10:30; Short report-outs from 10:30-10:40</i> )
10:40-11:00AM	<b>BREAK</b>
11:00-11:40AM	<b>Breakout Conversation #2:</b> Same question, different groups ( <i>Breakout from 11:00-11:30; Short report-outs from 11:30-11:40</i> )
11:40AM-12:20PM	<b>Breakout Conversation #3:</b> Same question, different groups ( <i>Breakout from 11:40-12:10, Short report-outs from 12:10-12:20</i> )
12:20-12:40PM	<b>BREAK</b> (Boxed lunches served)
12:40-1:00PM	<b>Recap/Synthesis</b> of the main “dream project” areas identified
1:00-1:30PM	<b>Breakout conversation #4:</b> At your choice of tables, take a dream project concept from the initial breakout sessions and distill it into more specific details. What types of expertise, capabilities, resources, and time frame would be needed towards a grant proposal?
1:30-2:30PM	<b>Share and discuss grant ideas</b> as a whole group. Which combine into larger ideas? Can we condense these into two big ideas?
2:30-2:45PM	<b>Next Steps</b>

# 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**

# UTSA Brain Health Consortium

**1<sup>st</sup> 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 **Hyung-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

# UTSA Brain Health Consortium

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

- 1:15-1:30 **Amina Qutub** (BME, COE) *Digitizing brain health: from 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*