

# NDRB Signals

DEPARTMENT OF NEUROSCIENCE, DEVELOPMENTAL AND REGENERATIVE BIOLOGY

OFFICIAL NEWSLETTER  
NOVEMBER 2022



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# FROM THE UNDERGRADUATE ADVISOR OF RECORD (UGAR) - DR. WILLIAM RAMOS

## Let's Talk about Scholarships

*Pro Tip: Even if you don't think you will qualify for financial aid, you should still submit the FAFSA!  
Information from the FAFSA could impact certain scholarships that are even merit-based.*

### UTSA Scholarship Hub

Through one general scholarship application, you can automatically be considered for dozens of scholarships at UTSA, including scholarships that are available for this major. In order to access all available scholarship applications on the UTSA Scholarship Hub, you must be an admitted student. If you are a student applying for admission, but have not yet been admitted, you may sign in and complete the Scholarship Hub's General Application as long as you have authenticated your myUTSA ID and Passphrase. Once you are admitted to UTSA, please sign back in to the Scholarship Hub to see if there are any additional scholarship opportunities available for you to pursue. Try it! It's worth a shot.



### Distinguished Scholarship

UTSA offers an automatic merit based scholarship to incoming new freshman and transfer students who display exceptional scholastic achievement in high school by the priority deadline. Non resident and international students awarded a Distinguished Scholarship for a minimum of \$1,000 for the academic year will be granted a waiver for non resident tuition if scholarship eligibility is maintained. This means out of state and international students could pay in-state tuition! For fall admitted freshmen, this scholarship is valued up to \$20,000 for up to four years. For fall or spring admitted transfer students, this scholarship is valued up to \$6,000 for up to two years. Renewal eligibility must be maintained and funding must be available.

## NDRB DISSERTATION DEFENSES

### Doctoral Dissertation Defense

**Erin Hurley**

Mentor: Jenny Hsieh, Ph.D.  
Program: PhD in Neuroscience



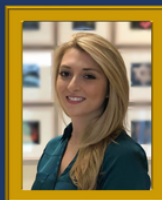
**'Not(ch) Just Development: Role of Notch Signaling in Neurodegeneration'**

Date: Friday October 28, 2022  
Time: 3:00 pm  
Location: BSE 2.102

### Doctoral Dissertation Defense

**Courtney McMahan**

Mentor: Jenny Hsieh, Ph.D.  
Program: PhD in Cell & Molecular Biology



**'Modeling the Neurodevelopmental Effects and Implications of Prenatal COVID-19 Exposure'**

Date: Wednesday, October 19, 2022  
Time: 3:00 pm  
Location: HSU 1.102 Bexar Room

Congratulations to our two PhD candidates, Erin Hurley and Courtney McMahan, for successfully defending their dissertation.



# FACULTY SPOTLIGHT

## DR. FRANCESCO SAVELLI

**Q: WHAT IS YOUR AREA OF EXPERTISE AND HOW LONG HAVE YOU BEEN WORKING IN YOUR RESEARCH AREA?**

Neuroscience and Computer Science. I have done research in these two fields since the early 2000s.

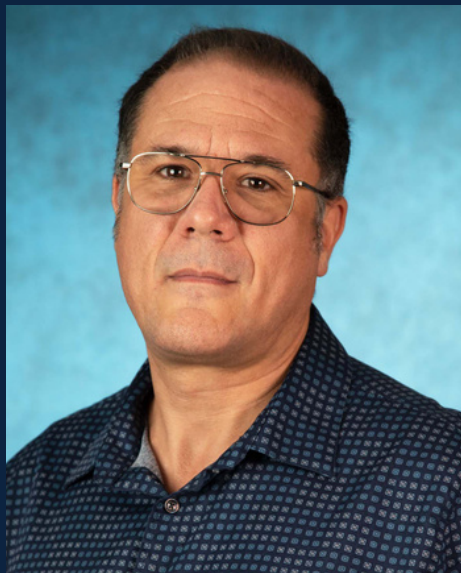


**Q: WHERE DID YOU GET YOUR DEGREE AND WHAT ATTRACTED YOU TO BECOMING A PROFESSOR?**

The Sapienza University of Rome. I was always very intellectually curious and enjoyed sharing knowledge. So I decided to make a living out of that.

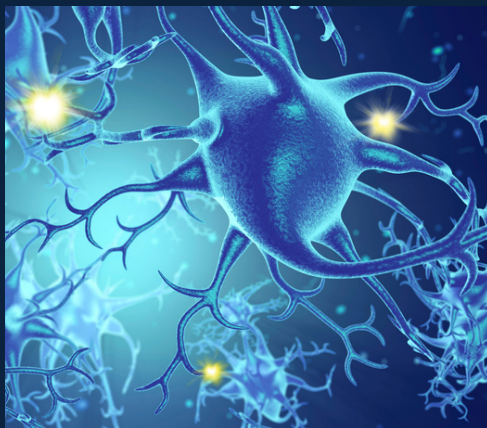
**Q: WHAT IS YOUR FAVORITE THING ABOUT UTSA?**

I am a first generation college graduate, and so are many of our students.



**Q: WHAT DO YOU THINK WILL CHANGE ABOUT YOUR RESEARCH OVER THE NEXT FIVE YEARS?**

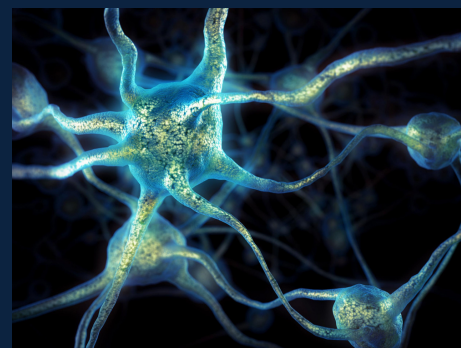
Brain Machine interfaces will become ever more sophisticated and capable of monitoring brain activity in real time. There will also be greater involvement of data science and AI in interpreting brain signals. These two trends will revolutionize our understanding of how the brain works and how we can use this knowledge for medical applications such as neuroprosthesis.



**Q: WHAT INSPIRED YOU TO WORK IN YOUR CURRENT FIELD?**

My undergraduate and graduate education were in computer engineering. I was drawn to the most theoretical aspects of computer science and AI, and I began my research career in these fields.

Ironically, I started using much of what I learned in my engineering classes—electronics, signal processing, etc.—only after switching to neurophysiology. I switched to neuroscience because I became interested in how the brain solves the same problem I was studying in AI: how you can make a mental map of your surroundings from noisy sensory information.



**Q: WHAT ADVICE WOULD YOU GIVE TO OUR FIRST-YEAR NEUROSCIENCE STUDENTS?**

Neuroscience is still in its infancy, and it is highly interdisciplinary. It will serve you well if you educate yourself in various subjects such as computer science, math, physics, chemistry, and biology.

# STUDENT SPOTLIGHT

## HOPE MSENGI



Hope is an undergraduate junior majoring in Neuroscience. She is the secretary for Women in STEM, a member of the Neuro Mind Association, and Black in Neuro. Hope is a hard working individual who strives to achieve academic excellence. She enjoys reading, has a passion for music, and loves filming and video editing.

### Q: WHY DID YOU CHOOSE NEUROSCIENCE AS YOUR MAJOR?

I chose Neuroscience as my major because I am fascinated by the complexity of the human brain and its various functions. I have an interest in understanding the relationship between the brain and behavior.

### Q: WHAT WAS YOUR FAVORITE CLASS AT UTSA AND WHY?

I've taken several great classes at UTSA, but since I have just transitioned into the new Neuroscience degree program, I am looking forward to taking Brain and Behavior and Brain Diseases because they captivate my interests.

### Q: WHAT IS YOUR DREAM JOB?

My dream job is to become a neuroscientist and to work in the biomedical research industry researching therapies for neurological and neuropsychiatric disorders.

### Q: WHAT CAMPUS RESOURCE DO YOU FIND HELPFUL AND WHY?

The tutoring services at the Tomas Rivera Center on campus have been the most helpful to me since I became a student at UTSA. They have drop in hours, and provide 1:1 tutoring sessions and group supplemental instruction that are easily accessible to students outside of class. I can always rely on them when I have quick questions or need tutoring on a challenging topic.

# NDRB LAB SPOTLIGHT

Dr. Lacy Barton had stepped out of her lab, and upon her return snapped a picture of her students, unknowingly, engaged in their work.

The Barton labs' research mission is to understand how egg and sperm precursors fulfill their unique potential to generate fertile and healthy offspring using *Drosophila*, mouse, and cell culture models.

For more information on the Barton, lab visit their website! [Barton Lab](#).



**UTSA**  
The University of Texas at San Antonio™  
**ADULT LANGUAGE RESEARCH STUDY**

**VOLUNTEERS NEEDED**

**BASIC ELIGIBILITY REQUIREMENTS** IRB #04-201 Approved 9-9-22

- AGE 18-35 ✓
- FLUENT ENGLISH SPEAKER/READER ✓
- RIGHT HANDED ✓

**COMPLETE OUR STUDY TO FOR A CHANCE TO WIN 1 OF 4 \$50 AMAZON GIFT CARDS**

ADDITIONAL ELIGIBILITY REQUIREMENTS APPLY. USE THE QR CODE TO SEE IF YOU QUALIFY.

+210-458-7012 | WICHALABGROUP@GMAIL.COM | PRIMARY INVESTIGATOR: NICOLE.WICHA@UTSA.EDU

Check out the QR code to see if you Qualify! [wichalabgroup@gmail.com](mailto:wichalabgroup@gmail.com)

Are you interested in more research lab opportunities with our NDRB Faculty?

Click [this link](#) to see what lab opportunities await you with our faculty.





# OUR PHD STUDENTS ARE TRAVELING AGAIN



*Shannon Landon: Keystone Conference - Gut Brain Axis in Fairmont Banff Springs, Banff, AB, Canada March 20th-23rd, 2022.*

Shannon was awarded a \$1200 travel scholarship to attend the conference where her abstract "GRASP in the Gustatory System: Observing Synaptic Connectivity and Dynamics in Peripheral Taste Circuits" was invited for poster presentation and symposium talk. While presenting her research findings about her dissertation work on peripheral taste connectivity, she had the opportunity to expose others to an area that is not particularly common and also had the honor of talking with many scientists like Dr. Diego Bohorquez and Dr. Charles Zuker who are well-known leaders in the field of chemosensation.



*James Jones: Gordon Research Conference - Basal Ganglia in Ventura, California March, 2022*

James presented a talk entitled "Ongoing local synaptic inhibition controls the firing rate and pattern of neurons in the mouse external globus pallidus" and later in the conference presented a corresponding poster.



*Tara Flaughter. Society of the Neurobiology of Language Conference in Philadelphia, Pennsylvania October 6th, 2022 and San Antonio Brain Injury Think Tank at UT Health San Antonio*

-Presented poster on language performance after mild traumatic brain injury in Philadelphia.

-Discussed newly funded UTSA Seed Grant project aimed at understanding prediction and contextual expectation after mild traumatic brain injury with a diverse audience of basic research scientists, clinicians, medical professionals and clinical research scientists to promote translational science

## DR. MCCARREY AND FACULTY HOMECOMING TAILGATE



The McCarrey Lab and Faculty representing the department during UTSA's Homecoming Tailgate! Go Runners!

# MONTHLY AWARENESS

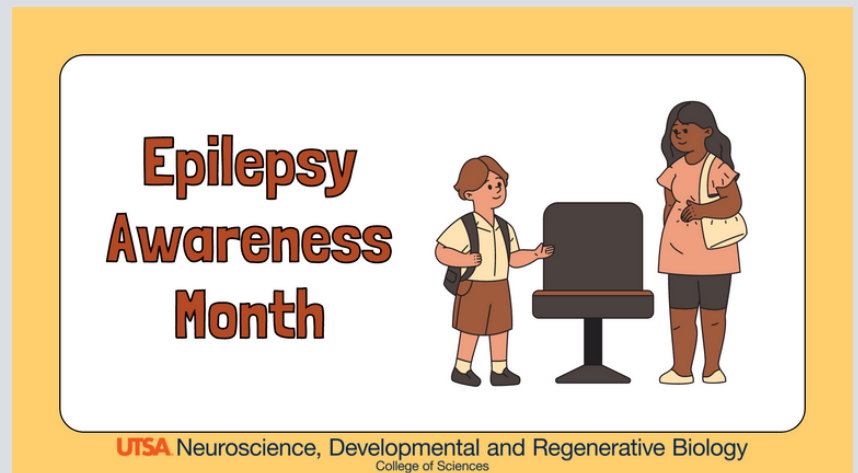


## Native American Heritage month

Did you know that November is Native American Heritage Month, or as it is commonly referred to, American Indian and Alaska Native Heritage Month? The month is a time to celebrate rich and diverse cultures, traditions, and histories and to acknowledge the important contributions of Native people.

## Epilepsy awareness month

Did you know this month is Epilepsy awareness month? Epilepsy is a central nervous system (neurological) disorder in which brain activity becomes abnormal, causing seizures or periods of unusual behavior, sensations, and sometimes loss of awareness.



# NEURO-MIND ASSOCIATION (NMA)

The Neuro-Mind Association is excited to announce its Fall 2022 General Meeting schedule. General meetings will be held:

11/15/2022 @6pm-7pm

Meetings will be located at the Mesquite Room in the Student Union (2.01.24)

To get involved for the Fall semester, visit [Rowdy Link](#) or email at [neuromindautsa@gmail.com](mailto:neuromindautsa@gmail.com)





## FALL 2022 NEURO SEMINARS

Date	Speaker	Affiliation	Title	Host
11/3	Harold Zakon PhD	UT Austin	Diversity of communication signals in electric fish: neurobiology meets molecular evolution.	Dr. Troyer
11/10	Lynette McCluskey PhD	Augusta Univ. Med. College of Georgia	Immune regulation of taste function	Dr. Macpherson
11/17	Susan Sangha PhD	Indiana Univ. Sch. Med	Using Learned Safety Cues to Map the Behavioral and Circuit Mechanisms of Fear Regulation	Dr. Burgos-Robles
12/1	Shannon Macauley PhD	Wake Forest Sch. Med.	Sleep, Metabolism, and Alzheimer's Disease	Uchit Bhaskar

## FALL 2022 CMB/DRS SEMINARS

Date	Speaker	Affiliation	Title	Host
11/7	Idse Heemskerk	University of Michigan	Decoding the signaling dynamics that control human gastrulation, with pluripotent stem cells	Lacy Barton
11/14	Todd MacFarlan	NICHD	Zinc finger genes vs. Retroviruses: a story of combat and cooperation in mammals	Jake Lehle
11/21	James Lechleiter	UTHSA	Targeting Astrocytes as a Strategy to Treat Brain Injurie	Gopakumar Changarathil
11/28	Qi Chen	UC Riverside	Sperm RNA Code: How many bits of information for epigenetic inheritance?	Brian Hermann

# UPCOMING EVENTS

**UTSA Neuroscience, Developmental and Regenerative Biology**  
College of Sciences

***CHEW ON THIS:***

"Alzheimer's disease: Cross roads of aging, medical economics, drug development and scientific ethics"

Come meet and chat with our faculty, get a taste of research, and socialize with your peers!

**CHAT WITH DR. GEORGE PERRY**

Wed, Nov 16, 2022  
1pm - 2pm  
@ BSB 3.03.02 - Loeffler Room

*Refreshments and department swag will be provided.*

**NDRB** Student Success Series

Contact [ndrb@utsa.edu](mailto:ndrb@utsa.edu) for questions

RowdyLink Sign Up

## Chew on this: Chat with Dr. George Perry

Wed. Nov. 16, 2022 **1pm - 2pm**  
@ BSE 3.03.02 - Loeffler Room  
*Refreshments and department swag will be provided.*

## NDRB Holiday Luncheon

Thur. Dec. 15, 2022 **11:30am - 3pm**  
@ BSE Atrium

**UTSA Neuroscience, Developmental and Regenerative Biology**  
College of Sciences

**NDRB PRESENTS**

***Holiday Luncheon***

THURSDAY, DECEMBER 15  
11:30 AM - 3:00 PM AT THE BSE ATRIUM

To view full NDRB events calendar: <https://bit.ly/3Qvql6Z>

To view COS SSC events: <https://rowdylink.utsa.edu/organization/cosssc>

# UPCOMING DEADLINES

**November 15 (Tue)** Deadline for Spring 2023 undergraduate degree candidates to apply for graduation. Visit the Graduation webpage for more information.

**November 17 (Thu)** Student Course Evaluations OPEN in ASAP at 8 a.m.

**November 24-25 Thanksgiving Holiday. University closed.**

**November 29 (Tue) Withdrawal/Automatic "W" Deadline\*\*** Deadline for all students to withdraw (drop all classes) ONLY and receive a grade of "W" for each class. Students **must** see an advisor to drop developmental classes. Students receiving financial aid must submit withdrawal forms in person to the One Stop Enrollment Center. Withdrawal forms are available at <https://onestop.utsa.edu/forms/registrar/>

## FALL 2022 ACADEMIC CALENDAR