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I am excited to announce a small change to the BS in Biology degree plan. The CMB (Cell and Molecular Biology) concentration will change its focus to a DRS (Developmental and Regenerative Sciences) concentration beginning Fall 2024.

For those interested in learning more, please email me at william.ramos@utsa.edu

Go Runners!

William Ramos, Ph.D.
Graduate Student Appreciation Week is April 3-7. Students are encouraged to showcase their scholarly work or research in the 3MT (3 Minute Thesis) competition. Winners will receive a cash prize!

Information on all events and registration links can be found [here](#).
Kaitlin Gahagan

Q: Any favorite exchanges/interactions with faculty?
My favorite professor so far has had to be Professor Minnigh. He was my professor for cognitive psychology and he just made the class super enjoyable.

Q: What has been your favorite class at UTSA and why?
My favorite class at UTSA so far has had to be my cognitive psychology class (PSY - 2563) because it was something I already had background knowledge of, and was interested in learning about, and my professor also just made his lectures fun and entertaining. If I could retake that class, I 100% would.

Q: What advice would you give to the incoming new students?
Do not slack off when it comes to assignments/homework, they may seem easy or like they’re just busy work, but they add up in the future and if you fall behind it’ll be very difficult to catch back up to where you need to be.

Q: Why did you choose UTSA?
I chose UTSA for the Neuroscience program, along with the beautiful campus. I actually transferred to UTSA this past fall, however, I remember about year ago when I came to San Antonio and visited UTSA, I immediately felt as if this is where I was supposed to be.

Q: Why did you choose Neuroscience?
I chose neuroscience for the purpose of wanting to learn and understand the human brain, in addition to hopefully one day comprehending the unknown complexities and questions that still persist. For as long as I could remember, I knew I wanted to pursue a career in the medical field, therefore, once I came across the Neuroscience major, I immediately knew that this was the major I wanted to move forward with.

About Kaitlin
Kaitlin Gahagan is currently a junior majoring in Pre-Medical Neuroscience with a minor in Spanish, with the goal of attending medical school.

Ryn Whitehorn

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About Ryn
Ryn Whitehorn is currently a sophomore majoring in neuroscience and minoring in psychology. Ryn is currently working in a neurology office running EEG assessments and biofeedback treatments. In the future, Ryn plans on pursuing research-based neuroscience to make a difference in the treatment of traumatic brain injuries.

Major: Neuroscience

Contact us: NDRB@utsa.edu +1 210-458-8411 BSE Suite 2.304
Corrin Salesky

Major: Neuroscience

Q: What was your favorite class at UTSA and why?
Intro to Neuroscience has been my favorite class here at UTSA so far. Every lecture I've been reminded just how much I love this field. Above everything, it's taught me that we really don't know much of anything at all, and this notion has kindled the drive to remain curious and to persist in my studies.

Q: Why did you choose Neuroscience?
The brain holds your entire self – both conscious and unconscious. Like an ocean, it's extremely vast and esoteric, and our conceptualization of the brain is very limited. Neuroscience is at the core of every discipline, from technology to medicine to the arts. I believe taking initiative to explore the mind is the key to understanding oneself and all we entail, and I'm honored to be a part of this research.

Q: What campus resources do you find helpful and why?
Honestly, I think clubs and groups are the best resource, anything that can connect you to your peers and staff. I also would say the PEACE Center and Wellness Center helped me a lot in navigating UTSA as a non-traditional student.

Q: What advice would you give to the incoming new students?
Pave your own path & invest time into yourself. There is wisdom and inspiration in everything if you pay attention. Appreciate and learn from everyone, even those that oppose you. Pace yourself and remember you are human too and that rest is necessary.

About Corrin
Corrin is from New Jersey and is currently a part of the campus organization YDSA [Young Democratic Socialists of America]. She likes to run and read and adores art and language. Corrin is currently learning Russian and Spanish.

COS STUDENT SUCCESS CENTER

The College of Sciences Student Success Center (COS SSC) is a comprehensive resource center which supports transfer, first-year, sophomore, junior and senior students. The COS SSC provides mentoring for all COS undergraduate students to help future scientists develop their scientific identity. Student mentors discuss things like academic success, campus connection, and overall well-being with mentees. The center has a variety of study spaces with whiteboards and academic materials for use by students.

Visit the SSC at FLN 2.03.02. The SSC is open Monday through Friday, 8 am-5 pm. Email COS SSC at: cos.success@utsa.edu or call 210-458-3702. Follow the SSC on Instagram @cos.success and check out their website at: https://www.utsa.edu/sciences/student-success/.
Samantha Oviedo

GRFP GRANT RECIPIENT

The purpose of the NSF Graduate Research Fellowship Program (GRFP) is to ensure the quality, vitality, and diversity of the scientific and engineering workforce of the United States. GRFP seeks to broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans.

Q: What does receiving the GRFP grant mean to you?
Being awarded this fellowship represents an acknowledgement of the hard work and research I have participated in throughout my undergraduate career. It also serves as recognition of my potential as not only a graduate student, but also a future scientist in the field of structural biology. The NSF Graduate Research Fellowship would serve as a steppingstone for my graduate career and enable me to fulfill my goal of being mentor for other underrepresented students.

Q: What does your senior research project entail?
I am currently a member of Dr. Lindsey Macpherson’s Lab, and I am currently working on my undergraduate thesis project investigating the molecular interactions between bitter taste receptors and G-Proteins for the development of potent bitter inhibitors.

Q: What made you choose Scripps Research to pursue your PHD this coming fall?
In Summer 2022, I participated in the Summer Undergraduate Research Fellowship (SURF) Program at Scripps Research in California. After my successful summer research experience, I am motivated to return to the Skaggs Graduate School at Scripps Research to pursue my PhD in Biophysics (Structural Biology). Along with access to cutting-edge research and technology, Scripps had a highly collaborative environment where I knew I could thrive not only as a graduate student but as a scientist.

Q: Who has influenced you the most at UTSA to get to where you are now?
The person who has influenced me most at UTSA is my PI, Dr. Lindsey Macpherson! She has offered unwavering support and guidance through my journey as an undergraduate researcher. I joined her lab in Fall 2019, and she has helped me through the “ups and downs” of every project, application, everything! I am truly grateful to have a mentor like her. Through the years, she has continuously encouraged me to apply to different opportunities such as research programs, scholarships, and awards like the Barry Goldwater Scholarship (awarded in 2022) and the NSF GRFP.

Q: What advice would you give to rising researchers?
Be willing to explore something new! Don’t be afraid to try new things! You may be surprised where you might end up! While my introduction to research began with the cell and neurobiology of taste, I have landed in the realm of structural biology after exploring different fields. This was only possible by trying out different labs at different institutions. My diverse research experiences have provided me with a large array of skills in my scientific toolbox, as well as the confidence to pursue a PhD.
Internationally recognized UTSA researcher studies complex contributors of Alzheimer’s disease

“I think all the disease-related proteins we study in neurodegenerative diseases are how you maintain successful aging.”

Dr. George Perry

Amyloid plaques are believed to be the critical driver of Alzheimer’s disease. To date, Alzheimer’s research has primarily focused on amyloid development in and around the brain. The build-up of the protein is consistent with the onset and progression of Alzheimer’s, and many researchers believe the plaque prevent brain cells from properly functioning. But UTSA researcher George Perry doesn’t buy it. “Being correlated and being causative are not the same thing,” said Perry, UTSA’s Semmes Foundation Distinguished University Chair in Neurobiology. “Instead, many who study Alzheimer’s have confused causality with association.”

Read the full article here

Find out more about his research

Contact us: NDRB@utsa.edu +1 210-458-8411 BSE Suite 2.304
UTSA's Brain Health Consortium (BHC) is expanding and strengthening its transdisciplinary research programs via a merger with the UTSA Neuroscience Institute and the university’s Bank of America Child and Adolescent Policy and Research Institute (BOA-CAPRI). The BHC now has representation from five affiliated academic colleges—Sciences (COS), Engineering and Integrated Design, Education and Human Development, Liberal and Fine Arts, and Health, Community and Policy (HCAP)—enabling the consortium to broaden its collaborative community of scientists applying their discoveries to prevent and treat neurological disorders, and seek new avenues for funding opportunities.

“We want to encourage further collaboration across all fields, to address complex brain health challenges with new methodologies and approaches from a multi-faceted transdisciplinary approach.”

Read the article here
inspiration taken from Correa Art, an artist on youtube.

During the Christmas break, our very own work study student assistant, Anastasia Magaña, was inspired to promote beauty to our building by using her artistic abilities to create a painting in the Biosciences Building here at UTSA. Anastasia is a senior Biology major and plays Women's Club Rugby at UTSA. In her free time when she's not at practice or studying she's creating art. Inspired by her love of nature, she went on an assignment to create a space to provide a quiet environment for the use of our faculty and students.

"During the process of the painting, there were a few struggles and different techniques I had to learn," Said Magaña. "But in the end, I came out with something I am proud to call mine and show others. This is the largest project I have ever done and I had fun doing it." Her piece is dedicated to her friend Esteban.
Día en la Sombrilla, formerly Fiesta UTSA, is a festival hosted each spring as a part of Fiesta® San Antonio events. Sponsored by Roadrunner Productions, the event features music, food, confetti, games, event t-shirts, and more. The primary focus of Día en la Sombrilla remains to create a space for student organizations to raise funds by selling food and drinks, host games, and providing services.

Look out for NMA at Dia en la Sombrilla! They will be selling popcorn at their booth. Please come out and support!
Here's a quick look at 20 years of UTSA's Fiesta medals!

Courtesy of Mrs. Wanda Guntz!

Bonus Medal: Biology Department Fundraiser

*2021 medal not designed due to COVID-19 pandemic*
A big thank you to all those who came out to volunteer and participate in our Viva Science SA event!

NDRB Table: Tara Flaugher Ph.D. student, Antonio Allevato Ph.D. student

Brain Health Consortium table: Courtney McMahon Post-Doc, Uchit Bhaskar Ph.D., Brandon Alarcon Research Assistant.
NDRB Poster Showcase

A few pictures from our NDRB Poster Showcase presented as a part of our PhD student recruitment cycle!
Thank you to all the parents and future Roadrunners who visited our table during UTSA Day, February 18th. Thank you to our student workers who assisted the department for UTSA Day. Can’t wait to see you all again at the next UTSA Day, April 15th!
Summer 2023 registration is now open!

Check out some of the courses we are offering!

**Summer 2023 Neurobiology Laboratory**

**Instructor:** Dr. Michael Hanna

**Register via ASAP:** NDRB 3442

**Class Meeting Times:**
Tues and Thurs
9:00AM-12:00 PM or 1:00PM-4:00PM

The Neurobiology Laboratory course is concentrated on basic neuroanatomy, investigative means of neuronal signaling via the passive membrane and the action potential, as well as sensory systems and learning and memory systems. It is intended to reinforce concepts taught in the lecture class as well as means of data collection, analysis and verbal and written reporting of results. Using computer simulations we investigate conditions that influence action potentials including changing intra and extracellular ion concentrations, adding ion pumps and myelin. Using an electrophysiological set-up spontaneous action potentials are recorded in crustacean neurons via extracellular recordings. Secondly, we apply current pulses to alter action potential activity. These activities are further applied by students examining the waveform characteristics of these action potentials using standard intracellular recording techniques. Students also design independent experiments to investigate how certain drugs and chemicals affect action potentials. The learning and memory components involve understanding the tri-synaptic circuit of fibers, the difference between explicit and implicit memory, features of memory including encoding and consolidation, the importance of rehearsal & priming, and the influence of interference.

**Instructor:** Dr. Michael Hanna

**Prerequisites:** NDRB 2113 and completion of or concurrent enrollment in NDRB 3433.

**UTSA Neuroscience, Developmental and Regenerative Biology**

Contact us: NDRB@utsa.edu +1 210-458-8411 BSE Suite 2.304
Fall 2023 registration opens on April 3, 2023. Click here to see when your registration date is.

Check out some of the courses we are offering!

**Fall 2023**

**Biology of Alzheimer's Disease**

*Register via ASAP: NDRB 7041*

**Class Meeting Times:**
Wednesday 1:00-1:50PM

The biology of Alzheimer’s Disease is an enduring puzzle that continues to challenge researchers around the world. This class will focus on the latest research on Alzheimer’s disease, including the role of the amyloid beta protein and its accumulation in the brain.

*Instructor: Dr. Marvin Lee*

**Computational Neuroscience**

*Register via ASAP: NDRB 5450/NDRB 4783*

**Class Meeting Times:**
MV 2:30-3:45PM

Models of the Mind: How Physics, Engineering, and Mathematics have shaped our understanding of the brain. This course will introduce students to the mathematical tools used to model the brain, including systems that underlie normal brain function and those that are disrupted in disease.

*Instructor: Dr. Todd Tremain*

todd.tremain@utsa.edu

**Neurophysiology**

*Register via ASAP: NDRB 5433*

**Class Meeting Times:**
MV 8:30-9:45 AM

How do neurons work? How are neural signals transmitted and processed? In this course, we will examine the processing of neurons and synapses. The basic unit responsible for communication throughout the nervous system.

*Instructor: Dr. David Jeffs*
david.jeffs@utsa.edu

**Brain Diseases**

*Register via ASAP: NDRB 5463*

**Class Meeting Times:**
MWF 9:00-9:50AM

There is a great deal of misunderstanding about brain disorders. In this course, students will learn about the fundamental mechanisms of brain function and dysfunction. The course will cover basic neurophysiology, including neural transmission and synaptic plasticity.

*Instructor: Dr. Truman Gamblin*

**Systems Neuroscience**

*Register via ASAP: NDRB 5433*

**Class Meeting Times:**
Tuesday and Thursday 10:00-11:15 AM

This course is designed for students interested in understanding how the brain works. The course covers the fundamental mechanisms of brain function, from synapses to networks, systems, and behavior. The course also includes an introduction to computational neuroscience.

*Instructor: Dr. Fidel Santamaria*
fidel.santamaria@utsa.edu

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APPLY NOW

UTSA Neuroscience, Developmental and Regenerative Biology
College of Sciences

Contact us: NDRB@utsa.edu  +1 210-458-8411  BSE Suite 2.304
Thank you to all who stopped by and engaged with our department chair's event where she discussed why drugs tested in mice fail in human clinical trials and alternatives to the mouse models.

Stay tuned for more Chew on This from our department chair and other faculty.
SAVE THE
DATE
Departmental Retreat

LOCATED AT THE UTSA SOUTHWEST CAMPUS DT

JUNE 2ND, 2023
Contact Us!

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