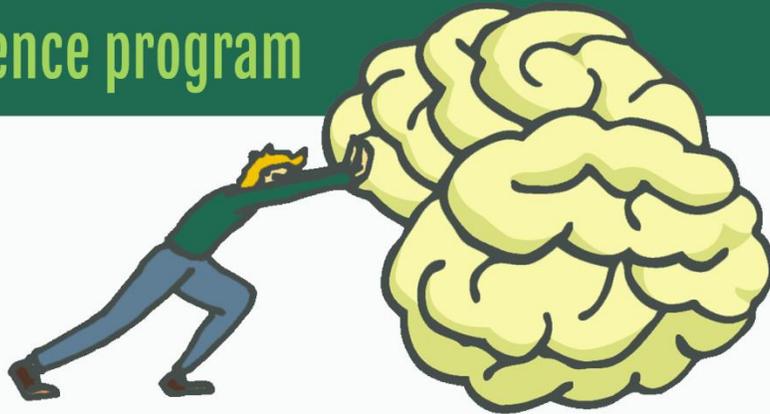


# undergraduate neuroscience program

## information digest 2.9.17



### PROGRAM INFORMATION

**Save the date:** The 29th Annual Ost Undergraduate Research Competition will be held on **Wednesday, April 19, from 3:00-5:00 PM, in the Green & Gold Room, Bartow Arena**. The poster session will be followed by presentations of the 2017 undergraduate and graduate student awards in the UAB Department of Psychology. All UNP students are eligible and encouraged to present their research. **The deadline to submit an abstract is Friday, March 24, at 5 PM**. More information about abstract requirements can be found on the UNP Canvas page.

### STUDENT GROUPS

In conjunction with the Department of Neurobiology, the UNS will be hosting our **Spring Guest Lecturer, Dr. Mark Wheeler** from Georgia Tech. Dr. Wheeler uses fMRI to elucidate the different stages of the decision-making process and the mechanisms of sensory based recollections. The lecture will be **Thursday February 16th from 1:30pm - 2:30 pm** in the first floor conference room of the **Shelby Building**. RSVP on **BSync** or on the Facebook event on the UNS page!

### LOTS OF VOLUNTEER AND SERVICE OPPORTUNITIES BELOW!

The UNS is partnering with the **Brain Awareness Week** team and the **McWane Science Center** to offer neuroscience demonstrations on the 2<sup>nd</sup> and 4<sup>th</sup> Saturdays of each month at the McWane Science Center. To make this happen, we need your help!!! If you're involved with Brain Awareness Week or are interested in learning what it's all about, this is a **great way to get some experience teaching neuroscience to lay audiences through fun interactive demonstrations**. The first two demonstration sessions will be held on **February 11 and 25**. If you'd like to sign up to work either of these sessions, or a future session, please **fill out this form** and we will contact you shortly with additional information.

**Mitchell's Place**, a local non-profit organization that offers services for children, adolescents, and families affected by Autism Spectrum Disorder and other developmental disabilities, is holding their largest fundraising event on **Sunday, February 26th**. They need our help preparing for this event. **Fill out this form** indicating your availability for February 24-26 and we will provide you with more information.

## Women in STEM meeting line up for spring 2017

### February 20<sup>th</sup> at 6pm in HHB 549 – Topic: sexual harassment. Speaker: Lindsey Beechwood

Blatant sexual harassment seems obvious to identify and report. But is it always that obvious? How can you respond in a situation where you are uncomfortable to prevent harassment from ever occurring? We will seek to understand the problem and discuss how to establish professional best practices women can employ to prevent harassment and deal effectively with it when/if it occurs.

### March 20<sup>th</sup> at 6pm in HHB 549 – Topic: Pay inequity. Speaker: Dr. Cristin Gavin

Women don't negotiate. Women take on administrative roles. Women worry more about a mate than about their career. Women have children. All of these (and many more) are recent assertions put forth in studies trying to understand why pay inequity exists. It exists for women across the educational spectrum and it could affect you. We will understand the theories for why pay inequality continues and discuss strategies to ensure fair and equitable treatment.

### April 10<sup>th</sup> at 6pm in HHB 549 – Topic: Cheese, whine, and story time. Speakers: Dr. Diane Tucker, Dr. Linda Wadiche, and Kunshani Shah

Even with everything in the news making us think about the struggles women in STEM face, success stories surround us and the evidence is clear that women are achieving at the highest levels of science. We will hear the stories of 3 UAB women at different stages of their career development and explore the personal path that led to their success.

### PrePhD Society workshop – Personal Statement Workshop

The Pre-PhD Society is hosting **next Thursday, February 16th, in the Spencer Honors House**. We have procured two speakers who will cover personal statements for fellowships and graduate programs for a Personal Statement Workshop. We plan on providing food, and the event is from **6-7 p.m.**

## STUDENT OPPORTUNITIES

**Want to make the most of your summer?** Consider applying for the **UAB Honors Neuroscience Summer Research Academy**. This summer program is designed to offer highly motivated UNP students intensive research experiences in their **current research labs**. During the ten-week program, scholars will have the opportunity to make significant advances in their independent research projects while receiving individualized preparation for a competitive graduate school application. **Students will receive a \$5,000 scholarship and \$750.00 in project funds for use in the lab.**

- **When?** Summer 2016 – June 5<sup>th</sup> to August 11<sup>th</sup>. Approximately 30 hours a week will be devoted to research.
- **Who is eligible?** Rising juniors and seniors in the UNP who have demonstrated excellent scientific aptitude and are currently conducting research with a UAB faculty member.
- **How do I apply?** Applicants should start with **this form**. In addition to your application, your research mentor will need to complete an evaluation on your behalf. Mentors will be contacted directly by the program after your application has been initiated. Applications will not be considered until ALL PARTS

(including the evaluation) have been completed. Students with incomplete applications will be contacted one week before the submission deadline.

- **When's that deadline? March 15<sup>th</sup> at midnight.** No late or incomplete applications will be considered, no exceptions.

Please **contact Dr. Gavin** with any additional questions, comments, or concerns.

**The Office of Undergraduate Research** will be holding a spring workshop series on the theme of **“Expanding Knowledge”**. The series will cover a variety of topics meant to support you in your research endeavors both in college and beyond. All workshops will be held in **HHB 524 on Wednesdays in February and March from 12 to 1pm**. Lunch provided with RSVP to **Gareth Jones**, see attached for full list of workshops.

Registration is now open for **Brainhack UAB 2017**. This 3-day workshop will be held **March 2<sup>nd</sup> – 4<sup>th</sup>** at UAB and is part of **Brainhack Global** where a constellation of such events happen simultaneously around the globe. Brainhack events convene researchers from a myriad of disciplines to work together on projects related to neuroscience. Thanks to generous funding from the UAB HSF, registration is free and includes some meals and coffee breaks. Attendees are encouraged to bring their own computers. **To register, go here.** Space is limited, so please only register if you are able to attend. Already registered? **Submit a project idea!** See more information at our Website: **<https://docs.uabgrid.uab.edu/wiki/BrainhackUAB>**

Poster Session! **The Alabama Brain Bee** is a free neuroscience competition for high school students on **Saturday, February 25<sup>th</sup>**. For the first time in Alabama Brain Bee history, there will be a **POSTER SESSION** for ALL undergraduate students involved in Neuroscience-related research (including, but not limited to psychology, psychiatry, neurology, neurobiology, etc). Want to practice your research presentation? Want to show off your research to your peers? NO faculty judges will be present, so no pressure! First-time or veteran presenters are welcome! (Yes, that even includes YOU, freshmen and sophomores). **Cool prizes for the top three presentations, T-shirt and free food for EVERYONE.** **Submit your abstracts here.** Contact [brainbee@uab.edu](mailto:brainbee@uab.edu) with any questions.

Are you a senior looking for an opportunity to fulfill your presentation requirement? **The UAB Spring Expo** will be held April 13-14<sup>th</sup> in the Hill Center Ballroom. **Go here to submit an abstract, final day to submit is April 5<sup>th</sup>.**

The **Civitan International Research Center** is announcing the availability of **trainee travel awards** to facilitate presentations at meetings, conferences or symposia related to research and/or clinical activities addressing neurodevelopmental disabilities. Individual awards of up to \$1000 will apply toward conference registration fees, airfare, hotel and meals according to UAB travel policy. Application deadlines will be April 1 and September 1, 2017. Mentors, this is a great opportunity to procure support for undergraduate conference attendees! Submit applications to: **Vicki Hixon [vhixon@uab.edu](mailto:vhixon@uab.edu)**

Applications should include the following in a single pdf file:

- A description of the travel opportunity and relationship to the trainee program of study
- A one-page CV from the trainee

- A letter of endorsement from the mentor clearly stating how the student will benefit from participation and also that no other support is available for this travel
- Travel budget details
- Copy of abstract – include letter of acceptance

## RESEARCH OPPORTUNITIES

**Drs. Farah Lubin and Aaron Fobian** are looking for a talented and highly motivated student that would be interested in classically conditioning rats to have non-epileptic seizures and measuring epigenetic changes. The student will be trained to help with set-up and a validation of behavior apparatus and DNA assays, handling rodents, and in some cases assist with cranial surgeries. Students should email their resume, schedule, and research interest statement to **Dr. Lubin**.

**The West lab** (Neurology) is looking for a student research scientist to help with ongoing preclinical Parkinson's disease (PD) projects. PD is a debilitating movement disorder affecting millions of people worldwide. Patients diagnosed with PD typically suffer from progressive loss of fine motor control and resting tremors. At the cellular level, PD is characterized by a drastic loss of dopaminergic neurons in the brain and by the presence of intracellular protease resistant inclusions. In West lab we model PD by injecting abnormally folded  $\alpha$ -synuclein protein into the brains of mice and rats. This abnormally folded  $\alpha$ -synuclein protein "corrupts" the normal  $\alpha$ -synuclein present in the brain cells of mice. The disease progression and presentation we observe in mice and rats is nearly identical to that observed in human post mortem tissue. Using this model we are currently testing several promising compounds that have the potential to be in human trials in the very near future! We are looking for self-motivated individuals who would like to pursue a career in neurodegenerative disease research with a focus on PD. All interested applicants should contact **Dr. Delic** with a copy of their CV, completed courses and a semester schedule. **Priority consideration will be given to students able to make a commitment of 15 hours a week.**

**The Visscher lab** (Neurobiology) is looking for a few spectacular students to help with two ongoing projects. One project is understanding what it means to be a healthy aging brain: how brain activity and structure relate to behavioral function in adults over age 85. The other involves examining human brain plasticity when adults change the way they use their vision. You'll be working on data collection, scoring cognitive assessments, data entry, and quality control of these data to start, and then doing data analysis. We love organized folks, and if you have experience programming, that's a plus. Interested students should email a copy of their CV, completed courses, semester schedule, and a few sentences about why the research interests them to **Dr. Visscher**.

## UPCOMING EVENTS

**Neuroscience Café:** Join **Dr. Taraneh Soleymani, M.D. and Mary-Katherine Ray** as they present "**When Food is a Four Letter Word: the Challenges of Treating Obesity**" at Hoover Public Library at 6:30 PM on Monday, February 20<sup>th</sup>.

**Neuroscience Café:** Join **Drs. Mark Bolding and Asim Bag** as they present "**Interventional Neuroimaging: Brain Tumors**" at Homewood Public Library at 6:30 PM on Thursday, February 23<sup>rd</sup>.

**Save the date: CENTER FOR NEURODEGENERATION AND EXPERIMENTAL THERAPEUTICS (CNET)** will host its 5<sup>th</sup> annual retreat that is open to the UAB community on **Friday, March 3<sup>rd</sup>**. Internationally renowned featured speakers from the NIH, Industry, and Academia will be on-hand for networking and interaction opportunities. **Go here to register, space is limited.** If you are an undergraduate interested in presenting a poster at this event, **please contact Dr. Gavin** ASAP with your abstract information.

**Darwin Day!** NPR Science Correspondent Joe Palca (host of "Joe's Big Idea") will be delivering a lecture for the **UAB Biology 2017 Darwin Day celebration**. This will take place **TOMORROW, February 10th, at 7 PM at the Alumni House**, and afterward there will be a **reception and poster session**.

Check out **Latinos in the Health Professions event on Feb. 21<sup>st</sup> in Mervyn Sterne Library room 163 at 6pm**. There will be a panel of current Latino students enrolled in professional healthcare programs at UAB. They will share their perspectives and success stories, despite the barriers they have faced in programs of higher education, specifically in the healthcare fields. **This event is open to people of ALL backgrounds, colors, and ethnicities.** Additionally, some of the current medical students at UAB will be offering mentoring services to undergraduates pursuing medical school. Go to **the Facebook event to RSVP**.

**Save the date: CIVITAN INTERNATIONAL / SIMPSON-RAMSEY NEURODEVELOPMENT SYMPOSIUM**

Thursday, April 20<sup>th</sup>, 2017. The symposium will be held at the UAB Hill Center from 8:30 a.m. – 3:00 p.m. with a poster reception at The Edge of Chaos to follow at 4:00 p.m. This event satisfies the UNP presentation requirement for seniors.

## **ACKNOWLEDGEMENTS**

Congratulations to UNP senior **Emily Jennings** for being selected as the sole recipient of the **Honors College Dean's Award**. Emily the best things about the Honors College students: academic excellence, leadership and involvement on campus and in the community, and service—to the Honors College, to UAB, and to the community.

Check out **this great local news article** on standout senior **Hriday Bhambhvani**. We can't wait to see what great things your future brings!

Congratulations to UNP students **Andrew Cash, Niharika Loomba, Sam Castillo, and Anna Jones** for being selected as a UAB Trailblazer.

Good luck to **all of our seniors who are interviewing for graduate programs**. Your list of invitations is impressive!

**Like and follow the UNP on Facebook** for more student opportunities, graduate information, events, and neuroscience-related content!

**Students, faculty and staff - want to place information in the digest?** Email your content to **Dr. Cristin Gavin** by Tuesday night the week of. The digest is finalized on Wednesday mornings, so any submissions received on Wednesday will be included in the digest the following week.