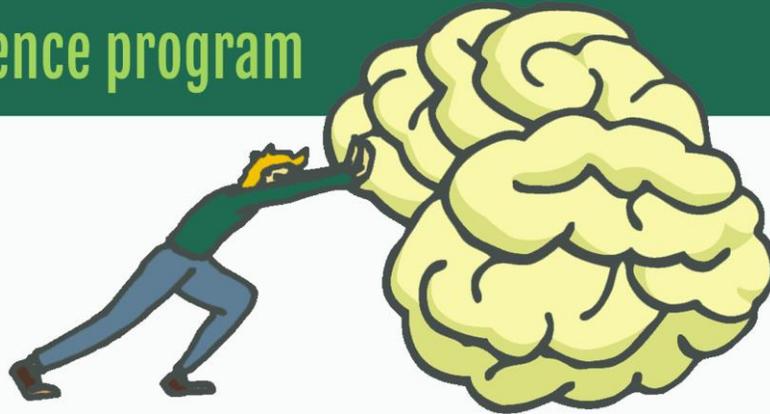


# undergraduate neuroscience program

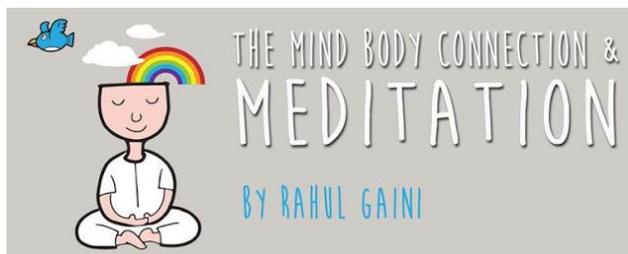
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### PROGRAM INFORMATION

**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.

Check out the latest **UNP Brainstorm Blog by Rahul Gaini**. Rahul dives into the mind-body connection and how meditation can help your brain and your body to CHILL.



Tomorrow is the last day for applications to receive the UAB Alumni Society **Patsy W. Collat Endowed Scholarship in Neuroscience**. This is a one-time award valued at \$1,250. Recipients are eligible to apply for the award in subsequent years as long as they continue to meet the requirements. All applications **must be completed through B Smart**.

Requirements for applicants:

- currently enrolled in or admitted to a degree-granting program in the Neuroscience Undergraduate Program
- earned at least an overall GPA of 3.0 in coursework completed prior to the time of application,
- female

Applicants are required to submit a personal statement, of at least 250 words and not to exceed 500 words, on what you plan to do with your Neuroscience degree. You will be notified via e-mail regarding their status after the selection committee has met. **The deadline to apply is TOMORROW Friday, February 3, 2017.**

### 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!

### UNS T-Shirt Fundraiser

**T-shirt sales extended until February 10th** – place your order now! The UNS will be selling **these amazing T-shirts** to raise money for student activities! T-shirts are available in gray or green, both with the design in white ink, with sizes ranging from XS to XXL. They have short sleeve shirts (\$15, or \$17 for XXL) and long sleeve shirts (\$20, or \$22 for XXL). Please note that both styles can be either color. You also have the option to **buy both a short and long sleeve shirt for only \$30!** Orders can be made **online** with credit or debit cards. Alternatively, cash payments can be made in person. If a cash transaction is necessary, please email [ckwalker@uab.edu](mailto:ckwalker@uab.edu) to place your order.



### UNS Raffle

This semester, attendance will be taken at all UNS-sponsored events. For every event you attend, your name will be entered into a raffle. Attendance at select events sponsored by other organizations will be counted as well – we will notify you in advance if an event counts! At the end of the semester, 2 names will be drawn for prizes (more info on the prizes to come).

### LOTS OF VOLUNTEER AND SERVICE OPPORTUNITIES BELOW!

The UNS will participate in a service project at **Turkey Creek Nature Preserve this Saturday, February 4th** at **9:00am**. If you're interested in volunteering, fill out **this form** and we will send you directions and more information.

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.

## 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 2nd - 4th** at the University of Alabama at Birmingham (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**. 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

**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. Internationally renowned featured speakers from the NIH, Industry, and Academia will be on-hand for networking and interaction opportunities. **Go here to register**. 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 at on **Friday, February 10th**, at **7 PM at the Alumni House**, and afterward there will be a **reception and poster session**. Those interested in presenting a poster should send an email to [evolve@uab.edu](mailto:evolve@uab.edu) (subject line: “Poster”) with their name, department, poster title, and indication of whether they are eligible for the poster competition (undergraduate or graduate students). **Deadline: Friday January 20<sup>th</sup>, 2017**.

Check out **Latinos in the Health Professions event on Feb. 21st 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

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.