Neuroscience Program

The Interdisciplinary Program in Neuroscience for Undergraduates at Vanderbilt

January 2019 Newsletter

Welcome back and Happy New Year! As a way to keep students and faculty informed of significant events and happenings, we provide a newsletter at the start of each semester. Enjoy!



Neuroscience Summer 2019 Research Funding

Last year the Vanderbilt Brain Institute (VBI) provided funding to support undergraduate neuroscience majors performing summer research on campus. For the summer of 2019, the VBI will again provide support for undergraduate neuroscience research, with recipients of funding receiving a \$5000 stipend for the summer.

Starting this year, the program will be administered as part of the <u>Vanderbilt University Summer</u> <u>Research Program</u>, and applications will be made through the VUSRP's <u>application</u> process, which are <u>due</u> <u>Thursday</u>, <u>January 31</u>, 2018.

The advantage of this arrangement is that it allows students to take advantage of the VUSRP experience, while ensuring that a dedicated number of VUSRP awards go to neuroscience majors. As long as a student is a neuroscience major, their VUSRP application will be considered for one of these dedicated slots.

Two pieces of advice. First, make sure to talk to the faculty member you hope to work with soon, because faculty can only sponsor two candidates for a VUSRP award. Second, priority for these dedicated neuroscience slots is generally given to students who have already spent two or more semesters in the

NEW NSC 3861 PRE-REQUISITE: Introduction to Research Seminar

Spring 2019: February 20, 2019, 5:00-6:00pm, 1220MRBIII

This short seminar will be offered once per semester; attendance is a requirement before you can register for the first required research course (NSC 3861). So, if you're starting research next semester or in a year, come now and get it out of the way!

The purpose of this seminar is to go over the requirements of the two required Neuroscience research courses NSC 3861 and 3862, learn how to register, discuss strategies for finding and approaching labs, and to answer any questions you may have about the process, including doing research and completing the requirements of the course.

Pizza and a sign-in sheet will be available so we can keep record of those who have completed this requirement. For questions, contact the Program Office.



Faculty Spotlight Dr. Leslie Smith Senior Lecturer

Q: How did you get into Neuroscience?

A: After graduating from Brown, I got married and started having children, but Lewis Lipsitt, a well-known child psychologist at Brown, contacted me about a project I had completed in his course as a senior and wanted me to become a graduate student. I told him I hadn't even taken any of the GREs and had three children, but because he brought a lot of money into the department and had the funds to do so, he said "No problem. You can work half time, not take a GRE, and I'll give you a graduate student stipend and pay your tuition." So, being a little bored

lab that they are proposing to work in, so make sure to detail your past experience in your proposed faculty mentor's lab. If you propose working with a new mentor for the summer, it is critical to explain how this work is linked to your past research experience.

For more information, please reach out to <u>Dr. David Zald</u>.

Vanderbilt Undergraduate Summer Research Program

Info Session

Monday, January 14th, 2019 3:30 – 5:00pm Sarratt 216/220

EVERYONE IS WELCOME TO ATTEND

Honors Program

Congratulations Riley Ferguson and Michael O'Brien for successfully defending their theses last semester!

Below are the Honors thesis titles submitted by both students:

- Probing Membrane Diffusion Dynamics of D2 Dopamine Receptors via Single Quantum Dot Tracking | Riley Ferguson, Vanderbilt '19
- Exploring the Role of Manganese-Induced Autophagy in Huntington's Disease | Michael O'Brien, Vanderbilt

If you are interested in the Honors program, there will be an informational meeting on Monday, January 28th at 5pm in Wilson Hall 316.

For more general information about the program's requirements, please visit the Honors page on our website.



Milaana

Seeking recipients, donors, or representatives

Milaana is a non-profit organization started by a Vanderbilt graduate, Kavita Prasad, who was also a Neuroscience major. The inspiration for this non-profit came from the large number of Vanderbilt at home with three little ones, I thought "why not?" However, I had to take a course that met for three hours, with no breaks, and the professor went on and on about the reversal shift on a goldfish - for three hours! - I knew right then that it wasn't a good fit. I had learned that I was more interested in what caused behaviors rather than the behaviors themselves and wanted to pursue that interest. I had been a human biology major during my undergraduate years at Brown, but they established the medical school while I was a graduate student and as part of the medical school, the department of neurobiology was formed. I decided to then move laterally into neurobiology instead. So it was all just by happenstance!

Q: What do you like most about teaching at Vanderbilt? A: Connecting with students and turning them on to the studies of the brain. Every student has a unique story and a unique passion and I want to hear about it!

Q: Do you have any advice for students wanting to continue in this field?

A: Be sure you have the aptitude for neuroscience. If you take my 2201 course and work really hard, but still struggle to do well, then that may be a warning that neuroscience isn't a good fit. But if you're excited about the material and do fairly well in the course, you should keep your eye on the ball, put your blinders on, and follow your passions! I do believe, though, that academics need to be your priority. It's so easy to distract yourself with extracurriculars, but it's more important that you do well in the major - and most importantly, enjoy it! It's a tough major and the requirements are heavy, but we try to prepare you to be able to talk the talk and walk the walk.

Noteworthy Events

Monday, January 14, 2019 Special Neuroscience Seminar, "Functional Diversity of Genetically-Defined Neuropeptide Circuits Driving Stress, Reward, and Arousal" William J. Giardino, Ph.D., 2:00pm, 1220 MRBIII

Vanderbilt Undergraduate Summer Research Program Info Session 3:30-5:00pm, Sarratt 216/220

Tuesday, January 22, 2019 Special Neuroscience Seminar, "Synaptic and Circuit Homeostasis in Models of Autism" Michelle W. Antoine, Ph.D., 2:00pm, 1220 MRBIII

Monday, January 28, 2019 Informational NSC Honors Meeting 5:00-6:00pm, Wilson Hall 316

Wednesday, February 20, 2019 Introduction to Research Seminar 5:00-6:00pm, 1220 MRBIII

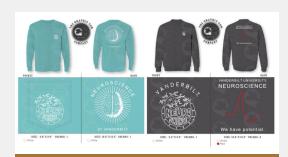
Details about these and future events will be announced on the neuromajors listserv or are listed on the right banners of our <u>website</u>.

students who are recipients of financial aid, but who are still struggling to afford the basic tools necessary for a successful education. Through the organization's website, parents and outside donors will be connected directly to such students, providing funds for things like laptops, textbooks, and even additional funding for gaps in tuition. Milaana's goal is to take finances out of the equation for all students and make everyone's education seamless and efficient.

This organization can make a significant difference in a large number of lives and can strengthen the Vanderbilt community as a whole. Please check out our website themilaana.org if you would like to read some student stories and donate, apply to be a recipient, or to learn more. If you have any specific questions, please feel free to email Kavita Prasad.

Help us bridge the gap and make our Vanderbilt community even stronger!

--- Kavita Prasad, Founder



The **Neuromajors Club** hopes that you had a wonderful winter break! We're placing orders for new Neuroscience apparel, and you can order a stylish long sleeve pocket tee or a crewneck sweatshirt by Friday, Jan. 11, 2019. If you are traveling abroad, fill out this form and a friend can pick it up for you! We have several exciting events coming up this semester, including an event that shows the diversity of careers that people with a neuroscience degree can pursue, academic registration tips, and brunch at Dr. Smith's house. If you are not on the listserv and want to hear more about these events, add us on Anchorlink!

--- Andrea Zhang & Francine Erfe, Neuromajors Club Presidents



BRAIN BLAST 2019: Call for Volunteers

The Vanderbilt Brain Institute's annual public outreach event, Brain Blast, will take place on a Saturday in March (date and location are still being finalized). K-8 kids and parents will visit booths designed by VBI labs and groups to build a neuron, touch real brains, and learn about cool science.

Interested in participating at this event? Sign up to volunteer by emailing <u>Jacob Ruden</u>. Jacob will get back to you as soon as the date and location are finalized to confirm your availability and can answer any additional questions you may have.

Are you interested in having your research mentor be your Neuroscience advisor?

We are encouraging students who are working in labs with A&S faculty to recruit their PI to becoming their major advisor. Not only will this create a better distribution among the current Neuroscience advisors, but will also allow for a more personal student-advisor relationship.

If you or your mentor have any questions or concerns, feel free to reach out to our <u>Program Office</u> for more information.

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Visit our Website

CONTACT
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