**Program Information**

**SENIORS!!** We will have a **MANDATORY informational meeting to cover graduation requirements** for the major. Based on your availability, the best dates/times to have this meeting are **Friday, October 21st at 6pm**, and **Sunday November 6th at 6pm** in HHB 524 (meetings will be 1 hour or less). Please make every effort to make one of the two meetings. Email Dr. Gavin directly if you are unable to attend either.

Students that will be registering for NBL 398 Research Credit for Spring 2017 can fill out their research information here to receive an override PRIOR to registration: [https://goo.gl/forms/cboQx5ulPpR7UfCs1](https://goo.gl/forms/cboQx5ulPpR7UfCs1)

**Upper level elective courses for Spring 2017 for Neuroscience Majors:**

- **NBL 433** – Diseases of the Nervous System
- **PY 431** – Dynamics of Pain
- **PY 463** – Cognitive Neuroscience
- **PY 472** – Social Psychophysiology
- **New course** **NBL 454** – The Body Electric: Electronics for Biologists (information included below, please email Cristin Gavin for more information)

**Course Description:** Some of the most important aspects of biological systems involve electrical phenomena. From the operation of the nervous system, to the control of cardiac or gut motility, the response of bone to stress, and even the most basic membrane physiology of every cell, the body is electric. Additionally, electronic instrumentation and analysis techniques are a major part of biological research. And yet, the typical biology student has very little background in these topics. Formal engineering courses have too many pre-requisites, and require more mathematical sophistication than is truly needed for most biologists. This course is designed to try and fill this gap.

**Director & Instructor:** Timothy J. Gawne, UAB Dept. Optometry and Vision Science, Worrell 664, email: [tgawne@gmail.com](mailto:tgawne@gmail.com)

**Time and Place:** Lectures Monday, Wednesday: 4:40 PM to 5:30 PM (Code “1N”). **NOTE:** THE SCHEDULED TIME FRIDAY IS A PLACE-HOLDER, THE LABS WILL USUALLY BE ON AN INDIVIDUAL SIGN-UP BASIS THROUGHOUT THE WEEK.
Courses of note (recommended but not required) for all Neuroscience students (major or minor):

- **NBL 225 – No Self Control: Motivation, Reward and Addiction. 3 credits.**
  MWF 10:10 am-11:00 am, Robin Lester
  Survival of self and species has been evolutionarily wired into the brain. Largely, involving sub-cortical networks, animals are strongly rewarded by beneficial outcomes and driven away from aversive situations. Overseeing these opposing subconscious determinants of motivated behavior is a pre-frontal cortical command center, which along with additional systems that provide for experiential memory and emotional significance, guide the choices we make. This course will provide the participant with an introduction to the neuronal pathways that underlie normal decision making, with a major focus on how this circuitry becomes compromised during addiction. These topics should be relevant to students interested in biomedicine, health professions or counseling.

- **New Course**  **NBL 327 – 100 Things You’ve Always Wanted to Know About the Brain.**
  3 credits. W 5-7:30 pm, Robin Lester
  This course examines intriguing questions in neuroscience as they are presented to the layperson through TED Talks, video presentations, podcasts, Scientific American articles, and newspaper/magazine science op-eds. The aim is to expose students to a wide range of topics about the brain, some fundamental, some controversial, in ways they may not have thought about before; challenging them to discuss the evidence for and against various theories of brain function. There will be no memorization of information, only the willingness to read, post and discuss scientific opinions on articles/videos. Non majors are encouraged!

- **New Section for SciTech Research Approaches**  **NBL 240/STH 201 – Introduction to Neuroscience Methods. 3 credits.** MW 3:45-5:45. Scott Wilson and Cristin Gavin
  This course is designed to develop practical, experience-based laboratory skills in undergraduate student researchers with minimal prior laboratory exposure. Any student that completes this course should have the rudimentary skills (and confidence!) to begin supervised research in primary laboratories around campus. Course will cover techniques ranging from the biomolecular to behavioral and everything in between.

Want a chance to flex your creativity? Wish you had better inside resources as a fledgling student? We are excited to announce the creation of a UNP student blog to allow current Neuroscience students a platform to talk about the things that matter most to them! Email uabneuroblog@gmail.com if you are interested in writing for the blog, or to suggest ideas and topics that you would like to see covered. First post coming soon!

**ALL UNP Freshmen are required** to attend the Office of Undergraduate Research’s Fall 2016 Undergraduate Research Workshop Series “A Map for Success”. Space is limited so RSVP to Gareth Jones ASAP. The next workshop is **Wednesday October 19th at 12pm in EB room 133**. The topic is Summer Research Opportunities. Lunch provided with RSVP.

**Inquire**
5 MORE DAYS! Are you looking to get published? *Inquiro*, UAB’s undergraduate research journal is accepting submissions for this year’s edition until **October 17th**! Don’t think you are qualified? Wrong! If you have enough data to present a poster you have enough data to be published! *Inquiro* accepts many different submission formats, from research manuscripts to short reports and even senior theses. For more information on the submission formats and other FAQs see the attached flyer, email us at inquiro@uab.edu, or **check out our website**.

**Undergraduate Neuroscience Society**

Thank you to those of you who submitted T-shirt design ideas for this year’s UNS shirts! We encourage all of you to **click here to vote for your favorite shirt design**. The deadline to vote is **Sunday, October 16th, at 11:59 PM**.

The Undergraduate Neuroscience Society, along with the **UAB Research Civitan Club** and the **McWane Science Center**, is sponsoring the upcoming **Birmingham Sci Cafe event: Neuroscience of Zombies**. Come visit us at **John’s City Diner** (112 Richard Arrington Jr Blvd N) on **Tuesday October 18th** to learn about the neuroscience of zombies. The fun will begin at 6:00pm with science trivia and will continue with the presentation at 6:30pm. **DON’T MISS THIS EXCITING EVENT!**

**Student Groups**

The **Pre-PhD Society** will be holding an interview workshop with Dr. Cristin Gavin on **Tuesday, October 25th at 7pm in BEC115**. Come learn the tips and tricks to make your interview outstanding!

Want to give back to the community and build your resume simultaneously? **Building Bridges** is looking for more volunteers! The organization was founded with the purpose of tackling social isolation and loneliness, which the elderly are particularly vulnerable to. They have implemented two programs at Highland Manor, a Section 8 Assisted living facility at Five Points: The Buddy System and the Technology Tutors program. If you are interested in volunteering with Building Bridges, fill out **this interest form**. Also, check out the official **website** and **Facebook page** to learn more!

**Camions of Care at UAB** is hosting a **donation drive for feminine hygiene products** such as: tampons, pads, pantyliners, and toilet paper. The donation drive boxes have been placed in all of the residence halls on campus (Denman, New Freshman Dorm, Blount, Rast, Camp, and Blazer Hall). Please consider donating whole boxes of products or individual items! For individual donations please put it in ziplock/plastic bag for sanitary purposes. These donations will be used to make care packages for women who struggle to afford these essential items every month. Camions of Care will make and distribute these care packages to local women's shelters and community centers in the Birmingham area! The organization is also selling t-shirts for $15 if you would like to support the initiative in other ways. **Go here to purchase**. When you purchase the official UAB chapter shirts for the year, be sure to sign up in the link below with your name and shirt size. All proceeds go towards making more care packages.
**Student Opportunities**

**Interested in Graduate education?** Join the UAB Graduate School for the **2016 Graduate Program Recruitment Fair** on Friday, October 21st at the UAB Campus Rec Center. You will have the chance to network with faculty and staff from programs across the UAB campus. Still trying to figure out if Graduate School is right for you? The representatives will be there to answer all of your questions and determine the program that is perfect for you and will propel you to the next level in your career. Email the Graduate School with questions, or email Thomas Harris to RSVP.

**Babysitters wanted!** Please email Dr. Gavin your name, phone number, and regular availability to be included in a local child care providers list for young professionals in the Birmingham area. Students should be responsible, reliable, and have their own transportation. Pay from $12 to $25 dollars an hour.

**Research Opportunities**

**Dr. Karen Cropsey, Psy.D, Department of Psychiatry**, is seeking an undergraduate research assistant for credit. Go here to view her faculty information, and here to view recent coverage of the lab’s exciting work! Her research lab focuses on substance abuse projects working with criminal justice and other disenfranchised clients. Ongoing NIH and other projects include studies using combination pharmacotherapy and behavioral therapy for the treatment of tobacco use in a criminal justice population, as well as training on recognizing the signs of opioid overdose to administer naloxone. They have a new project that will use computerized brief interventions and an algorithm as a decision aid for providers to treat alcohol use disorders among person living with HIV engaged in treatment for their HIV. The student volunteer would spend their time recruiting for studies, conducting consent and assessments, and data entry. Interested students should email a copy of their CV, completed courses, fall schedule, and a few sentences about why the research interests them to Dr. Cropsey.

**Dr. Edward Taub, PhD, Department of Psychology** is seeking an undergraduate research assistant for credit. Go here to view his faculty information. He has an opening on a project working with a patient with Tetraplegia. Trainees will learn EMG biofeedback and shaping procedures using Constraint Induced Movement Therapy. Dr. Taub is only looking for highly motivated students that can make a significant contribution to the lab. Interested students should email a copy of their CV, completed courses, fall schedule, and a few sentences about why the research interests them to Dr. Taub.

**Dr. Bulent Turan, Department of Psychology** is seeking an undergraduate research assistant for credit. Dr. Turan is a social psychologist (and formidable tennis player) who researches the effects of negative social evaluations on biological markers of health and stress. Go here to view his faculty information. The research involves music performance anxiety and includes the collection of saliva for cortisol and other hormone assays. Interested students should email a copy of their CV, completed courses, fall schedule, and a few sentences about why the research interests them to Dr. Turan.
Graduate Opportunities

The Department of Molecular, Cellular & Developmental Biology at the University of California Santa Barbara is inviting applications for its PhD program from US and international students. There are many exciting research areas available to doctoral students and UCSB is among the top-ranked research universities in the US. The campus is located in a beautiful ocean-front setting, and the city offers an exceptionally high quality of life. Their graduate program emphasizes interdisciplinary and collaborative research, a special commitment to training and mentoring, an exceptional student-to-faculty ratio, and individualized professional development for 21st century careers. The application deadline is Monday, December 5, 2016.

The Neuroscience Graduate Program at the Vollum Institute. The NGP faculty is large and diverse, but we have kept the number of graduate students relatively small, so grad students have great access to highly accomplished scientists. The NGP faculty includes many highly recognized senior scientists as well as a growing number of outstanding junior faculty members. Our graduates go on to excellent postdoctoral positions and a wide variety of positions in academics and industry as well as science-related jobs like science writing and work with foundations. There are vignettes about the experience of a few of our graduates at our website. Some areas in which we excel include membrane biophysics and structural biology; synaptic physiology, neuronal signaling and gene regulation, neuroendocrinology and neurobiology of disease. As a medical campus, we have strong connections to the clinical departments with their translational and clinical research activities. All students receive a graduate stipend that covers all fees, tuition and living expenses. Check out the NGP website, and feel free to contact us for more information. The application deadline for 2017 admission is December 1, 2016.

Upcoming Events

Interested in optometry or have questions about the field in general? Dr. Kelly Nichols is the Dean of UAB's School of Optometry, and she will be more than happy to answer those questions! Please RSVP HERE. Pizza provided with RSVP! Even if you don't think that you are interested in optometry, this is still a unique opportunity to learn more about the field and build your network of connections! The event will be held in HHB 524 on Tuesday October 18th at 6pm. Other ones coming up are Physician's Assistant, Nursing, and Physical Therapy.

The UAB Research Civitan Club will be holding their annual charity art auction, The Art of Giving, on October 20th, 2016 from 6-9 PM at the Civitan International Research Center (CIRC) here on campus. All proceeds from the event will go to benefit local charity Mitchell’s Place. There will be heavy hors d’oeuvres, live music, and great art up for auction! Tickets are $10 dollars for students and $15 for everyone else and includes 2 drink tickets. Go here to purchase your ticket! We also need many student volunteers in order for the event to succeed. Please go here to sign up to volunteer. Support our local neuroscience initiative to give back to the community! Official event flyer attached.

UAB to host inaugural Physician Scientist Symposium Nov. 5-6. Register by THIS FRIDAY Oct. 15 to attend the UAB Physician Scientist Symposium to be held in the Hill Student Center. Students, residents, fellows and
junior faculty should submit abstracts by Sept. 15. Registration includes meeting attendance, dinner Saturday and breakfast/lunch Sunday. The agenda and speakers are online. Flyer attached.

**Acknowledgements**

The Comprehensive Neuroscience Center (CNC) Annual Retreat poster winners are as follows:
- First Place: **Ben Boros**, Herskowitz lab
- Second Place: **Sam Mabry**, Roberts lab
- Third Place: **Rachel Rainey**, Goodin lab

Congratulations to all our winners!

Like and follow the UNP on Facebook for more 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.