**Biology**

**Job Description:** The undergraduate research assistant who will help us keep our research laboratory in order and to assist with experiments as needed. Responsibilities include: 1) Maintaining chemical/biological glassware 2) sterilizing glassware and solutions 3) inventorying chemicals 4) waste disposal 5) assist with experiments. The benefits of the position include working closely with graduate students and faculty to learn more about how biomedical research is conducted, attendance at weekly meetings where the science ongoing in the laboratory is discussed, potential to take on increasing responsibility for research duties as you are trained which is good preparation for graduate school and careers.

Approximately 5-10 hours of work required per week.

**Must be willing to work in an active animal research laboratory. STEM majors are preferred.**

Contact Dr. Melinda Duncan – duncanm@udel.edu

**Criminology, Law & Society**

**Job Description:** RAs work on various projects with faculty and graduate students. RAs learn to and complete a variety of different tasks depending on current research needs including data collection, coding, and/or analysis, literature search/reviews, meeting note-taking, interview scheduling and various other project-related tasks (some off site).

**Current projects:**

Media and legislative analysis related to sexual harassment, perspectives on removing barriers in university settings, oral history with a local justice organization, and the civil commitment of sexually violent predators.

**Required Skills:**

We will teach you everything you need to know to work on our research projects. You must have an open mind and be willing to challenge your pre-existing assumptions. What we really want is for you to have an interest in issues related to social justice and criminal justice and a desire to do research.

Approximately 3-5 hours of work required per week.

Contact Dr. Santhi Leon – santhi@udel.edu
**Education**

Dr. Barbieri’s research program centers broadly on instruction for students who struggle in math. Specifically, her work focuses on the evaluation and application of learning principles to improve mathematical competencies and motivation for math, especially for students at risk for low mathematics achievement. Dr. Barbieri studies mathematical competencies from preschool to adulthood. A core part of her work aims to understand how common mathematical errors can be used most effectively to reduce misconceptions and improve learning in math content areas that students commonly struggle with. Recently this has involved both algebra and fractions, both gateway topics for success in STEM disciplines and careers. Dr. Barbieri also considers the role of motivation and attitudes towards mathematics in student learning.

In Fall 2019, Dr. Barbieri’s various projects on mathematical cognition and learning will have a range of activities for an undergraduate scholar to receive mentoring in, such as analyzing students’ problem-solving skills and explanations, creating databases, and preparing conference submissions.

Approximately 10 hours of work required per week

Contact Dr. Christina Barbieri for more information - barbieri@udel.edu

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**Fashion and Apparel Studies**

Second Generation Textile Production (Fashion Design and Product Innovation)

The undergraduate research assistant would be responsible for maintaining lab, processing materials and developing textile samples as well as assisting faculty sponsor with related lab tasks such as sourcing textiles in collaboration with community partner Goodwill of DE.

Design and creative interest/ability as well as interest in sustainable textile innovation.

Approximately 5 hours of work required per week.

Contact Dr. Kelly Cobb – kcob@udel.edu
### Geology

**Job Description:** Student will work with the Mantle Processes Group, which uses rock samples to understand the interior of the earth. We are looking for a student to participate in cataloging and organizing field samples, organizing data in Excel spreadsheets, and assisting with keeping the research laboratory in order. Student will participate in weekly lab meetings to gain familiarity with geoscience research.

**Required Skills:** Strong organizational skills and experience with Microsoft Excel. We would like you to have an interest in rocks, as a project can be developed from this introductory lab work.

Approximately 3 hours of work required per week.

Contact Dr. Jessica Warren – warrenj@udel.edu

### Health Sciences

**Health Sciences Position 1:**

**Job Description:** CHS Innovation Lab Admin Apprentice: The Innovation Lab, under the direction of Dr. Martha Hall, hosts an event called First Step (see udel.edu/firststep for details), a major event held at the STAR Campus by the College of Health Sciences that is available to all undergrad students to participate in. The Lab Apprentice will work directly with Dr. Hall and staff to assist with the planning and coordinating of this event.

**Required skills:** Student must be proficient in Microsoft Word and Excel. An interest in event planning is a plus!

Must be work study eligible to apply

Up to 10 hours of work required per week.

Contact - Jessica Smith (jessmith@udel.edu)

**Health Sciences Position 2:**

**Job Description:** CHS Innovation Lab Apprentice: The Innovation Lab, located at the new STAR Campus is housed within the College of Health Sciences. We are currently accepting applications for Health Design Research Assistants. RAs work on various projects with faculty/staff and other undergraduate students. RAs learn to and complete a variety of different
tasks depending on current research needs including data collection, coding, and/or analysis, literature search/reviews, data validation and management and various other project-related tasks.

**Required Skills:**
We will teach you everything you need to know to work on our research projects. However, if you have a desire to help improve the health of patient populations (ex., aging, disabled, athletes, chronically ill) that is a bonus. What we really want is for you to have an interest in issues related to improving the lives of people in our community and desire to do research.

Up to 10 hours of work required per week.

Contact – Dr. Martha Hall ([innovationlab@udel.edu](mailto:innovationlab@udel.edu))

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**Kinesiology and Applied Physiology**

*Kinesiology and Applied Physiology: Concussion Research*

**Job Description**: The undergraduate research assistant will be engaged with the Concussion Research laboratory. The primary responsibilities will be assisting with basic laboratory equipment materials organization and calibration, assisting research team members with data collection, attendance and engagement at biweekly research group lab meeting, and data entry. The benefits of this research position includes working closely with graduate students and faculty to learn more about how concussion research specifically, and human subjects research more broadly, is conducted. The student will be actively engaged in data collection.

**Required skills** – We will teach you all aspects of the research protocol. Proficiency in basic Microsoft Word and Excel is preferred. A positive attitude and ability to interact effectively with other students is critical.

Approximately 5 hours of work are required per week.

Contact – Dr. Thomas Buckley – [tbuckley@udel.edu](mailto:tbuckley@udel.edu)
Linguistics and Cognitive Science

Linguistics and Cognitive Science – Position 1

Job Description: Student will help to recruit, schedule, and run participants for research studies and regularly check the lab’s email account. Occasionally, the student may also be asked to make small updates to the lab’s website (in WordPress) or to organize equipment in the lab. The benefits of the position include working closely with the PI and graduate students to learn about how behavioral research is conducted, and participating directly in data collection.

Required Skills: Strong interpersonal and organizational skills are preferred. Interest in linguistics (or language research, more generally) is a bonus.

Time Commitment:
Approximately 5 hours of work required per week.

Please reach out to the PI at kfranich@udel.edu if you are interested in the position.

Linguistics and Cognitive Science – Position 2

Job Description: Student will help to annotate acoustic data in Praat for research studies. They will gain direct experience with linguistic data and will have the opportunity to learn some basic database and data cleaning skills commonly needed in the behavioral sciences.

Required Skills: Some coursework or training in phonetics is necessary (e.g. having taken LING/CGSC 353), including experience with Praat software.

Time Commitment: Approximately 5 hours of work required per week.

Please reach out to the PI at kfranich@udel.edu if you are interested in the position.

Linguistics and Cognitive Science – Position 3

Undergraduate research assistant position, Experimental Psycholinguistics Lab.

Laboratory description: The Experimental Psycholinguistics Lab has an open position for an undergraduate research assistant for the 2019-2020 academic year. Our lab investigates the internal machinery of the mind during language perception, from speech sounds and words to sentences and meaning. We do experiments where we measure electrical activity in the brain via electroencephalography (EEG), and we then interpret those data to see how they relate to the mind’s response to language stimuli. We study the basic science of psycholinguistics, as well as bilingualism, second language learning and language impairments in children. The lab is directed by Dr. Arild Hestvik (Linguistics and Cognitive Science), and has PhD students and MA students conducting research. The lab also collaborates with researchers at AI DuPont Hospital.
for Children, CUNY Graduate Center, Michigan State University, and Waseda University in Tokyo.

**Job description:**

-What: recruiting and scheduling research participants; obtaining verbal and written informed consent from participants before experiments; preparing electrode nets with saline solution; applying electrode nets to research participants; administer experiments; debriefing participants and disinfecting and cleaning electrode nets. Additional involvement can be signal processing and data management, and preparing posters for scientific meetings and presentations. RAs will be paired with PhD students or researchers and assigned to one or two specific experimental studies. We will train you!

-When: Experiments take about 2 hours, so the RA must be able to be at the Barksdale lab for at least 2-hours blocks in given days. During active periods, we run 2 or 3 participants almost every day of the week. The most active period in the fall is October-November up until Thanksgiving, and just before and after spring break in the spring. Given the time investment in training, we encourage students who can commit to at least two consecutive semesters in the lab. Hours are flexible, but we seek someone we can depend on to help us carry out our research. Expect between 2 and 10 hours per week.

Who: This RA position is ideal for students who want to get lab experience that is relevant for their graduate school interests, and who have a real interest in psycholinguistics and the cognitive neuroscience of language. Some of our past RAs have continued in professional lab manager positions or continued to PhD programs in cognitive neuroscience. Students aiming for speech pathology professional programs have also benefited.

**Required skills:** basic computer skills, coursework in linguistics and cognitive science or experimental psychology; knowledge of descriptive statistics; attention to detail and being very organized; ability to work in a team and flexible with work hours due to the varying times that we can run subjects in experiments. Interest in the subject matter of our research is also a requirement.

Contact: Dr. Arild Hestvik, [hestvik@udel.edu](mailto:hestvik@udel.edu)

The Experimental Psycholinguistics Lab is part of the Department of Linguistics and Cognitive Science and is housed in 800 Barksdale Road, Newark, DE. It can be reached by a UD shuttle bus primarily meant to transport research participants to the building.
Material Engineering and Composite Materials

**Job Description:** Student will conduct characterization experiments for fibers and resins that are used to manufacture composites. Student will also assist in experiments to manufacture composites.

Required Skills: We will teach you everything else you need to know about working in the lab and our research projects. Safety trainings will be provided.

Approximately 8-10 hours of work per week.

Contact Dr. Suresh Advani – advani@udel.edu

Oceanography

**Job Description:** Student will be part of a marine robotics and seafloor mapping team working at the interface of oceanography and geology and archaeology to investigate waves and storms and climate change move sediment around the seabed causing erosion and exposing shipwrecks. We are looking for a student who will help us keep our research laboratory in order. Responsibilities include: 1) Maintaining meeting notes and schedules, 2) operating computers, 3D printers and scanning equipment (training provided) and 3) inventorying sediment samples from around the world. In addition, we would like for you to assist in maintaining the laboratory web page and social media feeds.

Required Skills: Google Documents and Excel Spreadsheet, Social Media posting (Facebook and Twitter), and writing short summaries for website entries. We will teach you everything else you need to know about working in the lab equipment and our research projects. Safety trainings will be provided.

Approximately 5 hours of work required per week.

To apply please email Dr. Art Trembanis art@udel.edu. Include resume and statement of interest.

Physical Therapy

**Physical Therapy Position 1:**

**Job Description:** We are looking for highly motivated undergraduate students who are interested in software design, robotics, and technical problem solving, especially as it relates to human-robot interactions in an experimental setting. Our lab’s overarching goal is to better understand how the brain controls reaching movements. To this end, we combine behavioral experiments using robotic devices, computational modeling, and studies of patients with neurologic impairments. The primary responsibility of the Research Assistant will be task programming of the fully integrated
robotic arm-virtual reality device (https://kinarm.com/kinarm-products/kinarm-end-point-lab/) that we use for experimental testing. Research Assistants will work with a faculty member and trainees in the Physical Therapy, Psychological & Brain Sciences, and Biomechanics and Movement Science graduate programs. This is an excellent opportunity to gain experience in a highly interdisciplinary lab that combines robotics, behavioral experiments, patient studies, and computational modeling.

**Required Skills:** Strong programming skills are required. Specific experience with Matlab, Simulink, and/or C are highly desirable.

Number of required hours are flexible and partly dependent on student’s schedule, but will likely range between 5-10 hours per week.

Contact Dr. Hyosub Kim – hyosub@udel.edu

**Physical Therapy Position 2:**

**Job Description:** We are looking for highly motivated undergraduate students who are interested in learning more about the brain and how humans learn and improve motor skills. Responsibilities may include participant recruitment, running behavioral experiments, data analysis, literature reviews, and other day-to-day research needs. Research Assistants will work with a faculty member and trainees in the Physical Therapy and Biomechanics and Movement Science graduate programs. This is an excellent opportunity to learn about experimental design, data analysis, statistics, programming, and how to present scientific results.

**Required Skills:** Those who like brains, math, and movement are strongly encouraged to apply. However, there are no strict requirements for the position other than an aptitude for logical reasoning, curiosity, and a willingness to work hard.

Approximately 5 hours of work required per week.

Contact Dr. Hyosub Kim – hyosub@udel.edu

**Physical Therapy Position 3:**

**Job Description:** We are studying the neurobiomarkers of Autism Spectrum Disorder (ASD) using an optical, non-invasive neuroimaging tool called functional near-infrared spectroscopy (fNIRS). Children wear a cap with multiple probes to scan the whole brain while engaging in a variety of motor and social communication tasks such as cooperative building, synchronous body sway, synchronous reaching, and gestural communication. We compare behaviors of children with and without ASD to identify cortical impairments that could be used later to study improvement in brain functioning following a bout of therapeutic interventions. We are looking to work with 3 different students on this project and would like to enroll students who are looking forward to working with special needs children and are also interested in neuroscience and neuroimaging. Apart from the student pursuing this research for credits (6 hrs per week), we
are also looking for a mature and responsible student who would like to work as a research coordinator for about 20 hours per week.

Contact Dr. Anjana Bhat – abhat@udel.edu

*Physical Therapy Position 4:*

**Job Description: Intervention Studies:**

Children with ASD have social communication difficulties as well as co-morbid deficits in motor and behavioral skills. We have tested effects of various creative movement ideas (music, dance, and yoga) to improve the social communication and motor skills of children with ASD. We have found improvements in various motor as well as communication skills following an 8-week bout of intervention. In the next two years, we plan on assessing the neural effects of such interventions to improve cortical activation in children with ASD. We are looking to work with 5 different students on this project and would like to enroll students who are looking forward to working with special needs children.

Contact Dr. Anjana Bhat – abhat@udel.edu

*Physical Therapy Position 5:*

**Job Description: Research assistant for Move to Learn Innovation Lab**

The Move to Learn Innovation Lab is located in Star Campus. Our Super Suits FUNctional Fashion and Wearable Technology Program focuses on designing garments to help improve quality of life for people with disabilities.

We are seeking an undergraduate research assistant to engage in a variety of research activities with our team. This will include assisting with data coding, lab organization, and garment fabrication and testing (no prior experience with these tasks are required as training will be conducted). The benefits of the position include working closely with our interdisciplinary team members to learn more about how to scientifically design and evaluate garments that support and assist movement for children with disabilities and participation in a supportive environment with students pursuing a variety of careers in health sciences.

Approximately 5-8 hours of work required per week.

Contact Dr. Michele Lobo - malobo@udel.edu
Plant and Soil Sciences

Plant and Soil Sciences Position 1:

Job Description: Urban Ecology Lab – Research Assistant. The student will work in an active Urban Ecology Research Lab in the Plant and Soil Sciences Department at the University of Delaware as a part-time research assistant. The position provides experience in urban ecology and global change research. Duties will include assisting graduate students with field sample collection and fall tree planting, and with plant and soil sample preparation for isotope analysis. The position is for 5-10 hours per week and starts immediately continuing through the fall semester. Renewal of position in the spring is contingent on performance.

Required Skills: All required skills will be taught for the position; however, ability to work independently and collegially is required. This position is for eligible students with work-study funding.

To apply: Please send letter of interest, unofficial transcript, and one letter of recommendation to Dr. Tara Trammell (tttram@udel.edu).

Plant and Soil Sciences Position 2:

Job Description: Center for Food Systems and Sustainability

Wanted: Student with an interest in Edible Forest Gardens/ Food Forests and Early Childhood Education!

The new Center for Food Systems and Sustainability has made possible the installation of an Edible Forest Garden at the UD Children’s Campus. There are a significant number of new gardens at the UD Early Learning Center, located on Wyoming Road, which creates an opportunity for a work-study student to gain experience in plant maintenance and management, edible forest gardens, youth education about where food comes from, and landscape architecture. This campus is accessible via UD buses and is a short walk from campus.

This position will be a hybrid experience, incorporating these tasks and others as determined by mentors: 1. Plant maintenance and management (including watering/ weeding/ planting/ plant health evaluation); 2. Assisting teachers with garden exploration for one to five year old children. Students will gain experience in plant maintenance processes, landscape design, and be given the opportunity to work with children.

Students must be able to work in all weather conditions and to lift 30 pounds on a regular basis. Students must complete background checks to work in an educational environment. Estimate approximately 5-10 hours per week. Start date of September 20th or earlier with MANDATORY work days on September 27th and 28th.
Required skills:
· Highly organized
· Detail oriented
· Self-motivated
· Comfortable working independently and in a team
· Eager to share ideas and knowledge
· Responsive to team and supervisor communications
· Interest in sustainability
· Able to lift 30 pounds
· Successfully complete background check
· Freshman and Sophomore

Desirable:
· Experience/ coursework related to plant ID & maintenance, horticulture, permaculture, vegetable gardening.
· Experience planning developmentally appropriate activities for young children
· Experience with Google Docs, Excel and web forms

Please send a resume and one-page letter of interest via email by September 15, 2019, including current GPA (if applicable) and any previous experience with garden maintenance, horticulture, early childhood education, food forests, and project management. In addition, provide names of a faculty sponsor, highschool teacher, or external employers with familiarity of your academic or extracurricular activities who we may contact as a reference to:

Dr. Anna Wik Assistant Professor of Landscape Architecture
Plant and Soil Sciences
University of Delaware
139 Townsend Hall
Newark, DE 19716
annawik@udel.edu

Plant and Soil Sciences Position 3:

Job Description: The laboratory of Prof. Jung-Youn Lee at the Delaware Biotechnology Institute

About the lab
The Lee lab (https://leelab.dbi.udel.edu/) is located at the Delaware Biotechnology Institute on Wyoming road. Research in Lee laboratory focuses on understanding how plant cells communicate using cellular, molecular, biochemical, and genetics approaches.

About the position
An Undergraduate Student Research Assistant (RA) is needed to help with basic lab maintenance and research.
The duties include preparing plant seeds and soil pots, culturing seedlings to adult plants, and harvesting seeds. RA will also assist with other laboratory tasks: General job duties include but are not limited to washing lab wares, autoclaving and maintaining a clean work environment. Work hours and lengths are flexible, but RA is expected to work approximately 10 hrs per week depending on the research needs each week. Importantly, RA is required to commit to work at least 1.5 year once hired and work through the summer and winter sessions.

About the qualification
A sophomore majoring or minoring in Plant Science, Biology, Chemistry, or related fields, who are maintaining good grades, have taken intro laboratory courses, are encouraged to apply. Highly motivated freshmen will also be considered if the student has prior work experience demonstrating strong work ethics or strong interests in research. The successful candidate is expected to have good organization and communication skills, show positive attitudes, and work well independently as well as with others.

About application
Send a resume which summarizes your academic standing and relevant course work, work experience, interest in the position, and two names of referees with contact information via email to Prof. Jung-Youn Lee (jylee@udel.edu).

Psychology / Neuroscience

Psychology / Neuroscience Position 1:

Job Description: Technical Research Assistant, QLAB

The Language Acquisition and Brain Laboratory (QLAB), directed by Dr. Zhenghan Qi, analyzes EEG, fMRI, and behavioral data to investigate how children and adults acquire and process language. Students may participate as a volunteer, receive work-study pay (starting at $9.00/hr), or earn credit for their work as an independent study (2-3 credits, based on experience and time commitment). Responsibilities include contributing to data analysis pipelines, working with our web-based experiment platform, and helping other lab members with their programming needs. Benefits include the opportunity to experience first-hand how research is conducted, learn and apply research methods, develop programming skills related to data science and web development, and gain experience in neuroimaging and behavioral data analysis relevant to neuroscience, linguistics, and cognitive science.

Required Skills:
Although neuroimaging and research experience are not required, research assistants must have knowledge of Linux, including Terminal and bash scripting, and knowledge of several of the following languages and programs: R, Python, Matlab, JavaScript and/or Java. Experience with website hosting and maintenance is also preferred. Candidates should be detail-oriented, organized, enthusiastic about the lab’s research, eager to learn new skills, and excited to work in a dynamic and collaborative environment. Preference will be given for students with a major or minor in Biomedical Engineering, Computer Engineering, Computer & Information Sciences, or Information Systems.
Approximately 9-12 hours of work per week is required for at least two full semesters (or one semester and 10 weeks of summer).
Please fill out the application form at https://forms.gle/mMiWcAbni9pHdXzs8. Review of applications will begin immediately.
Questions may be directed to the Laboratory Coordinator, Parker Robbins (probbins@udel.edu). Find us online at https://sites.udel.edu/q-lab/.

Psychology / Neuroscience Position 2:

**Job Description: Research Assistant, QLAB**
The Language Acquisition and Brain Laboratory (QLAB), directed by Dr. Zhenghan Qi, is a neuroimaging laboratory focused on how children acquire language, as well as how language learning differs for children with autism spectrum disorder and language impairment.
Students may participate as a volunteer, receive work-study pay ($9.00/hr), or earn credit for their work as an independent study (2-3 credits, based on experience and time commitment).
Responsibilities include recruiting participants to come into the lab, collecting data from adult and child participants, and coding and entering data.
Benefits include the opportunity to experience first-hand how research is conducted, learn and apply research methods, become familiar with the language and neuroscience literature, and gain experience relevant to psychology, neuroscience, speech-language pathology, and medicine.

**Required Skills:**
Although neuroimaging and research experience are not required, research assistants must have some background in psychology, linguistics, cognitive science, neuroscience, or a related field. Candidates should be detail-oriented, organized, interested in working with children, enthusiastic about the lab’s research, eager to learn new skills, and excited to work in a dynamic and collaborative environment.
Approximately 9-12 hours of work per week is required for at least two full semesters (or one semester and 10 weeks of summer).
Please fill out the application form at https://forms.gle/mMiWcAbni9pHdXzs8. Review of applications will begin immediately.
Questions may be directed to the Laboratory Coordinator, Parker Robbins (probbins@udel.edu). Find us online at https://sites.udel.edu/q-lab/.

Psychology / Neuroscience Position 3:

**Job description:** Neuroscience major with high GPA to become involved in randomized clinical trial studying parenting intervention effects on children’s behavioral and biological outcomes.

Contact - Dr. Mary Dozier – mdozier@psych.udel.edu
Psychology / Neuroscience Position 4:

**Job Description:** Seeking a research assistant who can assist with near-infrared immunohistochemistry and run behavioral procedures such as fear conditioning and extinction training in rats. Person should be comfortable performing euthanasia and know basic bench chemistry and how to use a cryostat. We are seeking 10-15hrs/ week for this individual.

Contact – Dr. Dayan Knox - dayank@udel.edu

Psychology / Neuroscience Position 5:

**Job Description:** This position is part of the University of Delaware Research Apprenticeship Work-Study (UDRAW) program. The undergraduate research assistant is responsible for collecting and analyzing data in the laboratory. Responsibilities include assisting with participant recruitment, running experiments, coding data from neurologically-intact and brain-damaged individuals, analysis of structural and functional neuroimaging data, and other day-to-day research needs. The benefits of the position include working closely with graduate students and faculty in a cognitive neuroscience lab, learning about brain stimulation and studying individuals with brain damage, attending weekly lab meetings, and learning more about our cognitive neuroscience research.

Approximately 5-10 hours of work required per week.

Contact: Jared Medina - jmedina@psych.udel.edu

Psychology / Neuroscience Position 6:

**Job Description:** Research Assistant, Mende-Siedlecki Lab
Our lab uses a multi-level approach to uncover the social cognitive and neural mechanisms that underlie how we dynamically perceive, evaluate, and understand other people, leveraging theory and methods from cognitive neuroscience, experimental social psychology, perceptual psychophysics, and computational modeling. We’re currently looking for a research assistant who will be involved in a number of in-lab and online projects aimed at confirming the perceptual mechanisms supporting racial disparities in pain recognition and care identified in our lab’s published and pilot work.

**Responsibilities:**
The student will be engaged in stimulus creation, task testing, and experiment setup. They will also be expected to recruit and run participants, and to assist with preliminary data analysis. The student will be obliged to attend bi-monthly lab meetings throughout the semester.
**Required Skills:**
Previous experience in Microsoft Excel and Photoshop are preferred, but not mandatory. We are looking for determined, detail-oriented students with an open mind, interest in psychology and/or neuroscience, and eagerness to learn.

Students will work approximately **5 to 10** hours/week.

Contact Dr. Mende-Siedlecki at mendesiedlecki.lab@gmail.com if you are interested in applying.