Undergraduate Student Expectations and Intake

Please read through this entire document as it represents an agreement between the lab and incoming students.

To learn more about the lab, our research goals, and lab staff, go to http://www.psychology.emory.edu/lcpc/. All of the lab publications can be found there, as well as demonstrations of the types of cognitive tests we use with monkeys.

**Academic Year Students**

Our lab typically accepts one to three undergraduate researchers each semester. Students help run ongoing experiments, develop their own research projects in collaboration with a mentor, and gain research experience. Students can join the lab as volunteers, can do independent study to earn course credit (e.g. 499R), can work on an honor's thesis, or may participate in a sponsored undergraduate research program (see below).

Several kinds of experience are helpful, but *not required*, if you wish to work in the lab.

- Experience training animals in any context
- Completion of Intro Psychology, Animal Behavior, or other courses in Psychology or Biology that pertain to behavior or cognition
- Completion of Psychology Statistics and Methods sequence
- Experience programming computers. Formal instruction could be acquired by taking CS 170 or CS 110. For our cognitive testing, we use Visual Basic.
- Facility with advanced Excel functions such as formulas and conditional sum wizard

Having some of these qualifications, while not absolutely required, will increase the extent to which you can make meaningful contributions to scientific projects and will mean that you have more fun in the lab.

**Expectations**

- Each student participates in lab projects by helping with setup/take down of cognitive testing rigs, cleaning testing equipment, feeding monkeys, image collection, coding video, testing equipment, and other lab activities as needed.
- Students are expected to work in the lab about 10 hours per week or more, divided among 3 or so work days. This amount of effort is the minimum needed to ensure that students have a chance to learn lab practices and contribute to the functioning of the lab.
- Students attend weekly lab meetings unless course schedules or other requirements conflict.

**Each student joins a graduate student or PI project**

- Students should meet weekly with their project leader.
• Students prepare an annotated bibliography covering at least 8 papers on a research topic in the **first semester**. The topic will likely be the one they are working on with their project leader, but it may be something else of interest to the student and the lab. The annotated articles may be the basis of discussion at weekly meetings. Some of the articles may be suggested by the project leader.
• Students are as involved as possible in developing goals and methods in the evolving project.

**Each student will prepare a research proposal to address a novel question by the end of the first year in the lab, sooner if possible**

• Includes introduction to theory, hypothesis, methods, discussion of at least two possible outcomes
• Proposal may be an extension of the current project or a novel question in another area relating to learning, memory, or cognition in primates
• This paper is due before winter or summer break, depending on when the student joined the lab

* For students participating in a sponsored undergraduate research program, the requirements of the program may substitute for the above.

**Funding**

• Students generally either volunteer, work for course credit, or have outside funding in 1st year. The following programs help support undergraduate researchers: Scholarly Inquiry and Research at Emory (SIRE); Summer Undergraduate Research program at Emory (SURE); Facilitating Academic Careers in Engineering and Science (FACES); NET/Work
• If outside funding is not secured after the first year, students may be funded by lab during summer or term, depending on the availability of funds.
• Students working for course credit may not be paid for the same work.

**Summer Students**

Students joining our lab for the summer may join as volunteers or through a program that provides them with funding or course credit. Students participating in SURE, BRAIN, or other summer grant programs are expected to meet the deadlines, expectations, and product goals of the program they are participating in. Both volunteers and funded students may help run ongoing experiments, develop their own research projects in collaboration with a mentor, and gain research experience.

Several kinds of experience are helpful, but not required, if you wish to work in the lab.

• Experience training animals in any context
• Completion of Intro Psychology, Animal Behavior, or other courses in Psychology or Biology that pertain to behavior or cognition
• Completion of Psychological Statistics and Research Methods courses
• Experience programming computers. Formal instruction could be acquired by taking CS 170 or CS 110. For our cognitive testing, we use Visual Basic.
• Facility with advanced Excel functions such as formulas and conditional sum wizard

Having some of these qualifications, while not required, will increase the extent to which you can make meaningful contributions to scientific projects and will mean that you have more fun in the lab.

Expectations
• In addition to any personal project, each student participates in general lab projects by helping with setup/take down of cognitive testing rigs, cleaning testing equipment, feeding monkeys, image collection, coding video, testing equipment, observations, and other lab activities as needed.
• Students involved in funding programs will be expected to work full time in the lab (~40 hours per week). Student volunteers are expected to work in the lab about 10 hours per week or more, divided among 3 or so work days. This amount of effort is the minimum needed to ensure that students have a chance to learn lab practices and contribute to the functioning of the lab.
• Students attend weekly lab meetings.

Each student joins a graduate student or PI project
• Students should meet weekly with their project leader.
• Students prepare an annotated bibliography covering at least 8 papers on a research topic by the middle of the summer (Early July). The topic will likely be the one they are working on with their project leader, but it may be something else of interest to the student and the lab. The annotated articles may be the basis of discussion at weekly meetings. Some of the articles may be suggested by the project leader, but you are encouraged to find and read papers on your own.
• Students are as involved as possible in developing goals and methods in the evolving project, and their primary responsibilities will be to that project.

Funded students will prepare posters, proposals, and papers as required by their program
• Most funding programs require students to complete a research proposal, or a paper or poster on the project they have participated in over the summer.
• You will have spent your whole summer working on a project, and are expected to be knowledgeable about what you did, why you did it, and what it means. Your project leader will be there to guide you, but these final projects should be a result of your efforts and knowledge.

General Lab Policies

Communication
• Please use informative subject lines, and “reply with quote” on emails so as to maintain the “thread” or topic.
• Reply to emails from senior lab staff promptly. Even if you are not able to take whatever action is requested immediately, send a message confirming that you
received the email and are “on it” (e.g. “I got your message asking for the new graphs from our experiment. I will have them next week.”)

- If you cannot make it to lab as scheduled, notify our Research Specialists (Tara) and your research mentor as soon as possible by phone and/or email. Absences without prior notice and explanation are a serious problem.

Research

- Read Institutional Animal Care and Use (IACUC) protocols, know their location, and consult them or a senior lab member whenever you are in doubt about procedures.
- Only procedures approved in protocols may be performed. If you are ever in doubt, seek advice from senior lab staff.

Policy on Scientific Credit, Presentations, Publications

- All presentations of data from the lab MUST be cleared by you project leader and Dr. Hampton. This includes papers, posters, and in class presentations. This requirement is meant to ensure that you represent yourself well, and represent the lab well.
- As in other cases, authorship on publications and presentations requires intellectual contribution to the project. “Helping” and testing animals alone is not sufficient to justify authorship. Authorship is a great thing to have on your CV when you apply for graduate or medical school.
- Students are encouraged to present their work at Emory and other local conferences. Attendance at national conferences can be a great experience and is encouraged, but funding from the lab would be available only under unusual circumstances.

Computers

- Students have access to general lab computers
- Keep all files organized according to the lab computer file organization system.
- Students may use computing “stations” if available.
- Laptops may be removed from lab only with permission, for presentations or special purposes. If you have such a need, check with Tara, then send a single email to Rob, Tara, and your research mentor indicating when you plan to have the laptop out of the lab and when it will be returned.

Lab Meetings

- All students should attend lab meetings unless course schedule does not permit
- Each student will meet weekly at a regularly scheduled time with their project leader. Ensure that you have a weekly meeting time. Occasionally these meetings will be missed, but that should not be common.
- Be prepared for all meetings (e.g., read assigned papers, have specific questions formulated, have data up to date, etc.)

Unacceptable behavior

- Fabrication or misrepresentation of data of any kind
- Lack of care in protection of data or other lab resources
- Active or passive behavior constituting abuse of animals
- Lying
- Repeated failure to arrive on schedule or carry out assigned duties
- Failure to adhere to safe laboratory practices
**Intake**
In order to join the lab you will have to complete some paperwork, training, and a health check. You need to do the following:

1. Confirm that Tara has submitted an access memo for you.
2. Contact Shayla Edmondson sedmon3@emory.edu to schedule a photo for ID and meeting with Joy Eberhardt.
AALAS and Blackboard training are assigned during Orientation (AALAS training can be completed in advance: Complete online training *Working with the IACUC, Introduction to Nonhuman Primates*, and *Pain Management in Laboratory Animals*; **do not do any other training modules**! Go to [www.aalaslearninglibrary.org](http://www.aalaslearninglibrary.org) and follow the directions for creating an account.
3. Complete the online Credentials Form [http://www.dar.emory.edu/FORMS/iacuc_credentials.php](http://www.dar.emory.edu/FORMS/iacuc_credentials.php) and notify Rob that you have done so (fill in the dates you completed CITI training modules. *Don’t worry if you do not have information to put in every blank – you should leave items empty if you have nothing to report there*). Rob can help you with this if you have questions.
4. Contact Joy Eberhardt joyinette.eberhardt@emory.edu to schedule your Health Assessment. She arranges placement of your TB test. The TB can be done in advance and can be done at your doctor or health department.
5. Contact Tracey Fountain tracey.fountain@emory.edu to schedule your orientation.
6. Complete your Health Assessment. Renee does these on Fridays ONLY. *Please arrange with Joy to have the Health assessment done on a Friday before your start date* – otherwise you will be here a week and unable to work with the monkeys.
7. Attend Orientation with Tracey Fountain.
8. Complete assigned Online training
9. Confirm that Rob has added you to our IACUC protocols
10. Pick up Badge from Joy