

Research Application for the Animal Communication Lab (aka the “Frog Lab”)

Thanks for your interest in our lab. We are always looking for creative and motivated people who are willing to help out, and gain research experience in the lab. You should review our lab’s web site (<http://www.tc.umn.edu/~mbee/>) to get a general overview about what we do. Then, if you’re still enthusiastic, you might read some of our papers (also available on the web site). This document provides some general guidelines for students and other volunteers looking for a research experience in the frog lab.



General Principles

First, it is often difficult for a single student to complete a meaningful research project on his or her own in our lab. This is because of the nature of our research: each behavioral experiment can take a long time to complete (3 months to 3 years), requires a range of skills that undergraduate students don’t usually have (such as acoustical analyses, statistical analysis), and most behavioral studies are seasonal and take place between April and July when frogs actively breed. But this doesn’t mean that you can’t learn significant research skills in our lab. Students undertaking directed research should think of themselves as part of a research program involving several different experiments and projects.

Second, research in our lab (as in many others) involves many different types of work, from fairly low-level work (like collecting and feeding animals) to the highest level of work (like designing experiments and writing scientific papers). All of these are important, but some kinds of work require more training and preparation than others. Students conducting research in the Frog Lab should expect to participate in day-to-day experiment running and animal care if they choose to work in our lab.

Third, there are a number of possibilities for you to conduct research in the Frog Lab. You can volunteer, use work study, or take directed research credits, or you may be hired as an undergraduate research assistant during the summer. All of these forms of participation require the completion of this application.

Finally, for students taking directed research credit, your work should, of course, have some intellectual content. In addition, if you’re seeking credit for directed research you should produce something during your time in the lab, such as a written report or a statistical or acoustical analysis. How you achieve this “intellectual content” and what you “produce” depends on your skills and interests. People in the lab can suggest ideas to you, but this should be a joint decision. It should be something that interests you, fits your skills and fulfills your educational goals.

Here are two suggestions about how you might contribute to our lab intellectually.

1. Project-oriented. If you find that you're interested in one of the on-going experiments or projects, you might, in consultation with lab staff, read about the issues behind the experiment, and identify a part of the experiment where you can play a role (e.g. data analyst, etc). In this model, you might, for example, perform a preliminary analysis of the data, or analyze some aspect of the data that we haven't planned to consider. In this case, your product would be like a mini-paper, reporting the findings and suggesting further studies. During the spring and summer semesters, your project would likely include catching frogs in the wild and conducting behavioral tests with frogs either in the lab or in the field.
2. Lab-oriented. Many issues and tasks in our lab apply to all experiments (frog testing, frog health, database management), and you may find that you have keen interest in one of these issues. You might specialize in database management or frog testing and develop new techniques that improve the way we do things, or analyze the results of what we have done in the past, such as sound analyses and video analyses of behavioral tests. In this case, your product would be recommendations for improvement or the development of a new generally useful tool.

It often works best for you to work in the lab, doing general lab tasks, for a few weeks to a month before deciding which of these tracks to follow; because this will introduce you to the projects and general procedures of our lab.

Research Application
ANIMAL COMMUNICATION LAB
DEPARTMENT OF ECOLOGY, EVOLUTION & BEHAVIOR

This application is for prospective volunteers, directed research/directed studies applicants, and applicants for a summer research assistantship in the Frog Lab.

Please attach the following with this application:

1. **Resume:** Make sure you have given details about your research and employment history.
2. **Transcript:** This transcript can be a printout from your OneStop web transcript.
3. **Preliminary Schedule:** Your preliminary schedule for the semester when you plan to take directed research.

You may return your application to Dr. Mark A. Bee's mailbox in 100 Ecology, 1987 Upper Buford Circle, St. Paul MN 55108.

Check the box for the type of research work for which you are applying:

- Volunteer
 - Work Study
 - Directed Research
 - Paid Research Assistantship (if available – check Lab webpage)
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NAME: _____

STUDENT NUMBER: _____

ADDRESS: _____

PHONE: _____

E-MAIL: _____

CLASS STANDING: _____

ANTICIPATED GRADUATION DATE: _____

MAJOR: _____ MINOR: _____

GPA: _____

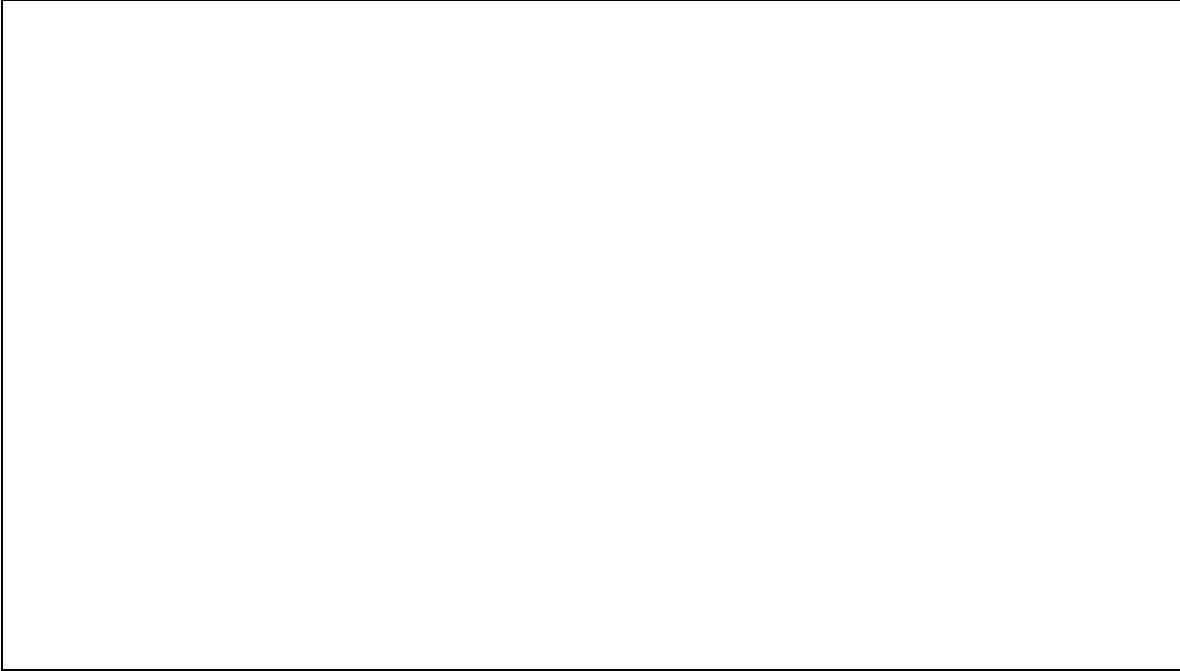
FOR WHICH SEMESTER ARE YOU APPLYING: _____

RESEARCH INTERESTS/PROJECT IDEAS:

SPECIAL SKILLS (Animal Handling/Biology/Field Experience/Statistics?):

HOBBIES, OTHER INTERESTS:

WHAT ARE YOUR PLANS FOR THE FUTURE (i.e. educational, professional):

A large, empty rectangular box with a thin black border, intended for the user to write their future plans. The box is currently blank.