



STRI Internship Opportunities

Thank you for your interest in an internship at the Smithsonian Tropical Research Institute.

Internships are intended for undergraduates, recent graduates (post-bachelor's) and beginning graduate students interested in advancing their professional goals and intellectual skills under the guidance of a scientist working at STRI.

Internships give interns the opportunity to meet and interact with scientists from around the world, gain hands-on experience in their area of academic interest, and delve into Panama's rich culture.

How to apply

At the end of this document, you will find a general application form that can be used to apply for all internships for which you are eligible, except Introduction to Neotropical Research and Culture. Introduction to Neotropical Research and Culture requires a separate application form, available on the Internships homepage.

Prior to submitting the formal application, applicants must consult with the staff scientist they are interested in working with to determine if that scientist will be available to serve as a research mentor. Please allow the scientists ample time to provide the Office of Academic Programs with the required project description (they will know what this is). If you are having trouble identifying someone whose research interests align with your own or contacting a scientist, please let us know and we can help you!

All application materials, except recommendation letters and the project description, must be submitted as a single PDF via email to fellows@si.edu by the application deadline. Please inquire if you are unable to submit your application via email. If necessary, there are other ways that we can receive applications.

****Important note:** All persons visiting STRI, including interns, must have health insurance during their time here. Upon acceptance into the internship program, you will be asked about health insurance. If you do not have health insurance, or if your coverage does not extend to Panama, you can purchase insurance through STRI.

Inquiries may be sent to:

E-mail (preferred method): fellows@si.edu

Telephone: 507.212.8031

Address: Smithsonian Tropical Research Institute

Office of Academic Programs

MRC 0580-12

Unit 9100 Box 0948

DPO AA 34002-9998

Opportunities

The following are several currently available internship opportunities. If you would like more information about a particular internship or help choosing a research mentor, please contact the Office of Academic Programs.

Introduction to Neotropical Research and Culture

Application deadline: 15 January of each year

Program duration: 10 weeks

Program dates: 1 June – 15 August of each year

Description: Twelve applicants will be selected to participate in a structured program of research and cultural experiences. In addition to working closely with a research mentor, program participants will have the opportunity to attend workshops, roundtable discussions, and field trips designed to increase their general understanding of tropical biology and Panamanian culture.

Eligibility: Undergraduates, recent graduates (post-bachelor's) and early-stage graduate students with a demonstrated interest in pursuing a career involving scientific research, and in particular, tropical biology. Applicants with at least some knowledge of both English and Spanish are highly encouraged to apply.

Award: Interns will receive a \$1000 airfare allowance, \$200 research allowance, plus \$250 per month to cover miscellaneous personal expenses. Interns at facilities not providing meals will receive an additional \$300 per month food allowance. Housing costs and most costs associated with organized activities will be covered.

Research Experience in the Tropics

Application deadline: 15 March, 15 May, 15 August, and 15 November of each year

Program duration: 3 months

Program dates: Internships usually begin approximately 2 months after notification of acceptance into the program.

Description: Individual applicants will be selected to conduct research under the supervision of scientist at STRI. Interns will work closely with their research mentor, becoming an integral participant in the scientist's larger research agenda. Additionally, interns will be encouraged to reflect on the conceptual and research implications of the work at hand so that they may maximize their understanding of a particular subject area.

Eligibility: Undergraduates, recent graduates (post-bachelor's) and early-stage graduate students interested in the research areas represented by STRI's scientific staff.

Award: Internships last 3 months and include a monthly stipend of \$800 US to cover room and board. This internship does not include any travel or research allowances.

Female Choice Experiments with Tungara Frogs

Application deadline: 15 March of each year

Program duration: 3 months

Program dates: June – August

Description: Assistants are needed for a continuing study of sexual selection and the evolution of the communication systems in the tungara frogs by Dr. Mike Ryan, University of Texas and Dr. Stan Rand (who recently passed away), Smithsonian Tropical Research Institute. The main part of this study involves conducting female choice experiments for 3 months each wet season. Each year the tungara group includes a pair of assistants, one a North American student and the other a student from Latin America who have formed a competent and reliable team. Typically, the assistants become well integrated into the conceptual background of the project and often conduct their own independent studies, which have been published in international peer-reviewed journals. Working and living closely together provides both assistants with an intensive intercultural exchange that has been positive for them and for us. Dr. Ryan is on site for the first half of the summer. The day-to-day operations are run by one or two of

Ryan's post-docs or graduate students, who have had multiple years of experience in studying tungara frogs for their Ph.D. theses.

The assistants, after an initial training period, are responsible for collecting mating pairs of tungaras each evening in the vicinity of STRI's facilities in Gamboa. The females are brought back to the lab where phonotaxis studies are conducted. Females are placed in a large, walk-in acoustic chamber and allowed to choose between pairs of stimulus calls, presented from opposing speakers. The assistants record choices made, paths traveled, time spent choosing, etc. After the test session, the assistants mark the females and return them to the sites where they had been collected. A typical working night is from 7:30 PM until 3:30 AM. The assistants shift their daily schedule to a nocturnal one for these three months.

The stimulus calls are computer synthesized and computer presented. The assistants become familiar with this operating system, Signal. They also enter the data they have collected in Excel and learn these data management tools as well.

The initial training includes an introduction to the tungara project as a whole and the rationale underlying the tests to be running, the protocols, experimental design and statistics to be used are discussed. Each day the test results of the previous night are reviewed and the selection of new tests discussed. Often research reports are presented and discussed. The papers, reports, grant proposals and manuscripts that have resulted from the project so far are made available and the assistants are encouraged to read and discuss these and the related literature with us. The assistants are expected to work about 8 hours a day, on an average of 5 days a week. Assistants often will accumulate days off to afford them the opportunity for extended trips in Panama. How students spend their time off has varied greatly, depending on the individual. Most have taken advantage of opportunities to explore the local environment, talk to other STRI visitors and residents in Gamboa and at other facilities, and to visit other parts of Panama. Some conducted pilot research for their PhD theses, three others completed small but publishable projects on frog oviposition behavior, still another collected the data for her master's thesis, others have collaborated with Ryan and Rand on short papers on results during the season.

For more information about the tungara frog project contact Dr. Michael Ryan at mryan@mail.utexas.edu. Additional information about the tungara project and Ryan's other research interests can be found at his web site at <http://www.sbs.utexas.edu/ryan>.

Eligibility: Assistants are usually beginning graduate students or advanced undergraduates. They must have a working knowledge of English, and a driver's license is useful. Preference will be given to applicants with an interest in pursuing studies in animal behavior.

Award: Two assistants share a 1 bedroom apartment in Gamboa. Round trip airfare to Panama will be paid by the project and an assistant will receive \$1,000 per month to cover living expenses in Panama.

Additional Opportunities for Latin Americans

STRI Internship for Latin Americans

Application deadline: 15 March, 15 May, 15 August, and 15 November of each year

Program duration: 3 months

Program dates: Internships usually begin approximately 2 months after notification of acceptance into the program.

Description: Individual applicants will be selected to conduct research under the supervision of scientist at STRI. Interns will work closely with their research mentor, becoming an integral participant in the scientist's larger research agenda. Additionally, interns will be encouraged to reflect on the conceptual and research implications of the work at hand so that they may maximize their understanding of a particular subject area.

Eligibility: Undergraduates, recent graduates (post-bachelor's) and early-stage graduate students interested in the research areas represented by STRI's scientific staff.

Award: Internships last 3 months and include a monthly stipend of \$800 US to cover room and board. This internship does not include any travel or research allowances.

Robert Stimming Internship

Application deadline: 15 March, 15 May, 15 August, and 15 November of each year

Program duration: up to 4 weeks

Program dates: Internships usually begin approximately 2 months after notification of acceptance into the program.

Description: This internship is based at STRI's Galeta Marine Laboratory, which is both a research and an educational facility. Thus, interns may apply to assist in education and outreach projects as well as research.

Eligibility: Undergraduates, recent graduates (post-bachelor's) and early-stage graduate students majoring in biology (or a sub-discipline of biology), natural resources, environmental engineering, tourism, education, geography, history, architecture, economics, sociology, or political science.

Award: Awards are variable, depending on the nature of the work and the length of the internship.



Application—STRI Internships: Application for all internships except Introduction to Neotropical Research and Culture

Application materials must be submitted to STRI on or prior to the stated deadline. Applicants will be notified of acceptance into the program approximately 6-8 weeks after each application deadline.

Application packet checklist:

- Application form
- Statement of Interest
- Curriculum vitae
- Academic transcripts (These do not have to be official transcripts.)
- Two letters of recommendation
- Project description from your proposed supervisor

All applications materials, with the exception of the two letters of recommendation and the project description, must be compiled into a SINGLE ELECTRONIC PDF FILE. The file should be named as follows: “Your surname_first initial_INTERNSHIP.PDF” (e.g., if your name is Jane Smith, then the file name is “Smith_J_INTERNSHIP.pdf”).

The applicant should arrange to have the two letters of recommendation and the project description sent directly to STRI’s Office of Academic Programs by email to fellows@si.edu. Applicants should contact their recommenders and proposed supervisors and confirm that these items were submitted.

Incomplete applications and applications that fail to follow guidelines will not be considered.

Inquiries about the application process may be sent to:

E-mail (preferred method): fellows@si.edu

Telephone: 507.212.8031

Address: Smithsonian Tropical Research Institute

Office of Academic Programs

MRC 0580-12

Unit 9100 Box 0948

DPO AA 34002-9998

Instructions: Please fill out the following form and include it in your application packet. This form has active fields that may be filled in using Acrobat Reader or Preview. Alternatively, you may fill in the form by hand and include a scanned copy with your application materials.

CONTACT INFORMATION

Name (last name in capital letters):

Mailing address:

Email address: _____

Phone number: (include country code, and area code if applicable): _____

EDUCATION

College/university: _____

Major (& minor if applicable): _____

Graduation date or anticipated graduation date (bachelors degree):

Day _____ Month _____ Year _____

Cumulative grade point average (índice académico) _____

Maximum possible grade point average at your school _____

PERSONAL INFORMATION

Date of birth: Day _____ Month _____ Year _____

Gender: Female Male

Citizenship: _____

Country Passport Issued by: _____

Passport Number: _____

Passport valid until: Day _____ Month _____ Year _____

EXPERIENCE

List any skills relevant to an internship at STRI (such as languages, laboratory and field work, computers, diving certification, etc.).

OTHER INFORMATION

Who is your proposed supervisor? _____

Please list the ideal start and end dates of your internship:

Start: Month _____ Year _____

End: Month _____ Year _____

Please provide the names & email addresses of two professors or other persons from whom you have requested letters of recommendation:

Recommender #1:

Recommender #2:

Statement of Interest | Address the following questions in an essay of 1000 words or less. Please use double-spacing and Times New Roman 12 pt font.

- a. Why are you seeking an internship at the Smithsonian Tropical Research Institute?
- b. How does participation in this internship program relate to your academic or professional development and goals?