CALL FOR APPLICATIONS FOR HARRIS CENTER RESEARCH GRANTS

The Whitney R. Harris World Ecology Center has limited funds available to provide research grants in biology and conservation. These grants include the Jane and Stanley Birge Tropical Research Grant, The Christensen Fund Research Grant in Plant Conservation, Henry B. Cowhey Grant in Tropical Conservation, John Denver Memorial Grant in Tropical Ecology, Stephen M. Doyle Memorial Fellowship, Leo and Kay Drey Grant, Jorie Butler Kent Grant, Jane Harris Grant in Tropical Botany, Mallinckrodt Graduate Fellowship in Tropical Ecology, Mary Osborne Grant, Parker-Gentry Tropical Research Fellowship, Peter H. Raven World Ecology Research Grant, Stokes Family Grant in Tropical Conservation, Whitney R. Harris Community Grant, and Harris Center Research Grants.

Graduate students enrolled at the University of Missouri-St. Louis, who are conducting or planning to conduct research for the M.S. or Ph.D. degrees in population biology, ecology, evolution, systematics, behavior, behavioral ecology, biogeography, conservation biology, conservation policy, politics or socioeconomics of conservation, and sustainable development, are eligible to apply for funding. Priority will be given to students beginning their research careers and to those who have not previously received Harris Center funding. Awards will normally range from $1,000-$4,000 (up to $7,000 is available through the Whitney R. Harris Community Research Grant).

Successful applicants will have demonstrated that the proposed project will enhance their graduate program. Proposals should include clear hypotheses/predictions in the narrative. Harris Center research grants will **not** support tuition, stipends, books or conference attendance. Funding is available to study research organisms anywhere in the world, although certain scholarships place geographic restrictions on where the research can be conducted.

Any questions regarding eligibility and budget should be directed to the Harris Center Director or Interim Director. Biology graduate students are strongly encouraged to present their proposal and any preliminary results in a Biolunch prior to applying for research research grant funds from the Harris Center.

Please submit completed proposals as ONE PDF file (proposal and resume together) by the competition deadline to pparker@umsl.edu. File name should be your surname.pdf. In the same email, send a copy to your advisor. Proposal guidelines can be downloaded from the Harris Center web site: http://hwec.umsl.edu/. NO HARD COPIES REQUIRED.

Deadlines

Fall 2019 Competition deadline: 5 p.m. on Friday, September 27, 2019. Awards will be announced in October (students who received support in the 2019 Spring competition are not eligible for awards in this competition).

Spring 2019 Competition deadline: 5 p.m. on Friday, February 2, 2020. Awards will be announced in March (students who receive support in the 2019 Fall competition will not be eligible for awards in this competition).

Whitney R. Harris Community Research Grant deadline: 5 p.m. on March 1 each year. Awards will be announced by April 15th each year.

GUIDELINES FOR APPLICATIONS FOR HARRIS CENTER RESEARCH GRANTS

Proposal format

Copies of previously funded proposals are available from the Harris Center office (Benton 111) for review by applicants. Please note that the guidelines have changed over the years and applicants should not directly model their proposals on those funded in previous years but should follow the current guidelines as detailed below.

Each application should consist of the following components:

Title Page (available at end of document or from Harris Center's webpage)
The title page should not exceed one page and should include the name of the applicant, graduate program (Ph.D. or M.S.), project title, project duration, location of field work, total funding requested, a summary of no more than 300 words, history of Harris Center funding and list of pending proposals. Specific hypotheses to be tested should be listed in the Abstract. The project title should be concise and informative. Indicate on the cover sheet whether the proposal has been reviewed by your advisor. Font size should be not less than 12 point and at least 1-inch margins are required throughout the document.

Research Proposal
The narrative of the research proposal should not exceed four single-spaced pages (not counting supporting figures and tables, bibliography, budget information, and 2-page curriculum vitae) for all applications, with exception for the Whitney R. Harris Community Research Grant which is 8 single-spaced pages (not counting supporting figures and tables, bibliography, budget information, project timeline, and 2-page curriculum vitae). Do not embed figures in the proposal text but include as additional pages. The following headings and sub-headings provide a suggested format for the proposal:

Objectives
Project Description
- *Introduction*
- *Hypotheses to be tested*
- *Methods*
- *Significance*

Project timeline

Budget
An itemized budget should be presented with each item clearly justified. For any projects whose total budget exceeds the amount allowable on a Harris Center Grant, be sure to show funding applications to other sources for those funds. Provide details on budget requests to other agencies here, including name of the agency/ agencies, submission date, budget requested and the award announcement date. It is expected that allocated funds will be spent within a calendar year from the time of the award.

Curriculum Vitae
A two page curriculum vitae should be attached to the proposal. Include in the resume a summary of your academic progress: years in program, courses completed, completion of qualifying exams, proposal defense, etc.

Ancillary information
Proposals that involve research on humans or other vertebrates must conform to human and vertebrate animal welfare policies at University of Missouri-St. Louis. Guidelines of these policies may be obtained from the Office of Research Administration. Appropriate permits for collecting biological specimens must be obtained or in the process of being obtained prior to accessing funds awarded by the Harris Center.

Proposal checklist
A good proposal should address the following questions:
1. Do the title and project summary match the purpose and scope of the project?
2. Does the Introduction explicitly indicate the validity of the concept to be investigated and lead into the project description?
3. Is previous work adequately used to frame the question to be answered by the project?
4. Are the methods appropriate to the research question or hypothesis proposed?
5. Is the significance of the work apparent, both to someone in your research area as well as someone outside your discipline area?
6. Have you provided a project timeline?
7. Is the budget well justified and appropriate for funding by the Harris Center?
8. Did your colleagues and advisor have ample time to review your proposal before submission?
9. Have you presented an informal seminar describing your proposal to your lab group or BioLunch?
10. Have appropriate protocol forms been reviewed by the University of Missouri-St. Louis Animal Care Committee? (Research monies from the Harris Center will be withheld until all necessary protocols are approved.)
11. Have appropriate permits to collect biological specimens been obtained or sought from appropriate authorities in all countries where research is to be carried out? (Research monies from the Harris Center will be withheld until all necessary permits are obtained.)

Proposal evaluation criteria
Your proposal will be evaluated on its academic merit and probability of success. In addition, preference will be given to students beginning their research careers, projects that have not previously received Harris Center research funding, and students who have demonstrated efforts to seek external research money. All things being equal, consideration will be given to students who are active in Harris Center programs. Students with previous Harris Center support must have on record a final report of previous Harris Center research and provide a summary of this research and clearly demonstrate why additional funds are necessary from the Harris Center and cannot be obtained elsewhere (see Item 7 on proposal checklist).

Reviewers will rate each proposal on academic merit and probability of success from poor (5) to excellent (1) and only proposals in categories 1 and 2 are likely to receive support.

Application for Harris Center Research Grants

Whitney R. Harris World Ecology Center at the University of Missouri-St. Louis

1. Name of applicant:
2. Graduate program (M.S. or Ph.D.):
3. Advisor:
4. Project title:
5. Total budget:

   What other sources have you or do you intend to apply to for the research outlined here? When are proposals due? Please attach a copy of the budget seeking funds from all external agencies.
6. Amount requested from Harris Center:

   If you have received previous funding from the Harris Center, please provide: project title; award amount and date award was received. Please attach a summary of results of prior Harris Center research and explain clearly why additional funds are now necessary from the Harris Center and why these cannot be obtained elsewhere (summary should not exceed 1 single-spaced page).
7. Abstract (300 word limit)

Do not exceed this space.

If this proposal is funded, I would be happy to have it shown to applicants developing proposals for Harris Center Research Scholarships in subsequent years.

Check appropriate box:

My advisor has reviewed this proposal requesting funding from the Harris Center. ☐

My advisor has not reviewed this proposal requesting funding from the Harris Center ☐

GUIDELINES FOR REVIEW OF HARRIS CENTER RESEARCH GRANTS

Grants available: Jane and Stanley Birge Tropical Research Grant, The Christensen Fund Research Grants in Plant Conservation, Henry B. Cowhey Grant in Tropical Conservation, John Denver Memorial Grant in Tropical Ecology, Stephen M. Doyle Memorial Fellowships, Leo and Kay Drey Grant, Jorie Butler Kent Grant, Jane Harris Grant in Tropical Botany, Mallinckrodt Graduate Fellowship in Tropical Ecology, Mary Osborne Grant, Parker-Gentry Tropical Research Fellowship, Peter H. Raven World Ecology Research Grant, Stokes Family Grant in Tropical Conservation, Whitney R. Harris Community Grant, and Harris Center Research Grants.

Geographical constraints

Harris Center Research Grants
Harris Center grants are restricted to University of Missouri-St. Louis graduate students and most awards support projects that intend to conduct field studies in the geographically defined tropics (between the Tropics of Cancer and Capricorn) in South America, Central America, Mexico, Africa and Madagascar, tropical Asia (including some developing countries in southern Asia), Malaysia, tropical Australia, the Caribbean and Pacific islands (including Hawaii). Funds are also available for research with a geographical focus in other regions of the world.

Parker-Gentry Fellowship
The Parker-Gentry Fellowship is restricted to University of Missouri-St. Louis graduate students from Latin America intending to conduct field studies in Latin America. Proposal must contain a significant field based component. Appropriate topics include biogeography, conservation biology, ecology, faunal surveys, floristics, natural history and systematics.

The Christensen Fund Research Awards
The Christensen Fund Research Awards are open to all University of Missouri-St. Louis graduate students who are conducting or planning to conduct research in applied plant conservation for the M.S. or Ph.D. degrees in some part of the New or Old World tropics. Proposals should address broadly-defined plant conservation research questions focused on the tropical countries of South and Central America, Mexico, sub-Saharan Africa, Madagascar, tropical Asia, Malesia, the Caribbean and Pacific islands (excluding Hawaii as a sole research site). Appropriate research topics include plant systematics, plant biogeography, plant ecology, plant conservation (including plant habitat conservation) and plant-animal interactions.

Harris Center Research Grant Committee Appointment

The Harris Center Research Grant Committee is appointed by the Harris Center Executive Committee. The committee consists of up to six Harris Center Faculty Associates, scientific representatives of the Missouri Botanical Garden and St. Louis Zoo (or nominees), and two senior University of Missouri-St. Louis graduate students (at least one will be an international student, neither will be an applicant in the current round). The Harris Center Director will be an *ex officio,* non-voting member.

Proposal review

Proposals will be circulated to members of the Harris Center Research Grant Committee. Proposals will be separated into discipline areas by the Harris Center Director. Each proposal will be reviewed in detail by three members of the research grant committee and they will rank the proposal, write detailed comments as feedback to the applicants, and report to the full Harris Center Research Grant Committee. Ideally, each proposal will be reviewed by two members of the research grant committee familiar with the discipline area and one from outside the discipline area. Proposals will be allocated to reviewers by the Harris Center Director in consultation with members of the Research Grant Committee. Advisors will not be one of the three reviewers of proposals submitted by their graduate students (see below). When expertise is lacking, views on the merits of particular research proposals may be solicited from suitably qualified individuals who are not members of the Research

Grant Committee. Members of the Research Grant Committee will have access to all proposals but may choose to rely on the comments of the three reviewers. The final decision on the award of research grant funds will rest with members of the Research Grant Committee. The Harris Center Director will determine which named research grant is awarded to each of the successful applicants.

Proposals from M.S. and Ph.D. students

The Harris Center Research Grant Committee will rank proposals from M.S. and Ph.D. students separately. A formula that splits funds between the M.S. and Ph.D. competitions based on the number of applicants and funding requested will be applied. This formula will be developed by the Harris Center Director prior to consideration of proposals but should act only to guide award decisions. Scientific merit and probability of success will remain the over-riding criteria in the award of all Harris Center research grants.

Student feedback

Detailed student feedback will be prepared by the three reviewers and, if necessary, added to by members of the Harris Center Research Grant Committee. Written reviews should be prepared by all reviewers and may be edited to remove repetition. Reviews should cover the following:

- Scientific merit
- Importance of funding to beginning research project and graduate career
- Relevance of research to Harris Center mission
- Contributions from previous Harris Center support
- Effort to obtain funds from other sources

Role of advisors

Advisors serving on the Harris Center Research Grant Committee will not remain in the room when proposals from their graduate students are being discussed and should not vote on proposals submitted by their graduate students. Advisors will not serve as specialist reviewers of proposals submitted by their graduate students.