

Brad McRae Fellowship for Innovation in Conservation of Biodiversity

In his NAU graduate thesis, Brad McRae (PhD, NAU School of Forestry, 2004) invented the circuit theory model of gene flow and animal movement. Unlike previous models, circuit theory reflects gene flow and movement across all paths in a landscape, not just within a single least-cost corridor. Circuit theory quickly became a dominant paradigm in conservation biology and other scientific disciplines. In the wake of Brad's untimely death in July 2017, his family and colleagues established this award to help NAU graduate students develop their own innovative ideas. It is anticipated that 1 to 3 fellowships (\$2,500 to \$7,500 each) will be awarded annually.

Application packet

- A description of the student's thesis research. List the most plausible research outcomes, and state how each outcome would lead to particular conservation interventions. Highlight any novel or innovative aspects of the project. (maximum of 1000 words and 2 pages)
- References cited.
- A statement of career goals. (maximum of 500 words and 1 page, including a required sentence that describes ethnic heritage and family history pertaining to higher education, e.g. first in family to attend college or graduate school)
- A CV including (a) Name, email, phone, NAU student ID, & standardized test scores including percentiles (SAT/ACT, GRE, TOEFL), (b) professional preparation (education with GPA in each degree program, including current program; relevant work experience), (c) up to 5 publications or other products related to the student's research project, (d) up to 5 synergistic activities, and (e) name, email address, & brief description of professional relationship to the applicant, for two references not including the student's graduate advisor. (500 words maximum)
- A letter of support from the student's graduate advisor, stating when the student started & is expected to be complete their NAU graduate program, and describing the value of the project and the applicant's ability & work ethic. (2 pages max)
- A budget including the total amount requested, broken down by categories (travel, and lodging, laboratory & field expenses, etc.), with brief justifications for amounts requested. This document should also list amounts of other support the student expects to receive, and an explanation how the Fellowship funds would to add value to the student's research project. (1 page maximum)

- These elements (in the order listed above) must be merged into a single pdf document and submitted to Denise.Walters@nau.edu by 5:00 PM Friday, February 1, 2019.

Selection Process

A selection panel, consisting of faculty from at least 2 academic units in CEFNS, will review applications, conduct interviews if needed, and select awardees based on the following criteria:

- Minimum requirement: Enrolled (or accepted, with enrollment before an award is made) as a degree-seeking student in a thesis-based graduate program in any academic unit in NAU's College of Environment, Forestry, and Natural Sciences, with a minimum GPA of 3.5 in the graduate program. Students not meeting this requirement will not be considered. US citizenship is not required.
- Degree to which the project will advance conservation of biodiversity or wilderness.
- Degree of innovation in the project, and the scientific rigor and practical utility of the innovation.
- The degree to which the Fellowship will add value to the student's research. It is expected that the student has funds for living expenses, tuition, and health insurance, so that the Fellowship is providing resources to take the research to a new level.
- Personal qualities of the applicant, including work ethic, academic ability, and commitment to a career in conservation. Diversity and family background (e.g., first in family to attend college or grad school) may also be considered.

The selection committee will recommend awardees, and an amount for each award, to the Dean of CEFNS.

Requirements if Awarded

Before filing his or her thesis, each recipient must submit (a) a post-project report (500-1,000 words) that describes outcomes in relation to proposed project goals, and (b) a list of expenditures. This report will be distributed to the selection panel and to Founders of the McRae Fund within 90 days of the completed funding period.