June 8, 2017

France Córdova  
Director  
National Science Foundation

James Olds  
Assistant Director, Bio Directorate  
National Science Foundation

Dear Director Córdova and Assistant Director Olds:

The Ecological Society of America (ESA) is the world’s largest society of professional ecologists representing over 10,000 members across the country. We write to urge the National Science Foundation (NSF) to keep the Doctoral Dissertation Improvement Grant (DDIG) program for the Division of Integrative Organismal Systems (IOS) and the Division of Environmental Biology (DEB). The DDIG award fulfills a very specific need of ecological graduate students and has a disproportionate impact on the field of ecology for the following reasons.

**Training:** Unlike the Graduate Research Fellowship Program (GRFP) and the NSF Research Traineeship Program, the DDIG offers students an opportunity to gain critical experience in writing NSF proposals. Learning how to construct such a proposal, how the process of applying to NSF works, and how to serve as a PI on a project is central to ensuring that early-career scientists are prepared to submit their first NSF standard grant proposal. Few opportunities remain for graduate students to apply for competitive federal funds. Losing the DDIG serves as a critical blow for ecological graduate students.

**Innovation:** The DDIG comes at a time during students’ development when they are beginning to build/establish a sound conceptual and methodological tool kit. They are becoming experts during this time of great creativity. The DDIG provides an opportunity for students to engage that creativity and stretch into areas beyond their adviser’s expertise. It is a stepping stone toward scientific independence. The DDIG’s modest award size also means that NSF can invest in innovative, risky science with potentially high intellectual return-on-investment.
**Broader impacts:** Benefits of the DDIG trickle down. Because the awards often fund field and lab work, many undergraduates are hired on DDIG projects. Many times, this experience is the first paid opportunity for an undergraduate to engage in ecological research. These early experiences for them to engage in research are essential to workforce development. Undergraduates also receive the benefit of graduate student PIs of DDIG projects serving as role models. Working with such a role model is a crucial step to becoming a scientist.

DDIG is a low-cost and hugely important program to the ecological community. The DEBrief blog mentions that staff time for travel arrangements is one reason DEB and IOS are discontinuing the program. Possible solutions to overcome this problem may be using digital communications for the proposal review rather than in person meetings. I note that the GRFP website reflects that NSF currently uses WebEx for its program review panels and it can serve as a digital model for DDIG review panels.

We recognize the fiscal limitations of nominal budgets facing NSF and appreciate the concerted efforts from your offices to ensure our nation remains at the forefront of scientific discovery, innovation, and workforce development. Hopefully, there are ways to continue NSF’s DDIG program investment in early-career scientists that would reduce high workloads and meet changing program priorities. ESA stands ready to work with you.

On behalf of the ecological community, thank you for your consideration of this request.

Sincerely,

David M. Lodge
President

cc: Paula Mabee, Heinz Gert de Couet, Aya Collins