EPSCoR Grant Writing Workshop

Allyson L. Degrassi

Allyson Degrassi

- 3rd year PhD student
- UVM
- Nicholas Gotelli, PhD

My dissertation

- Small mammal ecology
- Harvard Forest, MA
- LTER

My Academic History & Research Experience

SCERP

Certificate in Ophthalmology

Bachelors in Science Biology: Biodiversity, Ecology, and Conservation

GED

Associates in Art Environmental Studies

Teaching Certificate

PhD Student: Biology Ecology of Small Mammals

My Goal After Graduate School

- Research
  - Academia
  - Government
- Teaching
  - College
  - High school science programs

My Path to GRFP

NSF-GRFP

- Before entering graduate school
- Wolf/Coyote hybrids
- 2011- Denied!

Score for Degrassi, Allyson

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Good

Explanation to Applicant

-applicant with generally good prior research experiences that will help in developing the research plan -work would benefit from a larger theoretical context: how and why is the work important? -good hypotheses and local connection between hybridization and mate resource levels...role of geographic factors a bit tenuous, as is methods to quantify putative factors-what are the response variables? -can applicant work with wolves in the lab (how restrictive will IACUC be in carrying out the lab trials?) -minimal information about if student has the molecular background for the research

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Good

Explanation to Applicant

-applicant with a proven track record of outreach education in K-12 and beyond (SI peer-mentor) and with underrepresented groups. The applicant's non-traditional background coming from a community college will help assure this group will be served. -Will k-12 students take part in the research? If so, how? -how will the results be communicated to the above groups (and others)? This is unclear.

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Good

Explanation to Applicant

The applicant has experience with two very appropriate research intern positions, several publications, several presentations, and comes very highly recommended as an instructor with insight into learning disabilities. The letters of recommendation describe a mature individual who works well with group of students, often inspiring the others to greater efforts. The proposed research project addresses potential coyote hybridization. Part of the proposal was confusing, perhaps due to the lack of consensus among biologists regarding species and hybrids. The research has clearly stated hypotheses, but they could have been better supported.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

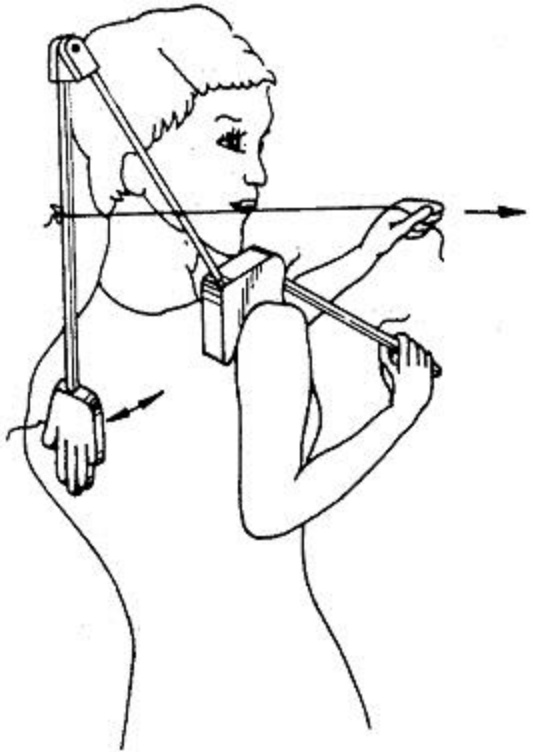
Fair

Explanation to Applicant

I like to read a description on the broader impacts in terms of what the research means and how the research is conducted. Based on the applicant's past record, I believe she will engage a broad audience in her research, but there is no discussion of such an effort in the project description. Furthermore, there is no discussion of the broader impacts of the work in general.

NSF-GRFP

- 1st semester of graduate school
- Small mammal ecology
- 2012- Honorable Mention



Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant has a strong undergraduate record of research experiences through an UMEB program. The proposed research is interesting and well-designed overall. How were adelgid attacks simulated and how might rodent responses between the two different hemlock impact treatments?

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Good

Explanation to Applicant

The applicant has overcome substantial obstacles on the path to a PhD and has shown a strong dedication to K-12 dedication and outreach. This record indicates a high likelihood of using the proposed work to achieve broader impacts, but more detailed information about how this would be achieved would have been beneficial. Also, what are potential implications of the work for applied conservation/forest management?

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

The applicant is highly motivated and has been very active in undergraduate research (e.g. UMEB), presented results of that experience at several conferences, and written up these results for publication. The proposed research is timely (Tsuga decline is in process) and the ecological effects are likely to ramify throughout the forest community; the BACI design seems appropriate to test these ideas. The procedures proposed also seem effective and appropriate. A suggestion may be to collect ancillary data abut the habitat conditions in each of the forest-treatments, to ensure that confounding variables are either not an issue or to allow for these affects as covariates. But over all - great job.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

The applicant in the past was very active in various student mentoring programs (including members of underrepresented groups). The applicant's current PhD program includes developing an ecological outreach program for K-12 students and students with disabilities. The expressed plan to recruit HS and undergrad students in the research itself is valuable and unlike many of her peers is genuinely devoted to this outreach

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant has demonstrated strong academic achievement and an excellent record of dissemination of research products in scientific publications and conference presentations stemming from prior research activities.
The research would investigate the effect of foundation species on rodent populations in eastern hemlock forests. The research is well articulated; further details on the statistical approach (rather than the program used) would improve the research plan.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

The applicant has a history of bringing science to a broader community as a student instructor for high school and undergraduate biology majors and assisting in kids college day for inner-city middle school youth. The applicant is currently developing an ecological research program for K12 students, and intends to continue mentoring undergraduates and high school students in this research project and volunteering for K12 education programs.

NSF-GRFP

- Last Chance!
- Small mammal ecology
- 2013- Awarded!

My Suggestions

- In addition to Alli's comments

- Go to meetings like this
- Start early
- Put Broader Impacts and Intellectual Merit in all 3 essays!
- Get it proof read by your advisor AND peers
- Ask for STRONG letters of recommendation
- Overall: Keep it simple!

GOOD LUCK! Questions?