

CELS Research Committee Meeting Nov. 13th 2019 - Meeting Notes and Discussion

In attendance: Thomas Boving, Niall Howlett (Chair), Jason Kolbe, Elizabeth Mendenhall, Carlos Prada Montoya, Carol Thornber (ex officio)

Absent: Tom Sproul, Mark Stolt

The conversation was a continuation of our previous discussions on increasing our (CELS and beyond) competitiveness for **graduate training program grants**.

- Initial brief discussion on new focus area of **microplastics** and the new funding initiative out of the Division of Research and Economic Development led by VPR Snyder and others. A multi-disciplinary approach is required to tackle this issue, and URI is uniquely poised to be a leader in this field.
 - With growing momentum in this area, are there opportunities to apply for a graduate training grant in this emerging research area?
- Follow up discussion on a graduate level **statistics** course that would be universally beneficial to all CELS graduate students. STA 550 Ecological Statistics (course description below) was discussed. It was pointed out that an advanced statistics course is often more beneficial when students have data in hand and are trying to determine the most appropriate methods to analyze. Also important to consider that a solid foundation in statistics is required to appropriately design experiments to ensure sufficient sample size and statistical power to test your hypothesis.
 - I will reach out to Gavino Puggioni to discuss further, or alternatively we could invite him to a meeting to discuss
- While our discussions have, in general, focused on the development of quantitative skills, students in certain disciplines - and maybe all of our students - would benefit from training in qualitative methods and potentially fieldwork studies - most students rely entirely on their PI for training in these areas
- Importance of improving scientific communication skills among graduate students was also emphasized, e.g. availing of Metcalf Institute resources including the Scicomm Exchange and the SciWrite program
- We also discussed past graduate training grant awards including the NSF IGERT award led by Peter August and Judith Swift. Carol has reached out to Pete and he will attend our next meeting on Wednesday December 4th
- We also discussed how to promote applying for graduate training programs. Should this be solely investigator driven or could the research committee be more proactive about

finding opportunities (SPIN database) and encouraging individuals to lead these efforts?
How could we incentivize/facilitate this?

STA 550: Ecological Statistics

LEC: (3 crs.) Application of statistical methodology to the following topics: population growth, interactions of populations, sampling and modeling of ecological populations, spatial patterns, species abundance relations, and ecological diversity and measurement. (Lec. 3) Pre: STA 409 or permission of instructor.