

CELS Research Committee Meeting December 4th 2019 - Meeting Notes and Discussion

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

Absent: None

Professor Emeritus Pete August joined the committee to discuss the NSF-iGERT graduate training program.

- In 2003, Pete had just become the director of the Coastal Institute
- Team effort: several leaders involved including Pete August (NRS/Coastal Institute), Jim Opaluch (ENRE/Coastal Institute), Candace Oviatt (GSO), Judith Swift (Communication Studies/ Coastal Institute), Art Gold (NRS/Coastal Institute), Cheryl Foster (Philosophy) - 5 PIs and many co-PIs and other personnel
- Resource management; application required different and complementary skills in addition to excellent academic research capacity
- All personnel had worked together on numerous previous proposals such as LTREB and Center grant applications - most of which were not funded, but this experience invaluable
- Need to demonstrate credibility/expertise in multiple disciplines
- Out of the box/highly innovative graduate education: training for the workplace, multidisciplinary coastal ecosystem management including environmental, social, and economic perspectives
- Proposal took 5 submissions to get funded; pre-proposals started in 2003, funded 2005-2010, persistence (tenacity, stubbornness) is key
- Major problem in the writing stage was pruning text to 20 page limit
- The majority of funding was directed to supporting the graduate student tuition and stipends - little in the way of effort for PIs
- A 2-year commitment was required of graduate students
- Most funds went to grad fellowships (2 years + summer funds)
- Graduate student received the in-state waiver
- Indirect costs were limited to 9%; NIH indirect costs on T32 graduate programs is limited to 8%
- Hugely beneficial to have input from someone who serves on the review panel, e.g. NSF NRT panel
- Major aspect of training involved scientific writing: exercises in writing for the public, e.g. newspaper op-ed article, group review article - in unfamiliar topic with multiple rounds of editorial work
- Scientific communication skills emphasized: ethics in science, scientific socialization (small talks), Celestial Café social science discussions
- Outreach and community engagement: interactions with outside peer/decision-making groups (town hall meetings)

- Also emphasized diverse career development and supported a wide variety of internships, e.g. DEM, consultancy firms, DC, other labs)
- T competency training model - classic training, hard skills (vertical part), soft skills (horizontal part) - vertical aligns with faculty mentor expertise; horizontal aligns with broad multidisciplinary training
- Field trip to the Baltimore LTER – urbanization and harbor
- Mandatory summer field class – data collection activities
- What worked from the IGERT went into the MESM program – internships, communication training, creating a workforce to solve problems
- Work-life balance (trainee wellbeing) also emphasized
- From an effort perspective, this was additional to normal duties and so, while renewable, it was determined that this was not sustainable beyond the 5 year period
- Trained 18-20 students in life of grant
- Structure: 5 students per cohort, peer advisors from previous years - year 2 trainees provided mentorship for year 1 trainees
- Look at the current NRT and dissect it to figure out what they are looking for; look for patterns of funding at NSF in general and in the NRT program; what are the URI and CELS strengths that align with program goals and have a unique idea?
- Examples discussed included: Coral reefs (Mars Industries), Indonesia, microplastics, neuroscience at the Ryan institute
- Consider ideas that can be pitched to NSF, USDA, and NIH