REPORT FOR THE UNIVERSITY OF HAWAI'I AT HILO MARINE OPTION PROGRAM
Preparation of a Grant Proposal for Marine Option Program Applied Learning Experiences
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November 28 <sup>th</sup> , 2016

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#### **Abstract**

A grant is a sum of money typically sponsored by a private or public organization to fund projects. The project idea that will hopefully be funded is will join the community and the students of the University of Hawaii at Hilo (UH Hilo) Marine Option Program(MOP) to focus on Hilo Bay watershed health. The National Oceanic Atmospheric Administration sponsors a federal grant to extensively fund projects with meaningful watershed experiences for the community and K-12 students. This project will write and submit a proposal for this grant to involve not only K-12 students, but also university students. The goal of this project is to provide future MOP students with applied marine science education experience for their MOP projects.

### Introduction

A grant is a sum of money private or public organizations and foundations offer to fund projects across several disciplines. It does not have to be repaid and can finance professional research, community projects, and more (Pfau 2015). The funds must be used to complete a project within a certain timeline, provide deliverables, and produce significant outcomes. Non-Government Organizations (NGOs) are highly dependent on grants to continue or start projects.

Grants with a broad project or idea are generally easier to find. However, they tend to be more competitive. Grants with a specific focus tend to be less competitive but have more restrictions that an NGO or other organization may not necessarily want to apply for. For the purpose of this project, grants and funding in environmental science, marine science, and education with general project requests preferably with no matching funds are sought. Grants can have a broad or specific focus in multiple disciplines. The more general or more specific a project increases chances of securing the grant, depending on the RFP guidelines. Two of the main funding sources in the United States for marine and environmental science is the National Science Foundation (NSF) and the National Oceanic and Atmospheric Administration (NOAA). NSF receives 40,000 proposals a year of which only about 11,000 are funded (About Funding 2016). NSF is more research targeted while NOAA, also research targeted, includes funding education outreach components and environmental stewardship projects (NOAA Office of Education 2016).

Grants are usually highly competitive among NGOs and those seeking extramural funding. Writing for grants begins with Request for Proposals (RFPs) or National Research Announcements (NRAs), where a funding source develops guidelines for project proposals that align with their mission statements or vision. The application and instructions for the grant are within the RFP (OSU Procurement 2016). Advanced planning with good time management and collaborative writing are some of the key pieces of the proposal (n.d. 2013).

In the 2014-2015 academic year, UH Hilo received \$18,785,111 in non-research funding and \$5,103,131 in research funding. Research funding is any fund awarded to complete a project while non-research funding is "to enhance instructional capabilities" or "scholarly and/or creative activities" (University of Hawaii 2014). The UH Hilo Marine Science Department was awarded \$40,00 for non-research and \$318,153 for research in the 2014-2015 academic year (University of Hawaii 2016).

The objective of this MOP project was to learn about the grant writing process and attempt to submit a proposal on behalf of the UH Hilo Marine Science Department. Additionally, my project aimed to increase the chances both non-research funding to support MOP's activities and future MOP student projects/internships through community partnerships.

## **Methods and Materials**

The UH Hilo MOP aims to provide students regardless of major with skills based opportunities or internship experience in the Marine Sciences (Marine Option Program 2016). Funding to financially support these project experiences and workshops are relatively scarce year to year. However, funding through grants with similar missions to MOP's are able to support large scale multi-year projects.

This MOP project idea originally started when I was on a student committee for a sustainability grant. My MOP advisor and co-coordinator, Lisa Parr, was a faculty member assisting with the logistics of the proposal. Lisa asked how I was involved with this committee and I expressed interest in gaining grant writing experience. I met with her the following week and we went over project proposal ideas that would help create MOP student projects or general opportunities. The project idea that I based my proposal writing off of was providing K-12 educators workshops for teaching coastal methods and also having K-12 students perform water quality and other coastal measurements. The workshop curricula would be developed by UH Hilo MOP and Marine Science students. Lisa mentioned a federal grant called the Bay Watershed Education and Training (B-WET) National Oceanic and Atmospheric Administration (NOAA) Grant and drew from past experiences of what could be expanded on in the future with this specific grant. I made the B-WET grant the focus of my proposal writing, but also searched for other grants similar to B-WET such as the NOAA's Marine and Education Training Mini Grant.

The B-WET NOAA grant is sponsored by NOAA's Office of Education whose mission is to advise the Secretary of Commerce for Oceans and Atmosphere on environmental literacy and promoting STEM sciences for the next generation (NOAA Office of Education). The RFP is offered annually and regionally throughout the United States. In Hawaii's case, it is only competitive statewide.

The previous RFP for the 2016 B-WET Grant was heavily reviewed to identify key objectives and instructions in preparation for the 2017 B-WET Proposal. Key objectives from the 2016 B-WET Grant were that the project must be integrated with the school and community, provide informal applied learning experiences for K-12 students or educators, and have a regional focus in the ahupua'a (Hawaiian watershed).

In August 2016, NOAA held a Federal Funding Opportunity Grant Workshop at the Humpback Whale Sanctuary in Kihei, Maui. I was able to attend this workshop and clarify questions I had about the B-WET Grant. I was also introduced to the logistics of federal funding.

### Conclusion

What I have learned through this proposal writing process are that grants are highly selective when choosing proposals to fund. Project feasibility, adhering to specific guidelines, and creating partnerships are qualities of successful proposals.

The Federal Funding Opportunity NOAA workshop was an informative opportunity with a B-WET focus. The coordinators of the Hawaii Regional B-WET grant, Jim Foley and Stephanie Bennet, hosted this workshop. I was able to ask and clarify any questions I had about the process with them and learn about the logistics of the application packet such as budget and other applicable forms for B-WET. This workshop also provided examples from previous B-WET recipients that I have constantly referenced while writing the proposal.

Although the final 2017 B-WET proposal was not submitted, I did accomplish several goals I had for this project. I reviewed previous successful manuscripts for B-WET and other

unrelated grants. I attended a grant writing workshop and practiced formal proposal writing. Overall, this MOP project experience with proposal writing better prepare me to apply for funding in my future graduate work. Sections that still need to be expanded in the draft are approach/methods, benefits, and project summary.

I hope this project will be used in whole or in part for other grant proposals to support MOP and Marine Science students in the future. Funding typically appears to be a downfall or restraint for some student projects. My hope is that the proposal will assist MOP with providing experiential learning for the next generation of MOP students.

## References

- Marine Option Program (2016) About MOP. http://www.uhhmop.hawaii.edu/links\_home/about.shtml (accessed 25 November 2016)
- n.d. (2013) Welcome to the Dark Side of Grant Writing. W Jour of Nursing Research 35:967-969
- NOAA Office of Education (2016) http://www.oesd.noaa.gov/overview.html (accessed 1 Feb 2016)
- NSF (2016) About Funding. http://www.nsf.gov/funding/aboutfunding.jsp (accessed 20 Feb 2016)
- OSU (2016) OSU Procurement and Contract Services http://pacs.oregonstate.edu/pacs/procurement/how-do-i-start/request-proposal-rfp (accessed 4 Feb 2016)
- Pfau S. (2015) Community Tool Box. http://ctb.ku.edu/en/table-of-contents/finances/grants-and-financial-resources/writing-a-grant/main (accessed 3 Feb 2016)
- University of Hawaii (2014) Extramural Grant Policies. http://www.ors.hawaii.edu/index.php/apply/uh-hilo-faculty/extramural-grant-policies (accessed 19 Feb 2016)
- University of Hawaii (2016) 2014-2015 Annual Report for UH Hilo. http://www.ors.hawaii.edu/index.php/reports/annual-executive-managerial-reports/85-reports/351-2014-2015-annual-report-for-uh-hilo (accessed 19 Feb 2016)