

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

The applicant proposes to work on the impact of topographic complexity on biodiversity, settling and recruitment in marine systems. This is an important question in benthic ecology. The proposal is very well-written, with clear and thorough methodology. The applicant's letters are very strong and express confidence in the applicant's likelihood of success. The applicant's prior experiences indicate a high level of maturity and the ability to design and conduct the work necessary for this project.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

This work shows the likelihood of strong broader impacts. The applicant has already been engaged in public outreach working with Boy Scouts, high school students and other groups. She plans to continue in a similar vein, working with the Monterey Bay Aquarium to do outreach with K-12 and underserved populations. Beyond this, she has already presented her work publicly, and will likely continue to do so in future.

Summary Comments

This is a very well written application that details a good plan for study of an important topic in marine ecology as well as a strong plan to contribute to broader impacts. The letter writers-- all established scientists-- express high confidence in the applicants potential for success in her work. The applicant plans to work with K-12 groups through the Monterey Bay Aquarium as part of her plan for Broader Impacts.

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant's background suggests a lot of passion and dedication to the particular study area in marine ecology. Being a graduate of UCSC and having experience of working at several interationally reputed institutes such as MBARI and the Hopkins Marine Lab, the applicant's academic background seems pretty solid. The applicant has undergone a lot of essential training, both in the field and also in classroom coursework, that is needed to take-up the challenging problem that is proposed for graduate research.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

The applicant has also shown lot of potential for community-oriented educational work and for engaging under-represented

communities. She expects to actively engage high-school students and undergraduates in her field work during graduate research, which is believable based on her background.

Summary Comments

In summary, I believe the applicant has all the credentials to take up the complex problem concerning the effects of topographic complexity on CCA habitats. From a larger perspective, this is an important problem since it relates to Ocean Acidification. Also, the applicant has shown considerable ability in engaging with researchers from different institutes and areas of expertise within the broader field of marine eco-systems.

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Excellent

Explanation to Applicant

The applicant's proposed work on marine benthic ecology, understanding spatial distributions and controls is of very high merit. If successful her work could be used across ecological fields broadly.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Excellent

Explanation to Applicant

The applicant has extensive experience in bringing marine science concepts to a broader audience including undergraduates and the public. Her plan for broader impacts is strong and well thought out. She has the commitment, skills and expertise to be successful.

Summary Comments

This is an excellent proposal with clear scientific merit and broader impacts. The candidate is well prepared and has a tremendous amount of experience which will ensure her success as a graduate student and in her career.