

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The intellectual merit of this proposal is very good. The candidate has a high potential for advancing knowledge through her proposed work exploring the 3-dimensional habitat use of blue and mako sharks. The proposal is well written, with clearly defined aims and methodology. The candidate is well prepared based on her very strong academic record and prior research experiences, including work in this field directly. In addition, the candidate has already been accepted to a graduate program and seems likely to have the resources needed to complete her work in graduate school.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Very Good

Explanation to Applicant

The work described in this proposal has very good broader impacts. The research has the potential to improve conservation of organisms about which little is known. The candidate proposes to mentor high school students during graduate school; given her work as an undergrad, she seems likely to follow through with this plan. Her Spanish language skills are likely to be a benefit working with the Hispanic community at her graduate institution. The proposal is overall quite strong, but would be improved by more concrete plans for broader impacts.

Summary Comments

This is a strong proposal to investigate habitat use by two sharks with seemingly overlapping potential niches. The applicant has a strong background in both academics and research and shows a good likelihood of success in the work she proposes. She has also outlined a good approach to achieving broader impacts in her work.

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Good

Explanation to Applicant

Applicant gained valuable experience in field and lab-based research as an undergraduate student. She will explore differences in (three-dimensional) habitat use and behavioral states (i.e., transient vs. resident) between blue and mako sharks. The research statement didn't fully link these dynamics back to ecological theory or 'why the research matters' (beyond a sentence or two stating potential to reduce bycatch by changing the depth of gear setting).

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Good

Explanation to Applicant

Applicant mentored high school students in Shark Camp and served as the elected president of her SCUBA club. She will continue mentoring students in graduate school. Additionally, both shark species are listed as endangered/threatened and her

work could be used to optimize conservation efforts.

Summary Comments

Overall, strong research and personal statements. Both could be further developed with details/examples.

Intellectual Merit Criterion

Overall Assessment of Intellectual Merit

Very Good

Explanation to Applicant

The applicant is outstanding in academic record with a very high GPA and some research experiences, including working as a Coastal and Environmental Fellow and presenting a poster at the URI undergraduate research symposium, and thesis work analyzing tags on sharks. Later a summer project as a Naval STEM Intern for the Naval History and Heritage Command Underwater Archaeology Branch. The applicant has received a few honors including Dean's list, the URI Honors program. The intellectual merit in the personal statement is good, yet I expect more scientific contributions of those data on shark ecology.

Broader Impacts Criterion

Overall Assessment of Broader Impacts

Fair

Explanation to Applicant

The applicant had a passion for marine biology at an early age and then gradually evolved to pursue of marine biology as a career. Experiences on broader impact seem is little, therefore, the BI section in the proposal is inappropriate. The applicant lists the potential benefits to the fisher and publication. I encourage the applicant to take one step further to highlight the benefits of the research project on fishers, the ocean environment, climate change policy, and student participation. A solid detailed plan for the proposed activities is missing.

Summary Comments

The applicant is outstanding in academic record with a very high GPA and some research experience. The intellectual merit in the personal statement is generally appropriate, yet I expect more specific scientific contributions of those data on shark ecology. The applicant had a passion for marine biology at an early age and then gradually evolved to the pursuit of marine biology as a career. In the proposal, the applicant listed the potential benefits to fisher and publication. I would encourage the applicant to take one step further to highlight the benefits of the research project on fishers, the ocean environment, climate change policy, and student participation. Furthermore, a solid detailed plan for the proposed activities is missing.