**Project Title**

**Overview**

What is the need or opportunity your work will address? What current approaches/methods are used, and how are these current approaches limited/insufficient?

In the context of the need for your work described above, what is your long-term career goal in terms of both research and education?

Toward that long-term goal, what is the overall research goal of the five-year CAREER program? What are the research objectives that will be completed in pursuit of this goal?

What is the overall education goal of the five-year CAREER program? What are the education objectives that will be completed in pursuit of this goal?

**Intellectual Merit**

Describe the potential of the proposed activity to advance knowledge. What is novel in the proposed approach? What knowledge will be advanced, and how will this new knowledge inform future work in your field and other fields?

**Broader Impacts**

Describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes. How might results of this work ultimately inform applications that benefit society?