Mississippi State University

Mississippi Agricultural & Forestry Experiment Station (MAFES)

College of Agriculture and Life Sciences (CALS)

National Science Foundation's Faculty Early Career Development Program (CAREER)

PURPOSE

The purpose of this guidance is to provide background information and tips for faculty considering applying for the prestigious NSF CAREER program.

BACKGROUND

This NSF program supports early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research. NSF encourages submission of CAREER proposals from early-career faculty at all CAREER-eligible organizations (MSU qualifies) and especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply. **Always use most current program solicitation for requirements and deadlines.*

GUIDANCE

Typically, the annul deadline for application is towards the end of July. The application package takes substantial time and effort to complete and should be started *at least* 6 months in advance. To be eligible, the PI needs to meet requirements as of the annual deadline. A PI may only submit one CAREER proposal per annual competition and may not participate in more than three CAREER competitions.

The CAREER award, including indirect costs, is expected to total a minimum of $400,000 for the 5-year duration (although some programs are expected to total a minimum of $500,000).

Proposers must meet all of the following eligibility requirements as of the annual deadline:

- Hold a doctoral degree in a field supported by NSF
- Be engaged in research in an area of science, engineering, or education supported by NSF
- Hold at least 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title)
- Be untenured, and
- Have not previously received a CAREER award

NSF CAREER awards are highly competitive and because only three submissions per PI are allowed, and PI must not be tenured, the timeline is critical. Some helpful tips include not applying for this award during the first year of a tenured position. Rather, apply to other NSF funding opportunities and include Co-PIs to help build the proposal. This will help familiarize yourself with NSF. The CAREER proposal is your plan for the next 5-10 years, and thus requires

substantial thought and calculation. It is wise to spend about 1 year on this award application. Another tip is to carefully incorporate research and teaching into the Integrated Education and Research Plan. This plan should carefully articulate your objectives and goals and be based in best practices outlined in the literature. It is not simply a list of activities. But it should have a major integrated educational activity along with smaller activities that also benefits and supports the research and society. Finally, be sure the proposal is limited in jargon only known in the field. It should have high readability and high impact. It is always recommended to view other successful proposals to help guide the structure and outline of a new proposal. Colleagues at MSU who have been selected as a CAREER recipient may be willing to share and help provide guidance!

For more information, visit the NSF webpage: https://new.nsf.gov/funding/opportunities/faculty-early-career-development-program-career

Below are some past recipients of CAREER awards from Mississippi State University:

Colleen Scott – Chemistry

Matthew Ballinger – Biological Sciences

Maxwell Young – Computer Science and Engineering

Mehmet Kurum – Electrical and Computer Engineering

Wenmeng Tian – Industrial and Systems Engineering

Doyl Dickel – Mechanical Engineering

Neeraj Rai – Chemical Engineering

Ali Gurbuz – Electrical and Computer Engineering

Ling Li – Biological Sciences

Sidney Creutz - Chemistry

Kimberly Wood - Geosciences

Dong Meng – Chemical Engineering

Andrew Lawton – Biological Sciences

Christopher Barrett – Mechanical Engineering

Amy Dapper – Biological Sciences

Mahnas Mohammadi-Aragh – Electrical and Computer Engineering

Xin Cui - Chemistry

Virginia Montiel-Palma - Chemistry