

Project Title: NASA Early Opportunities Program for Underrepresented Minorities in Earth and Space Sciences

Period of Performance: 8/1/2016-7/31/2019

Howard University:

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NASA Goddard Space Flight Center (GSFC):

Dr. Blanche Meeson, Chief, Higher Education Programs, Sciences and Exploration Directorate

Project Synopsis

The proposed joint educational effort between Howard University and University of Maryland Baltimore County (UMBC) will target underrepresented minority and women STEM students and expose them to an early career pathway in NASA-related Earth & Space Science research. The major goal of the proposed effort would be to instill interest in Earth & Space Science to Physics, Chemistry, Mathematics and Engineering majors early in their academic careers, so that they become engaged in NASA-related research and become motivated to pursue successful careers and become part of the NASA workforce. To accomplish this goal, the proposed effort focuses on exposing six selected Howard University freshmen to NASA-centric research in Astrophysics, Solar System Exploration, Heliophysics and Earth Sciences throughout their undergraduate tenure. The project will take a multi-faceted approach, with each particular year specifically tailored to each student's strengths and addressing their weaknesses in order for them to experience a wide array of enriching research activities that will help them grow both academically and professionally.

Six research projects will be explicitly specified in the NASA OSSI system for Howard University students funded via this project. The students will be engaged in research with GSFC mentors, which will help establish strong connections between Goddard, UMBC and Howard for the three-year duration of the project. The six Howard University students will be stationed full-time at Goddard during the three summers they are funded by this project. During the academic year, they will be at Howard and will continue their research with the Goddard mentors via regular telecons, e-mail exchanges, video chats & on an average two visits per semester to Goddard for in-person meetings with their research mentors. The students will be extending the research they carry out during the summer with their NASA mentors throughout the academic year, culminating in a Capstone Project and a Senior Thesis. As a result of the proposed effort, these six Early Opportunities Program (EOP) students, who have undergone rigorous training in the Earth and Space Sciences, are expected to be well-prepared to enter the NASA workforce.

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