Abstract
The NASA 2020 JPL-HBCU Internship Project will take place virtually, but be hosted primarily out of NASA's Jet Propulsion Laboratory in Pasadena, CA. This a 5-week long internship project comprised of 10 undergraduate students and 2 faculty members from two Historically Black Colleges and Universities (HBCUs), Howard University and Tuskegee University.

The participating students will be computer science majors. This 5-week internship project will entail introductory lessons and assignments in general bioinformatics, followed by group research projects focused on assessing various metagenomic, read-based taxonomic classification and functional assignment pipelines and contamination removal, and then applying the dominant method to 20+ environmental metagenomes from NASA JPL spacecraft-assembly rooms. Though contingent upon the progress made during the 5-week program, publications with the students are anticipated to result (as has been the case with previous allocations granted from XSEDE/Jetstream, e.g. https://portal.xsede.org/web/xup/publications/-/publications/29856, thanks to allocation TG-MCB200008 in that case).

Keywords
Workshop,Training,Bioinformatics,Internship

Field of Science
Environmental Biology

Allocation end date
2020-08-28

Disclosure of access to other compute resources
We don't have access to any other compute resources for this program though our organizations. We have participants joining from 2 different Historically Black Colleges and Universities (HBCUs), whose institutions may or may not be able to offer different levels of computational infrastructure support. However, rather than rely on that which may be unequal to different participants, we hope to be able to provide the same resources for all through this proposal.

Compute

Select:	"Jetstream IU/TACC"
Amount requested:	483,840 SUs
Comments:	Please see Resource Justification for reasoning.
How many Virtual Machines:	20
How many public IPs:	20

Storage

"Jetstream Storage IU/TACC Storage"

Other

Nothing selected