UMass Dartmouth student awarded 2020 National Science Foundation Graduate Research Fellowship

The National Science Foundation (NSF) recently announced that UMass Dartmouth doctoral student Akira Harper was awarded a 2020 NSF Graduate Research Fellowship. A STEM Education student, Harper's selection as an NSF Graduate Research Fellow is a highly significant national accomplishment and places her amongst an elite group of fellows who have gone on to distinguished careers in STEM or STEM education.

"This National Science Foundation award means that I have begun to desettle spaces in STEM. When I stay desettle, I mean shifting everyone's perspective, in the STEM field, on who these awards are traditionally given to," said Harper. "In my life I grew up with more hardships than blessings, so this award and working with my mentor, Dr. Kayumova, in this graduate program is affording me with the opportunities to affect change for my community for generations to come."

This award provides three years of financial support for Harper to engage in a research project with her advisor, Assistant Professor Shakhnoza Kayumova (STEM Education & Teacher Development). Harper's proposal to the NSF was based on her research on science identity development among culturally and linguistically diverse learners.

"I hope to gain a more powerful critical voice and understanding of how students, who look like me, can enter the spaces of STEM education and excel from K-12 and continue

during their undergraduate and graduate careers. Our STEM field needs critical scholars to question and challenge what a socially just and equitable education looks like, for students of color, in terms of resources, funds, and opportunities. I hope that by researching and trying to understand the perspectives of students of color, while also considering my own, as a black woman who is a first generation doctoral STEM candidate, will allow me to intellectually contribute to the STEM Education field in ways that have not been critically challenged before," said Harper.

Harper's proposed study will examine the role of engagement in science identity development among culturally and linguistically diverse students from nondominant backgrounds in the context of Kayumova's ongoing research project.

Harper earned her bachelor's degree in psychology from UMass Dartmouth and was recruited to the STEM Education Ph.D. program by her current advisor by Kayumova two years ago. The NSF fellowship puts Harper amongst the top graduate students nationwide.

The Graduate Research Fellowship Program is NSF's oldest program, dating to the Foundation's first fully funded year in 1952. Since then, GRFP has supported over 50,000 US citizens, nationals, and permanent residents to pursue advanced degrees in science and engineering. Among its alumni are over 40 Nobel laureates, over 450 members of the National Academy of Sciences, thousands of science and engineering faculty, and many notable individuals in industry, government, and the non-profit sector.