**Project title: Dillard University Women In Space-Force-Sciences High School Experience in Summer (DU SFS WISHES)**

**Publicly releasable Project Summary/Abstract**

Over the last eight years (2014-2021), the DU WISHES program has attracted 376 minority female high school students from disadvantaged school districts and communities from throughout the southern United States, like Louisiana, Alabama, Florida and as far away as Arizona. Thirty-eight percent (38%) of the participants were retained in STEM fields and 9% in medical fields. This program contributed to the success of the Dillard physics department being number two in graduating Black females in Physics in the USA. This proposed outreach program is a continuation of the successful DU WISHES program over the years is designed to support workforce in DAF. The overarching goal of this unique summer program is to target and enroll disadvantaged, underrepresented students, with special emphases on high school-aged black females and veteran/current military high school female students. DU WISHES will also increase awareness of STEM fields among these student populations and increase the capacity in Air Force workforce, which will be grounded in STEM fields that support space science. By increasing the recruitment activities, ensuring the retention in STEM majors among high school and undergraduate students through, providing systemic mentoring in research topic related to DAF, tutoring support systems, this project can provide a blueprint for producing a well-trained cadre of scholars prepared for the workforce. In addition, the program will establish new open-minded communities of learners that embrace and prepared to use new pedagogies to increase the inquiry-based activities and skills through hands-on and minds-on training. Critical thinking and exploration education activities will also help student to discover and explore space science by which will inspire them and to ask how, why, and explore the reasoning behind the observation of the outcomes of the experiments. The DU SFS WISHES program will continue to establish new and talented scholars and maintain them in science and technology fields to provide DAF with the adequate training skills which they need for today's technology of sciences of the Space Force. This helps to bridge the gap of the necessary educational training curriculum which is required for any talented work force. This program will help to bridge the gap of disadvantaged, underserved minorities participants and give a special recruiting attention to veteran/current military high school females in STEM fields. This has been a long-standing problem in every strategic plan for each governmental department or branch.

**Anticipated outcomes:**

**Impact on the institution:** Increase the recruitment of talented, disadvantage, underserved, minority female high school students in the Physics department and inspire them to engage with the current AFOSR funded project and train them for DAF workforce.

**Impact on students:** Contribute to advance the education curriculum, attract more minorities to be trained on Space Force Science and form a broader qualified community for future workforce for the nation's homeland security and create a baseline to further assess the process.

**Impact on DoD:**

The proposed project will contribute to AFRL-AFOSR STEM program described in the latest AFRL-AFOSR- FOA-AFRL-AFOSR-2022-0004.

The unit which the proposal is directed to is the AFOSR, Program Manager: Dr. Kimberly Jacob Morris, AFOSR: FOA-AFRL-AFOSR-2022-0004