



NORTH CAROLINA AGRICULTURAL
AND TECHNICAL STATE UNIVERSITY

PREPARING FUTURE MINORITY FACULTY PROJECT

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AGGIES **DO**



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PFMF Project Goals

- Goal 1: Broaden the participation of underrepresented minorities as faculty in engineering, engineering technology, and the sciences.
 - » Objective 1: Implement an evidence-based comprehensive professional development model that will transform the culture of graduate education and postdoctoral training;
 - » Objective 2: Increase minority graduate student/postdoc's access to mentors, role models and business leaders of color;
 - » Objective 3: Train graduate students in the core competency skills needed to effectively navigate the graduate and postdoctoral training process and to successfully achieve careers in the STEM professoriate;
 - » Objective 4: Collaborate, promote, and plan activities that will enhance and complement existing efforts of project partners to achieve the common goal of increasing the representation and preparation of underrepresented minorities for academic careers in STEM disciplines.

PFMF Project Goals

- Goal 2: Create a Network Improvement Community focused on preparing minority faculty for the professoriate.
 - » Objective 1: Host webinars to identify drivers and share best practices amongst practitioners, researchers, and other stakeholders;
 - » Objective 2: Provide online mini-courses, sample electronic portfolios, and other resources on a website that facilitate sharing of information and broaden the impact of PFMF project successes.

Verizon Innovative Learning Project Partners

16 HBCUs and MSIs- expanding to 24 next year

- Cohort 1: Jackson State University, Kentucky State University, Morgan State University, and North Carolina A&T University
- Cohort 2: University of the District of Columbia (DC), California State University - San Bernardino (CA), Central State University (OH), Clark Atlanta University (GA), Delaware State University (DE), Hampton University (VA), Harris-Stowe State University (MO), and Texas Southern University (TX).
- Cohort 3: California State University, Los Angeles, Dillard University, Florida International University, Tennessee State University



Early STEM Engagement for Minority Males



1,400+ students on partner campuses (summer 2017)

- 18 HBCUs/MSI partners
- 97% minority
- 79% interested in STEM careers
- Increased 3D design, mobile app development and problem solving skills

54 workshop attendees

- 36 organizations

- Attend Workshops/Webinars
- Attend the Annual Symposia
- Select/Engage with Faculty Mentors
- Develop a Professional Development Plan
- Teach A Course
- Create an Electronic Portfolio

Incentives will be given to students who participate in all aspects of the project!!!

- Orientation February 26, 2018 at 11:30 in 2016 Smith Hall
- Monthly Workshop March 26, 2018 at 11:30 in 2016 Smith Hall
- Monthly Workshop April 26, 2018 at 11:30 in 2016 Smith Hall
- Symposium May 18, 2018 at 8:30 a.m. in 2016 Smith Hall

Workshops/Webinars

Potential Topics

- Seminars and hands-on workshops on development of professional credentials, time management, negotiating a contract, and long range career planning.
- Workshops on designing courses, teaching techniques, conflict resolution, grading homework, authoring effective examinations, student advising, etc.
- Teaching one or more courses in STEM subjects at the university
- Hands-on instruction in the uses of new technologies for teaching and research
- Presentations on the governance and functions of academic departments and institutions.

Faculty Mentors

One from NCAT, One from another institution

- Primary mentor is the student's major advisor at NCAT who oversees student research/teaching.
- The second mentor is the external mentor that is selected by participant.
- Mentors should be a tenured/tenure track professor and willing to provide insight on how to successfully navigate the professoriate.
- Additional mentors are welcomed.

Create a Professional Development Plan

Due at April Meeting – Template will be provided

- Fellows are required to meet with their mentors to develop a professional development plan that focuses on areas of teaching, research, and/or outreach that have been identified as needing improvement.
- As a part of their plan, fellows can interview faculty, shadow administrators, participate in faculty meetings, present a paper at a conference, or participate in predefined activities designed to teach them about the professoriate.
- Fellows submit a monthly report of activities completed as a part of the program (Due at the end of each month – one-two pages).

Teaching a Course

Second Year: Observation semester, Actual Teaching Semester

- PDPs should include a teaching experience.
- Observation Semester:
 - » Regular meetings with mentor
 - » Course observations, structured reflection of observations, participation in teaching effectiveness workshops.
 - » Teaching a few classes, grading homework/examinations, developing course materials, creating a lab, holding office hours, supplemental instruction/tutoring, etc.
- Teaching Semester:
 - » Graduate Teaching Assistant or Adjunct Instructor
 - » Peer Evaluation must be conducted.

Creating an Electronic Portfolios

Due at the end of the second year

- Presents details of the student's work from this project stored on PFMF or personal website.
- Contents
 - » Curriculum Vitae
 - » Teaching Philosophy
 - » Research Philosophy
 - » Reference List
 - » Journal/Conference Papers
 - » Proposals Authored/Co-Authored.

Project Outcomes

Broadening Participation of URM's as Future STEM Faculty

- Participants will have teaching experience
- Participants will be better researchers
- Participants will be better prepared to serve as an Assistant Professor in a STEM discipline.
- Increased number of underrepresented minorities serving as STEM faculty members at HBCUs and majority institutions.
- Increased number of underrepresented minorities with tenure in STEM fields at HBCUs and majority institutions.

Any Questions?

All questions are appropriate!!!



Online Survey: Please complete it today!!!

You will be asked to complete a survey from time to time.

- You can complete it on your mobile phones.
- You can view the PFMF pre-assessment survey using the following link:

https://ncat.az1.qualtrics.com/jfe/form/SV_eFATz21fZmc3ZRP