# UMBC

<u>AN HONORS UNIVERSITY IN MARYLAN</u>

The Meyerhoff Scholars Program

Pursuing Academic Excellence, Scientific Research, and the Advancement of Underrepresented Students of Color in the Science, Technology, Engineering, and Mathematics (STEM) fields.

### The Meyerhoff History

- Founder: Dr. Freeman Hrabowski (UMBC president, 1992-2022)
- Initial Funder: local philanthropist Joseph Meyerhoff
- Initial Focus: African American Males
- Current Focus: All high-achieving high school seniors committed to STEM doctoral study (PhD or MD/PhD) and interested in the advancement of underrepresented groups in STEM

## Selected Program Accomplishments

- 450 MSP alumni have received STEM PhDs
- Over 70 MSP alumni hold faculty positions
- 70% of the 249 current students are from underrepresented racial & ethnic groups
- MSP widely recognized as a national model of a highly successful STEM intervention program



## Longitudinal Program Evaluation (1989-2022)

#### Selected Findings

- MSP students 5.3 times more likely to attend a STEM PhD program than comparison students
- MSP students 4.8 times more likely to complete STEM PhD than comparison students
- Comparison students: all students accepted into MSP who declined offer and pursued STEM majors at other universities

#### **Major Program Components**

- Summer Bridge Program
- Mentoring
- Research Experience
- Academic/Career Advising
- Cultural Enrichment
- Scientific Conferences
- Graduate and Professional School Placement
- Community Service
- Professional Development
- Staff Support

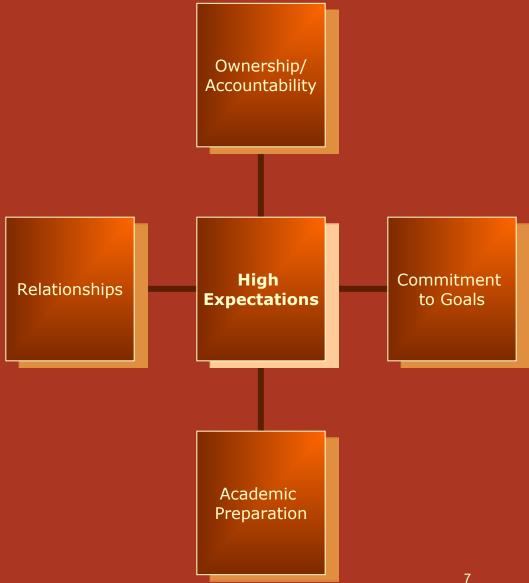
#### **Program Foundation**

 Academic **Preparation** 

 Supportive Relationships

 Commitment to Goals

Ownership and **Accountability** 



#### **Academic Preparation**

#### **Academics**

- CollegiateEnvironment
- Study SkillsEvaluation andModification



Academic Plans

#### **Academic/Career Advising**

- Academic Advisor
  - Department
  - STEM Faculty
  - Peer
- Career Advising
  - Graduate School Counseling
  - Professional Development
  - Program visits
  - Site Visits and Professional Talks
  - Mentoring



#### **Research Opportunities**

#### Research

- Early Exposure
- Laboratory Tours
- Site Visits
- Professional Talks
- Scientific Presentations
- Sustained Research
- Publications





#### Research Experience



Chiana Paschall (M4) 1994

> Volume 244, Number 2 November 25, 1994

Brian Turner (M7) 1999

**Volume 285, Number 1** 





**Ryan Turner** (M7) **2000** 

Volume 301, Number 2 August 11, 2000

Since 1992, over 200 Meyerhoff Scholars have been published including 3 on the covers of the Journal of Molecular Biology.

#### **Building Relationships**

#### **Peer Relationships**

- Connection to Counselor
- Connection to Current Students/Alumni
- Connection within Cohort
  - Team Building
  - Diversity Training
  - Group Responsibility



#### **Building Relationships**

#### **Program Relationships**

- Connection to Program Staff
  - Daily Interaction
  - Early Advising
- Connection to Campus Community
  - Vested Instructors
  - Demystifying "Professor"
  - Administrative Introductions

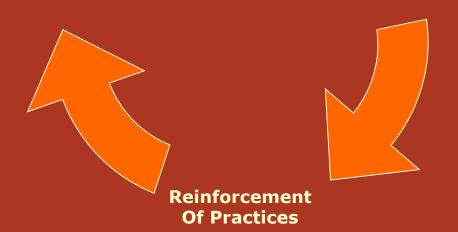


#### **Commitment to Goals**

- Knowledge of Path
  - Academic Rigors
  - Re-evaluate and Modify Existing Practices



- Measurable StepsToward Goals
- Reinforcement of Practices



### Cultivating Ownership and Accountability

#### **Developing a Renewed Perspective**

- Fostering a Legacy
- Interdependence
- Program Promotion
- Connection to Community



#### The Meyerhoff Scholar

- Exhibits intellectual curiosity
- Committed to science and research
- Comfortable discussing issues of diversity
- Believes that excellence demands sacrifice
- Possesses high standards and expectations
- Has no fear of failure nor success
- Encourages others consistently
- Able and desires to work well with others
- Values service
- Functions well in both leadership and supporting roles



#### Meyerhoff Scholars will...

- Grow together
- Learn together
- Discover together
- Serve together
- SUCCEED TOGETHER!!!!





#### **Graduate School Placements (Ph.D. Programs)**

Univ. of Notre Dame

Harvard

Cornell

Rice

Berkeley

Univ. of Pennsylvania

**UMBC** 

Univ. of Massachusetts

Stanford

Columbia University

UCLA

Maryland

MIT

Oxford University

University of Virginia

University of Delaware

University of Penn.

Yale

Duke

**NC State** 

**UNC Chapel Hill** 

Carnegie Mellon

Purdue

Northwestern

Michigan

Rice

**Arizona State** 

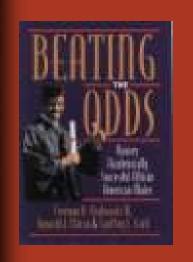
Georgia Tech

University of Florida

Johns Hopkins

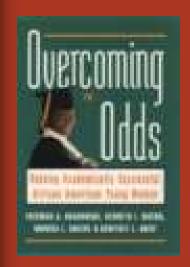
**SUNY-Stony Brook** 

University of Washington



#### **National Recognition**

The New York Times USA Today, **Diversity Digest** Focus, Spring 2004 Journal of Higher Education **US News and World Report** Washington Post **Baltimore Sun** The College Track (Get In, Stay In) (PBS)



National Academy of Sciences **Baltimore Magazine** National Public Radio Harvard Medical Community Magazine Pathways to College Digest

Maryland Tonight (Maryland Public Television)

National Institute of Medical Sciences Black Issues of **Higher Education** The Today Show on NBC

#### **Selected Program Evaluation Publications**

- Maton, K.I., Beason, T.S., Godsay, S., Sto. Domingo, M.R., Bailey, T.C., Shun, S., & Hrabowski III, F.A. (2016). Outcomes and processes in the Meyerhoff Scholars Program: STEM PhD completion, sense of community, perceived program benefit, and research self-efficacy. *CBE-Life Sciences Education*, 15 (3), pii: ar48, doi: 10.1187/cbe.16-01-0062.
- Maton, K.I., & Hrabowski, F.A. III. (2004). Increasing the number of African American Ph.D.s in the sciences and engineering: A strengths-based approach. *American Psychologist*, *59*, 547-556.
- Maton, K.I. Pollard, S.A., Weise, T.V.M., & Hrabowski, F.A. III. (2012). Th Meyerhoff Scholars Program: A strengths-based, institution-wide approach to increasing diversiy in STEM. *Mt. Sinai Journal of Medicine*, 79, 610-623. NIHMSID: NIHMS394552
- Sto. Domingo, M.R., Sharp., S., Freeman, A., Freeman Jr., T., Harmon, K., et al. (2019). Replicating Meyerhoff for inclusive excellence in STEM. *Science*, *364* (6438), 335-337. DOI: 10.1126/science.aar5540