Promising Practices, Strategies and Interventions to Improve Retention and Degree Completion of STEM Ph.D. Students from Underrepresented Groups

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About UMBC

- Medium size public research university (13,637 students)
  - Graduate: 2,684 (30% Ph.D. students)
  - Undergraduate: 10,953
- Will be 50 years old in 2016
- Offer 37 master’s degree programs, 24 doctoral degree programs and 21 graduate certificate programs
Basic Premise

- Diversity programs can only be successful if the climate for all graduate students is one that promotes:
  - Inclusiveness
  - Academic success
  - Self-confidence
  - Life balance
  - Professional development

With the university as a whole serving as a mentor to shepherd each student
What Makes the Undergraduate Meyerhoff Program Successful?

- Fully integrated into the academic affairs infrastructure:
  - Reports to the Provost’s office.
  - Advisory board of STEM department chairs.
  - The most productive research faculty serve as mentors and advocates.
  - Faculty are proud of the program and are eager to have brilliant undergraduate students work in their labs beside graduate students and post docs.
Translating the Meyerhoff Success to Graduate Students

- **Funding:**
  - Meyerhoff Graduate Program in Biomedical Sciences funded by NIH IMSD training grant
  - PROMISE: Maryland’s AGEP
  - GAANN and IGERT training grants
  - CGS Ph.D. Completion Project (Phases 1 & 2) and DIMAC Project
  - LSAMP Bridge to the Doctorate

- **Institutional transformation:**
  - Discussions at graduate program director (GPD) meetings
  - Discussions at President’s Council
  - Discussions with individual department chairs and GPDs
Academic Support
Graduate Student Success Seminars

Thesis and Dissertation Coach

Summer Success Institute
Professors in Training
Graduate Student Success Seminars

Managing a Family While in Graduate School
Community Building

Friends and Family Celebration of Graduates Picnic

Retreat at Rocky Gap

Fall Harvest Dinner
Four Elements of Psychological Sense of Community

- **Membership**: belonging to a community
- **Influence**: positive influence on student from others and ability to be positive influence and role model to others
- **Integration and fulfillment of needs**: members feel rewarded in some way for their participation in the community
- **Shared emotional connection**: opportunity to bond through shared experiences at retreats, conferences, monthly meetings, celebration of milestones

Results

Change in URM Graduate Enrollment in Natural & Mathematical Sciences and Engineering & IT at UMBC

Change in URM PhD Degrees Awarded in Natural & Mathematical Sciences and Engineering & IT at UMBC
For More Information

- Website: www.umbc.edu/promise
- Twitter: @PROMISE_AGEP
- Facebook: facebook.com/promiseagep