Selected APS Diversity Efforts

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Bachelor and PhD STEM Degrees

Percentage of URM

- Computer Science: BS 20%, PhD 78
- Biological Sciences: BS 18%, PhD 639
- Chemistry: BS 16%, PhD 161
- Engineering: BS 22%, PhD 386
- Mathematics and Statistics: BS 14%, PhD 61
- Physics: BS 12%, PhD 63
- Astronomy: BS 10%, PhD 6

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Bridge Program Design: Underlying Themes

• Focus on underrepresented minorities (Hispanic American, African American, Native American)
• Base components on published scholarship and operational successes of similar programs
• Design program to avoid “rearranging the deck chairs”
• Bring unique position of APS to bear on the problem
• Measurable outcomes must be immediately recognizable by an APS member as having significant value
• Must have significant national impact

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APS Bridge Program: Key Features

• **Recruit** students through graduate programs (unaccepted), undergrad programs (promising but uncompetitive, or unsure)

• **Establish** Bridge Sites (6):
  • Year 1: Advanced undergraduate or grad courses, introduction to grad-level research, active mentoring, progress monitoring, social integration into grad school *(Project funds)*
  • Year 2: Take 1st year grad courses, apply to PhD program, research underway *(Department funds)*

• **Place** additional students (at Partnership Institutions):
  • 44 graduate programs looked at “other” applications (2016), recruited additional students; No direct support, some travel
  • “COM approved” Partnership Institutions; national recognition of program

• **Monitor** student/site progress

• **Research**

• **Disseminate / Advocate**
Institutional Members

- Member Institutions
  - 108 in 36 states
- Partnership Institutions
  - 27 in 16 states
Bridge Program Achievements

Bridge Program Physics PhDs

- 23% Women (20%)
- 93% URM (6%)
  - 64% Hispanic
  - 24% African American
  - 5% Native
- 88% Retention (60%)

National Achievement Gap

Project Funding

Placed/Retained

Left Program

Students

0 5 10 15 20 25 30 35 40

2013 2014 2015 2016 2017

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Physics GRE: Impact of Cutoff Scores

- Fraction (White)
- Fraction (Hispanic)
- Fraction (Black)
- Fraction (Asian)

- 0.44 (White)
- 0.34 (Hispanic)
- 0.09 (Black)
- 0.61 (Asian)
JOIN THE
APS NATIONAL MENTORING COMMUNITY
A program by the American Physical Society

BENEFITS INCLUDE:
- Access to opportunities and resources
- Travel awards to NMC Conference
- Emergency aid fund
- A supportive mentor to help you navigate your degree
- Learn about physics careers

The APS NMC program aims to increase the number of African American, Hispanic American, and Native American undergraduates obtaining physics bachelor's degrees.

WWW.APS.ORG/NMC

SIGN UP
Connect to a local physics mentor.

IT'S FREE!
Not Discussing

• Conferences for Undergraduate Women in Physics (CUWiP)
• Site visits to improve climate for women and underrepresented minorities (CSWP / COM)
• Best Practices for Undergraduate Physics Programs – National Task Force
• Women in Physics Groups
• Childcare grants to meetings
• Code of Conduct for APS meetings (anti-harassment statement and process)
• LGBT+ Task force report
• Professional Skills Development Workshops for Women
• COM / CSWP Policy actions
• ...

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