APS Education and Diversity Programs

Theodore Hodapp
American Physical Society
Director of Education and Diversity
Departmental Programs

- PhysTEC
- APS Bridge Program
  - Minority scholarships
  - Conferences for Undergraduate Women in Physics (CUWiP)
- New Faculty Workshops
- Education conferences
- Physics chairs meeting
- REU site leaders
- Advocating for physics education
- Professional development workshops
- Childcare at meetings
- Mentoring seminar materials
- Ethics case studies

www.aps.org

©2014, T. Hodapp, Email: hodapp@aps.org
Underrepresented Minorities: Undergraduate Majors

US College-Age Underrepresented Minority Population

- Biological Sciences
- Chemistry
- Engineering
- Mathematics and Statistics
- Physics
- Earth Sciences
- URM

277

490
9-10% of BS degrees in physics are granted to underrepresented minorities

52 PhDs awarded to minorities in 2010

Sources: IPEDS Completion survey by race, US Census
APS Bridge Program: Key Components

- Recruiting through graduate programs across the US (now 115+ institutions, representing 75-80% of all doctoral students)
- Spend 1-2 years in a “Bridging program”
  - Take advanced UG or entry-level graduate coursework
  - Graduate-level research
  - Demonstrate ability to do independent research and succeed in graduate-level coursework
  - Receive coaching on preparing graduate admissions package (letters, GRE, statements)
  - Accepted into doctoral program
- Receive mentoring in doctoral program (especially in first years)
- Research into barriers; disseminate successful program elements
- Build a national coalition of departments committed to improving participation
Project Progress

- Bridge Site Selection
  - Ohio State, South Florida, Cal State Long Beach, Florida State
  - planning two in 2015

- Student Recruitment
  - 28 applicants in 2013; 39 in 2014
  - 93% URM, 30% female
  - Most (~75%) grad programs recruiting for this
  - Many undergraduate programs also helping

- Summer Meeting (25-27 June 2014)

- Admissions Study
  - Doctoral; Masters studies
Physics GRE: Impact of Cutoff Scores

- Fraction (White) 0.44
- Fraction (Hispanic) 0.34
- Fraction (Black) 0.09
- Fraction (Asian) 0.61