

Woods Hole Partnership Education Program (PEP): Expanding the Talent Pool



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What is PEP?

Woods Hole: Little Village, Big Science
Sponsoring Institutions/Organizations

The PEP Model & Approach

Selection criteria

Total immersion into the Woods Hole
community

Critical student support

Introduction to emerging issues

Acquiring necessary skills & “real world”
training

PEP Evolution

Multi-year program

PEP Alumni, back in Woods Hole and
elsewhere



Selection criteria:

- Non-traditional
- Broaden diversity
- Under-represented groups
- Markers of potential success
- Letters of recommendation
- Personal statement



Partnership Education Program (PEP)

- Four-week course in global climate change incorporating all oceanographic disciplines (academic credit)
- Summer-long research project
- Professional development opportunities
- Living expenses and stipend
- Community participation

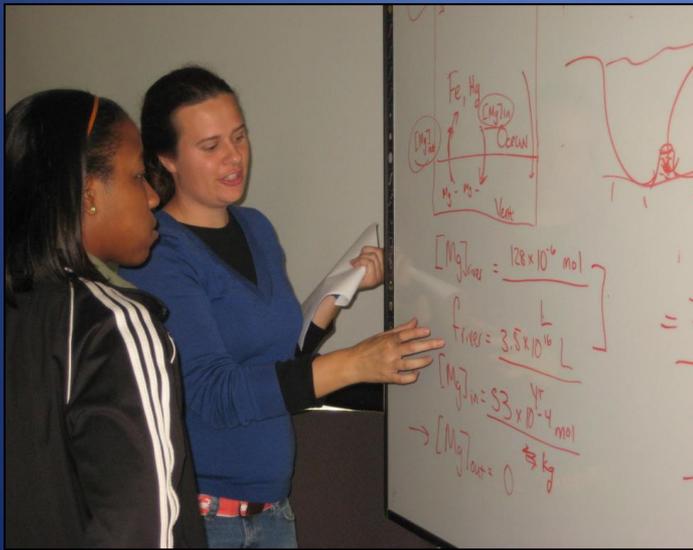


Ocean and Environmental Sciences: Global Climate Change

- 4-credit, 4-week course
- Hands-on survey of Global Climate Change through Marine Science
- Cross-disciplinary integration
- Data analysis



Marine Biology: DNA extraction



Marine Chemistry: problem sets!



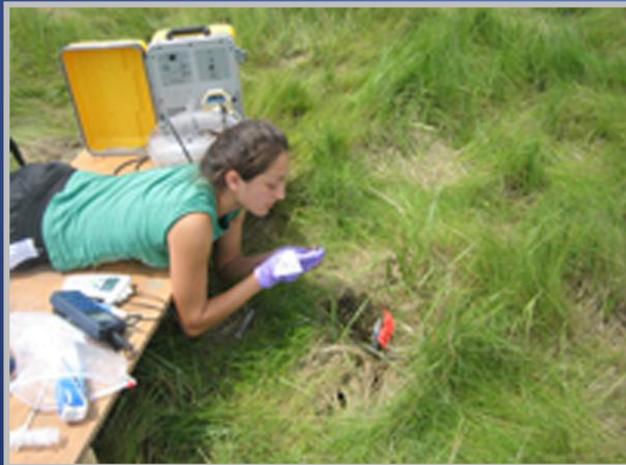
Marine Geology: learning how to survey

Summer Research Internships:

- 10-week research project
- Research mentors matched to students
- “Cutting edge” research



Instrumentation testing



Salt marsh carbon fluxes



Estuarine chemical analysis

Professional Development:

- Scientific ethics workshop (WHOI)
- Graduate school and early career discussions (WHOI/MBL)
- One day experience aboard a research vessel (WHOI)
- Public speaking workshops



Extra-curriculars:

- Harvard Museum of Comparative Zoology
- Mashpee Wampanoag Pow Wow
- Tour of New Bedford, MA Whaling Museum
- Whale Watching (Provincetown, MA)
- Scientific talks (MBL, WHOI)
- Collaboration with other intern programs
- Woods Hole Diversity events
- Talent show



Whaling Ship, New Bedford



Mineral Collection (Harvard)

Presentations and Final Symposium

- Mid-term presentations
- Final presentation:
12-minute professional meeting talk
- Symposia provide a view of the breadth of science in Woods Hole



PEP Data: 2009-2016

- 122 Students from 77 colleges and universities
- 66 students or 52% came from one of 23 Minority Serving Institutions (MSI)
- 61 women and 40 men from minorities under-represented in STEM
- Ethnicities: 56 African American; 25 Hispanic; 11 White; 4 Native American; 2 Pacific Islander; 24 Mixed/Other
- 85% are Under Represented Minorities
- 96% have completed (76%) or are working (20%) on bachelors degrees
- 14 have Masters; 2 have PhDs; 1 has a DVM

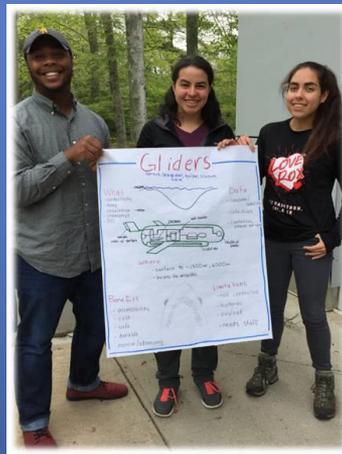


- 13 are enrolled in Masters Programs; 10 are enrolled in PhD programs
- 49% of the students with bachelors have earned or are pursuing graduate degrees
- 52% of the alumni not currently in school are known to be working in science or science-related fields (e.g., teaching science)
- 70% or more of alumni have received travel grants/awards to present their PEP research at leading science meetings



Lessons Learned:

- Recruitment takes personal connections
- Proactive mentoring is key
- Staff investment with mentors is key
- Diversity Training is essential



PEP Successes:

- PHDs and Masters Degrees
- Presentations at professional meetings
- A spring board to other internships, fellowships, and programs such as MSPHDS, Polaris, SOARS, Knauss Fellows
- Employment in science workforce
- Teaching experience for graduate students and post-docs
- PEP students have fostered a sense of community in Woods Hole!



Check: www.woodsholediversity.org
Search for: “PEP Woods Hole youtube”