Minority Graduate Student Recruitment & Retention

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IDEAS FOR RECRUITMENT (1)

• Identify target groups – e.g., students in:
  - Various STEM/life science undergrad majors
  - Postbac programs (URM “bridge” programs, pharmacy students, etc.)

• Leverage/develop personal contacts with undergrad institutions, departments, faculty
  - Visits to meet/recruit at target colleges/universities/scientific meetings where undergrads present research (e.g., EB, SACNAS, ABRCMS)
  - Use grad students and their contacts
  - Use available Society resources (e.g., APS Powerpts, career exploration websites)
IDEAS FOR RECRUITMENT (2)

- Create research opportunities/exploration programs for undergraduates
  - Summer programs
    - Build your own (partner with Grad Division)
    - Society/govt. programs (APS, UGSRF, NSF)
  - Academic year programs (internships, credit bearing research courses)

- Offer awards for undergrad research
  - Build your own in your graduate program or in collaboration with a group of programs
  - Participate in Society award programs (e.g., APS Bruce Awards)
IDEAS FOR RECRUITMENT (3)

- Work with other external programs & organizations to connect with students
  - NIH programs for increasing diversity
    - MARC, IMSD, RISE, Bridges to the Doctorate, PREP (all NIGMS MORE Division programs)
  - NSF programs (REUs)
  - Meetings (local/national) where students present their research
    - ABRCMS
    - SACNAS
    - APS
RETENTION IDEAS (1)

• Consider creating a summer bridge/early arrival program for incoming graduate students
  ➢ Builds knowledge of the campus, procedures, & expectations
  ➢ Can help students understand the trade-offs in selecting a lab in which to work
  ➢ Creates a network of new students who can support each other

• Provide other support groups & mentoring opportunities
  ➢ Encourage students to seek multiple mentors (in and out of the institution)
• Work toward a hospitable, inclusive environment
  ➢ “Dealing with diversity” is a two way street
    ❖ Students need to understand the culture of science & the culture/expectations of your institution/lab
    ❖ Faculty/staff need to be alert to & respectful of the students’ cultural backgrounds
    ❖ Know how to work with students for whom English is not their native language
  ➢ Provide frequent opportunities for communication (e.g., regular meetings with grad director/advisor, etc.)
### Resources

**APS Undergraduate Programs** ([http://www.the-aps.org/education/edu_ugrad.html](http://www.the-aps.org/education/edu_ugrad.html))
- Undergraduate Summer Research Program
- Undergraduate Poster Session at Experimental Biology
- David Bruce Undergraduate Research Awards

**APS Minority Programs** ([http://www.the-aps.org/education/minority_prog/index.htm](http://www.the-aps.org/education/minority_prog/index.htm))
- Minority Travel Fellowships
- Minority/Porter Reception at EB

**Reports/Studies on Effective Recruitment/Retention Strategies**

- Note: Includes information on using Facebook as a recruitment tool

- Note: This is the most recent National Academy of Science report on increasing minority participation in science.

- Link: [http://www.asha.org/practice/multicultural/recruit/litreview.htm](http://www.asha.org/practice/multicultural/recruit/litreview.htm)
- Note: Includes good list of references


- Note: Report highlights programs that have had success in enhancing diversity and inclusiveness in graduate education, and offers policy recommendations aimed at identifying and cultivating talent wherever it exists, with particular emphasis on developing domestic talent from traditionally underrepresented groups.

**Williams, Keith.** *The Potential Role of Minority Student Organizations in the Recruitment and Retention Process at Urban Universities.* 2002. Lincoln, NE: University of Nebraska.
- Link: [http://digitalcommons.unl.edu/pocpwi7/10/](http://digitalcommons.unl.edu/pocpwi7/10/)
- Note: Model program at Forth Worth, TX.

- Link: [http://www.nap.edu/catalog/11329.html](http://www.nap.edu/catalog/11329.html)
- Note: For preparing grant proposals
### Sources for Statistics on Minorities in Science

Statistics on Women and Minorities in Science and Engineering  

Commission on Professionals in Science and Technology (CPST)  
Link: [http://www.cpst.org/](http://www.cpst.org/)

### Minority-serving Colleges and Universities

US Dept of Education List of Postsecondary Institutions Enrolling Populations with Significant Percentages of Minority Students  
Link: [http://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html](http://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html)

### Organizations of/for Minorities in Science

Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)  
Link: [http://sacnas.org/](http://sacnas.org/)

Annual Biomedical Research Conference for Minority Students (ABRCMS)  
Link: [http://www.abrcms.org/index.html](http://www.abrcms.org/index.html)

American Indian Science and Engineering Society (AISES)  
Link: [http://www.aises.org/](http://www.aises.org/)

Just Garcia Hill – an independent collaboration of minority scientists committed to increasing diversity and celebrating contributions to science by minority scientists.  
Link: [http://jgh.hunter.cuny.edu/](http://jgh.hunter.cuny.edu/)

FASEB Society Programs for Underrepresented Students and Scientists  

FASEB Minority Access to Research Careers Program  
Link: [http://www.faseb.org/Marc/MARC-and-Professional-Development.aspx](http://www.faseb.org/Marc/MARC-and-Professional-Development.aspx)

National Institute of General Medical Sciences (NIGMS) Minority Opportunities in Research (MORE) Division  
Link: [http://www.nigms.nih.gov/About/Overview/MORE.htm](http://www.nigms.nih.gov/About/Overview/MORE.htm)

For programs by educational level, see  
[http://www.nigms.nih.gov/Research/FeaturedPrograms/Minority/Programs.htm](http://www.nigms.nih.gov/Research/FeaturedPrograms/Minority/Programs.htm)

Initiative for Maximizing Student Diversity/Development (IMSD)  

Note: “Administers research and training programs aimed at increasing the number of scientists who are members of groups underrepresented in biomedical and behavioral research. Support is available at the undergraduate, graduate, postdoctoral and faculty levels, as well as for education and research infrastructure improvements.” PIs and programs are excellent contact points.

National Science Foundation Human Resource Development (HRD) Programs  

Note: Past PI’s and programs are excellent contact point persons.

National Science Foundation Research Experiences for Undergraduates (REU) Program  

MESA (Mathematics, Engineering, Science Achievement)  
Link: [http://www.ucop.edu/mesa/](http://www.ucop.edu/mesa/)

Note: Works with thousands of educationally disadvantaged students so they excel in math and science and graduate with math-based degrees.

Network of Minority Research Investigators (NMRI).  

National GEM Consortium  

Note: Network of universities and employers focused on building diversity in science and engineering.

Council of Graduate Schools Inclusiveness Initiatives – includes multiple projects and reports  
AAAS projects on diversity:
Link: http://www.aaas.org/programs/education/CareersAll/index.shtml
See especially
* MySciNet – “a place for scientists and students from diverse backgrounds to network and build the personal and professional connections needed to succeed in the sciences.”
Link: http://community.sciencecareers.org/myscinet/
* AAAS Center for Advancing Science and Engineering Capacity: seeks to reinforce those bonds. As a human resource development consulting service, it provides institutions of higher education with assistance in achieving their educational mission in STEM fields.
Link: http://php.aaas.org/programs/centers/capacity/index.php
Understanding Interventions
Link: http://www.understandinginterventions.org/
Note: Annual conference that shares strategies that work. Conference reports summarize findings (e.g., “The Choices Black Students Make: Graduate School or Industry.”)