The Story of BNGAP

Building the Upstream Pipeline of Future Academicians
Dedicated to Research, Education and Leadership

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Objectives

- Review snapshots of diversity and inclusion in the academic medicine workforce;
- List examples of trainees’ perceived facilitators and barriers in pursuing academia;
- Outline upcoming BNGAP activities to promote diverse trainee awareness of and preparedness for academia.
ACADEMIC MEDICINE

“...encompasses the traditional tripartite mission of educating the next generation of physicians and biomedical scientists, discovering causes of and cures for disease, and advancing knowledge of patient care while caring for patients ... highlighting the interrelationships among teaching, research and service....”

Definitions

DIVERSITY
Diversity as a core value embodies inclusiveness, mutual respect, and multiple perspectives and serves as a catalyst for change resulting in health equity. In this context, we are mindful of all aspects of human differences such as socioeconomic status, race, ethnicity, language, nationality, sex, gender identity, sexual orientation, religion, geography, disability and age.

INCLUSION
“...Inclusion is achieved by nurturing the climate and culture of the institution through professional development, education, policy, and practice. The objective is creating a climate that fosters belonging, respect, and value for all and encourages engagement and connection throughout the institution and community.

https://www.aamc.org/members/gdi/about/
In 2012, only **6.9%** of medical school faculty were African American, Hispanic, Native American, Native Hawaiian, or Other Pacific Islander.

<table>
<thead>
<tr>
<th></th>
<th>US Population</th>
<th>Med School Graduates</th>
<th>US Physicians</th>
<th>Med School Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>63.0%</td>
<td>61.4%</td>
<td>55.0%</td>
<td>59.2%</td>
</tr>
<tr>
<td>Black</td>
<td>12.3%</td>
<td>6.7%</td>
<td>4.0%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>5.0%</td>
<td>21.5%</td>
<td>12.6%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.9%</td>
<td>7.5%</td>
<td>5.4%</td>
<td>3.8%</td>
</tr>
<tr>
<td>NA/PI*</td>
<td>0.9%</td>
<td>1.1%</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Multiple</td>
<td>1.9%</td>
<td></td>
<td></td>
<td>1.8%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td></td>
<td></td>
<td>20.5%</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

* = American Indian or Alaska Native plus Native Hawaiian and Other Pacific Islanders for data of census, graduates, and faculty.
Averaged over a 12-year study (Yu et al., 2013), the percentage representation of different races in Academic Medicine was as follows:

<table>
<thead>
<tr>
<th>Race</th>
<th>Professors</th>
<th>Chairpersons</th>
<th>Deans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites</td>
<td>84.76%</td>
<td>88.26%</td>
<td>91.28%</td>
</tr>
<tr>
<td>Asian</td>
<td>6.66%</td>
<td>3.52%</td>
<td>0%</td>
</tr>
<tr>
<td>Black</td>
<td>1.25%</td>
<td>2.69%</td>
<td>4.94%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.76%</td>
<td>3.37%</td>
<td>2.91%</td>
</tr>
<tr>
<td>Women</td>
<td>14.7%</td>
<td>9.2%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

Asians in Academic Medicine “…black physicians showed the smallest percentage increase among all minority academic groups. Likewise, among minorities, they showed the smallest percentage growth at every academic level.”
Faculty Diversity: Women

https://www.aamc.org/members/gwims/statistics/
Faculty Diversity: LGBT

Faculty Forward Survey at UCLA, 2011

- LGBT: 4%
- No data provided: 7%
- Heterosexual: 89%

LGBT faculty perceived less opportunities for growth, less equity in promotions, and less positive about the workplace culture than faculty peers.

Is interest re-cultivated during residency?

**NO.** Straus et al. Systematic review on career choice in academic medicine found that as residents progress through training they become less interested.

A lower proportion of URM medical students than non-URM medical students reported interest in an academic medicine career upon entering medical school (AAMC Matriculating Student Questionnaire).

At the end of medical school, URM in comparison to non-URM continued to express significant disinterest interest in academic medicine careers (AAMC Graduation Questionnaire).
## Do We Have Programming To Enhance The Upstream Pipeline?

<table>
<thead>
<tr>
<th>Pre-Faculty</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Graduate Students</strong></td>
<td><strong>Lecturer, Instructor, Assistant Professor/Dean</strong></td>
</tr>
<tr>
<td>Pre-Graduate Students</td>
<td>Associate Professor/Dean</td>
</tr>
<tr>
<td>Medical Students and Residents</td>
<td>Full Professor/Dean</td>
</tr>
</tbody>
</table>

### Institutional Programming
- Pre-Faculty: ?
- Faculty: Institutional Programming
  - Institutional Office of Faculty Development
  - Hispanic Center of Excellence, Leadership Development Fellowship

### Regional Programming
- Pre-Faculty: ?
- Faculty: Regional Programming
  - Center of Excellence Consortium on Minority Faculty Development

### National Programming
- Pre-Faculty: AAMC Careers in Medicine Program, BNGAP LGBT Trainee Leadership Summit, SNMA Physician Researcher Initiative, NIH/NMA Travel Award, Mayo Clinic Spirit of Eagles "Hampton Faculty Fellows"
- Faculty: AAMC Minority Faculty Career Development Seminar, NHMA Leadership Fellowship Program, AAMC Mid-Career Women Faculty Prof Development Seminar, AAMC Council of Deans Fellowship Program
2009 exploratory study of NE Regional LMSA and SNMA medical student members found that > 60% had an interest in an academic medicine career.
Encouraging Diverse Trainees to Pursue a Career in Academic Medicine
1. Assessment of diverse medical student, resident, and faculty perspectives regarding academic medicine careers;

2. Implement strategy to assist diverse trainees in considering an academic medicine career;

3. Evaluate outcomes and impact of BNGAP initiative
Medical Students and Residents: Perspectives on Academic Careers

Study Design:
Strategic convenience sampling

Instrumentation:
a) Survey (764 participants)
b) Focus Group Discussion Guide (121 participants)

Analysis:
a) Bivariate analysis of quantitative variables, SPSS version 21.0
b) Transcripts analyzed through a grounded theory approach

Population:
Attendees of the Annual Conferences of the National Hispanic Medical Association (NHMA), National Medical Association (NMA), Latino Medical Student Association (LMSA), Student National Medical Association (SNMA), American Medical Association (AMA)


Who Influenced Your Decision

“For me, it was a mentor in my summer research fellowship. We developed a very nice bond and she took me under her wings. I saw what she was able to do in her position and I thought it was something that maybe I'd actually be interested in.” (Black, male, medical student)

Mentors (51)
Teachers/Professors
Principal Investigator
Family Members
Teaching students
Role Models
Champions
“Lack of Mentors”
"The aspect of teaching, like people who pass on knowledge to the next group there's just something I think is very privileged. Very few people have that opportunity to prepare the next generation." (Latino, male, medical student)

Impact the future (79 respondents)
Contribute to your community of interest
Intellectual stimulation
Work activity (i.e. teaching, research)
Role modeling/mentoring
Fit with personality and interests
Job characteristics (i.e. flexibility, guaranteed salary)

Perceived Challenges

“I think the huge thing lacking is if you’re interested, this is how you do it. I feel like there are tons of information out there ... if you want to be a surgeon do this ... but if you want to teach future physicians or if you want to do academic medicine there is no then do this. It seems all very secretive to me.” (White, female, medical student)

Lack of information on academic medicine as career option (37)
Lack of role models/mentors, especially congruent ones
Lack of competency to perform scholarly research
Perception that academic medicine does not align with personal interests
Difficult to get promoted especially if diverse individual
Concern of low academic earnings
Gender and racial discrimination
Politics and bureaucracy

"...as someone interested in teaching, I should have in undergrad been encouraged to do TA-ship because when you apply for TA-ships, people want to see that you have experience. When you move further on, people just want to see that you have a history of dedication to teaching." (Latina, female, medical student)

Gain research experience (14)
- Gain teaching experience
- Access to academic medicine role models/mentors
- Participate in professional development organizations/conferences
  - Assume leadership roles
  - Acquire second degree
  - Be self motivated
  - Be financially conservative
“Where I would like to be is working in a predominantly Latino community with children and families working on wellness together with pediatric prevention. And how I see that is working partly in a clinic where I would see pediatric patients. Also being able to teach not only students but families itself, family members, people in the community working with the schools to be able to develop a community-wide effort certainly to try to make a change.” (Latino, female, resident)

Traditional academic activities
(Clinical>Teaching>Research>Admin work)
Pursuit of senior leadership positions
Community work
Family and career
Intervention – Webinar to Promote Career Awareness

- Content informed by >2,000 BNGAP study participants
- Content informed by informants from national organizations and academic health centers
- Webinar speakers are diverse leaders from across the country
- Webinar offered in each time zone recognizing trainee constraints
• Offered in each region to be accessible and low cost
• Offered at academic health centers that hire faculty
• Curriculum designed by diverse academic leaders from various national organizations and academic health centers
1 ½ days of workshops by distinguished academicians:

– Explore academic medicine careers to fit with your personal/professional interests.
– Navigate the array of academic medicine career paths and opportunities.
– Develop and enhance your academic medicine portfolio.
– Expand your network among academic medicine colleagues and role models.

Registration opens January 20, 2015

Space is limited, so register early! The early bird discount is available until one month prior to the regional conferences.

Visit www.bngap.org for the agenda, registration, and additional information. The registration process includes a pre-conference survey and selection of breakout sessions.
Curriculum designed by distinguished academicians

Curriculum implemented and evaluated at regional conferences

Curriculum submitted for MedEd Portal consideration for easy dissemination to all institutions
Intervention - Regional Conferences to Promote Career Awareness/Planning
a) What are our next steps to joining the BNGAP community?

   i. Identify and register trainee participants for regional conference

   ii. Inform BNGAP if your institution is interested in hosting a 2016 regional conference

   iii. Inform BNGAP if you (trainee or faculty) are interested in participating on 2016 Core Curriculum Committee for Regional Conferences
Next Steps

a) How can we collaborate?

i. Take inventory of resources at your own institution that support diverse trainee recruitment and retention into the academic medicine pipeline

i. Discuss with regional and national partners activities and best practices in supporting diverse trainees
Final Tips

a) What are next steps to exploring an academic career?
   
i. Assess interests, values, strengths, weaknesses, and skills;

   ii. Align your preferences and activities;

   iii. Transform teaching, research, service work into scholarship;

   iv. Document to build an academic foundation;

   v. Publish
Register for Regional Conferences

2015 Academic Medicine Regional Conference Registration

Please complete the following form to register for the 2015 Academic Medicine Career Development Regional Conferences. If you select a payment option, you will be prompted to pay via Paypal.

*A copy of an ID or letter is required to register. If you'd like to register before providing a scanned copy of either, please bring an ID or letter to the conference.

http://bngap.org/2015-academic-medicine-regional-conferences/regconfregistration-information/
Sponsors and Collaborators

Sponsors

- BNGAP
- AAMC

Regional Collaborators

- Icahn School of Medicine at Mount Sinai
- Rutgers New Jersey Medical School
- Albert Einstein College of Medicine
- Weill Cornell Medical College

National Collaborators

- UNM School of Medicine
- Loyola Stritch School of Medicine
- FIU Herbert Wertheim College of Medicine
- UCDavis School of Medicine
- National Hispanic Medical Association
- College of Medicine Tucson
- Association of Native American Medical Students
- UCSF School of Medicine
- Association of Pacific Islander Physicians