Diversity Resources and Data Snapshots

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The Physician-Scientist Workforce: Race and Ethnicity Diversity

Diversity in the biomedical research workforce is critical to ensuring the realization of our national clinical and scientific research goals.

This presentation combines The National Institutes of Health (NIH) & Association of American Medical Colleges (AAMC) data to highlight national trend in the racial & ethnic diversity of the physician-scientists career pipeline.

*n.b.: The National Institutes of Health (NIH) has suppressed most Native American Physician-Scientists data because of the low n.*
Physician-Scientist Workforce Overview

• The development of the Medical Scientist Training Program (MSTP) in 1964 resulted in medical schools becoming a key producer of Physician-Scientists
  • 2011: 111 U.S. Medical Schools offered the M.D./Ph.D. degree
  • Enrollment in the M.D./Ph.D. has increased over the last decade, but remains only a small portion of medical school graduates (Jeffe, et al., 2014).

• The National Institutes of Health (NIH) has identified the lack of diversity in the physician-scientists workforce as a primary challenge to clinical and scientific research (NIH/WGDBRW, 2012).

• A diverse workforce results in greater innovation, creativity, and discovery. Diversity can result in higher-quality scientific research (Nelson & Quick, 2012; Phillips, 2014).
Physician-Scientist Workforce: Race and Ethnicity Diversity
Findings

• Racial and ethnic diversity in the physician-scientists workforce is relatively stagnant.

• Fewer underrepresented minorities are in the medical school produced physician-scientists M.D./Ph.D. pipeline.

• Racial and ethnic minorities are under represented in medical school faculty, particularly among M.D./Ph.D. and Ph.D. holders.

• Black/African-American & Latino/Hispanic physician-scientists receiving pivotal NIH K & R01 grant funding has declined.
NIH-funded Physician-Scientist Workforce (FY2008-2012)

NIH-funded Physician-Scientist Workforce, by Race/Ethnicity (FY2008-2012)

- 73% White
- 13% Asian/Pacific Islander
- 4% Black/African-American
- 1.5% Latino/Hispanic

NIH-funded Physician-Scientist Workforce 
%, by Race/Ethnicity & Degree (FY2008-2012)

2014 U.S. M.D./Ph.D. Applicants, Matriculants, & Graduates %, by Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Applicants</th>
<th>Matriculants</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian/Pacific Islander</td>
<td>6.2%</td>
<td>4.1%</td>
<td>4%</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>6.4%</td>
<td>5.3%</td>
<td>4%</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>45.4%</td>
<td>58.9%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>21.9%</td>
<td>21.2%</td>
<td>58.9%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>4%</td>
<td>4%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

n.b.: Native Americans & Alaskan Natives represent 0.2% of the M.D./Ph.D. applicants & matriculants & 0.0% of graduates.

Sources: AAMC FACTS 2014 Table 32 & Table 34; AAMC Student Records System (SRS), 2014.
U.S. Medical School Faculty, by Race/Ethnicity & Degree

Sources: AAMC Faculty Roster Table 12. Distribution of U.S. Medical School Faculty by Sex, Race/Hispanic Origin, and Degree
Individual NIH Career Development (K) Award Rate, by Race/Ethnicity

Black/African-American K Award Rate declined 8.5% from 2000 to 2012.

Latino/Hispanic K Award Rate declined 14.8% from 2000 to 2012.

Individual NIH R01 Award Rate, by Race/Ethnicity

- **Asian/Pacific Islander**: 29.6% in 2000, declined to 17.1% in 2012.
- **Black/African-American**: 20.8% in 2000, declined 3.7% from 2000 to 2012.
- **Latino/Hispanic**: 29.6% in 2000, declined 13.2% from 2000 to 2012.
- **White**: 16.4% in 2012.

*Source: NIH Physician-Science Workforce Report (PSW) 2014*
References


Contact Information

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