Scientific Workforce Diversity at NIH

Where we were THEN & NOW

### NIH R01 Grants

**B/AA R01 Grants**
B/AA = Black/African American

<table>
<thead>
<tr>
<th>Year</th>
<th>Grants</th>
<th>Funding Gap</th>
<th>Proportion of all RO1 Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>52</td>
<td>+117%</td>
<td>~2%</td>
</tr>
<tr>
<td>2018</td>
<td>113</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**H/L R01 Grants**
H/L = Hispanic/Latinx

<table>
<thead>
<tr>
<th>Year</th>
<th>Grants</th>
<th>Funding Gap</th>
<th>Proportion of all RO1 Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>183</td>
<td>+113%</td>
<td>~4%</td>
</tr>
<tr>
<td>2018</td>
<td>390</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**White + Asian R01 Grants**

<table>
<thead>
<tr>
<th>Year</th>
<th>Grants</th>
<th>Funding Gap</th>
<th>Proportion of all RO1 Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>4,641</td>
<td>+73%</td>
<td>~94%</td>
</tr>
<tr>
<td>2018</td>
<td>8,014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

R01 Applicants

B/AA R01 Applicants

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>425</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>548</td>
<td>+29%</td>
</tr>
</tbody>
</table>

+29%  

H/L R01 Applicants

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1,034</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>1,362</td>
<td>+32%</td>
</tr>
</tbody>
</table>

+32%  

White + Asian R01 Applicants

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>22,184</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>26,320</td>
<td>+19%</td>
</tr>
</tbody>
</table>

+19%  

Proportion of all R01 Applicants

- B/AA: 2%
- H/L: 5%
- White + Asian: 93%
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2018</th>
<th>Change</th>
<th>Proportion of all K Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/AA K Awards</td>
<td>26</td>
<td>63</td>
<td>+142%</td>
<td>~5.5%</td>
</tr>
<tr>
<td>H/L K Awards</td>
<td>54</td>
<td>74</td>
<td>+37%</td>
<td>~6.5%</td>
</tr>
<tr>
<td>White + Asian K Awards</td>
<td>776</td>
<td>991</td>
<td>+28%</td>
<td>~88%</td>
</tr>
</tbody>
</table>
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

K Applicants

B/AA K Applicants

2013: 119
2018: 185

Proportion of all K Applicants

+55%

~6%

H/L K Applicants

2013: 181
2018: 263

+45%

~8%

White + Asian K Applicants

2013: 2,442
2018: 2,841

+16%

~86%
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

**Training**

**STEM PhDs**
- (2000-2008 Data)
  - 507
  - 7% URM
  - 6,421
  - 93% White + Asian

**STEM PhDs**
- (2018 Data)
  - 14%

**Training Grants**
- (2012 Data)
  - ~10%

**Training Grants**
- (2018 Data)
  - ~20%

- ~90%
- ~80%
Building the Future: NIH Diversity Program Consortium

BUILD
Building Infrastructure Leading to Diversity

2,500+ Students to date
Highly diverse community of students and faculty

- 41% Hispanic/Latinx
- 12% White
- 27% Black/African American

BUILD vs non-BUILD institutions:
- More STEM undergrads + grads?
- Increased science identity, persistence?
- More URMs choosing STEM careers?
- Impact of financial assistance?
- Impact of research experiences?

113 Institutions Nationwide
BUILD institutions must have:
- < $7.5 million NIH Research Grants,
- > 25% undergrads on Pell Grants

Testing the Impact of:
- Stereotype threat
- Critical race theory
- Student entrepreneurship
- Living and learning communities

BUILD
Building Infrastructure Leading to Diversity

non-BUILD

$500 Million Over 10 Years
Building the Future: NIH Diversity Program Consortium

NRMN
National Research Mentoring Network

NRMN Service
- Mentor + Mentee Training
- Virtual Mentoring
- Professional Development
- MyNRMN Social Networking Platform
- Grant-Writing/Coaching

Awards to Grant-Writing Coaching Participants
152 Research Grants (89 from NIH) ~$65 Million

Majority are NIH R01 grants and career-development awards

3,470 Mentors
5,690 Mentees
545 Highly Diverse Participants
- ~1/3 Black/African American
- 67% Women
- ~1/5 Hispanic/Latinx

NRMN Research: New Funding for 2020-2024
Eleven research projects on science of mentoring, such as culturally aware mentoring, inclusive mentor networks, recruiting/retaining physician scientists, addressing microaggressions and impostor syndrome, peer- and inter-institutional mentoring, and more

$500 Million Over 10 Years
Building the Future: NIH Diversity Program Consortium

$500 Million Over 10 Years

CEC
Coordination & Evaluation Center

Collect & Analyze

Using Hallmarks of Success
that measure progress at three levels

Student
Faculty
Institution
Scientific Workforce Diversity Toolkit

https://diversity.nih.gov/toolkit

Transparency and Accountability

tools to enhance diversity and inclusion

diversity metrics

transparency of hiring and promotion

Evaluate effect
Distinguished Scholars Program

NIH values diversity and inclusion

Annual cohort ~15 tenure-track investigators

Self-reinforcing diverse community at NIH

Multi-level mentoring

I feel part of a special group of people, I appreciate the support from NIH leadership.

NIH values diversity and inclusion

2018 Cohort
13 Scholars
• 8 Female
• 2 Black/African American

2019 Cohort
15 Scholars
• 11 Female
• 4 Black/African American

Creating the Future: Transforming Institutional Culture

Scientific Workforce Diversity at NIH

Percentage of URM IRP Tenure-Track Investigators

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<tbody>
<tr>
<td></td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>18</td>
<td>20</td>
</tr>
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