Scientific Workforce Diversity at NIH
Where we were THEN & NOW

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

- **2013**
  - 52
  - +219%

- **2020**
  - 166

**Proportion of R01 Grants**
- ~2%

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

- **2013**
  - 183

- **2020**
  - 428

**Proportion of R01 Grants**
- ~5%

**White + Asian R01 Grants**

- **2013**
  - 4,645

- **2020**
  - 8,368

**Proportion of R01 Grants**
- ~93%
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

R01 Applicants

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2020</th>
<th>Change</th>
<th>Proportion of Applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/AA R01 Applicants</td>
<td>425</td>
<td>703</td>
<td>+65%</td>
<td>~2%</td>
</tr>
<tr>
<td>H/L R01 Applicants</td>
<td>1,034</td>
<td>1,554</td>
<td>+50%</td>
<td>~5%</td>
</tr>
<tr>
<td>White + Asian R01 Applicants</td>
<td>22,184</td>
<td>27,710</td>
<td>+25%</td>
<td>~92%</td>
</tr>
</tbody>
</table>
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

K Awards

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2020</th>
<th>Gap</th>
<th>Proportion of K Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/AA K Awards</td>
<td>26</td>
<td>82</td>
<td>+215%</td>
<td>~7%</td>
</tr>
<tr>
<td>H/L K Awards</td>
<td>54</td>
<td>97</td>
<td>+80%</td>
<td>~8%</td>
</tr>
<tr>
<td>White + Asian K Awards</td>
<td>776</td>
<td>1,006</td>
<td>+30%</td>
<td>~85%</td>
</tr>
</tbody>
</table>
Scientific Workforce Diversity at NIH

Where we were THEN & NOW

B/AA K Applicants

- 2013: 119
- 2020: 189

Proportion of K Applicants

2013: ~6%
2020: +59% ~8%

H/L K Applicants

- 2013: 181
- 2020: 256

Proportion of K Applicants

2013: ~8%
2020: +41% ~8%

White + Asian K Applicants

- 2013: 2,442
- 2020: 2,966

Proportion of K Applicants

2013: ~87%
2020: +21% ~87%
Scientific Workforce Diversity at NIH

**Where we were THEN & NOW**

**STEM PhDs**
  - Total: 6,421
  - White + Asian: 93%
  - URG: 7%
- **(2019 Data)**
  - 507
  - 18%
- **(2020 Data)**
  - 22%

**Training Grants**
- **(2012 Data)**
  - ~10%
  - ~90%
- **(2020 Data)**
  - 78%
Building the Future: NIH Diversity Program Consortium

BUILD
Building Infrastructure Leading to Diversity

1,900 Students to date

All BUILD TL4 (Training Program) Appointees Since Program Inception

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>14%</td>
<td>12.5%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>21.6%</td>
<td>26.7%</td>
<td>24.2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>39.7%</td>
<td>33.7%</td>
<td>35.2%</td>
</tr>
<tr>
<td>Multiple</td>
<td>6.3%</td>
<td>5.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>American Indian/Alaska Native/Other Pacific Islander</td>
<td>3.3%</td>
<td>2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>White</td>
<td>13.1%</td>
<td>16.3%</td>
<td>14.8%</td>
</tr>
</tbody>
</table>

*Percentages do not add up to 100% because demographic categories with smaller Ns (<11) are estimates and “unknown” values are omitted. However, it does not affect the general percentage calculation.

All BUILD RL5 (Research Project) Appointees Since Program Inception

<table>
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<tr>
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<td>Asian</td>
<td>20.5%</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>25.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BUILD vs. Non-BUILD Students:
- More STEM undergrads + grads
- Increased science identity, persistence
- More URGs choosing STEM careers
- Impact of financial assistance
- Impact of research experiences

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

Testing the Impact of:
- Mentorship
- Active learning
- Emphasizing cultural assets
- Mitigating unconscious bias
- Engaging family and support systems

BUILD vs. Non-BUILD

BUILD non-BUILD

Building Infrastructure Leading to Diversity

BUILD

$500 Million for the DPC Over 10 Years
NRMN
National Research Mentoring Network
End of Phase I (March 2019)

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

Awards to Grant-Writing/Coaching Participants

$500 Million for the DPC Over 10 Years

152 Research Grants
(89 From NIH)
~$65 Million

Majority are NIH R01 grants and Career Development Awards

~6,000 Mentors
~2,100 Mentees

Grant-Writing/Coaching Programs Across the Nation

~3/4 Women
~3/4 URG
NRMN
National Research Mentoring Network
Beginning of Phase II

NRMN Phase II Services:
- Mentor + Mentee Training
- Virtual Mentoring
- Professional Development
- MyNRMN Social Networking Platform

During the first year of their research projects, these awardees have primarily focused on recruitment of study participants, refining their evaluation plans, and some have started implementation.

The NRMN research projects are using robust experimental designs to explore evidence-based mentoring and networking approaches. They are testing hypotheses and gathering data.

NRMN Research: New Funding for 2020–2024
Eleven research projects on the 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
Survey Administration:
- The CEC administers consortium-wide surveys to roughly 60,000 students and 2,000 faculty at BUILD institutions, who participated in BUILD-supported activities or who are surveyed as part of the control group.
- Response rates to the 2020 surveys are 16% among students and 40% among faculty, with survey participation being higher from BUILD-involved students and faculty than non-BUILD students and faculty (i.e., the control group).
- The CEC also manages the survey data and provides each BUILD site with their respective data to conduct analyses about the impact of the BUILD interventions and produce peer-reviewed publications.

CEC develops a range of publications and products, including:
- **Data Briefs** describe baseline trends in consortium-wide survey data
- **Technical Reports** provide information on data collection methodology and instruments
- **Publications** and **Literature Reviews** related to the DPC Hallmarks of Success

**Coordination:**
The CEC coordinates webinars and meetings for the entire DPC community.
Scientific Workforce Diversity Toolkit
https://diversity.nih.gov/toolkit

Transparency and Accountability

- diversity metrics
- tools to enhance diversity and inclusion
- transparency of hiring and promotion
- Evaluate effect

Scientific Workforce Diversity at NIH
Creating the Future: Transforming Institutional Culture
Scientific Workforce Diversity at NIH

Creating the Future: Transforming Institutional Culture

Distinguished Scholars Program

NIH values diversity and inclusion

Annual cohort ~15 tenure-track investigators

Self-reinforcing diverse community at NIH

It is my family at NIH!

Multi-level mentoring

NIH values diversity and inclusion

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

2018 Cohort
13 Scholars
- 8 Female
- 5 Male
- 2 Black/African American
- 6 Hispanic/Latinx

2019 Cohort
15 Scholars
- 11 Female
- 4 Male
- 4 Black/African American
- 1 Hispanic/Latinx

2020 Cohort
14 Scholars
- 7 Female
- 7 Male
- 3 Black/African American
- 2 Hispanic/Latinx
- 2 Multi

Percentage of URG IRP Tenure-Track Investigators

0 2 4 6 8 10 12 14