COVID-19 Survey of NIH and Extramural Staff – Preliminary Findings

Marie A. Bernard, MD
NIH Acting Chief Officer for Scientific Workforce Diversity

Michael Lauer, MD
NIH Deputy Director for Extramural Research

December 2020
Presentation Overview

1. Background
2. NIH Workforce COVID-19 Impact Survey Topline Results
3. Extramural COVID-19 Impact Surveys Progress Update
5. Questions & Discussion
COVID-19 Substantially Affects our Workforce

• COVID-19 has changed the landscape of our work environment, within and outside of NIH
  – Remote work and/or physical distance may affect research productivity or trainee career development
  – Unanticipated burden of caretaking, particularly among women, may inhibit productivity
  – Added burden of mental health challenges, stress, and trauma, particularly among underrepresented groups (URGs)

• SWD was tasked with recommending data-driven approaches to:
  – Support the NIH workforce
  – Protect crucial advances in scientific workforce diversity made in recent decades
NIH Workforce COVID-19 Impact Survey

TOPLINE RESULTS
NIH Survey Overview

• Administered July 14 to July 28, 2020
• NIH federal staff, students and trainees, postdoctoral researchers, volunteers, and contractors
• 16,892 valid responses (51.2% response rate)
• Executive Summary released November 19, 2020

Survey Goals

1. Understand impact of COVID-19 on the NIH workforce
2. Identify groups that may be newly vulnerable due to factors related to COVID-19
3. Assess impact of COVID-19 on URGs
4. Enable NIH to implement interventions to mitigate the impact of COVID-19 on its workforce
NIH Workforce COVID-19 Impact Survey

Key Finding 1: Caretaking is Common in the NIH Workforce

- **43.9%** had caretaking responsibilities for individuals who live in their household or family members who do not live with them

- **One in five** indicated that caretaking responsibilities have made work responsibilities *substantially more difficult* to complete
  - **15.7%** among extramural respondents
  - **23.3%** among intramural respondents
Key Finding 2: COVID-19 Has Impacted Job Productivity

Among all respondents, one in four experienced lower productivity

- 69.4% among trainees
- 40.3% among intramural respondents (relative to 8.7% among extramural)
Key Finding 3: Attention to Mental Health May Positively Impact Productivity

- **18.1%** indicated awareness/attention to mental health positively impacted productivity
- Among all respondents, **79.5%** did not use NIH resources to cope with stress and mental health (e.g., Employee Wellness Workshops, Employee Assistance Program)
Key Finding 4: Over Half Uncomfortable Returning Onsite

- **52.9%** uncomfortable with returning onsite (n=16,255)
- Extramural respondents were more likely than intramural respondents to be uncomfortable (71.8% vs. 38.0%)

**Top concerns:**
- 69.2% - Acquiring COVID-19 infection
- 59.6% - Transmitting COVID-19 infection to household members
- 52.7% - Ability to maintain physical distancing

Note: Percentages do not add to 100 due to removal of response groups of five or less for privacy
Extramural COVID-19 Impact Surveys

PROGRESS UPDATE
Extramural Surveys Overview

• NIH and SWD developed and fielded two surveys:
  1) Institutions Survey: > 200 research leaders
  2) Researchers Survey: 45,000 scientists who have been designated as personnel on NIH applications and/or awards

• Data collection concluded November 13, 2020
Institutions Survey: Preliminary Findings

Response Data

- 32% response rate
- 67% at a Doctorate Granting University
- Minority Serving Institutions accounted for 12% of institutions invited to participate, and 18% of total responses received

Factors that Most Negatively Impacted Research Functions (n=222)

- Reduced access to on-site laboratories: 61.6%
- Institutional hiring freezes: 31.7%
- Increased virtual meetings: 22.3%
Institutions Survey: Preliminary Findings (cont’d)

- **Increased expenses involved in ensuring safety** had the most substantial impact; **maintaining a healthy environment** was priority for restoring research operations.

### Factors that Most Substantially Impacted Institutions (n=218)

- 69.2%: Increased expenses involved with ensuring safety of staff and students
- 51.8%: Increased spending on technology
- 46.9%: Loss of housing and dining revenue

### Essential Priorities for Restoring Research Operations (n=224)

- 68.3%: Maintaining a healthy environment
- 61.2%: Developing and implementing phased return plans
- 59.8%: Maintaining financial sustainability
Researchers Survey: Preliminary Findings

Response Data

- 19% response rate
- 77% at academic institutions
- 53% faculty members

Factors that have Negatively Impacted Research*
(n=36,183)

- 54.5% Reduced access to colleagues due to virtual environment
- 48.5% Reduced access to laboratory
- 41.1% Reduced access to core facilities

* Note: Number displayed may change upon data cleaning
Extramural COVID-19 Impact Surveys

Researchers Survey: Preliminary Findings (cont’d)

- **Scientific/medical meeting participation** was the top activity respondents spent less time; **societal and/or political events** most negatively impacted mental health.
Mitigating Impact of COVID-19 on DEI

ACD WGD SUGGESTIONS
Mitigating Impact of COVID-19 on DEI

LEVERAGE NIH RESOURCES
1. Collect data on COVID-19 impacts (focus on URGs)
2. Reformat current funding mechanisms to address financial strains and workforce issues
3. Expand existing programs/trainings (e.g., Distinguished Scholars Program, Diversity Program Consortium, MOSAIC)
4. Promote visibility of successful NIH researchers from URGs

DEVELOP NEW INITIATIVES
1. Promote elevated inclusive excellence during times of crisis
2. Create better standards for hiring diverse faculty and staff
3. Provide trainings, resources, and support (e.g., mentoring guidance, career development)
4. Consider long-term impacts of the pandemic on the future biomedical workforce
Great Minds Think Differently.
NIH Workforce COVID-19 Impact Survey

DATA APPENDIX
Objective 1. Assess Impact of COVID-10 on NIH Workforce

Perceived Career Impacts Vary by Employment Type

Agreed or Strongly Agreed Pandemic Will Probably Have Negative Impact on Career Trajectory (n=16,079)

- Strongly Agree
- Agree

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>Agreed or Strongly Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH Employee</td>
<td>17.0%</td>
</tr>
<tr>
<td>Federal Government Employee*</td>
<td>16.4%</td>
</tr>
<tr>
<td>Volunteer/Special Volunteer</td>
<td>28.6%</td>
</tr>
<tr>
<td>Guest Researcher</td>
<td>38.5%</td>
</tr>
<tr>
<td>Trainee****</td>
<td>40.8%</td>
</tr>
<tr>
<td>Contractor</td>
<td>18.1%</td>
</tr>
</tbody>
</table>

**38.0%** of intramural respondents agreed/strongly agreed (vs. **18.2%** of extramurals)

*Excludes NIH employees
**Includes postbac, special volunteer, predoctoral student, postdoctoral researchers, research fellow, and clinical fellows
Objective 2. Identify Newly Vulnerable Groups due to COVID-19 Factors

Groups Highly Impacted by COVID-19

Respondents in the following categories reported higher-than average responses to questions indicating negative impacts of COVID-19:

• Respondents who perform research
• Early career researchers
• Respondents involved in clinical care
• Respondents who care for young children
• Men in caretaker roles
• Trainees on visas
## Objective 2. Identify Newly Vulnerable Groups due to COVID-19 Factors

Respondents who perform research or clinical care and early career researchers reported **higher-than-average responses** to questions indicating negative impacts of COVID-19.

<table>
<thead>
<tr>
<th>Hypothesized Group, proportion of respondents out of whole</th>
<th>Job Productivity is Lower</th>
<th>Pandemic Will Have Negative Impact on Career Trajectory</th>
<th>Job Satisfaction is Lower</th>
<th>They Are Uncomfortable Physically Returning to Work</th>
<th>Caretaking Has Made it Substantially More Difficult to be Productive</th>
<th>Being Separated from Co-Workers Has Negatively Impacted Workdays</th>
<th>Attention to Mental Health has Negative Impact on Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents, 100%</td>
<td>25.7%</td>
<td>28.5%</td>
<td>18.0%</td>
<td>52.9%</td>
<td>19.4%</td>
<td>26.5%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Respondents working on site, 8.5%</td>
<td>26.2%</td>
<td>28.3%</td>
<td>15.6%</td>
<td>18.2%</td>
<td>14.6%</td>
<td>24.5%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Tenure-track researchers, and early career researchers, 28.1%</td>
<td>44.8% (ACI)</td>
<td>42.9% (ACI)</td>
<td>24.1% (ACI)</td>
<td>41.4% (ACI)</td>
<td>40.9% (ACI)</td>
<td>48.3% (ACI)</td>
<td>n/a (ACI)</td>
</tr>
<tr>
<td></td>
<td>65.7% (TTI)</td>
<td>74.6% (TTI)</td>
<td>31.9% (TTI)</td>
<td>25.9% (TTI)</td>
<td>57.4% (TTI)</td>
<td>69.0% (TTI)</td>
<td>7.1% (TTI)</td>
</tr>
<tr>
<td></td>
<td>69.8% (Trainee)</td>
<td>66.5% (Trainee)</td>
<td>36.5% (Trainee)</td>
<td>24.8% (Trainee)</td>
<td>38.0% (Trainee)</td>
<td>50.6% (Trainee)</td>
<td>11.2% (Trainee)</td>
</tr>
<tr>
<td>Respondents whose work involves research, 36.9%</td>
<td>50.2%</td>
<td>45.9%</td>
<td>27.1%</td>
<td>33.4%</td>
<td>29.1%</td>
<td>40.8%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Respondents whose work involves clinical care, 7.7%</td>
<td>28.4%</td>
<td>29.6%</td>
<td>23.9%</td>
<td>29.7%</td>
<td>21.1%</td>
<td>31.9%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Respondents whose work involves infrastructure support, 1.6%</td>
<td>15.3%</td>
<td>17.4%</td>
<td>14.2%</td>
<td>48.3%</td>
<td>13.2%</td>
<td>16.0%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Note: ACI = assistant clinical investigators; TTI = tenure-track investigators
Objective 2. Identify Newly Vulnerable Groups due to COVID-19 Factors

Respondents who care for young children (0-12), men in caretaker roles, and trainees on visas reported higher-than average responses to questions indicating negative impacts of COVID-19.

<table>
<thead>
<tr>
<th>Hypothesized Group, proportion of respondents out of whole</th>
<th>Proportion Reporting That...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Job Productivity is Lower</td>
</tr>
<tr>
<td>All Respondents, 100%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Older respondents (65+), 7.8%</td>
<td>21.2% (65-74)</td>
</tr>
<tr>
<td></td>
<td>30.1% (75+)</td>
</tr>
<tr>
<td>Caretaker, men, 14.0%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Caretaker, women, 27.9%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Caretakers with young children (0-12), 25.4%</td>
<td>37.3% (under 5)</td>
</tr>
<tr>
<td></td>
<td>27.3% (5-12)</td>
</tr>
<tr>
<td>Trainee on visa, 5.3%</td>
<td>69.5%</td>
</tr>
<tr>
<td>Individuals at increased COVID-19 risk, 42.5%</td>
<td>16.8%</td>
</tr>
</tbody>
</table>
Objective 3. Assess Impact of COVID-19 on URGs

Disparities in Comfort with Return to Onsite Work

52.9% of respondents said they are not comfortable returning to the workforce, with respondents who have a disability and Black or African American respondents reporting the highest levels of discomfort.

![Bar chart showing comfort levels by race](chart.png)

*Contains American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and Other*
Objective 3. Assess Impact of COVID-19 on URGs

Caretaking Inhibited Work, Particularly Among Vulnerable Groups

64.5% of respondents reported that caretaking responsibilities have made it more difficult to complete work responsibilities, with trainees, other gender identities, and bisexual respondents reporting the greatest impact.

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes, It Has Made it Substantially More Difficult</th>
<th>Yes, It Has Made It Somewhat More Difficult</th>
<th>It Has Had No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainee*</td>
<td>14.1%</td>
<td>39.0%</td>
<td>46.9%</td>
</tr>
<tr>
<td>NIH employee</td>
<td>35.3%</td>
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* Includes postbac, special volunteer, predoctoral student, postdoctoral researchers, research fellow, and clinical fellows
**Excludes NIH employees
Objective 3. Assess Impact of COVID-19 on URGs

Certain Groups Experienced Heightened Productivity

Respondents who **have disabilities** and **Black/African-American respondents** were more likely to indicate higher than normal productivity since the pandemic began.

![Bar chart showing change in productivity since pandemic began for those with and without disabilities.](chart.png)