NIH COVID-19 Impact on Extramural Researchers Survey
Survey Implementation Guide

May 2021
Prepared for the NIH Chief Officer for Scientific Workforce Diversity
Prepared by Deloitte
NIH COVID-19 Impact on Extramural Researchers Survey

Survey Implementation Guide

This document describes the measures used in the 2020 National Institutes of Health (NIH) COVID-19 Impact on Extramural Researchers Survey. The survey was fielded between October 14 and November 13, 2020, to 234,254 participants who identified as having a scientific role and had logged into eRA Commons within two years prior to the survey. A total of 45,348 responses were received for a 19% response rate.

During the survey, respondents were asked about their work and household/caretaking status, access to research resources, research productivity, anticipated impact of the pandemic on their career, the institutional support they have received, as well as factors impacting job satisfaction and mental health. When possible, survey measures were based on validated survey items or scales. However, some measures were modified or revised based on the target population and the survey goals.

Prior to fielding, selected questions from the NIH COVID-19 Impact on Extramural Researchers Survey underwent cognitive testing with 9 researchers to test understanding and identify areas for improvement. Pilot testing of the questionnaire was then conducted with 150 additional researchers. Survey items were revised based on cognitive testing and pilot testing feedback prior to fielding the survey with all participants beginning October 2020.

How to Use this Document

All survey measures are presented in this document in the order and format they were administered to respondents when the survey was fielded in 2020. The survey has been annotated to support its use by other institutions and to convey key lessons learned. The following comment types are used throughout this document:

Administration Note: These notes describe survey language, measures, or administration techniques that may be specific to NIH, and therefore may change when the survey is implemented at other institutions.

Opportunity for Improvement: These notes describe lessons learned from the administration process and suggest improvements for future implementation of the survey both at NIH and elsewhere.

Additional Formatting Notes:

The types of survey questions are categorized below:

- Multiple choice questions with response options that are mutually exclusive (i.e., respondents must select only one response option).
- Multiple choice questions with response options that are not mutually exclusive (i.e., respondents can select more than one response option).
- Questions with a free text response option.

Survey logic text is in blue and enclosed in bracket notation.
Table of Contents

Section 1: Survey Information
Section 2: Organization and Role: Questions 1-13
Section 3: Harassment Experience: Questions 14-15
Section 4. Household/COVID-Related: Questions 16-23
Section 5. Research Resources: Question 24
Section 6. Productivity: Questions 25-42
Section 7. Impact on Career: Questions 43-57
Section 8. Institutional Support & Physical Place of Work: Questions 58-74
Section 9. Returning to Physical Workplace: Questions 75-77
Section 10. Job Satisfaction and Mental Health: Questions 78-92
Section 11. Final Feedback: Question 93
Section 12. Demographics: Questions 94-100
The NIH COVID-19 Impact on Extramural Researchers Survey

**Administration Note:** Throughout the survey, a number of components may be revised on an institution-specific basis. These include:
- Survey name and institution administering the survey
- Contact information and key institutional resources for those seeking assistance
- Main sections and timeframes for specific questions
- Adding or removing questions/answer choices as necessary

Thank you for participating in the NIH COVID-19 Impact on Extramural Researchers Survey. Administered by NIH’s Office of Scientific Workforce Diversity, results from the survey will help NIH leadership understand how the workforce at NIH-funded institutions has been affected by the COVID-19 pandemic.

Before beginning, please review the important information below and hit “I agree” at the bottom of this page.

**Confidentiality:** Your responses to the survey are confidential and anonymous. An independent outside entity has been contracted by the NIH to distribute the survey, collect responses, and present survey findings back to NIH in groups no smaller than 5.

**Before You Begin**
- Taking the survey is voluntary. You may opt out at any time by closing the webpage.
- For your responses to be assessed, you will need to click the “submit” button on the last page of the survey.
- You do not need to answer all the questions to submit your responses.

**Contacts:**

For general questions or technical issues about how to complete the survey, please email [insert email of contact person]. If you'd like to learn more about the survey background and objectives, please email the NIH Scientific Workforce Diversity Office at WorkClimate@od.nih.gov.

You can take this survey at your convenience on your mobile device or computer. We need a strong response rate to understand how we can address challenges posed by the COVID-19 pandemic. The survey will close on **October 30, 2020**.

**Administration Note:** For future survey iterations, survey closing dates may need to be adjusted depending on the target response rate or other circumstances.

Thank you!
Section 2. Organization and Role

Q1. Is the research conducted where you work funded by NIH?
   o Yes, I receive funding directly from NIH
   o Yes, I receive funding from NIH through my PI/PD
   o Yes, I receive funding directly from NIH and through my PI/PD
   o No
   o Don’t know

**Opportunity for Improvement:** Respondent feedback indicated that clarification was needed for Question 1. Future survey iterations may benefit from explicitly asking whether the respondent is a principal investigator, a trainee, or neither.

**Administration Note:** The source of funding may be modified or removed based on the administrating entity and the goals of the survey.

Q2. [Display if Q1 = No OR Don’t know] This survey is intended for those conducting research funded by NIH. Please indicate below if you would like to participate in the survey.
   o I would like to participate in this survey
   o I would not like to participate in this survey [END SURVEY]

**Opportunity for Improvement:** Q2 was initially fielded but due to participant confusion over eligibility, it was removed. If survey administrators choose to include Q2, it may be clarified as follows for researchers who are not funded by NIH:

   Q2. This survey is intended for those conducting research funded by NIH. However, we welcome participation from all extramural researchers regardless of funding status. Please indicate below if you would like to participate in the survey.

Q3. Are you currently a Building Interdisciplinary Research Careers in Women’s Health (BIRCWH) scholar?
   o Yes
   o No

Q4. Which of the following best describes the organization for which you work?
   o Academic
   o Government
   o Industry
   o Nonprofit
   o Clinical/hospital/medical center
   o Medical center affiliated with a university
Q5. Is the institution you are currently affiliated with based in the United States? If you are affiliated with multiple institutions, please refer to the primary institution for which you are conducting NIH-funded research.
   - Yes
   - No [END SURVEY]

Q5a. [Display if Q5 = Yes] In which state/territory is your institution located?
   [Drop-down list of states and territories]

Q5b-1 to Q5b-53. [A selection box will appear containing institutions in the corresponding state/territory selected in Q5a] Which institutions are you currently affiliated with? If multiple, please select the primary institution for which you are conducting NIH-funded research. (You can type to search for your institution.)

Q5c. [Display if (Q5a = American Samoa OR Northern Mariana Islands OR U.S. Virgin Islands OR Other) OR if (Q5b = None of the above)] Please specify the institution you are currently affiliated with. If multiple, please enter the primary institution for which you are conducting NIH-funded research. [OPEN END]

Administration Note: Q5b and Q5c required extensive manual coding to incorporate the list of institutions for each state/territory. Automating the process through adding scripts may reduce survey coding time but may require more technical expertise.

Q6. [Display if Q4 = Academic] Which description best describes your career stage?
   - Undergraduate student
   - Graduate student (non-medical)
   - Medical student
   - Postdoctoral fellow
   - Faculty (tenure/tenure-track/non-tenure): 0–6 years after last postdoctoral fellowship position
   - Faculty (tenure/tenure-track/non-tenure): 7–14 years after last postdoctoral fellowship position
   - Faculty (tenure/tenure-track/non-tenure): 15+ years after last postdoctoral fellowship position
   - Researcher, not faculty: 0–6 years after last postdoctoral fellowship position
   - Researcher, not faculty: 7–14 years after last postdoctoral fellowship position
   - Researcher, not faculty: 15+ years after last postdoctoral fellowship position
   - Staff or administrator (not faculty, not researcher)
   - Other (please specify)
Q6a. [Display if Q4 = Clinical/hospital/medical center OR Medical center affiliated with a university] Which description best describes your career stage?
   - Graduate student (non-medical)
   - Medical student
   - Resident
   - Postdoctoral fellow
   - Faculty (tenure/tenure-track/non-tenure): 0–6 years after residency/last postdoctoral fellowship position
   - Faculty (tenure/tenure-track/non-tenure): 7–14 years after residency/last postdoctoral fellowship position
   - Faculty (tenure/tenure-track/non-tenure): 15+ years after residency/last postdoctoral fellowship position
   - Researcher, not faculty: 0–6 years after residency/last postdoctoral fellowship position
   - Researcher, not faculty: 7–14 years after residency/last postdoctoral fellowship position
   - Researcher, not faculty: 15+ years after residency/last postdoctoral fellowship position
   - Staff or administrator (not faculty, not researcher)
   - Other (please specify)

Q6b. [Display if Q4 = Government OR Industry OR Nonprofit OR Other] Which description best describes your career stage?
   - Researcher: 0–6 years after last postdoctoral fellowship position
   - Researcher: 0–6 years after last advanced degree (no postdoctoral fellowship)
   - Researcher: 7–14 years after last postdoctoral fellowship position
   - Researcher: 7–14 years after last advanced degree (no postdoctoral fellowship)
   - Researcher: 15+ years after last postdoctoral fellowship position
   - Researcher: 15+ years after last advanced degree (no postdoctoral fellowship)
   - Staff or administrator (not researcher)
   - Other (please specify)

Opportunity for Improvement: Some respondents inquired about the distinction between faculty and researchers. Future survey iterations may benefit from adding definitions of key terms.

Q7. How would you describe the type of research you conduct? Please select all that apply.
   - Clinical research
   - Computational research
   - Epidemiologic or public health research
   - Laboratory-based research
   - Sociological or community-based research
   - Other (please specify)
Q8. [Carry forward choices from Q7 if the number selected is greater than 1; the respondent’s answer choices only include what they selected in Q7.] Of the type of research you conduct, which would you say is your primary focus?
   - Laboratory-based research
   - Clinical research
   - Epidemiologic or public health research
   - Computational research
   - Sociological or community-based research
   - Other (please specify)

Administration Note: During cognitive testing, participants indicated that many respondents would conduct more than one type of research. Including Q8 in addition to Q7 allows the researcher to assess how the pandemic impacted respondents whose research primarily relies on physical laboratories versus those whose research is less equipment-intensive.

Q9. What is your current employment status at the time of taking this survey?
   - Full-time
   - Part-time (working less than standard hours as defined by your employer)
   - Furloughed (mandatory leave of absence) with pay
   - Furloughed (mandatory leave of absence) with reduced or no pay
   - Retired
   - Unemployed

Q10. Has your current employment status been impacted by the COVID-19 pandemic?
   - I am under-employed due to the COVID-19 pandemic (e.g., not being paid a full salary or not being able to work as much as desired, but not on mandatory leave)
   - I was put on mandatory leave due to the COVID-19 pandemic
   - An employment offer was rescinded due to the COVID-19 pandemic
   - I am unemployed due to the COVID-19 pandemic
   - My employment status has not been impacted

Q11. [Display if Q2 = Academic AND Q6 = Faculty] What is your title/role? Please select all that apply.
   - Dean
   - Associate Dean
   - Department Chair
   - Division Chief
   - Program Director
   - Full Professor
   - Associate Professor
   - Assistant Professor
   - Professor Emeritus
   - Adjunct Professor
   - Visiting Professor
   - Instructor
   - Lecturer
   - Support staff
   - Other (please specify)
Q12. [Display if Q2 = Academic AND Q6 = Faculty] What is your current status regarding tenure?
   - I have tenure
   - I am on a tenure-track
   - I am not on a tenure-track
   - Not applicable

Opportunity for Improvement: Future administration of the survey should also display Q12 if (Q4 = Clinical/hospital/medical center OR Medical center affiliated with a university) AND (Q6a = Faculty).

Q13. Which of the following best describes your field of study? Please select all that apply.
   - Biological Science
   - Biomedical Engineering and Biophysics
   - Clinical Sciences
   - Data Science
   - Education
   - Epidemiology
   - Genetics and Genomics
   - Immunology
   - Mathematical/Computational/Statistics
   - Microbiology and Infection Diseases
   - Neuroscience
   - Pharmacology
   - Physical Science
   - Psychology
   - Psychiatry
   - Public Health
   - Social and Behavioral Science (other than Psychology)
   - Virology
   - Other (please specify)

Administration Note: It is important to identify any missing fields of study during cognitive testing.

Q13a. [Display if Q1 ≠ No OR Don’t know] From which Institute, Center, or Office do you receive funding? Please select all that apply.
   - NCI: National Cancer Institute, Center for Cancer Research
   - NCI: National Cancer Institute, Division of Cancer Epidemiology and Genetics
   - NCI: not in Center for Cancer Research or Division of Cancer Epidemiology and Genetics
   - NEI: National Eye Institute
   - NHLBI: National Heart, Lung, and Blood Institute
   - NHGRI: National Human Genome Research Institute
   - NIA: National Institute on Aging
NIAAA: National Institute on Alcohol Abuse and Alcoholism
NIAID: National Institute of Allergy and Infectious Diseases
NIAMS: National Institute of Arthritis and Musculoskeletal and Skin Diseases
NIBIB: National Institute of Biomedical Imaging and Bioengineering
NICHD: National Institute of Child Health and Human Development
NIDCD: National Institute on Deafness and Other Communication Disorders
NIDCR: National Institute of Dental and Craniofacial Research
NIDDK: National Institute of Diabetes and Digestive and Kidney Diseases
NIDA: National Institute on Drug Abuse
NIEHS: National Institute of Environmental Health Sciences
NIGMS: National Institute of General Medical Sciences
NIMH: National Institute of Mental Health
NIMHD: National Institute on Minority Health and Health Disparities
NINDS: National Institute of Neurological Disorders and Stroke
NINR: National Institute of Nursing Research
NLM: National Library of Medicine
CC: NIH Clinical Center
CIT: Center for Information Technology
CSR: Center for Scientific Review
FIC: Fogarty International Center
NCATS: National Center for Advancing Translational Sciences
NCCIH: National Center for Complementary and Integrative Health
OD: Office of the Director
Section 3. Harassment Experience

**Administration Note:** Harassment Experience and other sections involving sensitive subjects were omitted from cognitive testing. This section may be omitted based on the goals of the survey.

**Opportunity for Improvement:** Given the sensitivity of the Harassment Experience questions, this section would be better placed near the end of the survey, as it is best to build trust by asking less sensitive questions near the beginning.

Q14. Have you experienced any of the following forms of harassment or discrimination related to your position since the pandemic began? Please select all that apply.

- Gender harassment (a broad range of verbal and nonverbal behaviors not aimed at sexual cooperation but that convey insulting, hostile, and degrading attitudes about members of one gender)
- Other forms of sexual harassment (unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when this conduct explicitly or implicitly affects an individual’s employment, unreasonably interferes with an individual’s work performance, or creates an intimidating, hostile, or offensive work environment)
- Racial, ethnic, or nationality-based discrimination
- Disability discrimination
- General harassment (not based on your gender identity, sex, sexual orientation, racial/ethnic identity, or disability status)
- Other (please specify)
- None [EXCLUSIVE]
- Prefer not to answer [EXCLUSIVE]

Q15. [Display if Q14 ≠ None OR Prefer not to answer] Regarding the experience of harassment or discrimination since the pandemic began, did you do any of the following? Please select all that apply.

- Talk to your supervisor or manager
- Talk to someone at Human Resources or similar function in your organization
- Talk to someone at a designated office within your organization
- Talk to someone in an external organization
- Talk to a co-worker or peer
- Talk to a friend or family member
- None of the above
Section 4. Household/COVID-Related

We are now going to ask about your household and caretaking responsibilities. **Caretaking responsibilities** include childcare, schooling, eldercare, disabled care, or care for ill household and/or family members.

Q16. Do you have caretaking responsibilities for individuals who live in your household and/or family members who do not live with you?
   - Yes
   - No
   - Prefer not to answer

Q17. [Display if Q16 = Yes] Who do you provide care for? Please select all that apply.
   - Children under 5
   - Children 5-12
   - Children 13-18
   - Disabled dependents
   - Elderly dependents
   - Ill dependents
   - Other dependents (please specify)
   - Prefer not to answer

Q18. [Display if Q16 = Yes] How many people do you provide care for?
   - 1
   - 2
   - 3 or more
   - Prefer not to answer

Q19. [Display if Q16 = Yes] Which of the following is closest to your situation over the past 3 months?
   - I am the primary caregiver without a secondary caregiver
   - I am the primary caregiver with a secondary caregiver (e.g., partner, spouse)
   - Someone else is the primary caregiver
   - I share caregiving responsibilities evenly with someone else (e.g., partner, spouse)
   - Prefer not to answer

**Administration Note:** Q19 was modified based on respondent feedback during cognitive testing to further distinguish between the different caretaking situations.

Q20. [Display if Q16 = Yes] Have your caretaking responsibilities, including any supervision of educational activities for school-aged children, made it more difficult to complete your work responsibilities?
   - Yes, it has made it substantially more difficult
   - Yes, it has made it somewhat more difficult
   - It has had no impact
Q21. [Display if Q16 = Yes] Have you paid for caregiving help in the past 3 months (e.g., nanny, daycare, nurse, tutor, babysitter)?
   o Yes
   o No

Administration Note: Due to the evolving nature of the pandemic, it is important to specify time frames (e.g. past 3 months, past 30 days) when applicable, as answers may vary depending on the time frame given.

Q22. [Display if Q21 = Yes] Which of the following is closest to your situation? In the past 3 months, my family or I have paid for caregiving help (e.g., nanny, daycare, nurse, tutor, babysitter)…
   o On a full-time basis (approx. 40 hours or more per week)
   o On a part-time basis (approx. 20 hours per week)
   o On an ad hoc basis (less than 20 hours per week or as needed)
   o Prefer not to answer

Q23. Including yourself, do you consider anyone in your household to be at increased risk of severe COVID-19 illness? (Individuals are at a higher risk for severe illness if they are 65 and over, and/or have serious heart conditions, high blood pressure, obesity with a BMI of 30 or more, chronic kidney disease, type 2 diabetes, or an immunocompromised condition.)
   o Yes
   o No
   o Don’t know
   o Prefer not to answer

Section 5. Research Resources

We will now ask about how COVID-19 has impacted your ability to access and use research resources.

Q24. Since March 2020, have you lost access to any of the following resources? Please select all that apply.
   x Specialized equipment (e.g., autoclave, thermocycler, DNA sequencing equipment, mass spectrometers, surgical instruments, psychophysiology instruments, MRI machines)
   x Time-sensitive specimens (e.g., tissue, blood, live animals)
   x Human subjects
   x Data (e.g., due to bandwidth issues, remote access restrictions)
   x Expertise (e.g. due to absence of in-person journal clubs, discussions, conferences)
   x Collaborators (e.g. due to absence of available community partnerships)
   x Access to facilities/lab spaces
   x Research staff
   x Other (please specify)
   □ I have not lost access to research resources [EXCLUSIVE]
Section 6. Productivity

Q25. On average, how would you rate your overall research productivity since the pandemic began in March? Research productivity includes submitting grant applications, publishing papers, collecting data, etc.
  o Lower than normal
  o No change
  o Higher than normal

Administration Note: Respondents found it helpful when examples were provided for key terms, such as for research productivity.

Q26. Which, if any, of these factors have had a substantially negative impact on your productivity since the pandemic began? Please select all that apply. [RANDOM ROTATE]
  □ My personal mental health and/or physical health
  □ The physical or mental health of family, household members, or close friends
  □ Finances
  □ Caretaking responsibilities and/or responsibilities related to school/daycare closures
  □ Teleworking
  □ Changes in life priorities or in work-life balance
  □ Connections with family and friends (at home or virtually)
  □ Increased sense of meaning through my work mission
  □ Expectations of my supervisor or co-workers regarding my productivity
  □ Changes in laboratory and/or animal facility access
  □ Changes in clinical research subject accrual or visits
  □ Availability of data for analyses
  □ My research was put on hold
  □ IT infrastructure and/or support
  □ Virtual instead of in-person interactions with my trainees, mentors, or supervisors
  □ Visa considerations
  □ Cancellation of in-person regional, national, and/or international conferences
  □ Uncertainty about timeline for return to the physical workplace
  □ Social and/or political events
  □ Gender/racial/ethnic/nationality-based discrimination or harassment
  □ Time for role-related reading, planning, writing
  □ Virtual seminars, courses, and/or career development events
  □ Involvement in SARS-CoV-2 research or planning
  □ Other (please specify)
  □ None of the above [EXCLUSIVE]

Opportunity for Improvement: Answer choices were comprehensive in order to account for various factors impacting research, but they may have been tedious for respondents to read through. One way to reduce the number of answer choices would be to utilize factor analysis to identify answer choices that are strongly correlated and select the variables with the highest loading factors.
Q27. Which, if any, of the following have had a **substantially positive impact** on your productivity since the pandemic began? Please select all that apply.  [RANDOM ROTATE]

- □ My personal mental health and/or physical health
- □ The physical or mental health of family, household members, or close friends
- □ Finances
- □ Caretaking responsibilities and/or responsibilities related to school/daycare closures
- □ Teleworking
- □ Changes in life priorities or in work-life balance
- □ Connections with family and friends (at home or virtually)
- □ Increased sense of meaning through my work mission
- □ Expectations of my supervisor or co-workers regarding my productivity
- □ Changes in laboratory and/or animal facility access
- □ Changes in clinical research subject accrual or visits
- □ Availability of data for analyses
- □ My research was put on hold
- □ IT infrastructure and/or support
- □ Virtual instead of in-person interactions with my trainees, mentors, or supervisors
- □ Visa considerations
- □ Cancellation of in-person regional, national, and/or international conferences
- □ Uncertainty about timeline for return to the physical workplace
- □ Social and/or political events
- □ Gender/racial/ethnic/nationality-based discrimination or harassment
- □ Time for role-related reading, planning, writing
- □ Virtual seminars, courses, and/or career development events
- □ Involvement in SARS-CoV-2 research or planning
- □ Other (please specify)
- □ None of the above [EXCLUSIVE]

Q28. Overall, how would you say COVID-19 has impacted your research-related activities, if at all?  [RANDOM ROTATE Negatively and Positively]

- o They have been **negatively** impacted
- o They have been **positively** impacted
- o No impact
Q29. [Display if Q28 = Negatively impacted] Which, if any, of the following factors resulting from COVID-19 have negatively impacted or are currently negatively impacting your research? Please select all that apply.
- Reduced communication with supervisor and/or institutional leadership
- Reduced access to core facilities
- Reduced access to laboratory
- Reduced access to clinic/human research subjects
- Reduced access to experimental animals
- Reduced access to supplies
- Reduced access to team members/colleagues due to virtual environment
- Reduced access to collaborators at other sites due to virtual environment
- Reduced access to mentors due to virtual environment
- Change in graduation or career timeline
- Personal/mental health challenges
- Concern for the health of family members, friends, or community members
- Less time to conduct research due to caregiving responsibilities
- Decreased attention on area of research
- Decreased funding for area of research
- Inability to focus on research due to changed working environment
- Other (please specify)
- None of the above [EXCLUSIVE]

Q30. [Display if Q28 = Positively impacted] Which, if any, of the following factors resulting from COVID-19 have positively impacted or are currently positively impacting your research? Please select all that apply.
- Changes in communication with supervisor and/or institutional leadership
- Changes in access to core facilities
- Changes in access to laboratory
- Changes in access to clinic/human research subjects
- Changes in access to experimental animals
- Changes in access to supplies
- Changes in communication with team members/colleagues due to virtual environment
- Changes in communication with collaborators at other sites due to virtual environment
- Changes in communication with mentors due to virtual environment
- Change in graduation or career timeline
- Awareness or attention to personal/mental health
- Awareness or attention to the health of family members, friends, or community members
- Changes in amount of time to conduct research due to caregiving responsibilities
- Increased attention on area of research
- Increased funding for area of research
- Ability to focus on research due to changed working environment
- Other (please specify)
- None of the above [EXCLUSIVE]
Since the pandemic began, please indicate whether you are spending comparatively more, less, or the same amount of time on the following activities:

<table>
<thead>
<tr>
<th>Question</th>
<th>Less than normal</th>
<th>No change</th>
<th>More than normal</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q31. Administrative activities (including virtual administrative meetings)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q32. Career development (e.g., taking courses, learning new skills, working on resume or applications, applying for jobs)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q33. Clinical patient care or support for clinical patient care activities</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q34. Clinical research or support for clinical research activities</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q35. Data analyses or computational research</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q36. Information technology-related tasks or support (e.g., setting up Zoom)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q37. Laboratory or animal research or support for these activities</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q38. Reading or reviewing scientific or medical papers, websites, or other content</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q39. Mentoring or supervising trainees or other staff</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q40. Receiving mentorship or supervision</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q41. Scientific or medical meeting participation (including virtual meetings)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q42. Writing research papers, review articles, grants, or protocols</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

**Opportunity for Improvement:** Feedback from respondents indicated that certain questions were difficult to read through due to long lists of answer choices. Thus, it is important to strike a balance between thoroughness and a good survey-taking experience.

In future administrations of the survey, it may be valuable to show Q24 and omit Q29 and Q30 or vice versa. The choices and concepts are similar enough to accept the trade-off between amount of information and level of respondent burden.
Section 7. Impact on Career

As a result of changes in your workplace due to COVID-19, to what extent are you concerned about the following, if at all?

<table>
<thead>
<tr>
<th>Question</th>
<th>Very concerned</th>
<th>Somewhat concerned</th>
<th>Not concerned</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q43. Losing my job or becoming under-employed</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q44. The impact of returning to the physical workplace on my/my family’s health</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q45. The impact of COVID-19 on the longevity of my organization</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q46. The impact of COVID-19 on the work/mission of my organization</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q47. Has the COVID-19 pandemic negatively impacted your ability to apply for grants?
   ○ Yes
   ○ No
   ○ Not sure
   ○ Not applicable

**Opportunity for Improvement:** Questions were raised during post-fielding analysis on what factors negatively impacted researchers’ ability to apply for grants. For future survey iterations, we recommend including a follow-up question to identify the main causes for decreased ability to apply for grants (e.g. inability to gather preliminary data, caretaking responsibilities).

Q48. Has the COVID-19 pandemic negatively impacted your ability to access grant funding awarded after March 1, 2020?
   ○ Yes
   ○ No
   ○ Not sure
   ○ Not applicable

Q49. Has the COVID-19 pandemic negatively impacted your ability to access grant funding awarded before March 1, 2020?
   ○ Yes
   ○ No
   ○ Not sure
   ○ Not applicable

**Administration Note:** Based on respondent feedback, dates were added in place of “awarded prior to the pandemic” to add specificity. These dates may vary depending on time period of interest.
Q50. To what extent do you agree or disagree with the following statement? The pandemic will probably have a negative impact on my career trajectory.
  - Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree

Q50a. [Display if Q50 = Strongly agree OR Agree] In what ways do you think the pandemic will negatively impact your career? OPEN END

Q51. [Display if Q6 = Graduate student OR Undergraduate student OR Medical student] Have you discussed changes in your personal educational plans with your immediate supervisor since the beginning of the pandemic?
  - Yes
  - No
  - Prefer not to answer

Q52. [Display if Q6 = Graduate student OR Undergraduate student OR Medical student OR Postdoctoral fellow] Have you discussed changes in your career development plans with your immediate supervisor since the beginning of the pandemic?
  - Yes
  - No
  - Prefer not to answer

Q53. [Display if Q6 = Faculty OR Researcher OR Postdoctoral fellow] Have you discussed changes in your research plans with your immediate supervisor since the beginning of the pandemic?
  - Yes
  - No
  - Not applicable
  - Prefer not to answer

Q54. [Display if (Q6 = Faculty) AND (Q12 = On a tenure track OR Not on a tenure track)] Have you discussed changes in your career development plans with your immediate supervisor since the beginning of the pandemic?
  - Yes
  - No
  - Not applicable
  - Prefer not to answer

Q55. In your opinion, what would be the best approach for promotion/tenure reviews in the context of the pandemic?
  - Keep all reviews on schedule
  - Delay all reviews by a set amount of time
o Allow investigators to “opt in” to reviews on schedule; otherwise, delay by a set amount of time
o Allow investigators to “opt out” of reviews on schedule and request a delay based on individual circumstances
o Not applicable

Q56. [Display if (Q12 = Tenure-track OR Tenured OR Not on a tenure track) AND (Q11 ≠ Full professor)] What impact do you expect that the extended telework will have on your progress toward promotion/tenure?
   o Positive impact
   o Somewhat positive impact
   o No impact
   o Somewhat negative impact
   o Negative impact
   o Not applicable

Q57. [Display if (Q12 = Tenure-track OR Tenured) AND (Q11 ≠ Full professor)] Has your supervisor discussed the possibility of adjusting the timeline for your promotion/tenure reviews?
   o Yes, I have requested an extension but have not received word
   o Yes, but my request for an extension was denied
   o Yes, and my request for an extension was granted
   o No
   o Not applicable
   o Prefer not to answer

Section 8. Institutional Support & Physical Place of Work

Q58. Has your institution put in place accommodations to account for lost research time?
   o Yes
   o No
   o Don’t know
   o Not applicable

To what extent do you agree or disagree with the following statement?

<table>
<thead>
<tr>
<th>Q59. My organization is effectively managing the impact of COVID-19 on the workforce.</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Q60. In your opinion, what can your institution do to improve how they are handling things? OPEN END

END
Q61. [DISPLAY IF Q60 WAS ANSWERED] Which of the following categories best describe the topic of your comment? Please select all that apply.

- Communications
- Productivity
- Work-life balance
- Returning to the physical workplace
- Managing transmission of COVID-19 at the organization
- Integrity/ethics
- The work itself (e.g., research, attending conferences, writing and applying for grants, writing and editing articles)
- None of the above

Q62. Thinking about the last 30 days, what has been the status of your institution concerning on-site researchers and research activities as a result of COVID-19?

- My institution has been open at full or close-to-full capacity to on-site researchers and research activities
- My institution has been open at reduced capacity to all on-site researchers and research activities
- My institution has been open at full or close-to-full capacity for some researchers and reduced capacity for others
- My institution has been open at reduced capacity for some on-site researchers and research activities, with other research continuing to take place remotely/off-site
- My institution has been completely closed to on-site researchers/research activities, but research continues to take place remotely/off-site

**Administration Note:** A time frame was added based on feedback from cognitive testing to account for the evolving nature of institutional statuses during the pandemic.

Q63. At the time of taking this survey, are you exempt from the closure and allowed to travel to your work site(s)?

- Yes
- No
- Partially exempt
- Not applicable

Q64. [Display if Q63 = Yes] Which of the following best describes the primary type of work you are conducting given your exemption to travel to your work site?

- Clinical care or clinical support
- Laboratory/IT maintenance, or animal care activities
- COVID-19 research activities
- Non-COVID-19 research activities
- Administrative activities
- Teaching
- Other (please specify)
- Not applicable – I am still working remotely by choice
Q65. How supportive has your organization been in helping you to remain productive thus far during the COVID-19 pandemic?
   o Extremely supportive
   o Very supportive
   o Moderately supportive
   o Slightly supportive
   o Not supportive at all

Administration Note: Questions in this section were developed with the intention of comparing researcher responses with research leaders’ responses in terms of how well the institution has managed the pandemic (See NIH COVID-19 Impact on Extramural Institutions Survey). Future iterations may also benefit from this approach.

Q66. [Display if Q65 = Slightly supportive OR Not supportive at all] What steps should your organization take that will make you feel more supported? OPEN END _________________________________

Q67. Which of the following most closely reflects your communications with your supervisor regarding your workplace status?
   o We agree about my return to the workplace
   o My supervisor does not fully accept my concerns or fears regarding my return to the workplace (e.g., I feel I am expected to return to the workplace when I do not feel comfortable doing so)
   o I wish to return to the workplace, but my supervisor is not supporting my return
   o We have not discussed my return-to-workplace status
   o Other (please specify)
   o Not applicable – I don’t have a supervisor

During the pandemic, you may have received communications from your organization and the NIH with information on your work status and personal safety.

How effective were those communications in imparting useful information? Communications received from…

<table>
<thead>
<tr>
<th></th>
<th>Very effective</th>
<th>Somewhat effective</th>
<th>Not very effective</th>
<th>Not effective at all</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q68. NIH</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q69. Your organization’s leadership/Office of the President</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q70. Your department, branch or division, or equivalent</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
To what extent do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q71. I have received support from my organization in balancing my work and</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>personal responsibilities during the COVID-19 pandemic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q72. While working remotely, I have felt sufficiently connected with my</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q73. Have you used any of the following resources at your institution to help deal with stress or mental health since the beginning of the pandemic? Please select all that apply.

- Employee assistance program (e.g., short-term counseling, referrals to follow-up services)
- Employee wellness workshops or other workshops/discussions
- Other (please specify)
  - None, I have not used any of these resources [EXCLUSIVE]
  - My institution does not offer these resources [EXCLUSIVE]
  - Prefer not to answer [EXCLUSIVE]

Q74. Across your organization, has the workforce been reduced (laid off or furloughed) due to COVID-19-related restrictions?

- Yes
- No
- Don’t know

Section 9. Returning to Physical Workplace

Q75. At the time of taking this survey, have you returned to your physical workplace?

- Yes, I have returned full-time
- Yes, I have returned at reduced hours
- No, I have not returned
- I have been working on-site for the duration of the pandemic

Opportunity for Improvement: Q75 may no longer be relevant as more researchers return to on-site work.

Q76. How comfortable are you with returning to the physical workplace?

- Very comfortable
- Somewhat comfortable
- Neither comfortable nor uncomfortable
- Somewhat uncomfortable
- Very uncomfortable
Q77. What are your main concerns about working on-site at your facility? Please select all that apply.
   - The possibility of contracting the virus
   - Public health regulations not being followed by those around you
   - The office not being properly disinfected
   - Lack of available personal protective equipment
   - Physical working space not allowing for social distancing
   - Availability of COVID-19 testing/contact tracing at work for myself and coworkers
   - Having continued caregiver responsibilities at home
   - Readjusting to office life
   - My commute (e.g., using public transportation, different commute)
   - Having in-person interactions with others
   - Limited or no access to food and drink vendors/restaurants
   - Other (please specify)
   - I don’t have any concerns [EXCLUSIVE]

Section 10. Job Satisfaction and Mental Health

Please rate the impact of the following factors on your job satisfaction during the pandemic:

*Job Satisfaction*

<table>
<thead>
<tr>
<th>Question</th>
<th>Negative impact</th>
<th>Neutral</th>
<th>Positive impact</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q78.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q79.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q80.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q81.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q82.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q83.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q84.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please rate the impact of the following factors on your mental health during the pandemic:

<table>
<thead>
<tr>
<th>Mental Health</th>
<th>Negative impact</th>
<th>Neutral</th>
<th>Positive impact</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q85. Expectations of my supervisor</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q86. Access to programs assisting with applications to professional schools, grants, or other related resources</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q87. Access to programs focusing on stress and response to the pandemic</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q88. Disruption of promotion/tenure timeline and/or availability of next career steps</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q89. Visa considerations</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q90. Physical and/or social isolation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Q91. Societal and/or political events</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

In addition to the pandemic, we are interested in other major events that may have affected your work environment during the same period.

Q92. How has civil unrest tied to racism impacted your research productivity (e.g., submitting grant applications, publishing papers, collecting data)? It has had…
- A negative impact
- A somewhat negative impact
- No impact
- A somewhat positive impact
- A positive impact

**Opportunity for Improvement:** Feedback from respondents indicated the survey could have included additional questions on the impacts of civil unrest tied to racism and related social issues during the pandemic. Future survey iterations may benefit from expanding upon Q92.

**Section 11. Final Feedback**

Q93. Please share any successful strategies on how you and/or your lab or department are overcoming work challenges and approaching new situations during the COVID-19 pandemic. [OPEN END]
Section 12. Demographics

Finally, we have a few questions about your demographic information. This information will be used to understand whether certain groups are experiencing unique challenges.

Q94. What is your age?
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65-74
   - 75 or older
   - Prefer not to answer

Q95. Are you of Hispanic, Latino, or Spanish origin?
   - Yes
   - No
   - Prefer not to answer

Q96. With which race do you most identify? Please select all that apply.
   - White
   - Black or African American
   - American Indian or Alaska Native
   - Asian
   - Native Hawaiian or Pacific Islander
   - Other (please specify)
   - Prefer not to answer

Q97. What is your gender identity?
   - Man
   - Woman
   - Transgender man
   - Transgender woman
   - Genderqueer or gender non-conforming
   - Questioning
   - Something else
   - Prefer not to answer
Q98. Which of the following do you consider yourself to be?
   o Heterosexual or straight
   o Lesbian, Gay, or Homosexual
   o Bisexual
   o Asexual
   o Questioning
   o Something else
   o Prefer not to answer

Opportunity for Improvement: Feedback from respondents indicated that sex refers to a set of biological attributes, whereas gender refers to social constructs. Future surveys may benefit from making a clear distinction between the two terms. These questions may be reworded as:

Q97. What is your sex?
   o Female
   o Male
   o Prefer not to say

Q98. What is your gender identity?
   o (Various options that stakeholders have identified as important, including a “self-describe” option with text input)

Administration Note: Gender identity and sexual orientation questions are sensitive topics for some respondents. Therefore, it is important to keep these questions at the end due to their sensitive nature, even if the survey is to be administered online using quotas, in which case, biological sex and gender identity should be separated.

Q99. What is your marital status?
   o Married
   o Widowed
   o Divorced
   o Separated
   o Partnered
   o Single
   o Other
   o Prefer not to answer

Q100. Do you have a disability?
   o Yes
   o No
   o Prefer not to answer