THE COVID-19 PANDEMIC AND ACADEMIC SCIENCE
IMPACT ON EARLY-CAREER INVESTIGATORS

Background
To assess the impact of the COVID-19 pandemic on the research workforce and identify potential implications for the diversity of the biomedical workforce, the NIH Chief Officer for Scientific Workforce Diversity (COSWD) developed and fielded the NIH COVID-19 Impact on Extramural Researchers Survey in October 2020.

Population
This fact sheet focuses on the experiences of early-career investigators (ECI), including students (undergraduate, graduate, medical), postdoctoral fellows or residents, faculty (0-6 years), and researchers (0-6 years), especially in comparison to mid-career investigators (MCI), including faculty and researchers (7-14 years).

Response Rate
Overall, 45,348 of 234,254 invited researchers responded to the survey (19% response rate). Respondents included principal investigators, trainees, sponsors, undergraduate students, graduate students, postdoctoral researchers, scientists, and project personnel.

Results
- **Demographics:** 54% of respondents identified as ECI, relative to 19% MCIs and 27% senior-career investigators. Among ECI, 32% were students, 28% postdocs, 8% researchers <6 years, and 33% faculty <6 years.
- **Impact of Pandemic on Career Trajectory:** 55% of all respondents anticipated a negative impact to their career trajectory as a result of the pandemic. 63% of ECIs anticipated a negative impact on their career trajectory, a higher proportion than senior-career investigators. Figure 1 depicts anticipation of negative career trajectory among ECI and MCI.
- **Impact of Pandemic on Productivity:** 78% of all respondents reported decreased research productivity since the pandemic began. Figure 2 depicts lower productivity among ECI and MCI.
- **Mental Health:** 69% of all respondents indicated that societal/political events negatively impacted their mental health. Figure 3 depicts negative impact of societal/political events on ECI and MCI.

Where Do We Go From Here?
- NIH will continue to analyze these data and share findings with the extramural research community.
- NIH intends to use these and other data as they become available to maintain its focus on evidence-based actions that foster inclusive excellence within the scientific workforce, to better support the health of our entire population.
- NIH intends to continue taking preemptive actions for investigators early in their careers whose work may be impacted by the pandemic (for example, NOT-OD-21-052, NOT-NS-20-076, request to extend early-stage investigator status).

Learn about COSWD’s efforts to diversify the scientific workforce at diversity.nih.gov