

# 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.

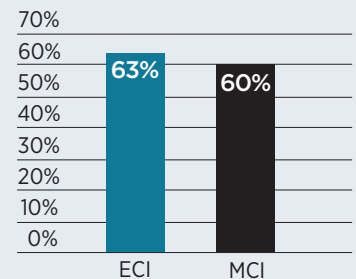
## Results

- **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.

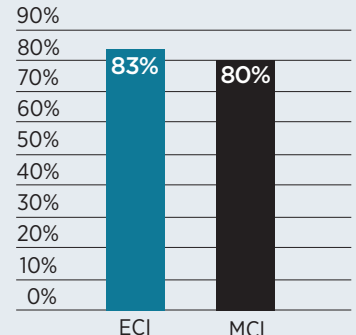
## Where Do We Go From Here?

- 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](#)).

*Figure 1. Percentage of Each Group Anticipating Negative Impact on Career Trajectory (n = 18,729)*



*Figure 2. Percentage of Each Group Experiencing Lower Productivity (n = 25,101)*



*Figure 3. Percentage of Each Group Indicating that Societal/Political Events Negatively Impacted Mental Health (n = 20,263)*

