# 2020 NIH Extramural Surveys:

The Impact of COVID-19 on the Research Community

In October of 2020, 45,348 researchers at domestic, NIH-funded institutions and 224 research leaders from the top 1,000 NIH-funded domestic institutions responded to an NIH COVID-19 Impact on Extramural Research Survey, which aimed to gauge the impact of COVID-19 on the research community.

At a high-level, survey findings emphasized the impact of COVID-19 on the career trajectory, mental health, and research productivity of extramural researchers:



of respondents said the pandemic will have a negative impact their career trajectory



of respondents said societal/political events negatively affected their mental health, more than other factors



of respondents reported lower levels of productivity since the pandemic began



# **CAREER TRAJECTORY**

61% of lab-based researchers agreed that the pandemic will harm their career trajectory

- Asian respondents were more likely than other groups to anticipate a negative career trajectory (65%), with a decline in research activities and lab-based research driving opinions
- ➤ Black or African American respondents were least likely to anticipate a negative career trajectory (39%), with relatively fewer lab researchers and more public health researchers driving a more optimistic outlook



#### A Closer Look...

The strongest predictor of a **negative** career trajectory perception is researchers' **ability to apply for grants** 

Top career stages that anticipate negatively impacted career trajectories due to COVID-19:



Postdoctoral Fellow/ Resident



Faculty (0-6 Years)



Faculty (7-14 Years)

Top factors that negatively impacted researchers' mental health include:

1

Societal and/or political events

2

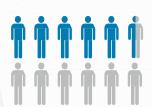
Physical and/or social isolation

3

Disruption of promotion/ tenure timeline

#### MENTAL HEALTH





**42%** of respondents said their mental/physical health had a substantially negative impact on productivity.

- Women and respondents identifying as "other" genders were consistently more negatively impacted than men across top factors affecting mental health
- Early career investigators were consistently more negatively impacted across top factors affecting mental health
- Asian researchers cited visa considerations as negatively affecting their mental health at twice the rate than the average



Did You Know?

Survey findings indicated mental and physical health is the #1 factor negatively impacting the productivity of early career investigators, Hispanics, and African American respondents



## RESEARCH PRODUCTIVITY

- Early- (80%) and mid-career investigators (81%) reported lower levels of productivity due to COVID-19, with faculty members reporting a more negative impact than non-faculty researchers
- 53% of Hispanics indicated their mental/physical health has negatively impacted research productivity since the pandemic began



### The Bottom Line:

The less institutional support provided to researchers leads to a greater impact on productivity

**Top factors** that negatively impacted researchers' **overall productivity** include:



Virtual instead of inperson interactions with trainees, mentors, or supervisors



Cancellation of in-person regional, national, and/or international conferences



Changes in laboratory and/or animal facility access

# AT A GLANCE: COVID-19 IMPACTS ON EXTRAMURAL INSTITUTIONS



83%

their institution

of respondents indicated that COVID-19 had a moderate or major impact on overall research productivity at



41% of respondents said it is likely the financial repercussions of COVID-19 will jeopardize their institution's ability to maintain research functions

2 in 3 respondents were very or extremely concerned about the pandemic's impact on the financial status of their institution:



of Doctorategranting universities reported as very or extremely concerned



of Independent
research
institutions
reported as very or
extremely
concerned