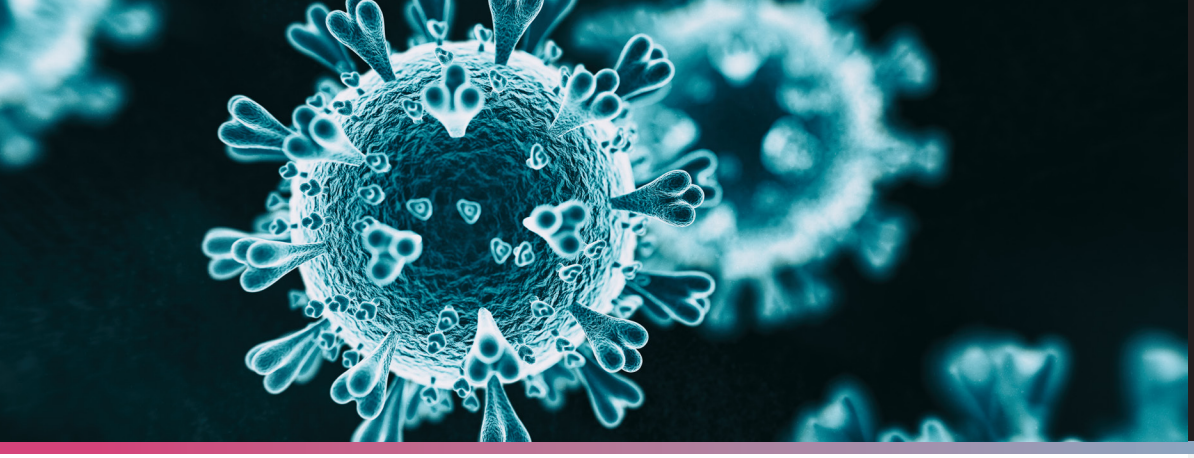
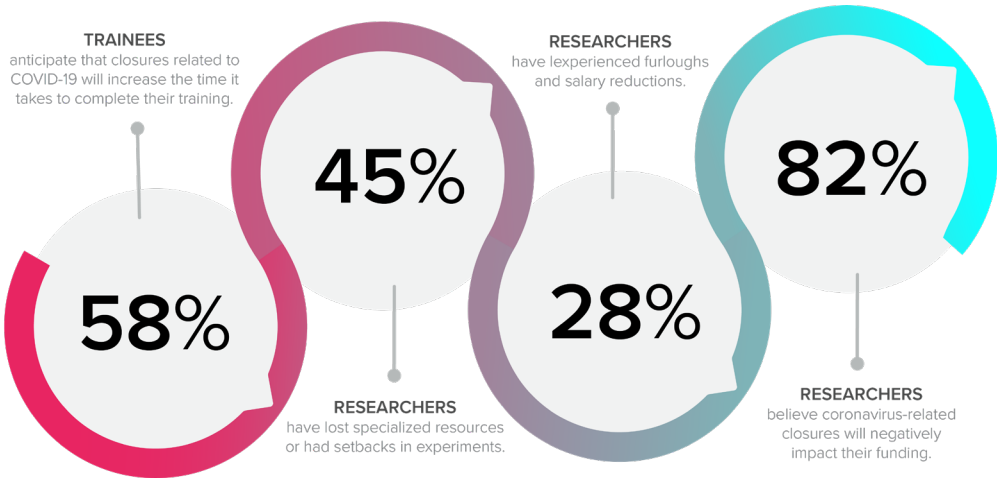


american physiological society®

Research on Pause: The Effects of the Coronavirus on Physiology



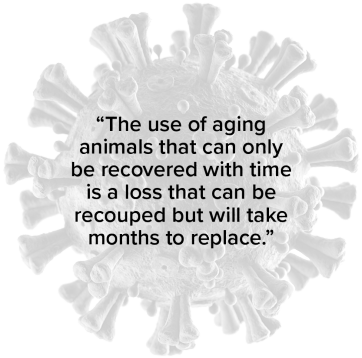
Home and family responsibilities pose challenges to researchers.

One-third of faculty level researchers and one-half of trainees report that home and family responsibilities are affecting their work negatively.

> *"I am still paying employees and animal-related costs, using grant and start-up funds to cover these expenses, without getting any data. This is quite stressful to an early-career PI, with all the pressures for publishing and acquiring grants. Further, I have to care for my child at home while finding time to work. All this together will undoubtedly have a negative impact in my progression."*

Faculty and other senior researchers and educators face setbacks that will likely persist. Rebuilding will likely take many months and the outlook for future funding remains uncertain.

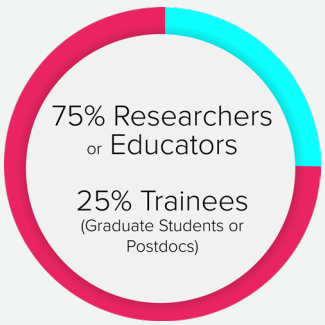
Researchers expect they will need three to six months of additional salary support and time to return to where they were.



About this Survey

The American Physiological Society (APS) conducted an informal survey asking how coronavirus-related laboratory closures are affecting our members' research.

97 respondents shared information anonymously, describing wide-ranging impacts on their careers and research. 92% were APS members.



View additional survey results at **physiology.org/covid19survey**.

Some faculty-level researchers (28%) have experienced furloughs and salary reductions, even though their salaries were funded by federal grants. Others have had raises or promotions delayed or retirement benefits reduced. With the continued spread of the coronavirus, more cuts are expected in the fall.

"Due to the immediate shutdown of the lab, we were forced to abandon time-sensitive animal experiments [in which] we had already invested a number of months in data acquisition and interventions. We will need to restart these experiments, but are unsure of how this work will now be funded."

Half of faculty-level researchers have either had to lay off skilled staff or were unable to hire such personnel. In addition, 60% of researchers have experienced delays in recruiting new students, staff and postdoctoral researchers due to closures and hiring freezes.

Resources that labs will need to recover include supplements, bridge funds and more time to complete experiments before applying for additional grants.

"I have postponed the recruitment of a graduate student due the uncertainty in lab workflow."

"I have lost approximately a year of preliminary data needed to be competitive for extramural funding."

Delays in research completion and professional development opportunities could have a lasting impact on physiology trainees (graduate students and postdoctoral fellows).

More than 80% of these trainees were unable to present their research at conferences or meetings due to cancellations.

One in three trainees report that coronavirus-related closures have affected their career plans, while an additional one in three are unsure. Reasons cited include the impact of travel bans on the ability to interview for new positions; delays in promotion to faculty positions; and slowed progress on publications and grant applications.

"I have to delay my animal study, which is a major part of my training."

"My university will not restore laboratory operations to 100% until a COVID-19 vaccine is developed."

*All quotes are slightly edited for readability and to remove any personal details.