COVID-19 Impacts to Research Activities in Spring 2020

We examined the most recent results from the Geoscience COVID-19 study regarding impacts to research activities during Spring 2020 from the COVID-19 pandemic. Over 60% of non-academic geoscientists and academic faculty deferred their research and project activities to a later time, whereas 47% of post-doctoral fellows and 39% of students deferred their research activities. While nearly three-quarters of post-doctoral fellows changed their research mode to utilize virtual or computational activities, 47% changed their research mode to literature review and writing activities. Cancellation of planned research and projects was more common among post-doctoral fellows and students than among academic faculty and non-academic geoscientists, yet termination of active research was more common among faculty than other cohorts.

Although impacts to research and project activities were reported by all cohorts, with nearly half or more of those in higher education reporting multiple impacts, a higher percentage of non-academic geoscientists and students reported no impacts to their research and project activities during Spring 2020 than other cohorts.

Field research activities

Over half of non-academic geoscientists (61%) were conducting fieldwork activities in Spring 2020, compared to 46% of academic faculty, 36% of students, and 27% of post-doctoral fellows. Over half of non-academic geoscientists reported deferring fieldwork activities to a later time, and just over one-fifth reported no impacts.

Nearly three-quarters of students had fieldwork activities cancelled, with either planned fieldwork being cancelled (60%) or active fieldwork being terminated (14%), while 20% of students reported their fieldwork was deferred to a later time. Other cohorts noted similar impacts in addition to challenges related to working from home and managing childcare.
time. Academic faculty most frequently reported deferring fieldwork activities (41%), or cancellations of planned fieldwork activities (37%). Other impacts reported include a mix of multiple impacts, modifying fieldwork to include health and safety protocols, and an increase in fieldwork activities and projects. Due to the small number of post-doctoral fellow respondents conducting fieldwork activities during Spring 2020, we excluded this cohort from this detailed analysis.

Lab-based research activities

Just over half of academic faculty (54%) were conducting lab-work activities in Spring 2020, compared to 46% of students, 40% of post-doctoral fellows, and 22% of non-academic geoscientists. Most respondents across all cohorts reported deferring lab research activities to a later time, while approximately one-third of students and post-doctoral fellows reported termination of their lab activities. One-fifth of non-academic geoscientists reported no impacts to their lab-based activities. The most common “other” impact was the conversion of lab activities to virtual/online formats or at-home activities.

We will continue to provide current snapshots on the impacts of COVID-19 on the geoscience enterprise throughout the year. For more information, and to participate in the study, please visit: www.americangeosciences.org/workforce/covid19

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