

IMPACTS OF COVID-19 FOR EMCRs

NATIONAL SURVEY REPORT

In May 2020, the Australian Academy of Science Early- and Mid-Career Researcher (EMCR) Forum conducted a survey to investigate the impacts of COVID-19 on EMCRs in science, technology, engineering and mathematics (STEM) in Australia.

The survey results indicate that COVID-19 restrictions are having significant effects on the mental health and productivity of EMCRs and will likely have a lasting impact on their careers and wellbeing. Researchers across the country reported increased anxiety due to uncertainty in their employment situation, the need to manage competing priorities, changes in the workplace and perceived loss of career prospects.

Female EMCRs with caring responsibilities, researchers who are early in their career, and researchers working on contract were the groups most impacted by the pandemic. The EMCR Forum concludes that employers, governments and funding bodies must take action to support Australia's future science leaders during this crucial time. This position is supported by the Australian Academy of Science.

IMPACTS ON RESEARCH

TOP 4 DISRUPTIONS TO WORK

1 Inability to participate in conference and training opportunities **63%**

2 International and interstate research opportunities were halted **52%**

3 Ability to travel to collect data was disrupted **51%**

4 Ability to do lab work was affected **51%**

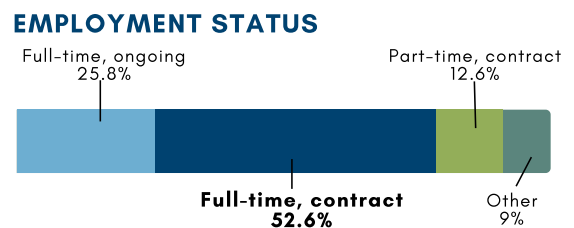
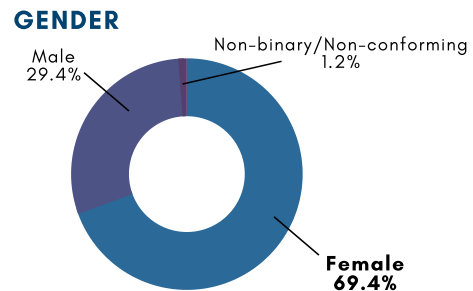
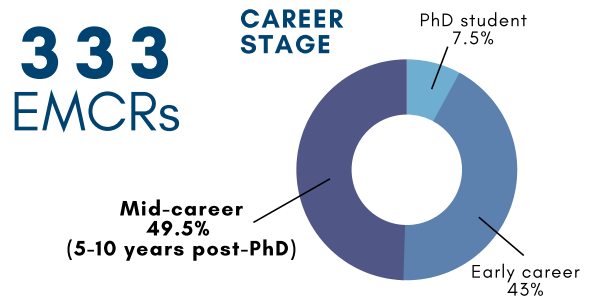
89%
SAID COVID-19 DISRUPTED THE WAY THEY WORK

88%
CHANGED THE WAY THEY FULFILL THEIR WORK OBLIGATIONS

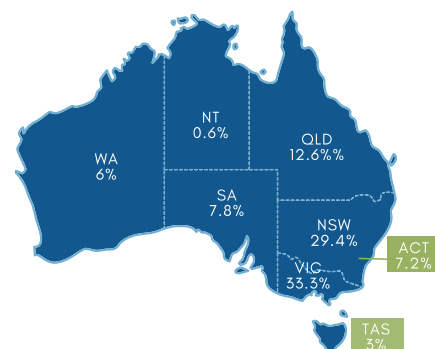
83%
FEEL THAT THE CHANGES IN THEIR WORKPLACE MADE THEM LESS PRODUCTIVE

82%
TRANSITIONED TO WORKING FROM HOME

SURVEY PARTICIPANTS



LOCATION



“The knowledge that my research has completely stalled, and I only have two years left to apply for funding. I have no momentum. This year was meant to be the year for that...”

- Survey respondent

VULNERABILITIES AND WELLBEING

CARERS

MAIN IMPACTS FOR CARERS

- Stress and mental health impacts caused by dealing with competing priorities
- Productivity levels affected by absence of undisturbed time
- Potential health impacts from working extended hours and weekends to "catch-up" with work responsibilities
- Home-schooling responsibilities hinder research productivity
- Increased anxiety about the wellbeing of older dependents

“Working from home with two young children, while being responsible for their education, has been very challenging. It has hugely affected my productivity and sometimes my mental health.”

- Survey respondent



OF THOSE WITH CARING RESPONSIBILITIES, THE INCREASE IN CARING RESPONSIBILITIES IMPACTED THEIR ABILITY TO WORK



46% OF RESPONDENTS HAVE CARER RESPONSIBILITIES



62%
FEMALE



50%
MALE

WOMEN

The EMCR Forum recognises similarities between the findings of this survey and those of the Rapid Research Information Forum (RRIF) report on the [impacts of COVID-19 on women in STEM](#). The combination of increased caring responsibilities, disruptions to working hours, job insecurity and paid work capacity will have significant effects on the careers of female EMCRs (an underrepresented group in STEM) and hinder their opportunities to contribute to Australia's research and economic recovery.



90% OF FEMALE EMCRS EXPERIENCED DISRUPTIONS TO THEIR WORK DUE TO COVID-19

Compared to 85% of male EMCRs



31% OF FEMALE EMCRS SAID THEIR CARING RESPONSIBILITIES INCREASED SIGNIFICANTLY, AND THAT THEY FOUND IT VERY DIFFICULT OR EVEN IMPOSSIBLE TO FULFILL WORK OBLIGATIONS

Compared to 16% of male EMCRs

WELLBEING



38% IDENTIFIED SOME POSITIVE OUTCOMES TO THE CHANGES IN THEIR WORKPLACE



POSITIVE OUTCOMES

- Increased flexibility in the workplace
- Ability to spend more time with family, especially children
- Less interruptions during work time for those without carer responsibilities
- Less time spent commuting to work
- More opportunities to learn new skills online
- Innovations in workflows and communication

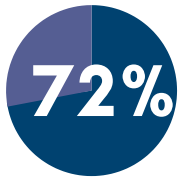


NEGATIVE OUTCOMES

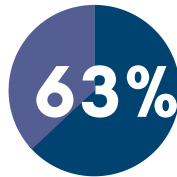
- Increased administrative and teaching workload
- Increased anxiety about end of contract and long-term impact of productivity loss for their careers
- Higher stress levels and mental health impacts due to ongoing uncertainty
- Lower productivity levels and research outputs

INSTITUTIONAL RESPONSE

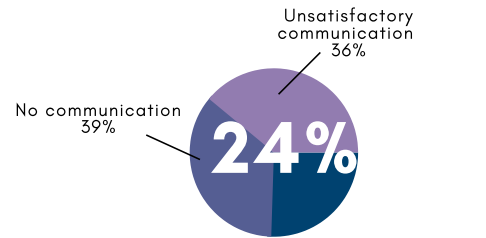
HOW DID EMPLOYERS RESPOND?



satisfactorily discussed the impact of COVID-19 response measures in the workplace with their employer



agree their supervisor provided adequate information and support addressing limitations or changes in the workplace



said their supervisors satisfactorily communicated the impacts of workplace changes on their research output

CHALLENGES FOR UNIVERSITIES

Closures of research facilities, laboratories and offices at universities due to COVID-19 disrupted data collection and research outputs for over half of the respondents. Activities considered to contribute to a researcher's track record were disrupted and replaced with more teaching and administrative tasks.

This shift in the nature of workload for researchers will raise challenges for universities on how they evaluate staff for internal promotions. **Female EMCRs with caring responsibilities and those who reduced their working hours are the most likely to be affected.**



FUNDING BODIES RESPONSE

Respondents indicated that these are some of the actions funding bodies should implement to support EMCRs in response to the current pandemic:

- 1 Allow researchers to renegotiate grant milestones and deliverables to account for COVID-19 disruptions
- 2 Provide flexible deadlines and allow for deadline extensions for project funding to account for delays, such as limited lab access
- 3 Provide clear instructions on how EMCRs can capture the impact of COVID-19 on their research track record in applications and assessments
- 4 Allow researchers to claim a career disruption due to COVID-19, especially those with carer responsibilities
- 5 Provide eligibility extensions for those who are in the last year of eligibility for particular fellowships



The EMCR Forum notes the findings of the May 2020 RRIF report on the [impact of COVID-19 on the research sector](#), which predicted "university job losses of up to 21,000 full time equivalent (FTE) positions are projected over the next six months of which an estimated 7000 could be research-related academic staff. There are concerns that women, early-career researchers and recent graduates will disproportionately experience negative impacts".

The results of the EMCR Forum national survey indicate that EMCRs have been heavily impacted by COVID-19 and will have less research capacity than prior to the pandemic to contribute to Australia's economic recovery. It is vital that employers, governments, and funding bodies consider the specific needs to retain and support EMCRs in the design and development of post-pandemic recovery plans.

“ COVID response planning has taken all 'spare' time from my PI [principal investigator], leaving me unsupervised at a critical point in the project. ”

- Survey respondent



RECOMMENDATIONS BY THE EMCR FORUM

FOR EMPLOYERS

- Provide clear communication on the productivity level expected during the pandemic
- Allow fellowship or contract extensions for employees who need to transfer from full to part time
- Provide assistance for researchers documenting how their track record and grant progress has been impacted by the pandemic
- Provide casual teaching support to manage increased teaching load caused by the shift to online delivery
- Provide access to training on 'leadership under volatile conditions' for EMCRs with supervision responsibilities
- If possible, offer small research grants to compensate for potential loss of research grants from funding bodies
- Continue to provide increased workplace flexibility post-pandemic
- Formally monitor the impacts of COVID-19 on EMCRs and include EMCRs in the design and delivery of HR policies and practices and other support programs
- Formally monitor and measure the impact on gender equity and diversity in STEM of COVID-19 and maintain gender equity and diversity programs

FOR GOVERNMENT

- Acknowledge the disruptive impact of COVID-19 on Australia's EMCR community and our future STEM workforce
- Include the EMCR community in the design and delivery of policies and programs that support science and research, including the role of science and research in economic recovery
- Ensure research funding applications allow applicants to articulate adverse effects on their research capacity due to unprecedented events, like COVID-19
- Develop guidelines for assessors reviewing research funding applications to ensure the impacts of COVID-19 for the research capacity of the applicant are properly considered
- Extend JobKeeper to the university sector and other STEM employers currently ineligible
- Formally monitor the impacts of COVID-19 on EMCRs to inform the development of policies and programs that mitigate the effect of attrition from the research sector
- Formally monitor the impact of COVID-19 on equity, diversity and inclusion in STEM, such as to analyse potential threats to achieving the vision of the Women in STEM Decadal Plan

TO SUPPORT CARERS

- Reduce the definition of full-time hours for carers
- Where possible, collect information about staff's caring and schooling responsibilities and the nature of dependents when discussing working from home arrangements to find an option that suits their needs
- If possible, consider providing access to safe work spaces for EMCRs with dependents for a few hours a day
- Allow for teaching free periods for staff with caring responsibilities when schools close to help reduce the burden of competing priorities

FOR EMCRS

- Seek clear communication from supervisors on what is expected from you during this time
- Take advantage of available online opportunities to build your transferable skills
- Be kind to yourself and those around you—the current circumstances are unprecedented, and everyone copes with change in different ways

ACKNOWLEDGEMENTS

This paper was prepared by the members of the EMCR Forum Executive in July 2020. Ms Laura Navarro from the Australian Academy of Science contributed to research and drafting of the document.

ABOUT THE EMCR FORUM

The EMCR Forum is the national voice of Australia's emerging scientists, representing researchers who are up to 15 years post-PhD (or other research higher degree), irrespective of their professional appointment or their discipline or research. The EMCR Forum's mission is to champion improvement in the national research environment through advocacy.

Some of the main areas of focus for the EMCR Forum are sustainable and transparent career structures, gender equity, stable funding policies, career development opportunities, and raising awareness of issues facing the future of science.

The EMCR Forum is supported by the Australian Academy of Science, which provides secretariat and other support for the Forum and its activities. This is a key strategic activity of the Academy and underpins its commitment to support diversity and excellence in science and empower the next generation of scientists. The EMCR Forum provides a mechanism for the Academy to engage with EMCRs around Australia and to receive advice on issues relevant to them. This informs the Academy's activities and its policy recommendations to government in view of creating a better future for scientists. The EMCR Forum provides a vital connection between Australia's most eminent scientists and tomorrow's future scientific leaders.