

Climate change threatens research itself

February 25 2020, by Dominic Jarvis



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Australian experts are calling for the higher education sector to prepare for the knock-on effects of climate change on their research.

A collaborative study between The University of Queensland and RMIT found extreme [climate change](#) weather events such as bushfires, hailstorms and floods impacted on research production.

UQ scientist and Director of Science at The Wildlife Conservation Society Professor James Watson said [climate](#) change was an escalating threat to research-intensive universities.

"Researchers are going to have to adapt their work to our changing climate," Professor Watson said.

"It will inevitably affect the physical assets needed for research such as buildings and equipment, research processes and practices, and the human groups and organisms studied.

"Our institutions need to start putting together climate risk plans that address the issue."

Associate Professor Lauren Rickards from the RMIT Centre for Urban Research said the recent bushfires have been a wake up call.

"Ecological [field work](#) is one of the most exposed and sensitive of any human activity to climatic and biophysical disruption," Dr. Rickards said.

"Even field work designed to study exactly such events can find vital data streams, research projects and intellectual agendas disrupted.

"Interruptions like this are especially consequential for groups unable to pivot their work to studying bushfire recovery or find alternative sites.

"It also effects people on time-sensitive work contracts or scholarships, with inflexible or limited budgets, or without the time or means to re-establish studies."

Even research seemingly safe inside buildings can find itself suddenly disrupted by climate-related events.

"The recent hailstorms [in Canberra] severely affected research at Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) by damaging three greenhouses and destroying

years of experiments, many on crop sustainability and resilience," Dr. Rickards said.

"According to CSIRO's Chief Operations Officer, most of those projects will be totally lost and the remainder will take years to recover."

Professor Watson said researchers cannot study climate change as independent observers.

"The only way the situation will change is when the university and research sectors, including national research councils' awarding grants, make a commitment to integrate climate adaptation vulnerability assessments and planning into their grant decision-making process," he said.

"We can't continue to be blind in the research sector as it will ultimately affect our ability to report on climate change related issues."

The research is published in *Nature Climate Change*.

More information: Lauren Rickards et al. Research is not immune to climate change, *Nature Climate Change* (2020). [DOI: 10.1038/s41558-020-0715-2](https://doi.org/10.1038/s41558-020-0715-2)

Provided by University of Queensland

Citation: Climate change threatens research itself (2020, February 25) retrieved 30 April 2024 from <https://phys.org/news/2020-02-climate-threatens.html>

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