How is biomedical research funding faring during the COVID-19 lockdown?

As the current pandemic has taken scientists away from the lab, funding agencies are having to adapt to these extraordinary situations. Some are keeping true to their original plan. Others have had to make difficult decisions.

Paul Webster
As the COVID-19 pandemic sours national economies around the world, funding bodies are having to do some soul-searching.

Government-funded medical research bodies in the UK, Europe, USA and Australia say they are committed to maintaining funding continuity for biomedical research. They are virtualizing peer-review panels and, in some cases, prolonging deadlines for funding competitions. So far, only in Canada has a major health-research funding round been canceled outright due to the pandemic.

However, for scientists supported by charitably funded entities — especially those that rely on public fundraising drives—funding this year is much less certain than it is for government-supported scientists.

On 6 April 2020, Cancer Research UK (CRUK), the charity that funds about half of all UK cancer research, announced that due to the "unprecedented financial effect" of COVID-19, it will cut its research budgets this year by up to 10%, alongside a cut of 20% or more to infrastructure spending. "We've also taken the decision to postpone any new funding commitments," CRUK's Executive Director of Research and Innovation, Iain Foulkes, explained in an open letter co-written with the group's chief scientist, Karen Vousden, and chief physician, Charles Swanton, "which means no new research projects will be funded for
at least the first half of this year."

CRUK expects its fundraising income to fall by at least 20% in the next financial year, a reduction of around £120 million. "We are a fundraising charity and we rely on our supporters’ donations," Foulkes, Vousden and Swanton explained. "Our shops have closed, our mass fundraising events have stopped, legacies have reduced."

In Los Angeles, David Sampson, the strategic director of medical and science communications for the American Cancer Society (ACS), which raises about US$100 million for extramural cancer research annually and is the largest non-governmental, not-for-profit funding source of cancer research in the USA, says that "while the COVID-19 epidemic has the potential to impact our ability to fund research, we have not made changes to our research budget at this time, and it is too early to quantify what any impact might be."

On 6 April, the ACS approved funding for 79 research and training grants at 59 institutions, totaling over US$36 million in the first of two grant cycles for 2020, Sampson said in an email message. “Grant applications were reviewed and approved remotely in light of the coronavirus epidemic, and the grant starting date was moved from July 1 to September 1, 2020, to accommodate institutions that are partially shut down due to the epidemic.”

**Canada’s foreboding example**

Whether future funding continuity can be guaranteed is an open question, however, the ACS recently warned in an update for researchers posted online. "As with many businesses, it remains uncertain how the pandemic will affect the economy and donations." This may impact its ability to fund grants later in 2020 at the normal level, the society warns. "At this point, funding of grants at any level for the next cycle cannot be guaranteed."

The Canadian Cancer Society (CCS) is similarly concerned, says Bob Bell, a CCS board member who formerly chaired both Cancer Care Ontario’s Clinical Council and the Cancer Quality Council of Ontario. The CCS forecasts a drop in donations of up to CDN$100 million
in the year ahead, or about half of its budget, says Bell. "In our 80-year history, CCS had never faced a greater challenge. The impact of the pandemic on CCS and all charities has been devastating."

April is normally one of the busiest months for cancer-research fundraising in Canada, Bell explains. "Typically we have fundraisers going door to door and numerous community fundraising events in towns and cities across the country. We're hopeful that moving a number of these events online will help." The CCS has yet to decide whether it will follow CRUK's lead in announcing cuts to its research budgets, Bell says.

The CCS is Canada's largest cancer-research funding agency after the Canadian Institutes of Health Research (CIHR), which is funded by the Canadian government. In a step that alarms many Canadian scientists, on 2 April, the CIHR canceled a major funding round that 2,300 investigators had applied for. "This is the only granting agency I know of to kill a competition that was in progress," observes Jim Woodgett, Koffler Director of Research at the Lunenfeld-Tanenbaum Research Institute, in Toronto. "Others have postponed or deferred competitions due to begin."

In an open letter to researchers on 3 April, the CIHR explained that it "did consider virtual peer review for the Spring 2020 Project Grant competition." But the agency—which until recently aggressively promoted online peer-review techniques—said it was not prepared: "With the situation continuing to evolve, we could not be certain about the reliability of the critical infrastructure required to deliver a high-quality competition," the CIHR explained.

It is not an explanation that sits well with Woodgett, who notes that the US National Institutes for Health (NIH) "switched to a secure Zoom platform in less than a week. Either this means CIHR has major vulnerabilities in its capacity to support remote IT solutions or it simply didn’t want to."

In canceling its current funding round and asking scientists to re-apply later this year, the CIHR finds itself at odds with its peer agencies in Australia, Europe, the UK and the USA.
Others holding strong

"There have been no cuts to Australian Government funding for health and medical research due to COVID-19," Anne Kelso, Chief Executive Officer for Australia's National Health and Medical Research Council, told Nature Medicine in an email. "Some funding processes are being slowed down to manage workloads for the research sector during 2020, while others have been accelerated to deliver rapid funding for COVID-19 research."

Nor have Australian charitable groups announced cuts to health-research programs, adds Gaetan Burgio, head of the Transgenesis Core Facility at the Australian National University College of Health and Medicine.

The European Research Council (ERC) is similarly undeterred by the pandemic, says ERC spokesperson Marcin Monko. "We're doing our best so that neither the current grantees nor current or future applicants are affected negatively by the pandemic. Therefore, we plan to open our Advanced Grants call (total budget of around €500 million) in May as planned," Monko explained in an email message.

James Giles-Franklin, Media and Communications Manager for UK Research and Innovation (UKRI), which, with a combined budget of more than £7 billion, brings together seven government-funded UK research councils, says his agency is taking much the same approach as the ERC’s.

“Our current plan is for UKRI funding programs to continue,” the UKRI has reassured researchers. “Funding opportunities that are open now will continue to be advertised. All our systems are operating as normal.” The deadlines on all open funding opportunities will be extended to give applicants more time to submit their applications on a case-by-case basis in which 'no-cost' extension requests to grants impacted by coronavirus will be allowed, UKRI says.

In the USA, where, despite calls from the Trump administration for deep cuts to the NIH and
National Science Foundation budgets in February, Congress approved substantial increases, the COVID-19 crisis has generated additional funding for NIH biomedical research awardees, says Kevin Wilson, the director of public policy for the American Society of Cell Biologists. “The NIH is trying very hard to maintain research continuity. The study sections are meeting virtually, and what we hear is what we want to hear. There’s been no hint of disruption.”

Officials with four major non-governmental health research entities that rely on private-foundation support, including the UK-based Wellcome Trust and the US-based Gates Foundation, Howard Hughes Medical Institute and Chan-Zuckerberg Initiative, also confirm that their research support will for now continue undiminished despite the economic impacts of the pandemic.

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