COVID-19 Hits Cancer Research Funding

Investigators worry about drop in institutional and philanthropic money, loss of productivity

As the impact of the COVID-19 pandemic continues to grow, with labs shuttered and clinical trials on hold, investigators' worries about the long-term effects on grants and funding are mounting.

"I think there are going to be wide, sweeping effects," says Eileen White, PhD, deputy director of the Rutgers Cancer Institute of New Jersey in New Brunswick. "This is going to have an impact at an institutional and at a federal level. I don't think we know what the impact will be, but I think everyone is bracing for a difficult time."

The NIH and NCI have released guidelines about federal grants and funding during the pandemic. "As a general principle, the NCI is trying to provide maximal flexibility to investigators," says the agency's director, Norman "Ned" Sharpless, MD. "We really want to avoid work stoppages, we want to avoid layoffs, we want to avoid a loss of research capacity for cancer research."

To that end, the agencies are extending deadlines on grant applications and reporting requirements and are offering research extensions. The agencies are also providing flexibility on how money is spent, allowing investigators to use grants to pay salaries and stipends or to cover unanticipated research costs. "I think it will be enormously helpful," White says.

Steven Artandi, MD, PhD, director of the Stanford Cancer Institute in Palo Alto, CA, agrees, noting that federal funding for cancer research appears intact so far, bolstered by a $2.6 billion increase to the NIH budget for fiscal year 2020. However, future funding levels remain unclear. "There's an openness towards deficit spending right now, and there is strong support for biomedical research," Artandi says. "In the immediate term, I suspect it's not going to be a major issue," but long-term deficit spending is concerning because no one is certain about how Congress will respond.

"I hope that the NCI and NIH budgets will be stable," White adds, "but I don't know, with all the competing financial problems, whether or not that will be true."

Institutions are feeling the economic pinch, too, with universities anticipating declines in income derived from their endowments, and hospitals assuming pandemic-related costs while deferring elective procedures that generate income. Many universities—including Stanford and Rutgers—have announced hiring freezes, and hospitals, including the Mayo Clinic in Rochester, MN, have cut salaries and furloughed employees. "The NCI and NIH only fund a fraction of the activity that goes on in cancer centers and in medical schools," Artandi says. "It requires so much institutional support to make cancer research effective, so I'm worried about how these other financial implications are going to restrict activity."

Philanthropic support is also likely to decrease as foundations cancel fundraising events and individuals focus on their own bank accounts. "People are concerned about other things—mainly their health—and the markets have gone down considerably, so these are bad omens for philanthropy," White says. The American Cancer Society, for example, announced that it may be unable to fund grants at the normal level later this year, and that grant funding is not guaranteed for the next application cycle.

Alice Soragni, PhD, of the University of California, Los Angeles, worries that reduced philanthropic support will disproportionately affect early-career investigators who rely on it. "Foundation funding is how I got my lab started, and it's how we got the preliminary data that allowed my lab to be successful in securing NCI funding," Soragni explains. "If those funds are jeopardized … I think that's going to be felt by lots of early-stage folks." Early-career investigators also stand to be more affected by lab closures, she adds, as "you're really trying to work hard and fast to accumulate data that allow you to get grants." To address this concern, the NIH announced it will extend its definition of an early-stage investigator beyond 10 years.

Artandi is also worried about postdoctoral fellows and clinical trainees faced with hiring freezes, which will cause applications to pile up, and possibly hinder career advancement. "It's very bad timing for people who are just getting on the job market now," he says.

White expects that reduced productivity will be an issue for all investigators as they struggle to advance their research at home while juggling childcare and other responsibilities, which could hinder their ability to secure future grants. "The overall productivity that would normally be required for preliminary data for a grant application is not going to be as robust as one would like given the circumstances," White says, especially for bench scientists, who cannot access their labs.

Soragni hopes that these circumstances will be considered by those reviewing applications. "The standards cannot necessarily be the same—we don't have the ability to do experiments now, and so that has to change the way in which we evaluate grants," she says. Some institutions are working to mitigate productivity concerns. For example, Stanford and Rutgers are extending tenure clocks for all investigators by a year.

Despite this myriad of funding challenges, cancer researchers are determined to continue making progress. "This virus is a devastating problem, but cancer doesn't go away—our cancer patients are still in need of care, and people will keep getting diagnosed," Soragni says. The disruption is undeniable, she adds, "but I think we really need to focus on preserving our cancer research capabilities so that we can restart once it's safe to do so."

–Catherine Caruso ■

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