

A Scientific Enterprise that is Open by Default and Equitable by Design: The Time is Now

Lessons from COVID-19

The pandemic brought researchers from across the country and the world together to build open systems for scientific collaboration - like the COVID-19 database to quickly share research articles and data - that have been key to our pandemic response including the fastest development of a vaccine in human history. Prior to the pandemic, federally-funded research was only required to be made public one year after publication, prompting the White House Office of Science & Technology Policy to ask publishers to lift 12-month embargoes on COVID-related science in March 2020. Waiting an entire year to make COVID-related research public would have cost more lives, and the continuation of any embargo period on taxpayer-funded research creates a dangerous precedent we cannot afford. The unprecedented health crisis laid bare the limits of a “closed” scientific publishing system that fails to quickly share, analyze, and review emerging science or support researchers from diverse backgrounds. **Congress and the Administration can end the needless delays that researchers, doctors, patients, entrepreneurs, and innovators currently face, and speed up scientific progress by ensuring immediate open access to the results of taxpayer-funded research with no embargo.**

Open Science Accelerates Research & Innovation

The majority of taxpayer-funded research outputs are locked behind publisher paywalls or inaccessible in proprietary databases, stifling the broad dissemination of knowledge and our ability to innovate for the public good. Public health crises like the COVID-19 pandemic and climate change have demonstrated just how important it is for scientists to openly share the results of their

The COVID-19 crisis has taught us that we cannot go back to science as usual, where research articles are locked behind paywalls and data is stuck in silos. Congress and the Biden Administration should make all taxpayer-funded research articles—and the data that supports them—immediately open to all. American lives depend on it.

research without delay or cost to the public. Open Science is a collection of policies, practices, and norms that empower scientists to do just that, by making research AI-ready and available under an open license to accelerate discovery and improve lives. Without open systems of knowledge sharing and collaboration, federally-funded research falls short of its promise to leverage investments in science for public benefit.

Open Science: A National Strategy to Meet Pressing Challenges

A “status quo” approach to scientific publishing impedes the United States’ ability to address current and future national challenges such as climate change, economic competitiveness, public health, and racial equity. The impact of open science on COVID-19 provides the federal government with an opportunity to ensure open science practices continue beyond the pandemic. Specifically, a national open access policy would require that all articles, data, and code resulting from taxpayer-funded scientific research be made immediately and freely available online to the public in open and machine readable formats, and under a license that allows them to be freely shared and fully used.

Congress and the Biden Administration can work together to end the needless delays that researchers, doctors, patients, students, entrepreneurs, and innovators currently face, and speed up scientific progress. Creating a national open science policy would make taxpayer-funded research more useful and increase our collective return on investment in science. Such a policy is also important to America’s leadership in science by bringing the U.S. to equal footing with governments around the world (including the European Commission, the UK, Canada, China, and Brazil) that have already established strong open access policies to promote their national innovation agenda.