September 2022

FEDERAL RESEARCH

Information on Funding for U.S.-China Research Collaboration and Other International Activities

Why GAO Did This Study

Federally funded research and development (R&D) contributes to innovation, the economy, and national security. To achieve their missions, federal agencies sometimes provide research funds to foreign entities such as universities, laboratories, and public health organizations. Agencies may also collaborate with foreign entities to access resources such as one-of-a kind scientific facilities. In fiscal year 2020, federal agencies obligated about $1.4 billion for R&D collaboration with foreign entities. The federal government also appropriated about $2 billion to multilateral institutions in fiscal year 2020 to promote U.S. and global security.

GAO was asked to review federal funds provided to China for collaborative research, and U.S. contributions to multilateral institutions. This report describes (1) the amount of funding departments and agencies provided to Chinese entities for collaborative research, (2) selected departments' and agencies' programs, activities, and results of collaborative research with Chinese entities, and (3) funding the U.S. government has provided to selected multilateral institutions that support activities in China.

GAO analyzed data from five agencies with the largest amount of funding for R&D. In consultation with the Departments of State and the Treasury, GAO analyzed publicly available data on eight selected multilateral institutions that provided funding and loans to China based on agency and multilateral institution's budget documents. GAO interviewed agency officials about the funding and activities.

View GAO-22-105313. For more information, contact Candice N. Wright at (202) 512-6888 or WrightC@gao.gov or Kimberly Gianopoulos at (202) 512-8612 or GianopoulosK@gao.gov.
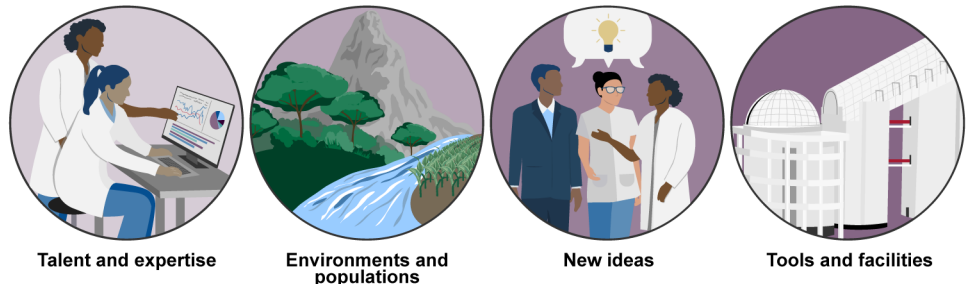
What GAO Found

The U.S. government collaborates with and supports foreign entities such as those in China to, among other things, broaden U.S. access to scientific resources. Of the five agencies that GAO reviewed, the Centers for Disease Control and Prevention, the Department of Defense, and the National Institutes of Health obligated $28.9 million directly to Chinese entities from fiscal years 2015 through 2021. Neither of the other two agencies—the National Science Foundation and the Department of Energy—provided awards directly to Chinese entities. Chinese entities also received federal research funds through subawards to do a portion of the work. The full extent of that funding is not known due to limitations in the data provided in accordance with federal subaward reporting requirements.

Examples of Resources Available Through International Research Collaborations

Talent and expertise   Environments and populations   New ideas   Tools and facilities

Source: GAO analysis of agency documents. | GAO-22-105313

The awards funded by the Centers for Disease Control and Prevention, the Department of Defense, and the National Institutes of Health focused on multiple scientific disciplines, including public health and biological sciences. For example, the Centers for Disease Control and National Institutes of Health funded Chinese entities to conduct a wide range of research, including disease surveillance, vaccination studies, and the development of new drugs. Additionally, the Department of Defense funded research in areas such as alternative technologies to propel vehicles such as drones. These awards provided directly to Chinese entities resulted in scientific articles, data collection systems, and international workshops.

The U.S. government, along with other donors, provides funding to some multilateral institutions—such as the United Nations. Multilateral institutions support activities worldwide, including in China, in areas such as agriculture, infrastructure, and economic development. According to State and Treasury officials, multilateral institutions specify how funding should be used, and which countries should receive funding.

United States Government Accountability Office