

ORIP

OFFICE OF RESEARCH
INFRASTRUCTURE PROGRAMS



S10 SHARED INSTRUMENTATION GRANT PROGRAM

orip.nih.gov
[X.com/NIH_ORIP](https://x.com/NIH_ORIP)

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Fact Sheet 2025

ORIP'S MISSION

ORIP advances the National Institutes of Health (NIH) mission by supporting infrastructure for innovation. This support is focused on research resources, including animal models for human diseases, cutting-edge scientific instrumentation, construction and modernization of research facilities, and research training opportunities for veterinary scientists. Through continued engagement with NIH institutes, centers, and offices and the biomedical research community, ORIP empowers and expands existing programs and develops new initiatives to support NIH research at the forefront of scientific progress.



National Institutes of Health
Office of Research Infrastructure Programs

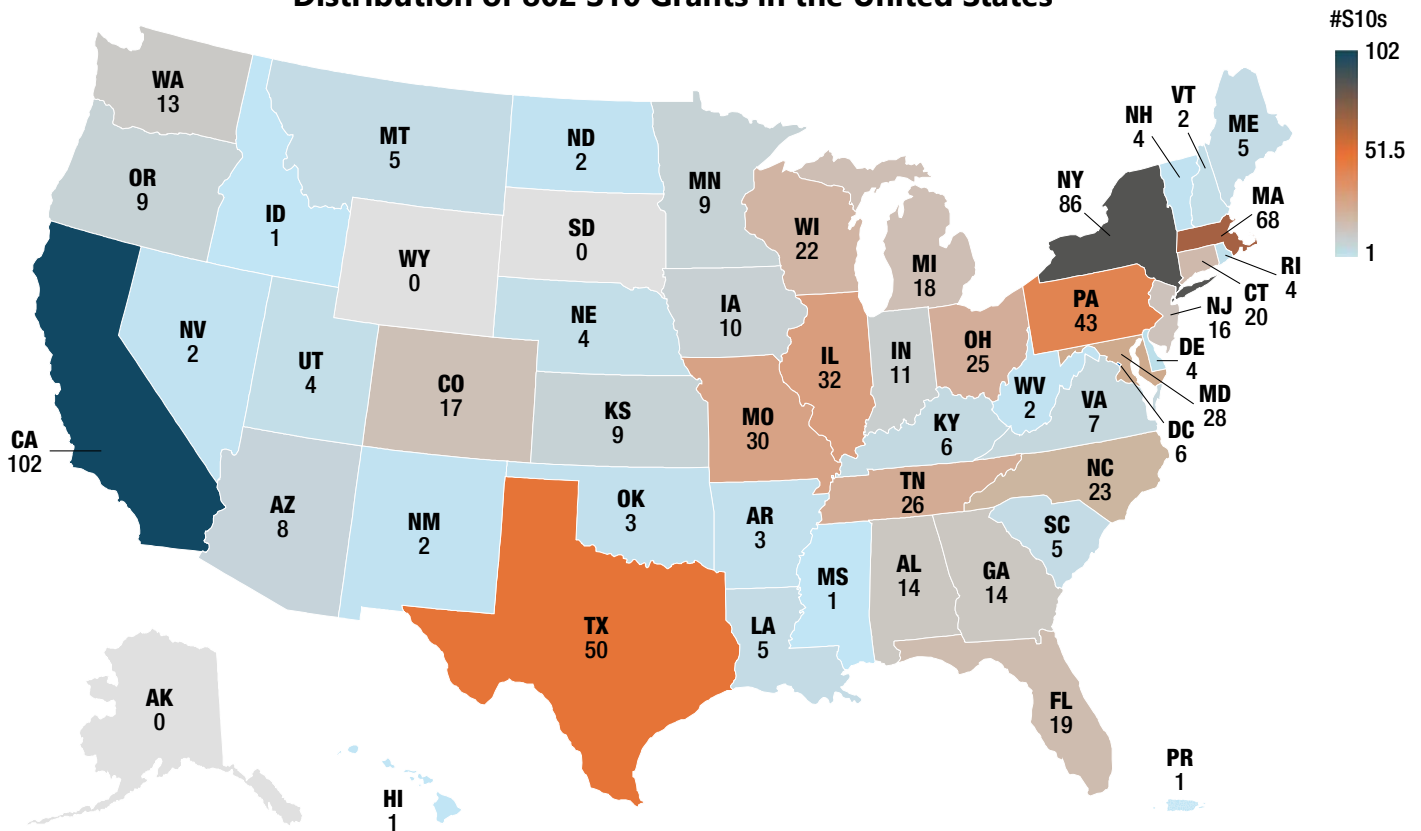
Photo credits: Images above courtesy of Avital Rodal, Brandeis University; Nir Hacohen, Massachusetts General Hospital; Vincent Magnotta, University of Iowa.

OVERVIEW

ORIP's Division of Construction and Instruments manages one of the most productive and impactful programs at the NIH—the [S10 Shared Instrumentation Program](#). The program supports the acquisitions of a wide spectrum of commercially available scientific instruments that are critical to conducting cutting-edge research or establishing basic research capacity. The instruments awarded are typically too expensive to be acquired by an individual investigator. However, through shared use of the awarded instruments,

the S10 program facilitates the most advanced scientific discoveries and creates new opportunities to enable a broad range of basic, clinical, and translational research activities in all the scientific disciplines supported by NIH institutes, centers, and offices. By maximizing cost-effectiveness, ORIP's S10 Shared Instrumentation Program optimizes operational efficiency and significantly increases the amount of advanced technologies made available to investigators.

Distribution of 802 S10 Grants in the United States*



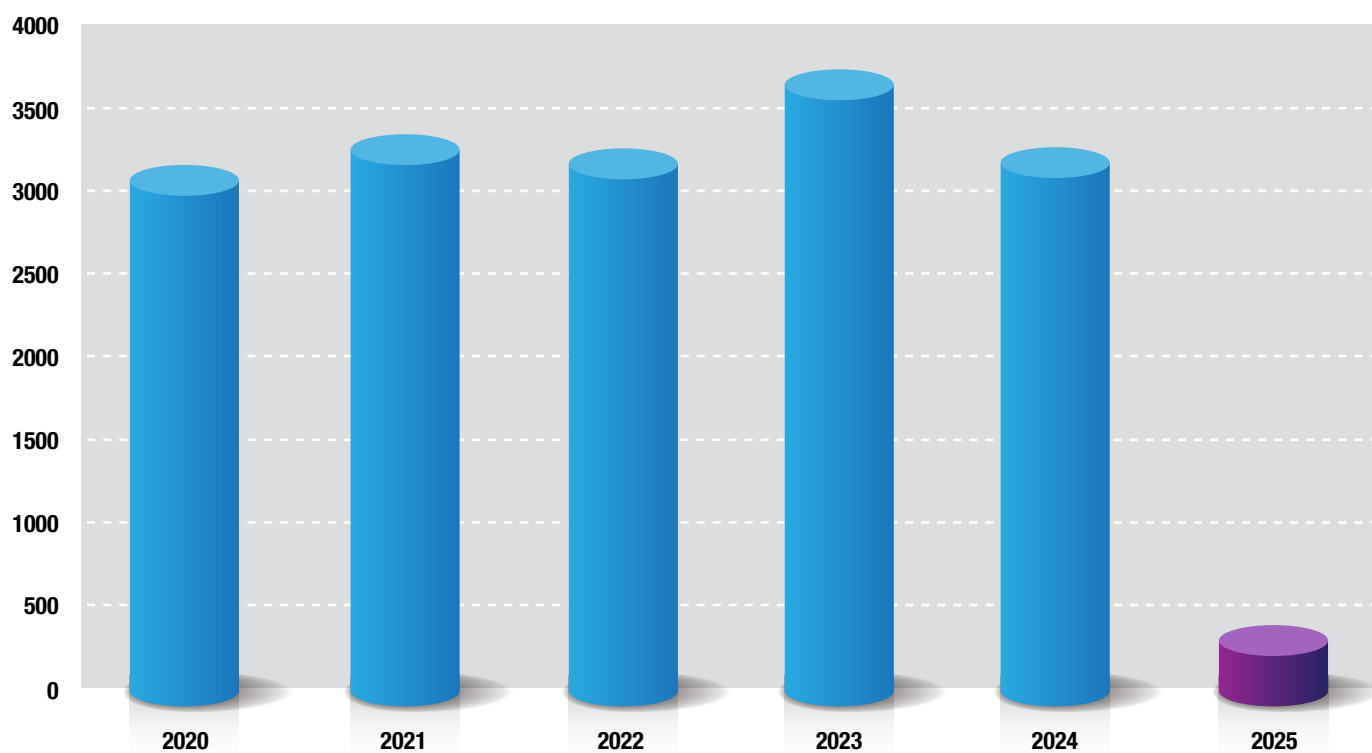
* As of January 2025, 802 S10 Shared Instrumentation grants were under ORIP's management. S10 grants were awarded to 219 institutions located in 47 states, as well as Washington, D.C., and Puerto Rico. (As indicated in the map above, no grants have been awarded in Alaska, Wyoming, or South Dakota at this time.) For more information, please visit orip.nih.gov/division-construction-instruments/s10-instrumentation-programs.

HOW THE S10 PROGRAM CONTRIBUTES TO COLLABORATIVE AND IMPACTFUL RESEARCH

Each S10-awarded instrument is used by three or more major users with active NIH research funding. The shared-use requirement makes the S10 program inherently collaborative, efficient, and cost-effective, enhancing our nation's leading position in research operations. As such, each S10-funded instrument serves as a collaborative hub that promotes mutually beneficial research endeavors among scientists with different backgrounds and expertise to collaborate on biomedically relevant projects from hundreds of institutions nationwide, fostering new ideas and innovation. For many public institutions whose research and development would be stymied without external funding mechanisms, the S10 program allows the purchase of costly state-of-the-art commercial instruments that are otherwise unaffordable.

Since its inception in 1982, the well-established [statutory S10 program](#) has supported the purchase of over 5,800 instruments from a wide range of categories and types. The research stemming from the use of these instruments has produced more than 40,000 publications, with over 3,000 papers being published annually in recent years (see below). This high level of productivity, coupled with its broad impact, has allowed ORIP and its S10 collaborators to fund the annual purchase of more than 100 instruments in recent years, with a relatively even distribution seen geographically and among the different types of instrument categories. Such results further demonstrate the program's ability to successfully facilitate the use of modern commercial instruments to broadly support research activities in all biomedical disciplinary areas.

Number of Publications Acknowledging S10 Grants



The 2025 publication data cover only January and February. See this [list of the most recent S10-acknowledging publications](#).

S10 PROGRAM FUNDING OPPORTUNITY ANNOUNCEMENTS

ORIP issues the following [S10 notices of funding opportunities](#), with one receipt date in June each year:

- Limited Competition: Basic Instrumentation Grant (BIG) Program

- ✦ Award Budget: \$25,000–\$350,000
- ✦ Instruments include, but are not limited to: basic cell sorters, confocal microscopes, ultramicrotomes, gel imagers, and computer systems.

- Shared Instrumentation Grant (SIG)

- ◆ Award Budget: \$50,000–\$750,000
- ◆ Instruments supported include, but are not limited to: confocal and light microscopes, computed tomography (CT) imagers, magnetic resonance imaging (MRI) imagers, positron emission tomography (PET) imagers, mass spectrometers, nuclear magnetic resonance (NMR) spectrometers, cell sorters, flow cytometers, protein and DNA sequencers, surface plasmon resonance instruments, and patch clamp systems.

- High-End Instrumentation Grant (HEI)

- ◆ Award Budget: \$750,001–\$2,000,000
- ◆ Instruments supported include, but are not limited to: MRI imagers, PET/CT imagers, cyclotrons, photoacoustic imagers, mass spectrometers, NMR spectrometers, electron microscopes, cryo-electron microscopes, X-ray diffractometers, super-resolution microscopes, and supercomputing and high-performance computing system and data storage infrastructure.

Program requirements include—

- At least three principal investigators, each with active NIH-funded research awards, who can demonstrate substantial need for the requested instrument.
- Demonstrated commitment by the applicant institution toward continued support for the utilization and maintenance of the requested instrument.

Eligible institutions include—

- Public and private institutions of higher education.
- Nonprofit domestic institutions, such as research hospitals and research organizations.

ADDITIONAL INFORMATION

DIVISION OF PROGRAM COORDINATION, PLANNING, AND STRATEGIC INITIATIVES (DPCPSI) OFFICE OF RESEARCH INFRASTRUCTURE PROGRAMS (ORIP)

For more information about program requirements, management, and previously funded awards, please visit the ORIP website: orip.nih.gov/division-construction-instruments/s10-instrumentation-programs.

