

ORIP

OFFICE OF RESEARCH
INFRASTRUCTURE PROGRAMS



S10 SHARED INSTRUMENTATION GRANT PROGRAM

orip.nih.gov

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ORIP'S MISSION

ORIP advances the 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.



OVERVIEW

The Office of Research Infrastructure Programs' (ORIP) Division of Construction and Instruments manages the S10 Shared Instrumentation Program to support the **acquisitions of commercially available, state-of-the-art scientific instruments** that are critical to the conduct of cutting-edge research. Instruments awarded are typically too expensive to be obtained by an individual investigator with a research

project grant. By shared use of awarded instruments, the S10 program facilitates the most advanced scientific studies and creates new research opportunities to empower a broad range of basic, clinical, and translational research activities supported by NIH institutes, centers, and offices, maximizing benefits of the available advanced technologies.



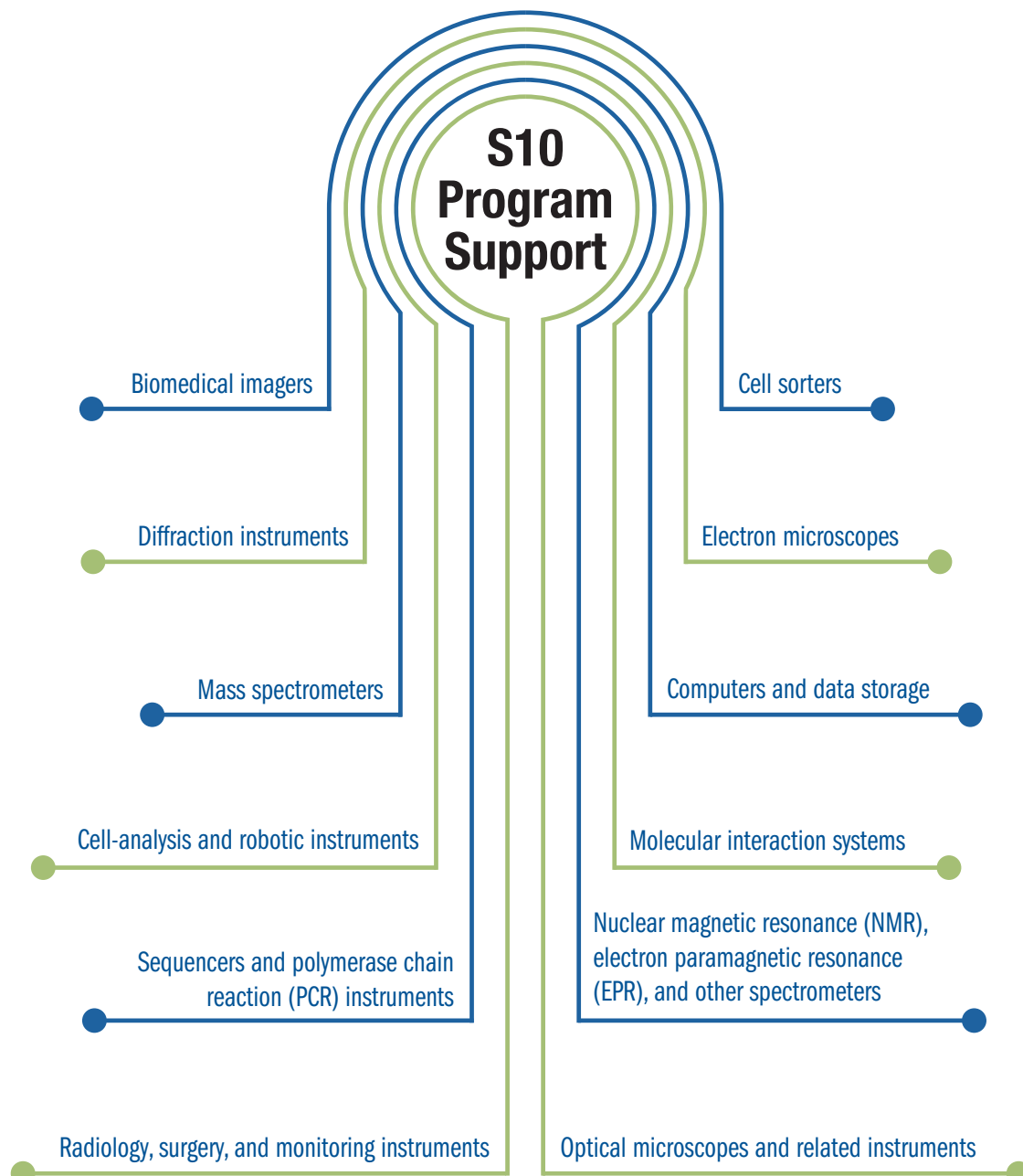
In fiscal years 2021 to 2023, ORIP funded more than 400 S10 Shared Instrumentation grants from 157 institutions in 42 states. For more information, please visit orip.nih.gov/division-construction-instruments/s10-instrumentation-programs.

HOW THE S10 PROGRAM CONTRIBUTES TO COLLABORATIVE AND IMPACTFUL RESEARCH

Every instrument awarded by an S10 grant must have at least three major users who have NIH research funding. The shared-use basis of the S10 program enhances the competitiveness of the research operations and makes it inherently cost-effective, efficient, and collaborative. S10 grants often have many major and minor users from across the same and/or different institutes. As such, the S10 program frequently serves as a collaborative starting point by promoting the engagement of mutually beneficial research endeavors among scientists from different backgrounds and expertise to support biomedically relevant projects at hundreds of institutions nationwide. For public or state institutions where research and development would be stymied without external funding mechanisms, the S10 program allows for the purchase of costly state-of-the-art

commercial instruments that would otherwise be unavailable at these institutions.

Since its inception in 1982, the S10 program has supported the purchase of over 5,700 instruments from a broad range of categories and types. The research arising from the use of these instruments has produced more than 32,000 publications. This demonstrated level of production allows the S10 program to fund the purchase of more than 100 instruments per year in recent years, with a relatively even distribution of awards among geographical areas and institutions across the nation. The number of requested and awarded types of instruments is directly proportional, effectively showing the success of the program at facilitating the purchase and use of modern commercial instruments according to need.



S10 PROGRAM FUNDING OPPORTUNITY ANNOUNCEMENTS

ORIP issues the following S10 notices of funding opportunities with one receipt date per year (June 3, 2024):

- [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, or 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 (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, or 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, or super-/high-performance computing system and data storage infrastructure.

Program requirements include—

- At least 3 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