ORIP

OFFICE OF RESEARCH
INFRASTRUCTURE PROGRAMS



S15/R24 MODERN EQUIPMENT PROGRAM

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Fact Sheet 2025

ORIP'S MISSION o

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.



OVERVIEW

In 2021, ORIP added the Modern Equipment Program to its portfolio toolbox to complement its well-established S10 Shared Instrumentation Programs. Aiming to modernize the research-supporting operations in shared research resources, such as core research facilities and animal facilities, the program supports the acquisition of modern equipment, first through the R24 activity code and now using the S15 code. The Modern Equipment Program

encourages operational innovation to support a broad range of basic and translational research activities. In its first 3 years, the equipment program has received applications from 152 unique institutions in 46 U.S. states, as well as the District of Columbia and Puerto Rico. The program has funded equipment requested by 67 institutions in 36 states and the District of Columbia in its first 3 years.

HOW DOES THE EQUIPMENT PROGRAM CONTRIBUTE TO RESEARCH?

The Modern Equipment Program funds equipment that is placed in a shared-use space to provide broad and long-term benefits to the research institution by facilitating and optimizing research-supporting operations and activities. Animal research facilities and core laboratories are typical areas funded through this program. Examples of suitable equipment include those used for husbandry of pathogen-free animal models, systems for management and quantitative assessment of water quality in aquatic animal habitats, individually ventilated animal caging systems that control air circulation, and digital equipment with remote controls to ensure functional stability. Modern equipment

yields increased operational efficiency and reduced cost and labor, resulting in consistent experimental outcomes while minimizing potential errors. The equipment program also promotes biomedical research capacity-building in under-resourced institutions, such as those in Institutional Development Award (IDeA)—eligible states. Applications from under-resourced institutions have comparable success rates to applications from other institutions. In 2024, ORIP developed a new program that supports the use of equipment to study environmental extrinsic factors and enhance rigor and reproducibility of animal research.

CURRENT NOTICE OF FUNDING OPPORTUNITY

ORIP's active notice of funding opportunity (NOFO), PAR-24-259, is described briefly below:

- Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations (S15 Clinical Trial Not Allowed)
 - Award budget ranges from \$50,000 to \$350,000.
 - Examples of supported equipment for animal research facilities include, but are not limited to, individually ventilated caging systems, aquatic animal systems, telemetry equipment, and automated feeding or watering systems.
 - Examples of supported equipment for core research laboratories include, but are not limited to, modern biobanking or cryopreservation equipment, biosafety cabinets, fume hoods, and bioreactors.

Program requirements include—

- A valid quote
- A letter indicating institutional financial support for the operations of the shared facility
- A letter from the institutional director of planning, design, and construction stating that the space and utilities are appropriate for the installation and functioning of the requested equipment



Modern laboratory equipment, such as the fume hood shown here, allows researchers to perform cutting-edge experiments that can provide insight into human health.

Eligible institutions include—

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

Only one application is allowed per institution.



Individually ventilated caging systems help researchers minimize environmental exposures in experiments involving certain research animals, such as rodents, as shown here.

ADDITIONAL INFORMATION

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

For more information about the Modern Equipment Program requirements and management, please visit the ORIP website: orip.nih.gov/division-construction-instruments/s15-equipment-program.

Previous R24 NOFOs are PAR-21-326 and PAR-22-190.

CONTACT FOR MORE INFORMATION

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