ORIP

OFFICE OF RESEARCH
INFRASTRUCTURE PROGRAMS

R24 MODERN EQUIPMENT PROGRAM

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Program Contact:
Xiang-Ning Li, M.D., Ph.D.
xiang-ning.li@nih.gov
Phone: 301-435-0766

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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.

NIH National Institutes of Health
Office of Research Infrastructure Programs

OVERVIEW

To complement the S10 Shared Instrumentation Programs, ORIP established the R24 Modern Equipment Program to support the acquisition and installation of modern research-supporting equipment in 2021. This program aims to enhance the operations and protocols in shared biomedical research facilities, such as animal facilities or core research facilities. Acquisition of modern equipment creates novel capabilities and enables 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 136 distinct institutions in 46 U.S. states, as well as the District of Columbia and Puerto Rico. The program has funded requested equipment at 48 institutions in 31 states and the District of Columbia in its first 2 years.

HOW DOES THE EQUIPMENT PROGRAM CONTRIBUTE TO RESEARCH?

The R24 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 targeted areas for this program, and equipment that helps ensure robust and reproducible experimental design and implementation is of particular interest. 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 leads to increased operational efficiency and reduced labor, resulting in consistent experimental outcomes while minimizing potential errors. The equipment program also promotes biomedical research capacity building in resource-limited institutions, such as those in Institutional Development Award (IDeA)–eligible states. Applications from resource-limited institutions have comparable success rates to applications from non-resource-limited institutions.

CURRENT NOTICE OF FUNDING OPPORTUNITY

ORIP's active notice of funding opportunity (NOFO), PAR-24-028, is described briefly below:

- Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations (R24 Clinical Trials Not Allowed)
  - Award Budget: $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 R24 Modern Equipment Program requirements and management, please visit the ORIP website:

orip.nih.gov/division-construction-instruments/r24-equipment-program

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