

VUMC Limited Submission Opportunity

NIH ORIP Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations (S15 Clinical Trials Not Allowed)

Applications due August 13

VUMC: These instructions are for VUMC investigators. VU investigators should apply through [InfoReady](#) and address any questions to VU-LSO@vanderbilt.edu.

Overview:

VUMC may submit **one proposal** to [the Modern Equipment for Shared-Use Biomedical Research Facilities: Advancing Research-Related Operations \(S15\)](#) program for the NIH Office of Research Infrastructure Programs (ORIP).

The program provides funds to Cores/Shared Resources to **purchase latest scientific equipment that will enhance and modernize research-supporting operations of existing shared biomedical research facilities**. Any equipment supported by this NOFO must be substantially used in a laboratory research core facility, animal facility, or similar shared-use research space to ensure broad benefits for the institutional research community. Moreover, any request must be justified by research-related demands for the modernization of research-supporting functions or for the advancement of facility operations.

The objective of this NOFO is to support the acquisition of latest, technologically advanced equipment needed to advance the operational efficacy, productivity, and throughput; improve energy efficiency, enhance, or streamline operating processes and procedures in core laboratories, animal research facilities, or other shared-use research support space. Providing access to such equipment can also expand the capacity of essential support services for evolving and emerging research programs. Maintaining current functions, replacing broken equipment, and routine upgrading are not supported by this NOFO. This NOFO does not support the acquisition of scientific research instruments that acquire experimental data or any other instrument directly involved in experimental processes that lead to data collection (i.e. spectrometers, microscopes, biomedical imagers, cell analyzers, sequencers, etc.)

Examples of Equipment Types Funded:

Animal research facilities are one of the targeted research spaces of this FOA. Examples of supported equipment for animal facilities include, but are not limited to:

- Multi-functional ventilated cages and/or cage racks for small animals
- Specialized caging system for large animals
- Aquatic animal systems equipped with water quality assessment sensors
- Automated feeding or watering systems to aid in consistency and accuracy of animal care
- Robotics and automations for animal facility operation

- Advanced, environmental-friendly, high performing or high-throughput cage, rack, bottle, and tunnel washer systems
- Veterinary care devices and veterinary diagnostic systems
- Telemetry equipment to monitor cage conditions and/or animal well-being for purposes of animal husbandry (not experimental data collection)
- Environmental management devices that assist in the monitoring and customizing of environmental conditions, such as temperature, humidity, air flow, and lighting.

Existing core laboratories and specialized facilities are other spaces targeted by this FOA.

Without access to modern research facilities with well-controlled environments and furnished with specialized support equipment, many research functions are not feasible. Examples of supported laboratory research equipment include, but are not limited to:

- Modern biobanking or cryopreservation equipment
- Freezers assisted by robotic arms or other forms of automation
- Biosafety cabinets
- Fume hoods
- Incubators
- Centrifuges
- Autoclaves or other sterilizers
- Cryogenic gas recovery/recycling equipment (servicing two or more instruments)
- Environmental chambers, isolators, or other chambers designed to create specialized environments
- Bioreactors
- Lyophilizers
- Liquid dispensers or other automated sample preparation equipment (single piece of equipment)
- Cryostats or other tissue sectioning equipment
- Single piece, integrated slide staining equipment (multiple pieces for single steps in the process are not allowed)
- Nucleic acid extraction equipment
- Peptide or oligonucleotide synthesizers
- 3D Printers
- Automated cell processing equipment
- Water purification/treatment equipment (in lab, not for an entire building)

Other equipment that modernizes, streamlines, or improves the operating efficiency of the facility is also supported. Computers or other electronics that are built into the equipment with specialized software may also be a part of the equipment request if and only if they are inseparable from the requested equipment.

Budget

Total budget must be between \$50k - \$350k. For requests of multiple pieces of the same equipment, the minimum budget for each piece is \$15,000. Auxiliary items required for the main equipment piece to function may be less.

Eligibility

- Proposed instrumentation should be housed in an existing/operational core or shared resource
- The PD/PI may be a core or an animal research facility director, tenured, or non-tenured faculty member of the applicant organization. Typically, the PD/PI will be a scientist with a leadership role in overseeing or managing the shared-use facility and relevant scientific or technical expertise related to the requested technology.

Please review the [solicitation](#) and [FAQs](#) for more information regarding the program.

Internal Application Process:

Anyone interested in being considered to submit one of VUMC's proposals must submit the following (in a single PDF) to LSO@vanderbilt.edu by **5 p.m. on August 13**:

1. Brief (2.5 page maximum) project description, including summary financial plan.
 - a. Include the name of the existing/operational Core or Shared Resource, proposed location for equipment, and plan for any space/infrastructure modifications required to install and operationalize the proposed equipment
 - b. Detail the proposed equipment
 - c. Describe how the proposed equipment will remedy the infrastructure's deficiencies, improve the facility's operations, modernize the facility's environment, or streamline its management
 - d. List the research groups that will benefit from the proposed equipment
 - e. Outline of financial plan that identifies source of "institutional financial support for the operations of the shared facility, as well as a commitment to continued software licensing beyond the first year, if applicable." Include costs of installation and/or renovation.
2. A quote (for each requested item) from the commercial vendor. An unofficial quote is acceptable.
3. Brief statement of support from department chair/center director
4. Brief Statement from VUMC Director of Space Management
 - a. Statement should confirm either a) no space or infrastructure modifications are required, or b) any necessary space and infrastructure modifications can be completed within the 1 year project period.
5. PI's NIH Biosketch or Brief CV (5 page max)

VUMC researchers interested in submitting an internal application are encouraged to connect with the Office of Research for further guidance. Email katelyn.poole@vumc.org with any questions.