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OFFICE OF RESEARCH INFRASTRUCTURE PROGRAMS

Division of Construction and Instruments

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Pre-application Webinar: PAR-21-326 *Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations*

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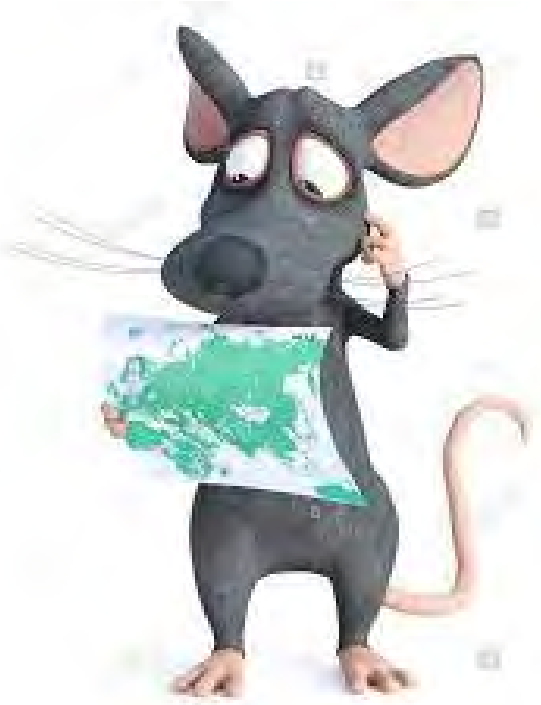
NIH National Institutes of Health
Office of Research Infrastructure Programs

Today's Presentation

- Background and purpose
- Considerations before applying
- Budget and timeline
- Structure of the application
- Review criteria
- Some good practices
- Questions and answers



Background and Purpose

- GOAL: Strengthen research-supporting operations with modern equipment

- TARGET: Shared-use facilities, *e.g.*, core labs, animal facilities, biorepositories, ensure broad benefits to a biomedical research community

- THINK of THE THREE 'ONES': ONE application per institution, ONE facility, and ONE operational upgrade achieved with the technology requested

Considerations

- Institutional eligibility
  - Any US domestic academic/research institutes
  - Only ONE application per organization
    - Defined as a “legal entity” by DUNS number or NIH IPF number
      - For example, a medical school and a dental school at the same institution could be separate legal entities
  - Only ONE shared facility per institution
    - Upgrading of several different core labs, each with its own instrument, is not supported
    - However, if multiple core labs share the same piece of large support equipment, that would be permitted, e.g., autoclaves
  - Award is for one year
    - Delivery, installation, and start-up should happen during the award period
      - Equipment cannot be purchased and stored indefinitely for a facility that is in design or under construction with a distant completion date

Considerations – PI/PD and Users

- Single PI/PD
  - Typically, a scientist with a leadership role in managing the shared-use facility and relevant scientific background
  - NIH funding is NOT required of the PI/PD

- Users
  - No minimum number of supported users
  - NIH funding is NOT required of facility users, but active biomedical research is required
    - This will be validated in the required letter from a university official documenting financial support for the facility
    - Other, non-biomedical researchers are not excluded

Supported Equipment

- Requested equipment should support scientific operations, not be part of scientific data collection or the scientific process
  - Sample prep equipment is not supported
- Equipment normally considered part of basic building infrastructure is not supported
  - Back-up generators, HVAC systems, major plumbing is not supported
- One functionality or innovation may be requested
- Multiple, different pieces for a single integrated system are allowed
- Multiple pieces of the same equipment for one core are allowed, but must be well justified by users' need
- Highest standards of "green" operation are encouraged

Examples, not inclusive of all options

- Examples of allowed equipment
  - Autoclaves and sterilizers
  - Specialized dishwashers
  - Some types of cages and/or cage racks
  - Environmental or animal health telemetry

- Examples of non-allowed equipment
  - Microscopes, sequencers, metabolic cages, or scientific sample prep equipment (Consider the S10 program.)
  - Office furniture
  - Computers, storage, and/or LIMS or scheduling systems
  - Back-up power supplies or generators
  - Non-commercial equipment without a one-year warranty

A&R (if needed)

- A&R must be associated with the equipment
  - ONLY what is needed for installation and operation of the equipment
    - General upgrading is not supported
  - Should be clearly defined in the required letter from the Director of Planning, Design, and Construction (or equivalent)
- ALLOWED (examples)
  - Electrical outlet modifications (minor) or new IT ports
  - Plumbing modifications (minor) to hook up equipment
  - Cabinet removal
- NOT ALLOWED (examples)
  - General reconfiguration of spaces
  - Modifications unrelated to the installation/operation of the equipment
  - Major modifications to critical building infrastructure, *e.g.*, HVAC, electrical, plumbing

Budget

- Maximum: $400,000 direct costs, Minimum: $25,000
- Each piece of equipment must cost a minimum of $10,000
  - Shipping and vendor installations costs are allowed
- A&R (if needed), 15% of equipment cost or $40,000, whichever is smaller
  - Calculated on the price of the equipment alone, exclusive of shipping or installation costs
- Personnel costs (only allowed if A&R is requested) for the PI/PD at a rate of 0.36 person months, maximum
- Overhead is not allowed on equipment or A&R, only on the salary component if there is one

Timeline

- Application due date: DECEMBER 1, 2021
- Scientific merit review: MARCH 2022
- Advisory council review: MAY 2022
- Earliest award date: JUNE 2022
- Latest award date: SEPTEMBER 2022

Structure of the Application

- Standard SF424 (R&R) Application Guide requirements apply with the following additions
- Research Plan requires (See FOA Section IV PHS 398 Research Plan)
  - Description of the facility
  - Modernization plan
  - Justification of the request
- Required attachments
  - Itemized valid quotes and budget justification, including A&R
  - Letter from an institutional official indicating financial support for the facility's operations and affiliated research
  - Floor plan showing equipment location
  - Letter from the Director of Planning, Design, and Construction

Review Criteria

- Significance
  - How will the project remediate infrastructure deficiencies?
- Investigator(s)
  - Does the PD/PI have the scientific or technical expertise required to operate and oversee the use of the equipment?
- Innovation
  - Does the project offer innovative technical solutions/technologies?
- Approach
  - Is the requested equipment well-justified by research-related needs and functions of the facility?
- Environment
  - How efficiently is the facility operated and how responsive is it to users' needs?

Note the specific questions associated with this FOA in the Review Criteria section. (One example of each is noted above.)

All review criteria will be scored and do matter.

General Good Practices

- Thoroughly understand the FOA by careful reading
- Reach out to program to clarify that your equipment request is supported
- Make the reviewers' task easier
  - With a clear writing style
  - With good organization of your application
- Think like a reviewer while preparing your application
  - Make everything explicit
  - Ask yourself whether your most important points have come across clearly

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Thank you very much for your attention.

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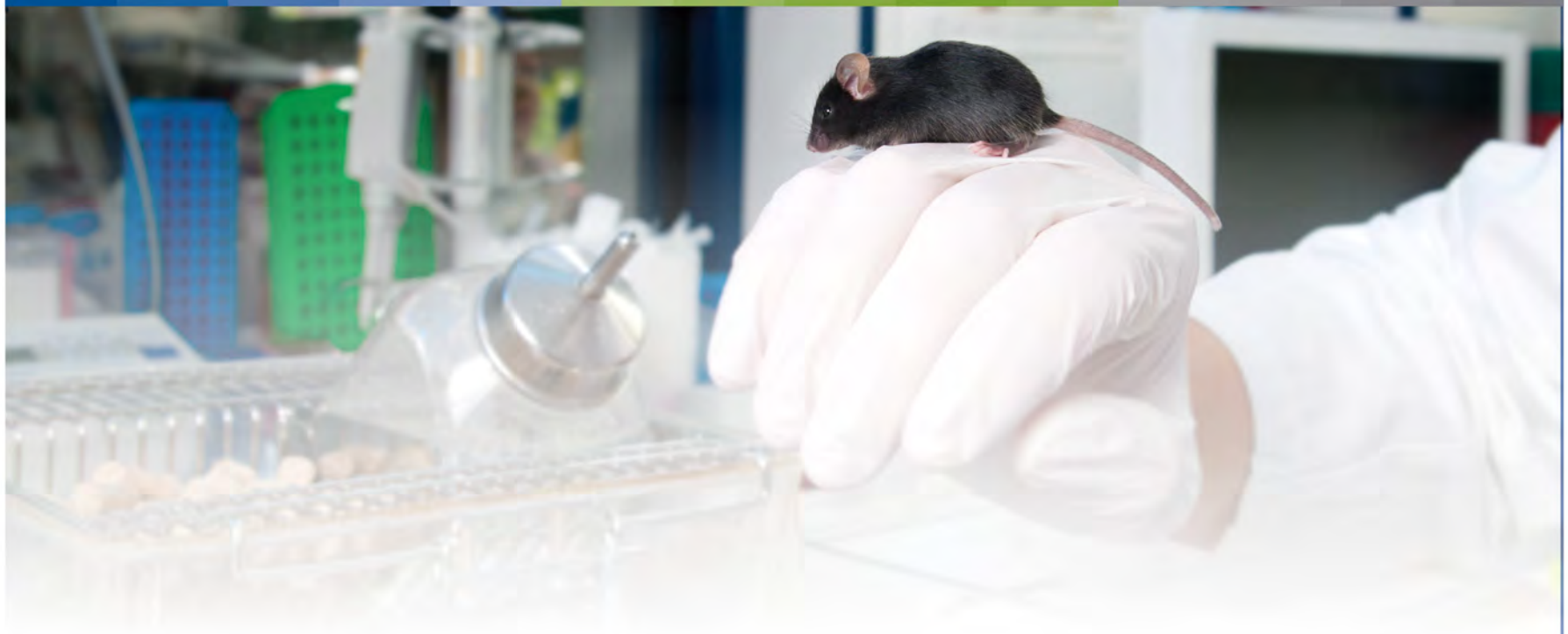
Questions & Answers



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Questions

- For this FOA, how are you drawing the line between scientific instruments and research-supporting equipment?
- What constitutes an “integrated system” and can you provide some examples?
- Under what conditions would “multiple units of the same item” be supported under this FOA?

Questions

- Can you elaborate on the “shared facility” concept? How many users do there need to be and what percentage of them must be biomedical researchers?

- My organization is currently building/renovating a core lab/animal space where the equipment will be housed. Can I apply the $40,000 to our construction/renovation project costs?

- How detailed should the floor plan be? Should it be done by a professional?

Questions

- I am NOT requesting A&R in my application. As the PI, can I still ask for the salary support?
- Is salary support permitted for any other personnel?
- Is vendor-provided specialized training supported for the PI and/or other personnel under this FOA?
- If my equipment requires a dedicated computer with specialized software to operate it, would that be supported under this FOA?

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Thank you very much for attending our webinar.

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