

# UNTHSC JOINT SEED PROGRAM FOR NEW INSTRUMENTATION/CRITICAL RESOURCES



## INTRAMURAL GRANTS PROGRAM APPLICATION INSTRUCTIONS

### JOINT SEED PROGRAM FOR NEW INSTRUMENTATION/CRITICAL RESOURCES

*(Note that considerable content is adapted from the NIH S10 shared instrument RFA)*

#### **Overview and Program Scope:**

**Funding Opportunity Purpose:** Research technologies and resources across all disciplines continue to develop rapidly. To optimize success of UNTHSC investigators, it is essential that they have access to as many modern technologies and resources as possible. The purpose of the program is to make available to UNTHSC investigators contemporary instrumentation and other critical resources that are designed for shared-use and that are needed for grant-supported projects in basic, translational or clinical areas of research. Successful proposals will be those that can demonstrate support of multiple UNTHSC investigators. This is an institution-wide initiative, with funding coming equally from the offices of the provost, the vice president for research, and the vice provost for health institutes.

**Funds available:** Up to \$300,000 is available to support this program. Depending on the quality and volume of proposals, all available funds may not be utilized.

**Award size:** The minimum proposal size is \$10,000, and the maximum proposal size is \$75,000.

**Matching Funds:** Matching funds are not required for this program. If a user group seeks an instrument/resource that exceeds \$75,000, a letter from the individual(s) committing the funds above \$75,000 must be provided. The existence of matching funds will not be a factor in the review.

#### **What type of instrument or resource can be requested?**

- New instrumentation that is not currently available to UNTHSC investigators
- Purchasing of access to large-scale databases
- Innovative statistical software that will support multiple users
- upgrades to existing shared-use resources may be considered if they significantly expand existing capabilities

#### **The joint seed program will not support requests for:**

- multiple instruments bundled together or a series of complementary related instruments;
- purely instructional equipment, institutional administrative management systems, clinical management or billing systems;
- general purpose equipment or resources that do not expand technical capabilities (such as, centrifuges, standard computer networks, autoclaves, hoods, etc.).

**Instruments/resources requested must be for research purposes only.**

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## KEY DATES:

- **Posted Date:** **June 27, 2016**
- **Application Due Date:** **August 26, 2016**
- **Scientific Merit and Advisory Council Review:** **September 2016**
- **Earliest Start Date:** **October 2016**

## **NOTE APPLICATIONS THAT ARE INCOMPLETE OR INCORRECTLY FORMATTED WILL NOT BE REVIEWED**

### Information on Eligibility

**Principal Investigator:** Any UNTHSC faculty member is eligible to apply for this program as Principal Investigator. The PI does not need to have current research support but is expected to be an active investigator, and should be well versed in the instrumentation or resource being sought.

**Major User Group:** As part of the proposal, a Major User group composed of three or more individuals who have substantial need for the instrument must be identified. Major Users are not required to have existing NIH or other federal funding. However, it is anticipated each Major User will have considerable research experience and either current or recent extramural support of some type, or the potential to acquire extramural funding.

**Minor User Group:** Investigators who have not yet secured extramural funding or otherwise developed a robust portfolio, but whose research programs could be enhanced by accessing the requested instrument or resource, may be included in the application as Minor Users. Inclusion of a Minor User Group is optional.

### Content and Form of Application

The application must be clear, legible and use an Arial or Calibri 11 point font. Margins should be set at narrow (0.5" top, bottom, left and right). Application text should be single spaced.

Organize the content in the specified order (described below).

**Cover page:** Use the cover page separately provided, and include the following information:

- **Project Title:** The title should include the generic name of the instrument/resource requested (for example, 600MHz NMR Spectrometer or High Throughput DNA Sequencer).
- **Investigator(s) Information:** Provide name, title, Institute/Department and school of the Principal Investigator and Co-Investigators, if applicable.
- **Funding Request:** Enter the total amount of funds requested for instrument/resource. The total amount needed should match the dollar figure on manufacturer quote provided (below), and the request cannot exceed \$75,000. As noted above, if an instrument/resource exceeding \$75,000 is requested, a letter from the individual(s) committing those funds must be provided (see the Additional Materials section).
- **Project Summary/Abstract:** The Project Summary/Abstract is meant to serve as a succinct and accurate description of the requested instrument/resource and the need of the research projects for this instrument/resource. State the application's broad, long-term objectives, concisely describing how access to the instrument/resource will enhance the health-related goals of the research projects. This section should be informative to other persons working in the same or related fields and understandable to a scientifically or technically literate reader.

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## Project Narrative

### **Equipment/Resource**

Describe the requested instrument/resource by stating its manufacturer, model number, and specific features and any accessories. Provide a detailed budget breakdown of the main instrument and requested accessories, including tax and import duties, if applicable. An itemized quote, with any appropriate discount, from a vendor is required. The quote must be scanned and combined in a single attachment with the equipment description as part of this upload.

If human or infectious materials, which could create a potential biohazard, are to be analyzed, funds for accessory containment equipment for the instrument may be requested in the budget.

Do not describe the need in this section; this narrative should be a part of the Justification of Need section of the Instrumentation Plan (see below).

### **Instrumentation Plan**

- **Justification of Need (up to 3 pages):** Name the requested instrument/resource. Compare performance of the requested model with other similar instruments/resources available on the market. Justify the need for specific features and special accessories of the requested instrument/resource. Explain why the chosen model and its manufacturer are the most suitable. Preliminary data is not required, though if feasible, you may include preliminary data to justify your choice. Provide an inventory of similar instruments/resources existing at your institution, neighboring research institutions, or otherwise accessible; describe why each similar instrument/resource is unavailable or inappropriate for the proposed research.
- **Technical Expertise (up to 2 pages):** Describe the technical expertise present at the institution to set up, run and maintain the instrument/resource. Specify who will operate the resource, train new users, ensure that it is operated safely and is appropriately maintained. Also, address technical support for data collection, handling, and analysis. Likewise, if the requested item requires complex sample preparation or consultation for experimental designs, describe the expert individuals who will serve in that capacity.
- **Research Projects (up to 2 pages for each Major User; up to 1 page for each Minor User):** In this section, each user should describe the benefit of the requested instrument to enhance his/her research projects. Categorize under a subheading for Major Users, and a separate subheading for Minor Users (if applicable). Each user should explain how the requested instrument will advance the research objectives of his/her research project(s). (Do not simply copy the Specific Aims section from a funded application.) Present sufficient technical details about types of samples or specific experimental protocols to be employed to allow evaluation of whether the instrument is appropriate, would be effectively employed, and would provide advantages over other methods and other similar existing or new instruments. Describe how data generated will be handled and analyzed so benefits of the entire experimental set-up can be judged. The focus of this section must be on the precise explanation of how the requested instrument/resource will advance research projects. Research projects may be drawn from a broad array of topics in basic science, translational investigation or clinical trials.
- **Bibliography & References Cited:** Include a list of publications that demonstrate the researchers' expertise in operation and usage of the requested instrument/resource, or those that are relevant to research projects which will be supported by the instrument. References of the research project narratives of Major and Minor Users may appear in this section under each user's name or users may list such references at the end of their individual research sections.
- **Summary Tables:** Generate tables summarizing Research Projects of: 1) Major Users and 2) Minor Users (if applicable). Each table should have the following columns: User's name, sponsor, grant number, brief title of the project, grant start and end dates, and estimated number of hours used per month. Proposals submitted but not yet funded may be included in the tables if clearly labeled as proposals. INCLUDE ONLY THOSE FUNDED AND/OR PROPOSED PROJECTS EXPLICITLY NOTED IN USER'S DESCRIPTIONS OF RESEARCH PROJECTS THAT WILL BENEFIT FROM THE INSTRUMENT/RESOURCE SOUGHT.

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- **Administration (Space, Organizational/Management Plan) (up to 3 pages):** Describe space in which the instrument/resource will be placed. Describe the organizational plan to manage the instrument/resource. In particular, describe how the instrument/resource will be utilized, how requests to use the instrument/resource will be made and how other projects and new users will be enlisted. Describe how users will be trained in experimental design, instrument operation and data analysis. Describe typical day-by-day management of the instrument.

Describe a plan for managing access to the instrument if users' projects involve human subjects, vertebrate animals or biohazards such as infectious materials.

Submit a specific financial plan for long-term operation and maintenance of the instrument. Explain how various operational costs will be met; specifically, costs associated with routine operation of the instrument, maintenance, and support personnel, as applicable. The financial plan must include a table for year one of operation, with approximate dollars for anticipated expenditures and anticipated income. Include a similar table for years 2 - 5 of operation, or the expected life of the instrument.

### Additional materials

- **Biosketches:** Include a current NIH biosketch for each Major and Minor User; each biosketch may be up to 5 pages.
- **Matching funds commitment letter:** Matching funds are not required, and will not be a factor in the review process. However, applicants may propose instrument/resources that exceed \$75,000. In that event, a letter from the individual(s) providing the funding in excess of \$75,000 must be included in the application.

### Review Procedures and Evaluation Criteria:

Applications will be evaluated for scientific and technical merit by a committee comprised of UNTHSC faculty members. Reviewers involved in any of the submitted proposals, or members with any real or perceived conflict-of-interest will recuse themselves from discussion of that proposal. All applications will be evaluated using the NIH peer review system; the specific criteria against which each application will be reviewed include:

#### **Overall Impact/Benefit**

Reviewers will provide an overall impact score to reflect their assessment of the likelihood that the requested instrument/resource will exert a sustained, powerful influence on the conduct of research projects and their scientific outcomes, in consideration of the following review criteria and additional review criteria.

#### **Scored Review Criteria**

Reviewers will consider each of the review criteria below in the determination of scientific merit, and give a separate score for each. An application does not need to be strong in all categories to be judged likely to have major scientific impact. For example, a project that by its nature is not innovative may be essential to advance a field.

##### **Justification of Need**

Is the need for the instrument clearly and adequately justified? Is the equipment essential and appropriate? Are all specific features and special accessories of the requested instrument well justified; in particular, by their need of Major Users? Justification of selection of proposed instrument may include but is not limited to comparison with other commercially available instruments of similar function.

##### **Technical Expertise**

Does the institution have the technical expertise to make effective use of the requested instrument/resource? How well qualified are the participating investigators or other assigned personnel to operate and maintain the instrument, conduct the projects, and evaluate the research results, including analysis and interpretation of data? How will new users be trained? How will biosafety procedures be implemented?

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### **Research Projects**

Will research with the requested instrument/resource advance the knowledge and understanding of the proposed projects? How will the research projects of individual Major Users be enhanced? Do Major Users adequately justify the requested instrument for the needs of their specific projects? If accessories are requested for the instrument, do at least half of the Major Users require each of the accessories for their research projects?

### **Administration**

Is the plan for the management and maintenance of the requested instrument/resource appropriate? Has appropriate space been identified to house the instrument? How will research time be allocated among the projects? Are the sharing arrangements equitable? If needed, are the policies to manage projects which have human subjects, animals or biohazards adequate? Is the financial plan for the instrument for five years or the expected lifetime of the instrument reasonable and secured, balancing anticipated expenditures and anticipated income? Is the expected usable lifetime of the instrument reasonable?

### **Questions:**

Questions should be directed to Katrina Gordon, [Katrina.Gordon@unthsc.edu](mailto:Katrina.Gordon@unthsc.edu)