



Competitive Research Program Request for Applications

COLLABORATIVE, MULTI-INSTITUTIONAL SEED GRANT OPPORTUNITY

The **Alliance for NanoHealth** (ANH) is a collaborative research endeavor aimed at bridging the gaps between life science and nanotechnology. With the principal goal of providing new opportunities for diagnosis, treatment and prevention through advances in nanotechnology, the ANH comprises world-class research institutions and innovative scientists and clinicians from within the Texas Medical Center and greater Houston community.

The ANH is pleased to invite applications for Seed Grants to support development of proposals for efforts to develop new collaborative research programs aimed to advance the field of nanotechnology relating to health issues. The objective is to bring together scientists, engineers, and clinicians from multiple disciplines across our institutions to collaborate and create new possibilities. Our goal is to foster advancements in nanotechnology such as nanomaterials, tools, devices, fabrication, analytics, monitoring, sensing, modeling, among others, toward solutions for unsolved clinical needs.

Critical to success will be cross-disciplinary, inter-institutional collaborations among investigators in the areas of nanotechnology, computational resources and clinical needs. Investigators from a minimum of two (2) member institutions are required for each proposal. Collaborators from institutions other than the member institutions are allowed, but no funding can be requested for these collaborators.

MEMBER INSTITUTIONS

- Baylor College of Medicine
- Rice University
- Texas A & M Health Science Center
- The Methodist Hospital Research Institute
- The University of Texas Health Science Center at Houston
- The University of Texas M. D. Anderson Cancer Center
- The University of Texas Medical Branch
- University of Houston

KEY DATES

Full Proposals:

Due January 25, 2009

OBJECTIVE

This ANH Seed Grant opportunity is intended to catalyze the formation of new high-risk exploratory projects in nanomedicine to advance novel inter-disciplinary collaborations toward success in obtaining external resources. A maximum budget of \$100,000 over a two (2) year period is allowed. The maximum budget of \$100,000 shall include direct and indirect costs. Approximately eight to ten (8-10) awards are anticipated.

MILITARY RELEVANCE

Health care remains a very significant issue for the Department of Defense (DoD) in both human and economic terms. In regards to cancer alone, the United States Military Cancer Institute reports that more than 355,000 patients undergo cancer treatment or follow-up yearly within the military health system. In 2003, breast cancer treatment accounted for more than \$56 million in direct care costs throughout the Military Health System. These costs are expected to increase by almost 50% by the end of the decade, with projections exceeding \$75 million in breast cancer direct care costs in 2009. The direct immediate health care costs of prostate cancer to the Military Health System exceeded \$42 million for fiscal year 2004.

The benefits of this research program are anticipated to provide new approaches to fighting disease that will transcend from our nation's war-fighters to the civilian population. Through the development of new diagnostic and therapeutic tools using principles and materials founded in nanotechnology, the ANH Competitive Research Program directly aims to provide the military with new approaches to protecting and treating personnel, in the field of oncology and beyond.

SEED GRANT PROPOSAL REQUIREMENTS

The proposals will adhere to the following guidelines:

- Proposals are expected to describe the relevance to nanotechnology and to a clinical problem. Proposals are not limited to any particular areas of medicine, but the nanotechnology components should be clearly defined, and the proposals should be directly relevant to a clinical goal.
- The proposal will require cross-disciplinary collaboration between at least two (2) ANH investigators from at least two (2) different ANH institutions.
- Duration of grants should be a maximum of two years with a total maximum budget of \$100,000, which includes direct and indirect costs.

Proposal Submission Process

Please submit proposals via email by 5:00pm (CST) to Efren Pena at the UTHSC-H Office of Research. (Efren.H.Pena@uth.tmc.edu)

APPLICATION CONTENT AND FORM

Applications must be prepared under the following guidelines. The proposal should utilize 12 point font with at least one inch margins. Submit applications as a single document, preferably in PDF format. Applications that do not adhere to these guidelines will be returned without review.

1. **Title and Affiliations:** Page 1 will include the title, names and affiliations of the principal investigator and co-investigators involved in the project.

2. **Abstract:** Page 2 will be a one-paragraph abstract (limit 250 words) that clearly includes a description of the area(s) of nanotechnology research that will be the focus of the application, the planned multi-disciplinary approach, and the specific objective of the project including the potential clinical significance.
3. **Research Plan: (Maximum 5 pages + References).** The following elements are required:
 - a. Specific Aims
 - b. Background and Significance
 - c. Preliminary Studies and Rationale
 - d. Research Design and Methods (include time table and milestones)
 - e. Military Relevance
 - f. References (Not Included in 5 page limit)
4. **Budget and Budget Justification:** Budget items and justification in standard NIH format.
5. **Biographical Sketches.** A biographical sketch of the principal investigator and all co-investigators. Limit to two (2) pages each with relevant publications using the standard NIH format.
6. **Resources:** Please list equipment and facilities available for the project at each institution including shared resources and major equipment.
7. **Institutional Approval:** Approval and sign off by the appropriate institutional representative will be required after selection. Other compliance documents may also be required.

POST AWARD INSTRUCTIONS

Grant recipients are required to send a 3-page progress report at 12 months and a 5-page final report at 24 months to the ANH. Report instructions will be disseminated to awardees.

REVIEW PROCESS

1. An ANH Seed Grant Review Committee will serve an advisory role to the ANH Steering Committee and will consist of at least one individual from each institution who is appropriate for reviews in nanotechnology and medicine, and who is not submitting proposals. This committee will screen proposals for technical merit and will provide a subset for further review and final evaluation by TATRC.
2. TATRC will perform the final review and select the recipients, anticipated to be eight to ten (8-10) Seed Grants.
3. For those projects that require animals and/or human subjects, final acceptance will be contingent upon official approval of the protocol submitted to the appropriate IACUC and/or IRB committees. Thus, investigators are encouraged to submit their protocol approval letters to the ANH Grant Review Committee as soon as possible.

QUESTION & CONCERNS

Please direct any questions or concerns regarding this RFA to Dr. Jason Sakamoto, Chief Operating Officer, Alliance for NanoHealth. (Jason.Sakamoto@uth.tmc.edu) 713-500-2466.