



# ALLIANCE *for* NANOHEALTH



## Competitive Research Program Request for Applications

### COLLABORATIVE, MULTI-INSTITUTIONAL SEED AND RESEARCH 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.

This Seed Grant funding is made possible through FY2009 appropriations via The Telemedicine & Advanced Technology Research Center (TATRC). TATRC performs medical reconnaissance and special operations to address critical gaps that are underrepresented in Department of Defense (DoD) medical research programs. TATRC is an office of the headquarters of the US Army Medical Research and Materiel Command (USAMRMC). TATRC fosters research on health informatics, telemedicine/m-Health, medical training systems, and computational biology, and promotes and manages science and engineering in other key portfolios.

The ANH is pleased to invite applications for two types of grants, as described below. 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.

#### ANH Seed Grants (8 Awards)

- Up to \$150k total funding for 2 years
- At least 2 ANH Collaborators from different ANH Institutions
- No Preliminary data required

#### ANH Collaborative Research Center Grants (3 Awards)

- Up to \$250k total funding for 2 years
- At least 3 ANH Collaborators from at least 2 different ANH Institutions
- Preliminary data required

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 15, 2010, 5:00pm (CST)  
**Planned Start Dates:** September 2010

## **OBJECTIVE**

The Seed and Research Grants are designed for teams (existing or new) to develop innovative research directions. The objective is for these teams to position themselves to secure future federal funding, produce high-impact publications, and develop intellectual property.

## **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 clinical medicine.

## **ANH 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 Seed Grant proposal will require cross-disciplinary collaboration between at least two (2) ANH investigators from different ANH institutions.
- The duration of grants should be a maximum of two (2) years with a total maximum budget of \$150,000, including direct and indirect costs. Initial funding will be for one year at up to \$75,000, including direct and indirect costs. A mid-term review will be held to assess progress. If significant progress is made in the first year, additional funding of up to \$75,000 in the second year may be awarded. Approximately eight (8) awards are anticipated.

## **ANH COLLABORATIVE RESEARCH CENTER GRANT PROPOSAL REQUIREMENTS**

The proposals will adhere to the following guidelines:

- Proposals are designed to develop a research area that would lead to a center or program project level proposal at the end of the period of support.
- 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 Collaborative Research Center Grant proposal will require cross-disciplinary collaboration between at least three (3) ANH investigators from a minimum of two (2) different ANH institutions.
- The duration of grants should be a maximum of two (2) years with a total maximum budget of \$250,000, including direct and indirect costs. Initial funding will be for one year at up to \$125,000, including direct and indirect costs. A mid-term review will be held to assess progress. If significant progress is made in the first year, additional funding of up to \$125,000 in the second year may be awarded. Approximately three (3) awards are anticipated.

### **Proposal Submission Process**

Please submit proposals via email by 5:00pm (CST), January 15 2010 to Damian Walsh. ([damian.walsh@uth.tmc.edu](mailto:damian.walsh@uth.tmc.edu)), ANH Program Manager.

### **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 500 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 goals of the project, including the potential clinical significance.
3. **Research Plan: (Maximum 8 pages + References).** The following elements are required:
  - a. Specific Goals
  - b. Background and Significance
  - c. Preliminary Studies and Rationale (No Preliminary Data required for Seed Grant applications)
  - d. Approach and Research Envisioned (include timetable and milestones)
  - e. Military Relevance
  - f. Strategy for Future Funding
  - g. References (Not Included in eight (8) page limit)

For Collaborative Research Center Proposals, additionally describe how the proposed research would be developed and the community of participants enlarged for a center or program project proposal at the conclusion of the funding period.

4. **Budget and Budget Justification:** Budget items and justification in standard NIH format.
5. **Biographical Sketches.** Provide 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**

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

#### **REVIEW PROCESS**

1. An ANH Grant Review Committee will serve in an advisory role to the ANH Steering Committee and will consist of at least one (1) individual from each institution who is appropriate for reviews in nanotechnology and medicine, and who is not submitting any 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

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 Damian Walsh, Program Manager, Alliance for NanoHealth. ([damian.walsh@uth.tmc.edu](mailto:damian.walsh@uth.tmc.edu)) 713-500-3768.