
REQUEST FOR SYNERGY TRANSLATIONAL PILOT PROJECT APPLICATIONS

RELEASE DATE: FEBRUARY 21, 2013

MANDATORY LETTER OF INTENT DUE: MARCH 15, 2013

APPLICATIONS DUE: MAY 1, 2013

This announcement from the Dartmouth SYNERGY Translational Pilot Program seeks innovative, interdisciplinary research proposals that have clear potential for translation into patient-oriented care and for improving population health.

The goal of the SYNERGY Pilot Projects Program is to facilitate collaborative translational research studies within all our institutions and affiliated health centers. By providing support for clinical and translational pilot studies, SYNERGY aims to accelerate the process of clinical, community-based, and translational research.

Grants are available for projects that are at an early stage and need support to create pilot data and/or to develop research concepts that will advance translational research in any of four areas: 1) methodology and technical innovation for translational research (MITRA); 2) population-based translational research; 3) community-based translational research; or 4) investigator-defined translational research. Successful proposals must have a high chance of leading to extramurally funded research and/or to discoveries with the potential for commercialization. A total of up to \$300,000 will be used to fund SYNERGY Pilot Projects in 2013. The total number of awards granted under this RFA will depend on the quality of applications independent of the area of focus.

GUIDELINES

Eligibility. Investigators at Dartmouth College, Geisel School of Medicine, Thayer School of Engineering, Tuck School of Business, and Dartmouth-Hitchcock and its affiliated sites, including the White River Junction VA, Manchester VA, and Togus VA who meet the requirements detailed below are eligible to apply.

Pilot Project Focus Areas.

- *Methodology and Technology Innovations for Translational Research Awards (MITRA).* Examples of pilot projects that would be viewed as responsive under this category include, but are not limited to: innovative use of imaging and/or biomarkers to assess treatment prognosis; genomics research methodology; design or implementation of assays in medium throughput screening for drug discovery; innovative experimental design and development of statistical methodologies for clinical and translational research applications including innovative clinical trial design; and technologies for clinical decision support.
- *Population-based Translational Research.* Examples of population-based translational research include, but are not limited to: analysis of administrative claims data such as Medicare that elucidate associations between drug exposures and outcomes in defined populations (e.g. pharmaco-epidemiology studies); evaluation of hypotheses generated in the laboratory through claims analyses or hypotheses generated from other population-based data sources that are further explored in the laboratory; comparative effectiveness studies involving claims-based analyses designed to compare outcomes of alternative approaches to health care for defined populations (e.g. surgical vs. non-operative care for specific conditions, treatment with innovative

technologies vs. established technologies); comparative effectiveness studies of alternative approaches to health care delivery, which may include both health and economic outcomes of care and may involve analyses of patient-reported measures and/or registry-enriched claims data; claims-based analyses that elucidate health and health care disparities.

- *Community-based Translational Research.* Examples include, but are not limited to, applying findings from basic research or clinical trials to design and implement innovative interventions or models of care in community-based settings; innovative applications of technology and informatics to improve health behaviors or disease management; application of findings from decision science or use of innovative mobile health delivery systems to provide decision support or practical implementation of shared decision making in community-based settings; implementation science research in the evolving health care reform arena; the analysis of observational studies using community samples to model underlying mechanisms of health determinants or to identify and develop innovative approaches to addressing health disparities. Community-based participatory research is encouraged within this pilot project focus area.
- *Investigator-defined Translational Research.* Any investigator-defined translational research pilot project that contributes to the mission of “advancing knowledge from bench to bedside to practice to population” and meets the requirements detailed below will be considered for funding.

Requirements.

- To foster interdisciplinary and inter-institutional research, the application must list two co-principal investigators, each from a different discipline, department, or school. The contact PI must be at the Assistant or Associate Professor level.
- The application must demonstrate mentored research and must explicitly identify a mentor(s). A mentor does not need to be one of the co-principal investigators.
- Proposals must be innovative and should have a high likelihood of leading to extramural funding and/or discoveries with the potential for commercialization.
- All applicants are eligible for SYNERGY-supported research consultation through the SYNERGY Cores and Services. To arrange for initial consultation, go to http://synergy.dartmouth.edu/research_design.html. In addition, successful applicants will have access to the SYNERGY Clinical Research Unit at DHMC, as appropriate.
- Review criteria applied by the multidisciplinary Pilot Application Review Committee include innovation, interdisciplinary engagement, approach, significance, community impact, translational character, investigator qualifications, and strength of mentoring environment.
- To fulfill the translational expectation of SYNERGY, proposals are sought that pursue either (1) application of scientific discoveries to clinical practice or community interventions or (2) underlying mechanisms behind observations from patient care or public health.

Budget. Applicants should prepare a budget that is appropriate for the resources necessary to carry out the proposed research. Most successful pilot project applications are completed with budgets of \$25,000 to \$50,000, although some studies may be more costly to undertake. Award amounts may range up to a limit of \$100,000, depending on the scope of the proposed work, its scientific merit, feasibility, and relevance to the SYNERGY mission. All project work must be completed within 24 months.

Human Subjects. Investigators submitting proposals involving human subjects must obtain approval from the Committee for the Protection of Human Subjects at Dartmouth College. Funding will be contingent upon CPHS approval, but it is not necessary to obtain approval prior to submitting a proposal.

Animal Use. Projects involving animals must obtain approval from the Institutional Animal Care and Use Committee. Funding will be contingent upon approval, but it is not necessary to obtain approval prior to submitting a proposal.

Submission

- A one- to two-page letter of intent must be submitted by March 15, 2013. The letter of intent must specify:
 - Co-Principal Investigators, with one designated as the contact PI who must be at the Assistant or Associate Professor level.
 - Mentor(s) for proposed project.
 - Names of all co-investigators.
 - Proposal Title and brief description of specific aims and how they are responsive to the RFA.

Submit to SYNERGY@Dartmouth.edu

- **The absolute final submission deadline for this RFA is 5:00 PM, Wednesday, May 1, 2013.** Applications must use the SYNERGY Pilot Application Form and Instructions at (http://synergy.dartmouth.edu/funding_landing.html) Note that the scientific section of each proposal (Specific Aims, Significance, Innovation, and Approach) is limited to 5 pages. Applications must be submitted by email as a single PDF file in standard format to SYNERGY@Dartmouth.edu.

Review. All applications will be reviewed by the SYNERGY Pilot Application Review Committee. Funding decisions will be announced before July 31, 2013. Applicants will receive brief review comments.

GENERAL INFORMATION

Our Mission: Advance knowledge from bench to bedside to practice to population in a manner that improves the health of the population of Northern New England and beyond. In so doing, we will support the mission of our academic health center, which is to advance health through research, education, clinical practice and community partnerships.

Our Vision: A research environment and patient information system that delivers rapid, comprehensive and critical evaluation and application of biomedical and clinical innovation and discovery. We seek to challenge traditional boundaries of clinical and translational biomedical research to link basic research to clinical practice, and to ensure that newly discovered diagnostics and therapeutics are effective and improve population health. We will thus work in concert with the vision of our academic health center, which seeks to achieve the healthiest population possible, leading the transformation of health care in our region and setting the standard for our nation.

Our sites: Dartmouth-Hitchcock and its affiliated sites, Geisel School of Medicine, The Dartmouth Institute, Norris Cotton Cancer Center, Children's Hospital at Dartmouth, White River Junction VA Medical Center, Manchester VA, Togus VA, Dartmouth College, Thayer School of Engineering, and Tuck School of Business.

"Translational Research" includes:

- Basic science and its translation into clinical research (T1)
- Clinical research and patient-specific evidence of clinical effectiveness (T2);
- Comparative effectiveness studies; practice guidelines; tools to allow for the right treatment of the right patient in the right way at the right time (T3)
- Reliable delivery of care to all patients, in all settings and to the population, based on measurement and accountability implementation and on system redesign (T4)

Definition of Patient-Oriented Research:

Research conducted with human subjects (or on material of human origin such as tissues, specimens and cognitive phenomena) for which an investigator (or colleague) directly interacts with human subjects. Excluded from this definition are in vitro studies that utilize human tissues that cannot be linked to a living individual. (However, such studies can be part of laboratory research that may lead to the development of studies in humans, as noted above.)

Patient-oriented research includes:

- therapeutic interventions
- clinical trials
- development of new technologies
- epidemiologic and behavioral studies
- outcomes research and health services research

Source: *NIH PHS 398 Instructions on Human Subjects Research*