



SYNERGY Scholars Mentored Career Development Program

LETTER OF INTENT (Required): Due Friday, December 20, 2013

FULL APPLICATION: Due Friday, February 7, 2014 (by 5:00 pm)

AWARD START DATE: May 1, 2014

I. Background

Dartmouth SYNERGY Scholars is an on-going Mentored Career Development Program, modeled on the NIH KL2 Scholars Program. The program combines didactic training, mentoring, exposure to multidisciplinary research, and ongoing evaluation to prepare junior investigators for careers in Clinical and Translational Research (CTR). The SYNERGY Scholars Program Committee anticipates that two slots will become available to begin May 1, 2014.

The SYNERGY Scholars Program aims to develop future researchers and facilitate collaborative translational research studies. The Program Committee anticipates that providing funding for such studies will accelerate the development of clinical and translational research scientists, thereby having a positive impact upon our overall clinical and translational research enterprise.

The SYNERGY Scholars Program seeks to promote multidisciplinary and interdisciplinary research initiatives. Consequently, applications that reflect a strong multidisciplinary or interdisciplinary focus will be viewed very favorably. The proposed research must meet the NIH definition of patient-oriented research—i.e., the focus of the research can be translational, mechanistic, therapeutic, clinical trials-oriented, physiological, behavioral, or epidemiologic in nature. If the research is focused on testing a drug or medical device, the SYNERGY Scholars award is restricted to only early phase pilot studies. See <http://grants.nih.gov/grants/policy/hs/glossary.htm> for a full definition of patient-oriented research and clinical trials.

II. Eligibility Criteria

Candidates for the SYNERGY Scholars Program must have a research (PhD) or health-professional doctoral (MD, DO) degree or its equivalent. Applications from women and under-represented minorities are encouraged.

The candidate must be a U.S. citizen or permanent resident and must hold a regular faculty appointment at Dartmouth College at the level of Instructor, Assistant Professor, or Associate Professor. Exceptional applicants who are Research Associates or Fellows will be considered. An individual who has been approved for hire into a faculty role, but has not yet started as an employee at Dartmouth, is eligible only if there is documentation to support the hire and an anticipated start date.

Former or current PD/PIs on an NIH research project (R01), program project (P01), center grants, FIRST Awards (R29), sub-projects of program project (P01) or center grants, other career development awards (K-awards), or the equivalent are *not* eligible. Former principal investigators of an NIH Small Grant (R03), Exploratory/Developmental Grant (R21), Dissertation Awards (R36), or SBIR/STTR (R34, R41, R42, R43, or R44) remain eligible.

Candidates must be able to *commit a minimum of 75% of full-time professional effort* for career development and research activities associated with the SYNERGY Scholars Program *for a duration of two years*. The SYNERGY

Scholars Program will provide funds annually to cover 75% of the individual's salary, not to exceed \$100,000, plus fringe benefits. Year 2 funding is contingent upon demonstrated progress toward the Scholar's individual career goals and continued support from mentors and the department chair. Each Candidate's department chair or supervisor must provide a supporting letter guaranteeing that the individual will have no more than 25% time committed to other non-research (e.g., clinical/teaching) duties during the period of the award.

In addition to the Candidate's salary support, the award will provide up to \$25,000 per year to cover travel, supplies, research assistant salary, and tuition expenses.

Candidates and appointed Synergy Scholars may apply for individual mentored career development awards, including NIH K-awards (e.g., K07, K08, K22, K23) or foundation training awards (e.g. ACS). If successful, the Scholar's appointment would be supplanted by the funding received from the individual's new external career award.

III. Team Mentorship

Each applicant must identify **mentors from at least two different disciplines (or distinctly different areas of methodological expertise)** to supervise his/her research progress during the period of the award. The ideal candidate will propose science that is multidisciplinary or interdisciplinary; therefore, the Mentors should be chosen to reflect the disciplines needed to gain independence in the proposed research area. For example, a lab-based researcher and an endocrinologist might be chosen to supervise a project on early diabetes drug development. The Mentors should be chosen from the large pool of senior investigators at Dartmouth who have established reputations in clinical and translational research and mentorship. The Secondary Mentor can be from Dartmouth or another institution. Additional consultants may also be named, as appropriate.

The Program Committee will review the credentials of the proposed Mentors for scientific productivity, grant funding record, and mentoring history. If the committee decides that a Mentor is unsuitable, the applicant may be required to meet with SYNERGY program leaders to discuss how to proceed. In some instances, the Program Committee may recommend that a more senior mentor join the mentoring team or propose additional Mentors. Applicants may send specific questions on Mentor selections via email to attention of the SYNERGY Scholars Program Committee at SYNERGY@synergy.dartmouth.edu.

IV. Submission and Notification Timeline

- ▶ Submit the required Letter of Intent (LOI) following the Attachment A template, along with Candidate's NIH Biosketch, by Dec 20, 2013.
- ▶ Submit Full Application and required enclosures, following Attachment B, by February 7, 2014.
- ▶ All materials must be sent via email to SYNERGY@synergy.dartmouth.edu, with "Synergy Scholars Program" as the subject.
- ▶ Attach the materials as a single PDF file named: <SYNERGY_PIname.pdf>.
- ▶ Submitted materials will be acknowledged within 24 hours of receipt.

V. Application Checklist

The SYNERGY Scholars Program places special emphasis on multidisciplinary clinical and translational research, which must be reflected in the research, training, and team mentorship plans. See templates that follow for details. The application must include:

1. Face Page: The name, title, and department of the Candidate, Primary Mentor and Secondary Mentor, project title, and brief abstract.
2. Biosketches: Candidate, Primary Mentor, and Secondary Mentor.
3. Candidate Statement: (2 pages) describing personal career goals and training plan including specific training goals, plans (e.g. frequency of mentoring sessions, tutorials, seminars, formal coursework, attendance at conferences, etc.) and timelines for submitting planned manuscripts and grant proposals.
4. Mentorship Plan: Letter of support describing plan for mentoring from the Primary Mentor and an additional

letter from the Secondary Mentor.

5. Research Proposal: (6 pages, NIH format) a well-developed scientific initiative in clinical or translational investigation, developed in consultation with the proposed mentoring team. This should follow the standard NIH format.
6. Literature Cited.
7. Budget Justification.
8. Human Subjects, vertebrate animals, embryonic stem cells.
9. Other grant applications.
10. Letter of Support from the Department Chair.
11. Appendices are not permitted.

VI. Post-Award Conditions

To activate a SYNERGY Scholar Award, invited Scholars and their Mentors must sign a SYNERGY Scholar Compact, indicating their agreement to all Award requirements and expectations, including:

- ▶ Annual report - SYNERGY Scholars are required to submit a written report annually detailing participation in career development activities, progress towards both career-related objectives and research project aims, as well as the status of publications and grant submissions. Each Scholar and his/her Mentors must attend an annual meeting to discuss progress with the SYNERGY Scholars Committee.
- ▶ Scholars must provide, upon request, written updates on the Scholar's academic career accomplishments and feedback on the program and mentorship, both during the program and throughout the Scholar's career.
- ▶ Scholars must work with administrators in their home departments as well as SYNERGY administrators to ensure successful management of SYNERGY Scholar funds (\$25,000 per year) for the costs of tuition, research expenses, travel, and supplies.
- ▶ All SYNERGY Scholars will be expected to apply for independent research funding from NIH or other extramural agency by the end of the first year of support. Application to NIH is strongly encouraged.

Attachment A

**2014 SYNERGY Scholars Mentored Career Development Program
Letter of Intent Template**

1. Candidate and Mentoring Team

Candidate:		
<i>Name</i>	<i>Position Title</i>	<i>Department / section</i>
<i>email</i>		
<i>phone</i>		
Primary mentor:		
<i>Name</i>	<i>Position Title</i>	<i>Department / section</i>
<i>email</i>		<i>Institution (Dartmouth affiliated)</i>
<i>phone</i>		
Secondary mentor:		
<i>Name</i>	<i>Position Title</i>	<i>Department / section</i>
<i>email</i>		<i>Institution</i>
<i>phone</i>		
Additional consultants (if any):		

2. Title of proposed research project:

3. Preliminary research project description and aims: (may be modified for final full application)

Attachment B

**2014 SYNERGY Scholars Mentored Career Development Program
Full Application Template**

1. Face page (1 page):

Candidate:		
<i>Name</i>	<i>Position Title</i>	<i>Department / section</i>
<i>email</i>		
<i>phone</i>		
Primary mentor:		
<i>Name</i>	<i>Position Title</i>	<i>Department / section</i>
<i>email</i>		<i>Institution (Dartmouth affiliated)</i>
<i>phone</i>		
Secondary mentor:		
<i>Name</i>	<i>Position Title</i>	<i>Department / section</i>
<i>email</i>		<i>Institution</i>
<i>phone</i>		

Title of research project:

Abstract: (Summarize the goals of both the Candidate’s training plan and the research project.)

2. Biosketches (NIH format, maximum of 4 pages each):

- ▶ Candidate
- ▶ Primary Mentor
- ▶ Secondary Mentor

3. Candidate (2 pages total):

A. Candidate’s Background

B. Career Goals and Objectives

This should include specific research training aims and objectives for the candidate that will result in achieving the necessary skills to complete the proposed research study and to advance the candidate’s research career in the selected topic area and methods. Each aim should be associated with specific educational and mentoring activities designed to achieve the aim.

C. Career Development / Training Activities During Award Period

- i. Mentoring activities. A specific schedule for meetings between the scholar and mentors, detailing each mentor’s one-on-one meetings with the scholar, and plans for joint meetings involving all mentors with the scholar. The strongest applications will specify frequent (e.g., weekly) team mentoring meetings in which all mentors meet simultaneously with the scholar. Meetings with other advisors/consultants are expected to take place less frequently.
- ii. Didactic courses or seminars related to the candidate’s research interests and career development. These can be courses offered at Dartmouth or elsewhere and must be relevant to the applicant’s research. Applicants must describe how the additional training will enhance their specific research program. Awardees are required to participate in at least one additional career development opportunity per year (e.g., leadership seminar, grant-writing workshop).
- iii. The SYNERGY Certificate Program in Clinical and Translational Science, if not attended previously.
- iv. Good Clinical Practice (GCP) training (<https://www.citiprogram.org/>), if not completed previously. GCP is the international ethical and scientific quality standard for the design, conduct, performance, monitoring, auditing, recording, analysis, and reporting of clinical trials that involve human subjects.

Example Table. Detailed breakdown of proposed educational and mentoring activities.				
	Activity	Topics	Location	Schedule
Training Aim 1	MENTORING ACTIVITIES			
	COURSES, SEMINARS, WORKSHOPS			
	CONFERENCES, SCIENTIFIC MEETINGS			
Training Aim 2	MENTORING ACTIVITIES			
	COURSES, SEMINARS, WORKSHOPS			
	CONFERENCES, SCIENTIFIC MEETINGS			

4. Mentorship Plan: A Letter of Support from each of the mentors indicating commitment to the Candidate, as well as his/her experience serving as a mentor. The Primary Mentor should submit a one-page discussion of the mentoring plan, including proposed meeting schedule, access to research material, candidate support, and expectations; the Secondary Mentor should also submit a brief letter of commitment (less than one page). In addition, the Mentors must be available to report on the Scholar’s progress to the full Program Committee. Finally, written feedback and evaluations are required periodically of both Scholars and Mentors.

5. Research Proposal (6 pages total): Should represent a well-developed scientific initiative in clinical or translational investigation, developed in consultation with the proposed mentoring team.

- A. Research Specific Aims
- B. Significance
- C. Innovation
- D. Approach (recommended sections may include: Preliminary Studies (relevant pilot data, if any), Population or Patients, Statistical analysis and Power calculations, Pitfalls and Alternative Approaches, Milestones, and Timelines)

6. Literature Cited

7. Budget Justification: The applicant must ensure that SYNERGY Scholar funds (\$25,000 per year) for the costs of tuition, research expenses, travel, and supplies will cover planned expenses or include a letter of support that provides evidence of support for additional funding. Salary for mentors is not allowed. Applicants should describe how funds will support their proposed research initiative. Cost estimates should be provided categorically, for example:

- ▶ Supplies e.g., blood collection supplies (\$x per patient, total cost: \$x in Year 1)
- ▶ Services e.g., DNA isolation will be performed by xxx (\$x per sample, total cost: \$x)
- ▶ Tuition or Conference fees
- ▶ Travel expenses

8. Other issues (if applicable to the proposed project):

- ▶ Protections for Human Subjects:
http://grants.nih.gov/grants/peer/guidelines_general/Human_Subjects_Protection_and_Inclusion.pdf
- ▶ Vertebrate Animals: <http://grants.nih.gov/grants/olaw/VASchecklist.pdf>

9. Other grant applications: list the Candidate’s other currently pending research grants. If a previous K-award application has been submitted to NIH, include the Summary Statement from the most recent review.

Example Table. Other Grant Applications.			
Grant Mechanism	Project Title	Submission date(s)	Current Status
Pending Research Grants e.g., R01, R21, ACS-IRG			
Prior or Pending Career Development Grants e.g., K-awards: K01, K07, K23, etc.			

10. Letter of Support from Department Chair: Should address the following:

- ▶ The Candidate's prospects for development into an independently funded clinical and translational scientist.
- ▶ The Department's assurance that at least 75% of the Candidate's time will be protected for research career development and devoted to her/his role as a SYNERGY Scholar.
- ▶ The dollar amount requested for the Candidate's salary and percent effort to be devoted (must be less than or equal to 75% of salary, up to \$100,000). Specify how any difference in salary will be compensated.
- ▶ Other necessary support, such as space allocated to the Candidate, or the availability of administrative assistant support.