

Clinical Investigator Training Enhancement Program

at the Indiana University School of Medicine



SUMMARY

Target Audience

Fellows, junior faculty and other health care professional trainees committed to a career in clinical research

Purpose

To prepare health care professionals for careers in clinical research

Program

Two years of coursework and clinical research leading to a Master of Science in Clinical Research

History

The program began in 2000

Operating Costs

Salary support for program participants' time commitment, provided by their department; time for administrative activity

Outcomes

The program is too new to have data on the number of trainees who go on to achieve R01s

Available Materials

Program website, containing program description, curriculum, and application

For More Information

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Program Overview

The purpose of the Clinical Investigator Training Enhancement (CITE) program is to prepare health care professionals for a career in clinical research and to teach the skills necessary to compete successfully for grant funding, conduct and analyze research findings, and publish work in scientific journals. Over the past several decades, it has been increasingly recognized that a cadre of clinician-scientists committed to and trained in patient-centered research is essential to complement the numerous advances emanating from the basic biomedical and laboratory sciences. The program serves as an excellent local resource for advancing careers in academic geriatrics.

Most participants already have a doctoral degree (MD, PhD, DNS, DDS, or DPT) or are in training for one. Potential applicants include, but are not limited to:

- fellows or other health care professional trainees who have substantial protected time for clinical research
- junior faculty who have career awards or support from their division or department head for participation in the program
- other faculty who have focused previously on basic research or other academic activities but are now committed to pursuing a career in clinical research.

Program Operations

The program includes two main components:

- a two-year formal clinical research curriculum, at the end of which participants receive a Master of Science in Clinical Research degree
- a clinical research project conducted under the mentorship of a faculty scientist whose discipline or area of clinical investigation



corresponds to the research interests and career aims of the student.

This is an integrated program in which the formal curriculum complements and parallels the ongoing clinical research that is relevant to each enrollee's career. This differs from a sequential program in which individuals focus predominantly on formal coursework for several years, deferring actual research until they have attained their degree.

The rationale for the integrated approach is two-fold. First, the coursework is most meaningful when applied to research in which the enrollee is engaged and hopes to continue following program completion. Second, success in clinical research requires not only formal training, but also several primary outcomes, particularly publications and grants.

Program participants meet at least once a month with their primary mentor, and five times during the two-year program with their Advisory Committee, at approximately four-month intervals.

In addition to the work for the MS degree, program graduates complete a grant proposal for funding as well as one or more manuscripts for publication. The combination of a degree and research output substantially enhances the likelihood of a participant's sustained success as a clinical investigator following program completion. Because the program involves both coursework and ongoing clinical research, a 70% time allocation for a two-year period is strongly recommended.

Staffing Requirements

The following personnel are needed:

- A primary mentor who chairs the trainee's Advisory Committee and forwards an evaluation report to the Program Director following each Advisory Committee meeting.
- The Program Director, who meets individually with each program trainee

twice a year to discuss his or her progress and needs, as well as to solicit feedback.

- An Advisory Committee consisting of the primary mentor and other relevant faculty scientists for each enrollee. The Committee oversees the trainee's progress, provides guidance and necessary support, evaluates the completion and quality of research, and offers ongoing career advice.

Program Costs and Funding Sources

The major cost of the program is the time commitment of the program participants (a recommended 70% time allocation for two years) for the completion of the full program; typically, this requires support by the head of the division, department, or research unit in which the trainees reside. Many program participants have salary or stipend support funded by a fellowship, training grant, or junior faculty career award. Others arrange for the necessary protected time with their supervisor, with the express purpose and intent of building the research capacity and productivity of their division or department. Participants receive no salary support from the CITE program.

There is no salary support from the CITE program for mentoring activities. Time for administrative activities depends on the number of trainees and the trainees' projects.

Program funding is through a National Institutes of Health K-30 grant.

Process and Outcomes Data

The program is too new to have any outcomes data on the number of trainees who go on to achieve R01s. Because this is a general program, there is also no data specific to geriatrics or aging-related research.

Implementation Lessons

- Because its goal is to support advanced training in clinical research, the program is an excellent local resource for advancing



careers in academic geriatrics. Other Hartford Centers of Excellence and geriatrics programs may have access to similar research enhancement programs on campus, and trainees should be encouraged to participate in them.

- Hands-on experience with a specific research project is a major aspect of the CITE program; the geriatric message and methods are best introduced through this practical experience.
- This program provides a strong foundation of training for fellows and junior faculty with only minimum prior training in clinical research methods and design.
- It is very important to pair participants interested in aging and geriatrics with mentors who have experience and interest in aging research.

Available Materials

Website

- Contents include program description, curriculum, and application
<http://www.regenstrief.org/training/cite>

For More Information

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This document is part of a compilation of approaches to geriatrics recruitment, career development, and programmatic expansion, based on the work of the John A. Hartford Foundation "Centers of Excellence in Geriatric Medicine and Training." For more information, visit www.afar.org/recruitment or www.jhartfound.org.

