

2024 Yale Center for Clinical Investigation Multidisciplinary Pre-Doctoral Training Program

The YCCI Program will be open to ALL pre-doctoral applicants training across the full span of clinical and translational research. All applications will be accepted and reviewed based on scientific merit.

All Applicant Category: Multidisciplinary Pre-Doctoral Training Program in Translational Research

The Multidisciplinary Pre-Doctoral Training Program in Translational Research aims to identify and support a representative and diverse group of outstanding trainees who specifically want to pursue careers in clinical and translational research; to train them in the use of state-of-the-art research tools; to enhance their abilities to work collaboratively in complex multidisciplinary research teams; and to provide outstanding mentoring (including concordant mentoring) by experienced and diverse faculty that support the trainee's long-term professional development. Pre-doctoral students from the Schools of Medicine, Nursing, Public Health, Engineering and Applied Science, or other appropriate departments in the graduate school in training across the full span of clinical and translational research focused on human health are encouraged to apply. The program will tap into Yale's established educational leadership team, who has a diverse background in clinical and translational research, as well as expertise in the evaluation and dynamic reshaping of medical education programs. The leadership will work directly with both the trainees and their mentors to promote multidisciplinary team-based research that addresses complex medical and/or societal aspects of health and healthcare delivery in the US and around the world.

Funded by the Yale CTSA, this program focuses on providing students the opportunity to develop and participate in multidisciplinary team research with the mentorship of Yale faculty in two or more disciplines. Students in the program will:

- Identify an interdisciplinary research question related to patient or public health with aims that should be achievable in one year.
- Establish a mentoring team comprised of both primary and secondary mentors who come from distinct disciplines and work as a team to address the research question. An example would be a primary mentor from Medicine or Nursing and a secondary mentor from Biomedical Engineering or Public Health.
- Gain clinical or laboratory research experience under the mentorship of the mentoring team.
- Meet with one of the Co-Directors of Education at least once annually.
- Interact with Yale physician-scientists, PhD investigators, pre- and post-doctoral fellows, and graduate students.
- Participate in the YCCI research in progress and ROCATS team science activities.
- Attend appropriate institutional lectures, departmental conferences, and lab meetings.

Research projects reflect a broad-based perspective on the entire research cycle from discovery to development to delivery of care. Project areas include laboratory bench research, clinical research, biostatistics, and epidemiology, among many others. Awards will be for one year, with the option to apply for a second year of support.

Special Emphasis:

Promotion of Health Equity Research

The YCCI strongly advocates for research that will guide healthcare systems in ways to improve the health outcomes of all individuals. Health equity research is a portfolio of activities across the translational research spectrum that moves beyond documenting existing group disparities in health outcomes and healthcare delivery to generating solutions through the application of novel approaches. Rather than being confined to the study of static population subgroups, health equity research interrogates the dynamic, cumulative, and interrelated structures of power, environmental conditions, and economic systems that produce unequal population health. Health equity research also identifies and highlights protective factors that are traditionally undervalued and understudied. Health equity research is grounded in rigorous interdisciplinary research methodologies and centers on the valued contributions and engagement of diverse stakeholders across all phases of research activity. We recognize our institutional responsibility to prioritize research that is responsive to communities and to create dynamic structures that support a unified mission to advance health equity and justice. Applicants whose focus is on developing expertise in health equity research are encouraged to apply for this pre-doctoral program and, if awarded, will be supported for one year, with the option to apply for a second year of support.

Promotion of Diversity in Translational Research

The YCCI is committed to attracting outstanding trainees who are members of populations that are underrepresented in the biomedical research workforce and who want to pursue careers in any type of translational research. Translational research includes clinically-based, laboratory-based, population-based, or community-based research that is focused on understanding or treating human diseases. Such applicants will be a member of a population identified by NIH as underrepresented in the U.S. biomedical, clinical, behavioral, and social sciences research enterprise (see NIH NOT-OD-20-031). Awardees will receive training in the use of state-of-the-art research tools; training to enhance their abilities to work collaboratively in complex multidisciplinary research teams; and outstanding mentoring (including concordant mentoring) by experienced and diverse faculty that will support the junior faculty member's long-term professional development, including connecting diverse individuals to support networks. We will also provide access to resources for retention and the elimination of barriers to career transition.

Community-Engaged Research and Implementation Science

We encourage applications from persons who are conducting community-engaged research or are working on implementation science. Community-engaged research is generally considered to involve working collaboratively with groups of people who are geographically colocalized or share a special interest or similar situations to each other in order to address issues affecting the well-being of those people. Implementation Science involves the study of methods that can be used to promote the adoption and integration of evidence-based practices, interventions, and policies into routine health care in order to improve overall population health.

Application Details

Due date for applications in all areas: Friday, March 8, 2024, at 5:00 PM

Earliest anticipated start date: Saturday, June 1, 2024

Applications must be submitted online via the link available at:

https://medicine.yale.edu/ycci/education/predoc/

Requirements

- Applicants must be Yale students actively enrolled in and in good standing in the MD program, the MD-PhD program, or a PhD program.
- Applicants who are working toward their MD degree must have a commitment from a Yale faculty primary mentor to support them in a year-long research experience and are strongly encouraged to enroll in the Master of Health Science degree program.
- Applicants who are working toward their PhD degree must have passed their qualifying
 examinations by the anticipated start date and be projected to remain in the PhD program for
 the duration of the year award.
- Program awardees who have already received 2 years of support are not eligible to apply.
- The applicant's primary mentor must hold a full-time faculty appointment at Yale University.
- The applicant's secondary mentor should come from a discipline, department, or school that is distinct from the primary mentor.
- This program is funded by a National Research Service Award (NRSA) from the National Institutes of Health. Accordingly, all NRSA rules and policies apply, including the items below.
 - Candidates must be citizens or non-citizen nationals of the United States or have been lawfully admitted for permanent residence.
 - NRSA support at the predoctoral level via institutional training grants or individual fellowship awards is limited to 5 years. Candidates may have no more than 4 years of NRSA support prior to beginning the program.
- Trainees appointed to the program must participate on a full-time basis.
- Applicants who are chosen for this award will receive:
 - Stipend support at the prescribed NIH pre-doctoral level, based on Ruth L. Kirschstein National Research Service Award (NRSA) Stipends, Tuition/Fees and Other Budgetary Levels Effective for Fiscal Year 2024
 - Training Related Expenses (<u>primarily for healthcare coverage</u>) at the prescribed NIH predoctoral level, based on Ruth L. Kirschstein National Research Service Award (NRSA) Stipends, Tuition/Fees, and Other Budgetary Levels Effective for Fiscal Year 2024.
 - Travel funds. The amount will be based on what is provided by the CTSA grant for Grant Year 2024-2025.
- Mentors/Departments will need to commit to cover any additional costs of the trainee, including research support costs.

Additional Terms of the Award

- Recipients must be prepared to start the award on time, which means that all required approvals (IRB, IACUC, etc.) must be obtained or submitted by the start of the award.
- Recipients will be required to complete training in the responsible conduct of research
 appropriate for their career stage that complies with NIH standards regarding the format and
 range of topics to be covered.

Questions

For questions about the application process and eligibility, please contact Christine Costantino (YCCI Funding Opportunities@yale.edu). For questions related to the science of the project, please contact Drs. Lloyd Cantley (Lloyd.Cantley@yale.edu) or E. Jennifer Edelman (EJennifer.Edelman@yale.edu).