## Addressing the Urgent Demand for Clinical Research Professionals Through a Novel Training Initiative

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## 1. Background

Training and retaining diverse, qualified clinical research professionals are critical to designing inclusive clinical protocols, recruiting underrepresented populations, and increasing the generalizability of scientific advancements. A job market analysis by the University of Chicago Medicine's Comprehensive Cancer Center (UCCCC) and Office of Professional Education revealed an urgent, unmet demand for clinical research professionals nationwide, with Illinois ranking among the top ten states for job postings. High turnover in entry-level positions underscores the need for strategies to grow and retain the workforce, especially as 60 percent of UChicago's clinical research activities focus on cancer. In collaboration with City Colleges of Chicago (CCC), the UCCCC launched the Cancer Clinical Research Internship (C5RI), offering a yearlong training pathway that included a six-week summer internship, monthly engagements, and a semester-long apprenticeship.

# 2. Goals

The goals of the program are:

- Create a unique training and education pathway for CCC students
- Provide opportunities for CCC students to explore clinical research workforce careers, learn through direct experiences and reflection (i.e., experiential), practice science communication skills, and grow professionally through mentorship by members of the UCCCC scientific community
- Engage, hire, train, and retain a diverse and inclusive clinical research workforce, part of UCCCC's long-term strategic goals

# 3. Solutions and Methods

Initial contact between CCC and UCCCC was made through mutual connections in UChicago's Office of Civic Engagement. The potential for a mutually beneficial partnership was clear, given the Cancer Center's urgent need for clinical research staff and CCC's need for experiential learning and employment opportunities in biomedicine. Program leaders worked closely with CCC partners to post marketing material publicly via the City Colleges Earn & Learn website, send materials directly to students in relevant associate degree programs, and attend a Malcolm X internship fair where they spoke directly with over 100 potential candidates. The Clinical Trial Support Office (CTSO) worked with the Diversity, Equity, and Inclusion (DEI) and Cancer Research Training and Education Coordination (CRTEC) teams to create the curriculum, identify mentors, and find areas of overlap with current cancer research pathway programs.

#### 4. Outcomes

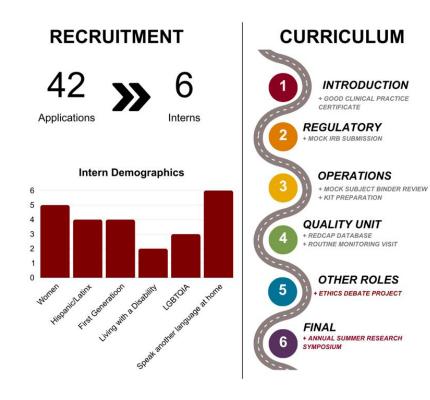
The program comprises three distinct modules: Module 1 (Earn & Learn Internship), Module 2 (Career Enrichment Activities), and Module 3 (Apprenticeship). Within a month of recruitment, UCCCC received 42 applications for Module 1 and welcomed six interns to begin their training in June 2024. Each week of the internship curriculum focuses on a specific functional unit of the CTSO (see figure attached). The curriculum for each week is complemented by professional development activities, faculty lectures, and projects that simulate entry-level job responsibilities for each unit. At the end of Module 1, interns reported improvements in their sense of belonging within a scientific community, knowledge of clinical

research careers, confidence in their skills as clinical research staff members, and confidence in planning for their education and future careers.

#### 5. Learned and Future Directions

Findings from the program evaluation can provide valuable insights to other cancer centers aiming to develop a diverse and skilled workforce for cancer clinical research and health equity. Interest in expanding C5RI is strong, both internally (across other diseases) and externally (among other academic medical centers). The initial launch of C5RI presented a significant burden in terms of administrative tasks and curriculum development. Program leaders will continue to engage with the students as they complete Modules 2 and 3. Regarding future directions, we are focused on building long-term sustainability by exploring various funding opportunities, re-evaluating the curriculum structure, and expanding our cohort of interns in 2025.

#### Figure



# OUTCOMES

- Interns reported gains in: Sense of belonging in a scientific community, Clinical research career knowledge, Confidence in skills as a clinical research staff member, and Confidence in planning for education and careers.
- Interns reported C5RI enhanced key skills: Critical thinking, Analytical and critical reading, Ability to engage in dialogue about clinical research concepts, and Ability to communicate clinical research concepts

All interns:

- Want to return for apprenticeship
- Are interested in a career in clinical research
- Feel confident communicating what clinical research is to their families and communities
- Cited C5RI as having at least a moderate impact on future plans

"I learned a lot about the fundamental knowledge of clinical research and related career paths. The compassion and dedication of the faculty, professors, and mentors have inspired me so much."