

Cultivating Pathways for Clinical Research Professionals Through Development of an Undergraduate Certificate Program

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1. Background

Recruitment and retention of skilled clinical research professionals (CRP) remains a challenge for cancer centers in the post-pandemic era. As part of an established CRP Task Force at the University of Cincinnati (UC), we are collaborating with key stakeholders (UC Cancer Center, UC Office of Clinical Research, UC College of Medicine, UC Human Resources, and Center for Clinical and Translational Science and Training) to develop and implement strategies for recruitment, retention, and education of our clinical and translational sciences workforce.

Our education working group conducted a 4-part educational needs assessment including a review of internal and external data regarding the clinical research workforce. While we saw a decrease in staff turnover rates in 2023 compared to the prior two years, the highest turnover rates across CRP roles exist in entry-level job titles.

2. Goals

After review of needs assessment data and workforce factors, the group elected to pursue development of an undergraduate certificate program with the following goals: 1) improve the visibility of clinical research careers in the undergraduate student population at the University of Cincinnati, 2) provide training to potential CRP staff by introducing the principles of clinical and translational sciences (CTS) at the undergraduate level.

3. Solutions and Methods

Using the Joint Task Force Core Competency Framework for the CRP version 3.1, we established program learning objectives by categorizing competencies into essential, important, or not needed in an entry level CRP position. Next, we reviewed existing resources (ex. CITI training) and available UC courses for related content. No courses addressed CRP competencies according to the 3.1 Competency Framework.

We established program learning objectives and developed the curriculum: 1) seminar experience with 12 hours per week working as a patient care team member in our health system, 2) Introduction to CTS, 3) Fundamentals of Clinical Trials and 4) online seminar with 12 hours per week working in a clinical and translational research unit. The certificate is 12 credits and can be completed in 2-4 semesters.

4. Outcomes

To better prepare undergraduate students for careers in clinical and translational sciences, our working group pursued development of a competency-based, for-credit undergraduate certificate program. The Undergraduate Certificate in CTS program proposal is now approved at University of Cincinnati. We aim to begin student enrollment in the fall 2024. Once implemented, we plan to evaluate the program via alumni survey and annual focus group to assess learner satisfaction and career outcomes in addition to basic course evaluations.

5. Lessons Learned and Future Directions

A diverse group of stakeholders engaged in the process of developing the certificate program. As a result, we can benefit from use of existing resources for program development, course administration, instruction, and enrollment, resulting in low program costs.

Through our CRP Task Force, we also plan to address completion of the certificate in our CRP hiring, allowing the foundational knowledge to contribute toward candidate experience level at time of hire. As mentioned above, we expect the certificate to impact career outcomes for CTS staff positively and will capture measurable data via alumni survey.