

Health Professions Education Institute (HPEI)

Abstract submission template

Title:

The Training in Research Affecting Child Health (TRAC)-Implementing an Innovative Transdisciplinary Research Training Program for Learners across Multiple Educational Stages

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CURRICULAR INNOVATIONS

Problem/Needs Assessment:

Innovative training in research methodologies, critical thinking skills, and mentoring for learner independence are needed for successful careers in biomedical research but traditionally limited to a single educational stage in most programs. TRAC, a novel transdisciplinary research training program, addresses these needs for multiple educational stages and empowers learners to autonomously develop child health-related projects and community engagement.

Program Objectives:

To establish a transdisciplinary child-health research training program with customized curriculum responsive to varying learner needs and with reach across the academic learning health system.

Description of Program:

TRAC, designed to promote horizontal peer coaching among multi-level learners, includes three main stages: (1) a *runway*, from acceptance into the program until (2) an immersive full-time summer research experience and (3) continued learner-driven research during the following year to complete project deliverables. TRAC uses a learner-PI© model to encourage autonomous child-health focused research projects of learner design. Proposed research ideas, presented during application interviews, are conceptualized during the *runway*. Varying learner needs (program dates, elements for medical vs. undergraduate students) are addressed by staggered start times and adjustments in complexity of program elements. Experienced research coach-mentors matching learner topic areas provide individual support; weekly horizontal near-peer coach-mentoring© meetings with TRAC learners and program leaders support team building, transparency and accountability and continue monthly throughout the year. Pediatrics-centered sessions supplement shared didactic and professional development activities across multiple programs that maximize networking. While the in-person program elements build community, research projects can accommodate coach-mentoring virtually, allowing inclusion of faculty across Advocate Health.

Evaluation/Assessment:

Twelve TRAC learners matriculated in 2024 (six undergraduate, six medical students). Feedback is collected continuously and in pre- and post-surveys. Program success, learner- and coach-mentor satisfaction, measured qualitatively, showed high learner excitement for autonomous projects and some challenges for coach-mentors, responded to in coach-mentor training. Deliverables include abstracts (2024: 18 WFUSM, 7 external), manuscripts (11 submitted or in preparation), and conference presentations (18 WFUSM, 7 external posters).

Conclusions and Lessons Learned:

Autonomous research projects enhance continuous learning and research output. Successfully integrating various-stage learners boosts peer-coaching and broadens perspectives. TRAC will expand learners to pediatric residents and include alumni participation to build longitudinal support for careers in child-health research.