

MD/PhD, 1 PhD). The two-year curriculum consists of 14 lunch-time sessions held bimonthly during academic terms. Session structures include a variety of interactive presentations, activities and facilitated discussions as well as reading material, assessment tools, and case studies. Facilitators include topic experts in academia, entrepreneurship, communications, and professional and personal development. The program is evaluated qualitatively through student satisfaction surveys after each session. RESULTS/ANTICIPATED RESULTS: Of the 2018-2019 participants, 90.8% rated the overall quality of PDC sessions as Very Good (56.05%) or Outstanding (34.75%). DISCUSSION/SIGNIFICANCE OF IMPACT: Feedback indicates that the group benefited from combining predoctoral and postdoctoral trainees, although not all content was immediately relevant to early stage trainees. Trainees appreciated the opportunity to engage with experts in disciplines typically considered outside of traditional science but critical to CTS career success. The flexibility of the curriculum allowed for inclusion of timely topics, newer suites of sessions focus on the multiple dimensions of valuing your science.

4039

The Development of a Mentored Writing Workgroup

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OBJECTIVES/GOALS: The purpose of the mentored writing workgroup developed at The CCTS at the Rockefeller University (CCTS RU) was to promote scholarship among clinical research nurses (CRN). The goal was to publish and/or present their projects at national professional association meetings. METHODS/STUDY POPULATION: A two-part writing workshop was presented at RU in December 2018 and January 2019. Members of the RU nursing staff and CRNs from local institutions were invited to attend. Twenty-four CRNs participated in the workshops. The first workshop focused on the writing process, styles of writing and how to get started. The second concentrated on components of a manuscript, categories of papers, selection of the journal, and communications with the editorial team. After the workshops, the CRNs from RU was offered the opportunity to participate in the mentored writing workgroup. To participate, the CRN had to agree to attend scheduled writing meetings and submit written work for each session. The scheduled submission of written materials ensured the CRN was committed to completing their manuscripts or presentations. RESULTS/ANTICIPATED RESULTS: Three CRNs from RU participated in the writing workgroup. Two papers were accepted for publication, and one manuscript is under-review, two abstracts accepted by an international professional organization, and two presentations conducted at an area nursing school and medical center. DISCUSSION/SIGNIFICANCE OF IMPACT: A mentored writing workgroup wherein participants commit to attend writing meetings and to submit written materials in a scheduled-matter can promote scholarship. CONFLICT OF INTEREST DESCRIPTION: NA.

4484

The Entrepreneurship for Biomedicine (E4B) Training Program

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OBJECTIVES/GOALS: Regardless of their career choices, today's biomedical researchers need to blend great science with core skills in innovation and entrepreneurship (I&E). The objective of this NIH-funded education program was to develop and test a pragmatic training program to teach relevant I&E skills. METHODS/STUDY POPULATION: We used a modified Delphi approach to identify 15 relevant competencies for I&E and the essential topics to include in the program. Learner interviews identified preferences for online training programs (short, high-quality audio-visual content, ability to self-navigate, peer and instructor interactions). The inaugural program included 7 short, online courses that addressed how to identify and validate opportunities for innovation, sell your innovation to diverse audiences, assess its ethical consequences, work in teams, and develop resilience as an innovator. It also included mentor support, a team-based capstone project, and an optional in-person boot camp. RESULTS/ANTICIPATED RESULTS: 51 students enrolled and 41 participants from 9 institutions completed the program, including pre- and post-doctoral students and junior faculty. They organized into 10 teams to complete the capstone project, with 6 teams pitching their innovation to fellow students and mentors at the boot camp. Students rated satisfaction with courses highly overall, with 79% stating they would be disappointed if the program was no longer available. Preliminary results suggest participants increased their knowledge about and ability to perform tasks taught throughout the program. Suggestions for improvement included providing more practical advice and real-world examples to complement educational videos. DISCUSSION/SIGNIFICANCE OF IMPACT: The inaugural E4B program was well received and effective in increasing I&E skills. Improvements will include increased opportunity for mentor interactions and for advanced entrepreneurial training. The program is open for biomedical research trainees from all institutions with a CTSA award.

4515

The Impact of First Level Training Cycles (FLTCs) on Clinical and Translational Research (CTR) in knowledge and interest in CTR of students (S) and faculty (F) from health professions and basic science programs island wide in Puerto Rico (PR)

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OBJECTIVES/GOALS: To assess the impact of FLTCs on CTR on S and F from health professions and basic science academic programs island wide in Puerto Rico. Cycles supported by the Title V Cooperative Project at University of Puerto Rico-Medical Sciences Campus (UPRMSC) and Universidad Central del Caribe (UCC)(Title V). METHODS/STUDY POPULATION: After offering FLTCs in CTR to S and F from UPRMSC and UCC, Title V expanded it to S and F from other institutions island wide in PR. These FLTCs