

team member using a standard data collection tool. We also recorded documented events in the electronic medical record (EMR). Paired t-tests were performed for continuous data and McNemar's test for categorical data. RESULTS/ANTICIPATED RESULTS: In total, 50 patients were enrolled between February and April 2023. The nurses reported that patients participated in a median of 5 mobilizations (Interquartile range [IQR] 4-6) in a 12-hour shift, whereas nurses documented in the EMR that patients participated in a median of 1 mobilization (IQR 0-3;  $P < 0.001$ ). On direct query, the nurses stated that a total of 8 individual safety events occurred during mobility, representing a 3% (8/259) safety event rate. In the EMR, the nurses documented 1 individual safety event during mobility, representing a 1% (1/84) safety event rate ( $P = 0.008$ ). Nurses reported that they mobilized 50% (25/50) of the patients out of bed; however, they documented that they mobilized only 32% (16/50) of the patients out of bed ( $P = 0.007$ ). DISCUSSION/SIGNIFICANCE: Compared to EMR documentation, nurses report more mobilization of critically ill children during the day, including more out of bed mobilization and safety events. Future nurse education should focus on mobility documentation to ensure that it reflects mobility at the bedside to facilitate process improvement and optimize care for PICU patients.

117

### Applying the Competency Index for Clinical Research Professionals (CICRP) for Educational Program Evaluation

Carolynn Thomas Jones<sup>1</sup>, Xin Liu<sup>1</sup>, Carlton Hornung<sup>2</sup>, Jessica Fritter<sup>1</sup> and Marjorie V. Neidecker<sup>1</sup>

<sup>1</sup>The Ohio State University and <sup>2</sup>Louisville University

OBJECTIVES/GOALS: To demonstrate the value of the Competency Index for Clinical Research Professional (CICRP) as a tool in program evaluation using a pre- and post- design to evaluate student perceived self-efficacy in clinical trial competencies at program entry and at program completion. METHODS/STUDY POPULATION: Using a separate-sample pre-post study design, we administered the CICRP questionnaire to students in the entry and exit courses of the Master of Clinical Research (MCR) Program during the 2021-2022 academic year, using Qualtrics™ (Provo, Utah) survey instrument for use on desktop or mobile device. We included the 20 CICRP competency items asking students to rate their self-efficacy in performing each item using a Likert Scale (from 0-10) (0=not at all confident; 10= extremely confident). Links to the survey were included in the courses for the foundational entry course and for the final culminating project course. RESULTS/ANTICIPATED RESULTS: Overall, 54 students took the CICRP during the entry course and 56 during the exit. Cronbach's alpha for each assessment ranged from 0.93 to 0.98. Both the Welch's two-sample t-test and Wilcoxon rank-sum test show very significant differences between the group of students entering the program and leaving the program ( $p$  value  $< 0.001$ ). A significant increase in mean CICRP total score is seen at each experience level between program entry and program exit ( $p < 0.001$ ). A linear regression, adjusting for available covariates, individuals taking the exit course have a mean CICRP total score 92.690 ( $p$  value  $< 0.001$ ) higher than individuals taking the entry course. DISCUSSION/SIGNIFICANCE: Competency indices have been used to measure self-efficacy in translational research scientists, thus the use of CICRP to measure

self-efficacy can be useful in assessing whether our competency-based program is meeting the JTF Competency needs of students.

119

### Academic Innovation through the interdisciplinary (elective) course Introduction to Clinical and Translational Research (CTR) to increase the number of undergraduate students in Puerto Rico with the knowledge, skills, abilities, and opportunities in CTR

Edgardo L. Rosado-Santiago<sup>1</sup>, Juan C. Soto-Santiago<sup>1</sup>, Edgardo L. Rosado-Santiago<sup>2</sup> and Lizbelle De Jesús-Ojeda<sup>2</sup>

<sup>1</sup>University of Puerto Rico and <sup>2</sup>Medical Sciences Campus, Title V UPR-MSC Project

OBJECTIVES/GOALS: The Title V project team is offering an elective course to teach the historical development of CTR, make a compelling scientific presentation, and use bibliographic databases. In addition, students learn: to write the research question, design a career development plan, protect human subjects in research, and the mentor-mentee relationship. METHODS/STUDY POPULATION: The course includes a variety of educational strategies and activities that allow the student to increase their knowledge and initiate their interest in the field of CTR. Both academic semesters (August to December and January to May) are offered remotely in two-hour synchronous sessions on Fridays from 3:00 p.m. to 5:00 p.m. through videoconferences, in addition to asynchronous activities. Invited expert lecturers and faculty reinforce the course content in each topic they address. In addition, course coordinators assign guided tasks where the students perform the work. Then, they present or send their work to the course coordinators for evaluation. RESULTS/ANTICIPATED RESULTS: The course began in January 2020 and has had six offerings, including one in the current academic semester (August to December 2023). Its first offering was in the semester from January to May, and due to the interest generated in students in August 2022, it is now available in both semesters. From its beginning to the present, the course has included students from the University of Puerto Rico (UPR) Bayamon, Cayey, Humacao, Mayagüez, and Rio Piedras campuses, impacting all geographic areas of Puerto Rico. The course has also represented an opportunity for graduate faculty to teach CTR to undergraduate students. Until 2023, 56 students have enrolled. DISCUSSION/SIGNIFICANCE: Upon completing six-course offerings, the evaluation carried out by the students demonstrates satisfaction with the learning obtained. The knowledge and skills achieved have led them to participate in CTR with the mentoring of collaborating course professors and starting a new professional development opportunity for undergraduate students.

120

### Impact of Undergraduate Clinical Research Experience: Highlighting the UCLA Clinical and Translational Science Institute Research Associates Program (CTSI-RAP)

Amanda Piring, Jim Morrison, Noah Federman, Laurie Shaker-Irwin, Amanda Piring, Sam Duong-Brett, Jim Morrison, Noah Federman and Laurie Shaker-Irwin

University of California, Los Angeles

OBJECTIVES/GOALS: CTSI-RAP is a professional development program that provides undergraduate students with clinical research exposure and training. Students support UCLA research faculty by