

Towards Opportunities (RETO) and Mentoring Offering Training Opportunities for Research (MOTOR) 1 - 2 trainings were offered as part of the Title V Coop. In addition, since January 2020, as part of the institutionalization of the trainings in CTR, two elective courses (INTD 5998 and MDCL 101) were created-offered. The trainings/courses present the main concepts underlying CTR performance through lectures, workshops and presentations, in hybrid modalities, as well as the services-resources of the Center Research Education and Science Communication Opportunities (CRESCO). These programs have given students (undergraduate and graduate) and faculty the opportunity to get started in CTR and to integrate in Clinical and Translational Mentoring Teams (CTMT). RESULTS/ANTICIPATED RESULTS: Eight (8) cycles of RETO-MOTOR 1 and seven (7) cycles of RETO-MOTOR 2; two sessions of INTD 5998 and one session of MDCL 101 were offered. The RETO-MOTOR 1 training was completed by 219 participants and RETO-MOTOR 2 by 130 participants. The INTD 5998 course was completed by 22 students and the MDCL 101 course by 18 students. A total of 389 participants have been initiated in the CTR. Of the trainings, 90% indicated that the knowledge acquired in CTR was invaluable, 85% understand that the most significant achievement, as students, was present at a scientific conference, and 100% indicated interest in continuing to do CTR. Of the courses, 100% indicated that they were a good learning experience, helped them increase their knowledge in CTR, met their expectations and would recommend other students to take the course. DISCUSSION/SIGNIFICANCE: The RETO-MOTOR 1, RETO-MOTOR 2 trainings and CTR courses provide a based of research knowledge and valuable interprofessional experience for those who wish to start in the clinical and translational research. The Title V Cooperative Project provides this opportunity to undergraduate and graduate students such as faculty of HEI in PR.

501

### Training the translational research workforce: evolution of the Master of Science in Clinical and Translational Investigation Program at the University of Miami CTSI.

Tatjana Rundek<sup>1</sup>, Tulay Koru-Sengu<sup>1</sup>, Gigi Giobio<sup>1</sup> and Rosalina Das<sup>1</sup>  
<sup>1</sup>University of Miami

OBJECTIVES/GOALS: The goal of this study is to highlight the unique characteristics of Miami CTSIs Master of Science in Clinical and Translational Investigation (MSCTI) as part of CTSIs overall translational workforce development program and to describe program outcomes. METHODS/STUDY POPULATION: The MSCTI at the University of Miami offers a structured, individualized, and mentored educational program that trains students in the principles and practice of translational science and clinical research. Based on student feedback and needs assessment, three courses were specifically created for the program to include additional scientific cognates and promote essential skills for the translational research workforce – team science and entrepreneurship, research ethics, and writing for clinical and translational science. A fourth course on applied statistics is currently under development that provides training in practical statistical knowledge required for clinician-researchers. Career trajectory of graduates and academic output were tracked through surveys and secondary data collection. RESULTS/ANTICIPATED RESULTS: The MSCTI Program has enrolled 76 students over its lifetime, including KL2 scholars, NIH K scholars

and T32 trainees; with 25% of students holding foreign degrees. In addition to traditional outcomes such as funding and publications, qualitative case studies will highlight scientific impact and career progress of students. The program has performed exceptionally well in recruiting underrepresented persons in research, with 41% of the students identifying as Hispanic, and 52% of the students as female. Of the graduates, 84% have gone on to achieve leadership positions in NIH and pursue research careers in academic institutions, while 16% have moved to industry, government, or non-profit careers. Overall, 92% of graduates were engaged in research after two years of graduating from the program. DISCUSSION/SIGNIFICANCE: Miami CTSIs MSCTI Program has trained students with a wide range of incoming experience to establish successful careers in clinical and translational research and is a critical component of CTSIs translational workforce development program.

503

### Implementing a formal research mentoring training program at the Miami Clinical and Translational Science Institute: early findings and outcomes

Patricia Avissar<sup>1</sup>, Maria Alcaide<sup>1</sup>, Alessia Fornoni<sup>1</sup> and Robert Levy<sup>1</sup>,  
 Rosalina Das<sup>1</sup>

<sup>1</sup>University of Miami

OBJECTIVES/GOALS: The goal of this study is to describe the implementation of a formal research mentoring training program at Miami CTSI in collaboration with University of Colorado CTSI, to build effective mentor-mentee relationships that help build successful research careers for junior faculty. METHODS/STUDY POPULATION: The Miami CTSI Research Mentoring Training is a three-part series for early stage faculty and their mentors to strengthen mentoring skills and build successful relationships. The curriculum uses evidence-based strategies and is modeled after University of Colorado CTSIs CO-Mentor Training Program. The pilot training was conducted as a train-the-trainer program with subsequent workshops led by Miami CTSI faculty. The program has mentee-only, mentor-only, and joint sessions covering topics such as networking skills, managing financial aspects of an academic career, and career mapping. To assess program effectiveness, pre/post surveys were conducted and follow up surveys are planned. Data collected will assess participant diversity, research productivity, and mentoring relationship status. RESULTS/ANTICIPATED RESULTS: A total of 49 mentor-mentee teams from 18 departments participated in the training over two cohorts. An upcoming third cohort will be included in the analysis. Overall, 100% mentors and 86% mentees reported the overall value of the program as positive. Post-training, mentees reported an increase in confidence in creating career development plans and articulating career goals. Mentors reported an increase in confidence in providing guidance tailored to mentees needs. Mentees reported improvement in their knowledge of developing personal narratives and handling financial aspects of research; both mentors and mentees reported improvement in insights into achieving work-life balance. Follow up survey results will provide insight into the evolution of the mentoring relationships. DISCUSSION/SIGNIFICANCE: Miami CTSIs mentoring training demonstrated successful participation and positive feedback from mentors and mentees and is poised to become a critical component of the Miami CTSIs research career development pipeline.