

**METHODS/STUDY POPULATION:** First stage of the training sessions (TS) dealt with the theory of CTR. After TS and responding to their research interests, as answered in a questionnaire, the participants formed a CTMT, under the mentorship of a well-established CT researcher. This, as a prelude to their hands-on experiences in Intensive Development and Experiences in Advancement of Research and Increased Opportunities (IDEARIO), for which a research proposal is needed. **RESULTS/ANTICIPATED RESULTS:** Five (5) CTMTs were formed in different research areas – cardio, neuro, liver, renal, Zika–, as submitted in their research concept papers. Eight (8) CT researchers are currently mentoring 2 US, 7 GS and 6 F of HSPs through the CTMTs. They have submitted a research proposal, as a bridge between the theory in the TS and the practice in IDEARIO. Five (5) proposals were received and 2 of them approved, while the other 3 are in the evaluation process. We will present the composition, research topics, development of research and the feedback of participants in IDEARIO and CTMTs. **DISCUSSION/SIGNIFICANCE OF IMPACT:** The CTMTs and their respective proposals are effective strategies for the mentoring of US, GS and F in CTR.

3563

### Clinical research training methods that improve self-efficacy in clinical research domains

Mathew Sebastian<sup>1</sup>, Matthew Robinson<sup>1</sup>, Leanne Dumeny<sup>1</sup>, Kyle Dyson, Wayne T. McCormack<sup>1</sup> and William Stratford May<sup>1</sup>  
<sup>1</sup>University of Florida Clinical and Translational Science Institute

**OBJECTIVES/SPECIFIC AIMS:** The study aims to determine the current clinical research training interventions of MD-PhD programs and how effective they are in promoting clinical research self-efficacy. **METHODS/STUDY POPULATION:** A national survey of MD-PhD trainees was conducted in 2018 to identify clinical research training methods and self-efficacy for clinical research skills. MD-PhD program directors and coordinators from 108 institutions were asked to distribute the survey to their students. Responses were received from 61 institutions (56.5%). Responses were obtained from 647 MD-PhD students in all years of training, representing 17.9% of the 3613 possible participants at the 61 medical schools represented. No compensation was provided for this study. **RESULTS/ANTICIPATED RESULTS:** The primary methods of clinical research training reported by students included didactics, mentored clinical research, didactics plus mentored clinical research, didactics plus clinical research practicum, and didactics plus mentored clinical research plus clinical research practicum. A quarter of all participants reported having no clinical research training. Clinical research self-efficacy was then correlated with the amount of clinical research training. Students exposed to no clinical research had the lowest self-efficacy in clinical research skills and students experiencing didactics plus mentored clinical research plus clinical research practicum had the highest perceived self-efficacy in clinical research domains. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This is one of the first studies assessing clinical research training methods for MD-PhD students and assessing their efficacy. We found that of all students questioned, 25% mentioned had not received any type of clinical research training. The remaining students identified 5 research training methods that institutions currently use. This work highlights the importance of clinical

research experience students need to improve their self-efficacy, a major influence on research career outcomes.

3366

### Communication in Science: a summer workshop program at Mount Sinai

Janice Lynn Gabrilove, MD, FACP<sup>1</sup> and Layla Fattah<sup>1</sup>  
<sup>1</sup>Mount Sinai School of Medicine

**OBJECTIVES/SPECIFIC AIMS:** In an effort to increase awareness and enhance knowledge and skills in relation to communication in science at Mount Sinai, the Communication in Science summer workshop series aimed to provide an accessible, workforce-wide lecture series to promote key concepts and skills related to communicating science. Delivered by faculty and invited speakers, a series of seven workshops delivered over a 4 week period covered topics such as communication in teams, storytelling and TED talk principles, and community engagement. The aim of each session was to offer “top tips” that participants could apply to their practice. Evaluation of the workshop series aimed to determine participant satisfaction and self-perceived changes in knowledge and skills in relation to science communication. **METHODS/STUDY POPULATION:** A total of 375 participants registered to attend the workshop series from a range of backgrounds including post-docs, faculty, residents, staff and students at Mount Sinai. Attendance at the workshops ranged from a high of 119 and a low of 33 participants, with as many as 41% of attendees joining the session via live-streaming. Participants were emailed an online survey at the end of the workshop series, asking for satisfaction feedback on each individual workshop and an overall impression of the workshop series. Participants were asked to rate the satisfaction criteria related to content, gained knowledge and skills, presentation style and whether they found the session of value for each workshop, using a Likert scale from 1 - 5 (1 = strongly disagree, 5 = strongly agree). Participants were also asked to provide an overall rating for the summer workshop series as a whole. **RESULTS/ANTICIPATED RESULTS:** A total of 35 participants responded to the survey. Mean responses to the survey questions were: The content of this session is important to my work = 4.09 (range 3.77 - 4.45). This session increased my knowledge or skills 4.03 (range 3.56 - 4.62). The presenters delivered this content clearly = 4.16 (range 3.78 - 4.67). Overall I found this session valuable = 4.13 (3.78 - 4.61). Participants were also asked to provide an overall rating for the summer workshop series as a whole on a scale of 1 to 10 (1 = poor, 10 = excellent). The mean response was 8.36, indicating a high level of satisfaction with the program. Qualitative feedback indicated that the sessions were successful in increasing awareness of this topic. One participant reported that “these sessions inspired me to think differently, and in a way that can potentially allow me to communicate with the non-science community”. **DISCUSSION/SIGNIFICANCE OF IMPACT:** The high number of registrants for this summer workshop series indicates a perceived need for education and training on Communication in Science at Mount Sinai. Sessions that focused on TED talk principles and storytelling in science were particularly well attended and well-reviewed, suggesting a particular interest in these topics. There was, however, a discrepancy between registration and attendance numbers, which going

forward we will seek to better understand. One explanation is that recording and posting the sessions on YouTube allowed participants to review content asynchronously at a time and location convenient to them, which may have deterred people from attending in person. Following the popularity of this program, future plans are underway to provide an ongoing program of learning in relation to Communication in Science.

3519

### Community Engagement And Health Disparities In Clinical And Translational Research Course: A Joint Academic Institution Approach

Rakale Collins Quarells<sup>1</sup>, Winifred Thompson, PhD<sup>1</sup>, Elleen Yancey, PhD<sup>1</sup> and Tabia Akintobi, PhD<sup>1</sup>

<sup>1</sup>Morehouse School of Medicine

**OBJECTIVES/SPECIFIC AIMS:** Current translational research moves beyond bench to bedside and includes translating scientific evidence to clinical practice and into the community settings (T1-T5). This progression is dynamic, involving patient-physician, community, and academic organizational structures and translational strategies. However, basic and clinician scientists are often unprepared and/or ill equipped to successfully conduct community-engaged research which may aid in more efficient translation of their research findings. The recognized need for such training was the impetus for our course which was originally designed and implemented through the innovative and sustainable joint academic-community partnerships of Morehouse School of Medicine and Emory University with the support of Georgia Institute of Technology. Since that time the course has evolved with the recently added partner, University of Georgia. **METHODS/STUDY POPULATION:** Initially developed and implemented in 2008, the course continues through the Georgia Clinical and Translational Science Alliance, Community Engagement and Research Program (GaCTSA/CERP), a Clinical Translational Science Award (CTSA) (UL1TR002378). The course is an introduction to community-engaged research concepts/methods. This includes behavioral science; community engagement principles; clinical translational research partnerships; and strategies in planning, implementing, evaluating, and disseminating community-engaged research to address health disparities. The course is open to the four GaCTSA academic institutions' faculty, MD, PhD, MS in Clinical Research, and the Graduate Certificate in Translational Science students. **RESULTS/ANTICIPATED RESULTS:** Students received scholarly and hands-on training in community engaged research through faculty- and community member-led didactic lectures/interactions, team science activities, and a final assignment involving work with a community-based organization. From 2008-2017 over 230 students have matriculated through this course and many are now involved in community-engaged translational research. Most students in the class were MD/PhD students (33%), however 21% were junior faculty, attending physicians (21%), or fellows/residents/ postdocs (15%). Evaluations over the years indicate that most students were unaware of Community-Based Participatory or community-engagement strategies for conducting translational research. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Effective application of community-engaged translational research requires essential skills training to facilitate the translational research paradigm. Translational researchers, at any stage, will benefit from understanding the entire translational research process and the importance of quickly bringing research advances to patients and the community.

3561

### Creating a Scientific Community for Outcomes Researchers

Rebecca Avery Reamey<sup>1</sup> and Michael J Mugavero

<sup>1</sup>University of Alabama at Birmingham

**OBJECTIVES/SPECIFIC AIMS:** 1. Foster a community of scholars – by centering on training and professional development programs that assist with career progression. 2. Improve health equity for the community – by developing innovative ways to capture data, address problems, deliver solutions, and disseminate results to patients and people everywhere. 3. Facilitate interdisciplinary teams at all career stages – by providing opportunities for researchers, regardless of discipline and career stage, to engage in dialogue with others. SCOR has developed a series of programs to address each stage in the career arch. **LEAD:** Learn Enhance Advance Drive develops a pipeline of future leaders within UAB by engaging junior faculty and staff who are in leadership roles or will be in leadership roles soon to develop fundamental competencies. The one-year, cohort-based program enables junior faculty and staff to enhance their interpersonal skills, professional skills, and leadership skills. The program uses the Leadership Competency Model to provide the framework for the chosen topics. The K2R program provides structured activities over a 4– 5 month timeline to assist cohorts of scholars in their preparation of a specific grant application. Leveraging existing programs, like Project Panels, and offerings including a Specific Aims Workshop, K and R Writing Groups, and Mock Study Section, the SCOR extends the engagement of scholars in their ongoing research development. **METHODS/STUDY POPULATION:** Using quantitative methods, we have conducted surveys to measure effectiveness of weekly didactic sessions and topics. We use qualitative methods such as interviews and focus groups to better understand the relevance of the individual programs and the larger community of SCOR. **RESULTS/ANTICIPATED RESULTS:** N/A **DISCUSSION/SIGNIFICANCE OF IMPACT:** Creating a community of interdisciplinary investigators will greatly impact research at the institution.

3509

### Developing a Leadership Alumni Forum to foster a culture of leadership at Mount Sinai

Janice Lynn Gabrilove, MD, FACP<sup>1</sup>, Layla Fattah<sup>1</sup>, Lisa Bloom and Cara Della Ventura

<sup>1</sup>Mount Sinai School of Medicine

**OBJECTIVES/SPECIFIC AIMS:** Leadership is an essential and recognized team science competency. To support the development of leadership skills at Mount Sinai, the LEAD (Leadership Emerging in Academic Departments) program, launched in 2016, delivers a structured 12-month blended learning program for junior faculty. The program aims to promote personal and professional leadership capacity, skills and behaviors. Following a competitive application process, 24 participants each year are selected to participate. In its second year, the challenge for the LEAD program leadership is to support alumni in fostering a culture of leadership that extends beyond the 12-month program. In order to promote a leadership community of practice and offer continued support to junior faculty, the LEAD Alumni program aims to bring former LEAD participants together to maintain motivation, share challenges and successes, meet with mentors and role models, and foster an ongoing community of practice that seeks to embed evidenced-based leadership