

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 Quarells¹, Winifred Thompson, PhD¹, Elleen Yancey, PhD¹ and Tabia Akintobi, PhD¹

¹Morehouse 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 Reamey¹ and Michael J Mugavero

¹University 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, FACP¹, Layla Fattah¹, Lisa Bloom and Cara Della Ventura

¹Mount 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

culture at Mount Sinai. **METHODS/STUDY POPULATION:** The previous two cohorts of LEAD participants were approached to volunteer for the LEAD Alumni Forum working group. Four LEAD alumni came forward to form a self-selected working group. With input from the program leadership, the alumni working group is tasked with organizing regular events that bring the 48 previous LEAD participants together. The events provide the opportunity for individuals with expertise and a passion for leadership to create a supportive environment. This ultimately seeks to increase the transfer and utilization of leadership skills in practice, and promotes a culture of leadership. These alumni events also provide the opportunity for alumni to interact with senior leaders at Mount Sinai, thereby learning from role models within the organization. **RESULTS/ANTICIPATED RESULTS:** Evaluating learning transfer and culture change is challenging, so a number of proxy measures will provide insight into the success of the Alumni Forum. Firstly, the number of LEAD Capstone projects implemented in practice, and the success of these initiatives, will provide insight into transfer of leadership learning to practice. Secondly, participants will complete a validated survey tool, Leadership Programs Outcome Measure (LPOM), which explores self-reported leadership change at a personal, organizational and community level. Finally, participants will be followed up in the long-term to track promotion, awards, and other formal or informal leadership positions assumed following engagement in the LEAD program and the subsequent LEAD Alumni Forum. **DISCUSSION/SIGNIFICANCE OF IMPACT:** It is hoped the LEAD Alumni program will enhance the ability of participants to implement leadership knowledge and skills to practice, which may subsequently advance organization and culture change. Fostering a community of practice will further the reach of the LEAD program and as the number of LEAD alumni grows, and the Alumni Forum may provide the supportive environment that allows these individuals to have real impact.

3339

Development of a Competency-based Informatics Course for Translational Researchers

Ram Gouripeddi¹, Danielle Groat¹, Samir E. Abdelrahman¹, Tom Cheatham¹, Mollie Cummins¹, Karen Eilbeck¹, Bernie LaSalle¹, Katherine Sward¹ and Julio C. Facelli¹

¹The University of Utah

OBJECTIVES/SPECIFIC AIMS: Translational researchers often require the use of informatics methods in their work. Lack of an understanding of key informatics principles and methods limits the abilities of translational researchers to successfully implement Findable, Accessible, Interoperable, Reusable (FAIR) principles in grant proposal submissions and performed studies. In this study we describe our work in addressing this limitation in the workforce by developing a competency-based, modular course in informatics to meet the needs of diverse translational researchers. **METHODS/STUDY POPULATION:** We established a Translational Research Informatics Education Collaborative (TRIEC) consisting of faculty at the University of Utah (UU) with different primary expertise in informatics methods, and working in different tiers of the translational spectrum. The TRIEC, in collaboration with the Foundation of Workforce Development of the Utah Center for Clinical and Translational Science (CCTS), gathered informatics needs of early investigators by consolidating requests for informatics services, assistance provided in grant writing, and consultations. We then reviewed existing courses and literature for informatics courses that focused

on clinical and translational researchers [3–9]. Using the structure and content of the identified courses, we developed an initial draft of a syllabus for a Translational Research Informatics (TRI) course which included key informatics topics to be covered and learning activities, and iteratively refined it through discussions. The course was approved by the UU Department of Biomedical Informatics, UU Graduate School and the CCTS. **RESULTS/ANTICIPATED RESULTS:** The TRI course introduces informatics PhD students, clinicians, and public health practitioners who have a demonstrated interest in research, to fundamental principles and tools of informatics. At the completion of the course, students will be able to describe and identify informatics tools and methods relevant to translational research and demonstrate inter-professional collaboration in the development of a research proposal addressing a relevant translational science question that utilizes the state-of-the-art in informatics. TRI covers a diverse set of informatics content presented as modules: genomics and bioinformatics, electronic health records, exposomics, microbiomics, molecular methods, data integration and fusion, metadata management, semantics, software architectures, mobile computing, sensors, recruitment, community engagement, secure computing environments, data mining, machine learning, deep learning, artificial intelligence and data science, open source informatics tools and platforms, research reproducibility, and uncertainty quantification. The teaching methods for TRI include (1) modular didactic learning consisting of presentations and readings and face-to-face discussions of the content, (2) student presentations of informatics literature relevant to their final project, and (3) a final project consisting of the development, critique and chalk talk and formal presentations of informatics methods and/or aims of an National Institutes of Health style K or R grant proposal. For (3), the student presents their translational research proposal concept at the beginning of the course, and works with members of the TRIEC with corresponding expertise. The final course grade is a combination of the final project, paper presentations and class participation. We offered TRI to a first cohort of students in the Fall semester of 2018. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Translational research informatics is a sub-domain of biomedical informatics that applies and develops informatics theory and methods for translational research. TRI covers a diverse set of informatics topics that are applicable across the translational spectrum. It covers both didactic material and hands-on experience in using the material in grant proposals and research studies. TRI's course content, teaching methodology and learning activities enable students to initially learn factual informatics knowledge and skills for translational research correspond to the 'Remember, Understand, and Apply' levels of the Bloom's taxonomy [10]. The final project provides opportunity for applying these informatics concepts corresponding to the 'Analyze, Evaluate, and Create' levels of the Bloom's taxonomy [10]. This inter-professional, competency-based, modular course will develop an informatics-enabled workforce trained in using state-of-the-art informatics solutions, increasing the effectiveness of translational science and precision medicine, and promoting FAIR principles in research data management and processes. Future work includes opening the course to all Clinical and Translational Science Award hubs and publishing the course material as a reference book. While student evaluations for the first cohort will be available end of the semester, true evaluation of TRI will be the number of trainees taking the course and successful grant proposal submissions. References: 1. Wilkinson MD, Dumontier M, et al. The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data*. 2016 Mar 15. 2. National Center for Advancing Translational Sciences. *Translational Science Spectrum*. National