

entrepreneurship, biomedical innovation, and design pathway curriculum at UMass Chan and provide preliminary assessment data. The lessons learned are informing further adjustments to the content and learning objectives of this pathway. **METHODS/STUDY POPULATION:** This new pathway curriculum introduces students to the principles of innovation, entrepreneurship, basic engineering principles, and technology commercialization. It is modeled after the I-Corps curriculum with added material regarding engineering principles. I-Corps was initially developed by the National Science Foundation (NSF) to help scientists understand the commercial potential of their inventions. Major elements include the Business Model Canvas and Customer Discovery. Eleven first-year (Class of 2027) and twenty-one second-year (Class of 2026) pathway students were invited to participate in online surveys evaluating course material, student self-efficacy, and knowledge of course content. **RESULTS/ANTICIPATED RESULTS:** This pathway gives students a hands-on customer discovery learning experience that teaches students how to successfully transfer knowledge into products and processes that benefit society. At the end of each semester, students were invited to complete a pathway evaluation survey. Initial results show that the program was well received. 15/20 (75%) first-year students in the Fall 2023 and 13/21 (62%) in the Spring 2024 rated the experience as good or excellent. There was a noticeable increase in the students' levels of comfort and self-assessed understandings of engineering material, and students' knowledge of engineering material significantly improved after the three lectures. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Despite small sample sizes impacting generalizability, the results show improvements in student comfort with the material, students' knowledge of the material, and their enjoyment and applicability of the curriculum. As additional cohorts move through the curriculum, we will continue to measure student satisfaction and learning outcomes.

211

Effect of implementing communicating science training for research workforce

Aileen McGinn¹, Claudia Lechuga¹, K. Zoe Tsagaris¹, Laura Lindenfeld², Mimi Kim¹ and Jessica Kahn¹

¹Albert Einstein College of Medicine and ²Alan Alda Center for Communicating Science CEWIT

OBJECTIVES/GOALS: Communicating science to varied audiences is an essential component of conducting research. This study evaluated how science communication training impacted participants' knowledge, confidence, and skills; examined sustained application of achieved skills; and assessed overall satisfaction of the training. **METHODS/STUDY POPULATION:** The Montefiore-Einstein CTSA hub partnered with the Alda Center for Communicating

Science to offer their Foundational Series. The series aims to build effective science communication skills to 40 research faculty, staff, and trainees via three weekly 3-hour virtual workshops: The Essentials, Small Group Coaching, and Science Through Narrative. Retrospective pre-post surveys were administered after each workshop to measure changes in self-reported knowledge, confidence, and skills related to each learning objective using a 7-point Likert scale. Pre- and post-program score differences were analyzed using the Wilcoxon signed-rank test. Participants also rated pacing and likelihood to recommend each workshop to their peers. A 3-month follow-up survey assessed sustained application of skills. **RESULTS/ANTICIPATED RESULTS:** Pre-workshop knowledge, skills, and confidence related to all learning objectives for each workshop were generally moderate (median Likert score of 4). Participants showed significant improvement across all areas, with median scores increasing by 1-2 points on a 7-point Likert scale immediately post-session ($P < 0.0001$). All workshops were well received, with most participants indicating they would recommend them to peers and found the length appropriate. The 3-month follow-up survey showed sustained skill uptake, with participants reporting sometimes, often, or always applying skills from the various learning objectives within each workshop: Essentials (89%–94%), Small Group Coaching (77%–94%), and Science Through Narrative (80%–90%). **DISCUSSION/SIGNIFICANCE OF IMPACT:** Effective science communication helps researchers build trust, meet community needs, and promote collaboration in translational research. We found that a short training course in science communication improves skills, confidence, and knowledge, with sustained skill retention observed after three months.

212

Strategic investment through an endowment for research infrastructure to advance institutional research capacity

Aracelis Huertas Chardon

University of Puerto Rico - Medical Sciences Campus no additional authors besides the one already indicated as authors +

OBJECTIVES/GOALS: HiREC Endowment investment accelerates investigators readiness for research infrastructure and advance career development to conduct impactful research. Support access to facilities and resources, research training and scientific mentors, encourage collaborations, scientific outcomes dissemination, and grant submission. **METHODS/STUDY POPULATION:** HiREC Endowment employs competitive application and review process to identify and support early-stage and mid-career investigators with high potential for impactful research. Applicants submit proposals outlining objectives, infrastructure needs, and expected outcomes.