and long-term professional growth. RESULTS/ANTICIPATED RESULTS: The inaugural RISE cohort included 28 experienced CRPs with expertise in areas such as regulatory knowledge, data management, study coordination, and award administration. Pre-/post-assessments showed a 16% (mean; range 8-20%) knowledge gain in leadership domains including team management, communication, vision setting, motivation, resilience, and decision-making. The strongest areas of understanding (≥95%) were empathy, near-peer mentoring, and translational scientist traits. Participants rated the course ~90% for helpfulness, relevance, and actionability, with a net promoter score of 93%. Valued elements included DISC assessments, networking, and elective readings. DISCUSSION/SIGNIFICANCE OF IMPACT: CRPs are vital to clinical research leadership. RISE delivers tailored training in leadership best practices for this group. In response to strong demand, the curriculum is being refined and efforts are underway to expand access across the region.

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Mentor training for research professionals: An overview of curriculum development and beta testing outcomes

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OBJECTIVES/GOALS: This poster provides an overview of a new curriculum, "Entering Mentoring for Research Professionals," that is designed for research professional mentors who provide research support. The presentation will highlight the curriculum adaptation process and evaluation results from beta testing. METHODS/STUDY POPULATION: The new curriculum was adapted from the Entering Mentoring base curriculum with support from the National Organization of Research Development Professionals in collaboration with the Center for the Improvement of Mentored Experiences in Research. Modules and activities were revised for use with research professionals (RP) across career stages and research areas. The adapted curriculum was beta tested with RP mentors at several sites, including CTSA and CTR hubs, and ISCORE-RC. Evaluation surveys were administered to mentors immediately following the training. Surveys were also administered to facilitators to collect information on their experience implementing the new curriculum. RESULTS/ANTICIPATED RESULTS: The anticipated results of this project include beta test data from 40 participants and their facilitators across four implementation sites. Key outcomes include data on how well the newly adapted curriculum aligns with the intended audience and participant workshop satisfaction. Data on workshop impact, including intended behavioral changes, will also be reported, along with recommendations for curricular modifications. Data from facilitators of the training will also be shared. DISCUSSION/SIGNIFICANCE OF IMPACT: RPs, who primarily operationalize research studies aimed at improving human health, play a critical role in the translational science workforce. This curriculum is designed specifically for this group and helps promote mentorship excellence across the academic enterprise. The curriculum will be disseminated widely after beta testing.

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Building a peer-reviewed resource collection for team science digital badges: A work in progress

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OBJECTIVES/GOALS: The team science professional digital badge initiative aims to build a high-quality, expert-reviewed collection of team science education and training resources that are aligned with key clinical and translational science competencies and integrated with a microcredential from the Association for Clinical and Translational Sciences (CTS). METHODS/STUDY POPULATION: We are initiating a structured process to solicit TS education and training resources from diverse stakeholders in the fields of Team Science (TS), Interdisciplinary Collaboration, and CTS. Using the Team Science Toolkitting Model, resources will be reviewed for alignment with the five domains of CTS competencies (facilitating team affect, communication, research management, collaborative problem-solving, and leadership). The ITD Alliance toolkit inventory will serve as a model for comprehensive coverage and interoperability. Approaches to remove roadblocks to knowledge integration will be prioritized, including epistemic inclusivity, boundary spanning, and shared mental models, for resource selection and peer review. RESULTS/ANTICIPATED RESULTS: We anticipate assembling a curated collection of resources spanning all CTS competency domains, with explicit mapping to individual and team competencies. Peer review of resources will ensure quality, relevance, and adaptability for digital badge requirements. By linking these resources to a digital badge credential, learners will be able to demonstrate applied skills in interdisciplinary collaboration. The process aims to reinforce best practices for curation of team science education and training, maintenance, and scholarship and develop strategies for overcoming conceptual and methodological barriers to knowledge integration in translational teams. Results will be reported at the conference. DISCUSSION/SIGNIFICANCE OF IMPACT: This ongoing project will advance team science education through competency-based training, cross-disciplinary collaboration, and integrated knowledge. It will develop a training resource collection and showcase a reproducible model for strengthening the field and profession of team science.

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From bench to breakthrough: The bench tutorials program for high schoolers

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OBJECTIVES/GOALS: The Bench Program offers academically talented high school students a unique opportunity to engage in cutting-edge research. Students are paired with a UTMB graduate student or postdoc and mentored by faculty, gaining hands-on experience in a rigorous, research-focused setting. METHODS/STUDY POPULATION: The Bench Tutorials course is open to all Ball High students and pairs each student with a UTMB graduate or postdoctoral mentor based on scientific interests. Students commit at least four hours weekly to supervised research and instruction, totaling about 40 hours per semester. This 5.0-credit course mirrors college-level rigor, with regular lab meetings and mentorship. Students present their research at two symposiums annually, including a Year-End event. Successful completion is considered an advanced academic achievement. RESULTS/ANTICIPATED RESULTS: The Bench Program continues to serve as a model biomedical training program for qualified GISD high school students. Since its start, it has enrolled over 490 students, many of whom have pursued science-related college paths. For the upcoming year, we aim to maintain a high-quality, intensive experience by enrolling around 16 students, each paired with one of 8 dedicated mentors. This structure ensures personalized guidance and hands-on research training, helping to shape the next generation of scientific leaders. DISCUSSION/SIGNIFICANCE OF IMPACT: The Bench Program gives high school students hands-on research experience with UTMB scientists. It mirrors graduate-level rigor, requiring time management and independent learning. The program is expanding to reach more students through GGCTSA partnerships.

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Evaluating grant writing support programs to enhance faculty research funding success

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OBJECTIVES/GOALS: To evaluate the effectiveness of multiple grant writing support services – including workshops, one-on-one mentoring, and grant pre-review – in improving faculty success in securing research funding. METHODS/STUDY POPULATION: The study included junior faculty participating in the R Club Grant Program – a grant development program to assist junior faculty in the preparation of their first research grant proposal – within the University of Cincinnati College of Medicine (UC COM) and the Center for Clinical & Translational Science & Training (CCTST), as well as UC COM faculty who engaged in one-on-one mentoring, workshops, or the Grant Pre-Review Program. Data on participation, satisfaction, and grant submission outcomes were collected and analyzed to assess the impact of each grant writing support service. RESULTS/ANTICIPATED RESULTS: More than 100 investigators participated in R Club Grant Program workshops and received supplemental grant development materials. Comprehensive support – including workshops, mentoring, and pre-review – has contributed to successful funding across multiple NIH mechanisms (K23, R01, R03, R21, R35, and R56). Based on positive participant feedback, future expansion will include online and on-demand resources to enhance accessibility to grant writing webinars and training materials. DISCUSSION/SIGNIFICANCE OF IMPACT: Comprehensive grant writing support improves faculty preparedness and funding success. Expanding to online and on-demand formats will broaden access, promote equity in research training, and strengthen institutional grant competitiveness.

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Development of students (S) and faculty (F) of undergraduate (Ug) programs in Puerto Rico (PR) in clinical and translational research (CTR) with an interdisciplinary approach (IA): Real-world impact from 2020 to 2025

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OBJECTIVES/GOALS: 1. To develop UgS and UgF in CTR with IA in PR. 2. To equip UgS and UgF with the necessary knowledge, skills, and mentoring and provide hands-on experiences for their academic and professional development. 3. To provide UgS and UgF with dissemination opportunities. METHODS/STUDY POPULATION: Main approaches: Restructure the Center for Research Education and Science Communication Opportunities (CRESCO), hub to provide support in CTR skills, statistics, scientific writing, and access to library resources; and organize/launch a training program in CTR to support student development in CTR. Main strategies: peer-mentoring with graduate students (GS), faculty (F), and health professionals (HP); a pilot project (PiP) program to offer UgS, GS, F, and HP hands-on experiences with participation in up-to-date research in CTR under the mentorship of a principal investigator-mentor; organization/offering the Title V Annual Symposium in CTR as a dissemination platform; and acquisition of supplies/equipment to support the research and infrastructure to the library and academic programs. RESULTS/ANTICIPATED RESULTS: CRESCO: Acquired 2-96' interactive monitors and refurbished 7 study rooms with technology, boosting distance learning. Developed a Web portal, offered 27,249 consultations, and 692 attended CTR workshops. Training program: INTD 5998 course had 74 students (64 UPR-MSC and 10 from other campuses/institutions). 190 Orientations offered to Academic Program in Health Sciences (APHS), reaching 36 departmental chairs (dc) and 129 UgS from 10 UPR campuses, and 23 dc and 2 UgS from other universities. Healthcare associations approved one Continuing Education Module, and two were submitted for approval. PiP: 32 PiP teams (32 primary researchers, 32 UgF,

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