68.4% were female and 47.0% from underrepresented groups. The cohort spanned career stages, with 35.3% students, 34.2% postdocs, and 30.4% faculty, most of whom were at the junior level. Competency evaluations showed improvements in all core competencies of the course: (1) independently carrying out small-scale research improvements, (2) confidence collaborating with statisticians, bioinformaticians, and other genome science experts, (3) applying appropriate statistical methods for the analysis of genetics and genomics data, (4) accurately interpreting findings from genome research studies, (5) critiquing the internal/external validity of genome research studies, and (6) effectively engaging diverse populations and community stakeholders. DISCUSSION/SIGNIFICANCE OF IMPACT: CREiGS successfully provided inclusive, high-quality, genomic and statistical training, to diverse scientists enhancing their research capacity and methodologic competency. Findings from longer term evaluations examining the contribution of CREiGS to participants' genome science-related scholarly productivity are forthcoming.

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Addressing burnout in radiologists: Causes, impact on patient care, and potential solutions

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OBJECTIVES/GOALS: This study objective is to evaluate the prevalence and risk factors of burnout in practicing radiologists, with a focus on personal as well as systemic factors. It aims to identify and assess the existing strategies to mitigate burnout, enhance radiologist performance, and improve the quality of patient care. METHODS/STUDY POPULATION: The present study is a systematic review that summarizes existing literature on burnout in radiology, examining its prevalence, risk factors, and effect on diagnostic accuracy, decision-making, and job satisfaction. The review will synthesize validated evidence for emotional exhaustion, depersonalization, and professional fulfillment. The review discusses trends and solutions that have emerged from analysis of data within differing countries, subspecialties, and career stages, focusing on elevated risk of burnout in radiologists. It also assesses downstream effects on patient care quality such as missed diagnoses and increased medical errors. The review also discusses potential strategies for mitigating these negative effects on healthcare delivery. RESULTS/ANTICIPATED RESULTS: The anticipated results of this review are expected to reveal significant variability in burnout rates across radiology subspecialties and practice settings, with prevalence ranging from 33% to 88% (Fawzy et al., 2023). Emotional exhaustion and depersonalization emerge as the most reported symptoms as consistently highlighted in previous studies. Major contributors such as workload, administrative burdens, and technological isolation (e.g., remote work and reduced face-to-face interaction) are anticipated. Radiologists in high-demand areas like interventional radiology and those in private practice may show higher burnout levels than those in academic settings. Protective factors, like exercise, supportive environments, and work-life balance, are expected to reduce burnout levels. DISCUSSION/SIGNIFICANCE OF IMPACT: This study calls attention to the importance of addressing radiologist burnout as a key institutional priority. Early and effective interventions are essential for improving job satisfaction, reducing medical errors resulting in enhanced patient care. Addressing burnout is crucial for maintaining a sustainable and effective radiology workflow.

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Building a community of practice among research managers supporting mentorship research

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OBJECTIVES/GOALS: The National Research Mentoring Network Coordination Center (NRMN CC) received funding from NIH to create an Online Community of Practice (OCoP) for Research Managers (RM). These RM contributed to advancing the research on the science of mentorship in STEMM. In a Proof of Concept, RM explored various aspects of their mentorship research support work. METHODS/STUDY POPULATION: An OCoP met 18 times across the 5-year grant to share experiences working to advance the science of mentorship in STEMM. Topics, frequency, and length of meetings were selected based upon several needs assessments surveys from the RM community. RM were invited to join the OCoP based on their roles as the point people for administrative activities in research projects (e.g., finances, budgets, training, and project management). RM often supervised staff, collected data, monitored IRB protocol compliance, and conducted research. RM played a pivotal role in the gathering and sharing of common measures across the 11 U01 studies to allow for greater confidence in research findings on mentorship (McConnell, 2021). RESULTS/ANTICIPATED RESULTS: Our primary goal was to provide a supportive community for RM contributing to mentorship research and data sharing. The results from several needs assessments exemplified a request for this support from the community to engage in an OCoP focused on their professional development. Therefore, the OCoP served as a starting point to explore the duties, functions, roles and responsibilities of RM, and extended into providing professional development. Although the number of RM attending decreased as the grant entered the no-cost extension phase, a subgroup of RM expressed interest in continuing the OCoP to focus on dissemination of research findings, further supporting the need for this community. DISCUSSION/SIGNIFICANCE OF IMPACT: RM supported 11 research projects and contributed to the data collection for over 6,000 participants. Few opportunities exist to create an OCoP for large scale data collection on experiences with mentorship in STEMM. RM were pivotal in their role with the NRMN to enhance the training and career development of individuals from diverse backgrounds.

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HCTRECD's K to R Club: Adapted model to support research independence of Clinical and Translational Researchers in Puerto Rico

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OBJECTIVES/GOALS: A limited number of Hispanic researchers compete successfully for NIH career development and research

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