M-REACH: The Process of Discovering How the Academy and Community Connect to Partner in Translational Research

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OBJECTIVES/GOALS: To identify insights and challenges in community engaged research for the academy and community. To develop an online platform to match academic and community partners; promote networking; and provision of key resources. METHODS/STUDY POPULATION: Using a human-centered design approach, 19 interviews were conducted with academics, community organizations and members, and other CTSA participants. The interviews focused on understanding CEnR challenges and processes in partnership formation. RESULTS/ANTICIPATED RESULTS: Findings revealed the following 10 challenges to and insights about CEnR: (1) time intensive; (2) lack of knowledge; (3) differing motivations; (4) connections occur through networking; (5) topic area, proximity, and readiness influence partnerships; (6) organizational turnover; (7) promotion pressure; (8) collaborations throughout; (9) navigator for partnership; and (10) lack of shared language. Also, a CEnR system chart revealed the following five phases of an effective partnership: 1) generating interest; 2) learning process; 3) connecting with the right partner; 4) defining the research question; and 5) implementing research as a partnership. DISCUSSION/SIGNIFICANCE: In conclusion, input from academics and community members support the need for an online platform like M-REACH to facilitate CEnR partnerships, networking, and resources to address significant public health issues through translational research.

Mission: Health Equity Challenge Series - Using a Four-part Multimedia, Interdisciplinary Framework to Raise Health Disparities Awareness and Advance Health Equity

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OBJECTIVES/GOALS: The Mission: Health Equity Challenge Series is a four-part multimedia, interdisciplinary series that raises awareness about health disparities and health equity, cultivates environments for collaboration, and encourages participants to apply learnings via film screenings, a book discussion, community research panel, and un-meeting. METHODS/STUDY POPULATION: Methods used to collect data include: REDCap for participant profile storage and surveys, Zoom polls and chats, and informal, unsolicited feedback from e-mail communications. Our primary study population includes researchers and healthcare professionals. Secondary populations include: administrative staff and community members. We had approximately 500 individuals, across four of our hospital institution stakeholders (Cleveland Clinic, University Hospitals, MetroHealth, and the VA Northeast Ohio Health Care System), the community at-large, and others from CTSA hubs and related entities participated in one or more of the challenges. RESULTS/ANTICIPATED RESULTS: We anticipate that participants in the Mission: Health Equity Challenge Series, whether they participated in one or more of the challenges, will gain increased awareness about health disparities and how research can help close preventable gaps in health outcomes amongst underserved communities as well as advance health equity. Additionally, we suspect that due to the diverse nature of each challenge and attraction of nontraditional audiences to spaces with researchers and healthcare professionals, we will foster environments where cross-institutional, interdisciplinary collaboration can thrive. This is the type of collaboration needed to address complex problems that prevent health equity. DISCUSSION/SIGNIFICANCE: This challenge series elevates the relationship between advancing health equity and clinical and translational science and is one way to create opportunities for the existing research community to meet and collaborate with individuals that are not typically included in the ideation, design, implementation, and dissemination of research.

Neighborhood socioeconomic deprivation is not an independent predictor of cardiovascular reactivity during static exercise in young adults*

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OBJECTIVES/GOALS: Greater blood pressure (BP) reactivity and socioeconomic deprivation (e.g., area deprivation index; ADI) are associated with poor vascular health [1-3]. However, it is unclear if ADI is associated with BP reactivity. Thus, we sought to examine if ADI is associated with BP reactivity in young adults. METHODS/STUDY POPULATION: Participants completed questionnaires used to derive lifetime ADI averaged from early-, mid-childhood, and adolescence. Participants completed a handgrip (HG) exercise protocol including 10 minutes of rest, 2 minutes of static HG at 40% of their maximal voluntary contraction, 3 minutes of post-exercise ischemia (PEI), and 2 minutes of recovery (REC). Beat-to-beat BP (photoplethysmography) and heart rate (HR; electrocardiogram) were continually assessed. We used the Shapiro-Wilk test to assess data for normality. We examined associations between ADI, BP reactivity, and HR using unadjusted and body mass index (BMI), sex, and race-adjusted Pearson’s correlation (set a priori to 0.05). RESULTS/ANTICIPATED RESULTS: This study included 53 (27Males/26Females; 21 ± 1 years; 24Black/29White; BP 107 ± 9/64 ± 9 mmHg) participants. There were racial differences (Black compared to White adults) for several BP reactivity metrics (e.g., PEI minute 3 diastolic BP: 96 ± 15 vs. 84 ± 19 mmHg, p=0.014) and lifetime ADI (p=0.05). DISCUSSION/SIGNIFICANCE: Our data suggest racial differences exist in socioeconomic deprivation in a modestly sized young adult sample living in the southeast. While additional data are needed for other stressors, socioeconomic deprivation was not independently associated with BP or HR reactivity during acute exercise.