

**ANTICIPATED RESULTS:** The culmination of 20+ years of CRP has led to the current state of CRP at CCHMC. CRP operates an internal website to collate all activities and resources, including educational opportunities and helpful links related to CCHMC research processes. CRP currently has leadership, membership, education, and regulatory committees providing opportunities for all clinical research professionals to join, collaborate, and grow within CCHMC and beyond. Established career pathways and centralized CRP advancement guidelines support career development. The centralized REDCap onboarding tool is accessible at any time for initial onboarding and then continuing education. **DISCUSSION/SIGNIFICANCE:** The formation and evolution of CRP, developed by work of past CRPs, has fostered an innovative community to meet clinical research needs through education, career development, and process standardization. We aim to continue to disseminate knowledge and lessons learned beyond our institutional walls.

### **Building the Future of Dissemination and Implementation (D&I) Science at Frontiers CTSI: Capacity Building, Infrastructure, and Emerging Research Areas**

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**OBJECTIVES/GOALS:** A diverse workforce is an aspiration of CTSIs and embedded in goals to build D&I workforce capacity. However, little research describes the diversity of the current workforce. We assessed current assets, opportunities, and diversity of D&I efforts at Frontiers and characterized investigators and those supported by services offered. **METHODS/STUDY POPULATION:** In January 2021, Frontiers convened a working group to identify existing D&I assets and needs in the CTSI multi-state catchment area. The committee catalogued existing training and consultation resources and services, which the CTSI supported with infrastructure to support, track, and evaluate ongoing efforts. We obtained data from the evaluation platform and conducted descriptive analyses of the investigators and service uptake among two programs offered, contrasting the workforce with national data obtained from the American Academy of Medical Colleges (2022) and the National Institutes of Health (2018). **RESULTS/ANTICIPATED RESULTS:** Ninety individuals at 9 institutions across Kansas and Missouri identified as implementation researchers. Since 2022, 28 D&I consultations were provided, 92% for grant applications. Five early-stage investigators were identified for career development in an NIH-supported Health Equity and Implementation Center (ESI). The network mirrors the larger workforce regarding underrepresented racial/ethnic minorities (18%) and new investigators (60%). More women (76%) are represented in the D&I network and among ESIs (80%) than the academic workforce (44%), but significantly fewer women used consultation services ( $p < 0.001$ ). Lower proportions of underrepresented minority investigators ( $p < 0.001$ ) and investigators from disadvantaged statuses ( $p = 0.027$ ) accessed consultations services. **DISCUSSION/SIGNIFICANCE:** Investigators underrepresented in science on multiple dimensions were less likely to use consulting services, Outreach for consultation services may be necessary, if needs are not being met in other programs. Further exploration of overall D&I workforce trends is needed to ensure goals for the field and the CTSA network are achieved.

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### **Impact of the COVID-19 Pandemic on CTSA Training and Career Development**

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**OBJECTIVES/GOALS:** Immediate negative impact of the COVID pandemic on CTSA T trainees and K scholars was reported in 2020 to be lack of access to research facilities, clinics, human subjects, and team members, and a need for homeschooling. In this study we examined in more detail the perceived impact of the COVID pandemic on training and career development three years later. **METHODS/STUDY POPULATION:** CTSA T trainees and K scholars were surveyed in May-June 2023 to assess the impact of the COVID-19 pandemic on training and career development. Data were included from 309 T trainees and K scholars appointed in 2018-2023 at 50 institutions, with good representation from states that were heavily impacted by COVID. Respondents included 76 past and 64 current T trainees, and 56 past and 113 current K scholars. There were no significant differences in race, ethnicity, or gender between T and K respondents. Significantly more K scholars reported both being married or in a committed relationship, and having children. Survey items included the same questions asked in the 2020 survey, plus additional new questions. Results compare impact for T trainees and K scholars. **RESULTS/ANTICIPATED RESULTS:** K scholars were more negatively impacted for access to clinic/human subjects, home environment, child care, access to staff, increased clinical responsibilities, and other hospital service. T trainees and K scholars reported higher positive impact than in 2020, for having more time to think/write and develop new research ideas. About 2/3 of respondents reported returning to research full-time by April 2021, and the remaining by August 2021. Lasting changes in career progression or research direction were reported as both positive and negative (48%), negative (25%), or positive (10%). Most (2/3) respondents in faculty positions reported that a time extension was available for promotion and/or tenure. Additional in-depth analysis will be presented, based on qualitative analysis of open-ended questions. **DISCUSSION/SIGNIFICANCE:** Despite research shutdowns in response to the COVID-19 pandemic that lasted for about a year, CTSA T trainees and K scholars were remarkably resilient. They were able to continue some research activities and professional development activities, and developed strategies to maintain productivity and minimize impact on their training duration.

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### **Leveraging Implementation Science Competencies to Establish a D&I Science Core**

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**OBJECTIVES/GOALS:** Clinical and Translational Science Award (CTSA) hubs are launching D&I Science cores to provide resources