

the meetings, we are building a virtual RI platform to connect PIs across multiple CTAs and increase the footprint of RI efforts

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### Creating a data repository of sociomic factors to further characterize clinical outcomes and disease progression in patients with asthma

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**OBJECTIVES/GOALS:** To assemble publicly-available, proprietary, and geocoded datasets about social, environmental, behavioral, and psychological exposures experienced by children with asthma, to provide a technical overview of data aggregation, management, and integration processes utilized, and to build predictive models using sociome and clinical data. **METHODS/STUDY POPULATION:** Publicly-available data involving census information, crime, green space, building permits, vacant and abandoned buildings, traffic (City of Chicago data portal), pollution and weather (National Oceanic and Atmospheric Administration), and noise (Array of Things project) were assembled. We placed a local instance of the Pelias geocoder on the UChicago Center for Research Informatics HIPAA-compliant infrastructure. The UChicago Clinical Research Data Warehouse will be leveraged to obtain clinical information for children diagnosed with asthma at UChicago Medicine between 2007 and 2021. The address of each child will be subjected to geocoding, and this information will be aligned with imported sociome data. A model will be built to account for each sociome elements contribution to asthma outcomes. **RESULTS/ANTICIPATED RESULTS:** Here we are creating sustainable and scalable ways for collecting, standardizing, and sharing real-world sociome data, simultaneously linking those data back to patient information. With this work, we aim to demonstrate feasibility of a data-commons-as-a-service for clinical and sociome data and to provide technical specifications and descriptions of processes employed. Creating generalizable and scalable infrastructure to support research of social and environmental impacts on clinical outcomes is critical, and our work will provide a framework to be used in other disease states. Further, this infrastructure will facilitate the application of advanced analytical tools and visualization platforms to accelerate the study of diseases and lead to new insights into factors influencing outcomes. **DISCUSSION/SIGNIFICANCE:** Beyond focusing on and treating biological mechanisms of disease, advancing health also requires addressing adverse consequences of sociome factors on clinical outcomes. We describe an innovative process to comprehensively codify and quantify such information in a way suitable for large scale co-analysis with biological and clinical data.

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### Examining the Role of Community Engagement Studios & Community Experts in Translational Research: A Thematic Analysis

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**OBJECTIVES/GOALS:** 1. Describe the importance of community engaged research. 2. Explore the impact of participating in

Community Engagement Studios from the perspective of the community expert. 3. Explain how Community Engagement Studios can positively impact clinical and translational sciences. **METHODS/STUDY POPULATION:** Stakeholders who participate in CE Studios are defined as community experts (CEs); care-givers, patients, researchers, etc. They are not classified as research participants, but rather consultants, who are designated with the task of providing input on the specified research study. CEs were recruited in a variety of formats such as clinics, social media, and other community-based settings. To be eligible for the study, CEs had to participate in at least one CE Studio prior to data collection. Data was collected from an online survey from April to September of 2019. One hundred and fifteen CEs participated in the study. We conducted thematic analysis on a total of 233 participant responses to three open-ended questions assessing attitudes towards research, desire to engage in research, and understanding of research. **RESULTS/ANTICIPATED RESULTS:** Ten major themes emerged from the data: involvement, togetherness, trust, value, confidence, community engagement, community connectedness, encouraging others to participate, increase knowledge and awareness, and respect. A major overarching theme of inclusion was presented in the data. Findings from this study indicate that CE Studios provide a space for CEs to gain a better understanding of the multi-faceted research process, offer insight into ways to include historically excluded populations, and increase trust, confidence and respect for researchers and the research process. Moreover, community experts felt connected to their community by participating in CE Studios and expressed interest in encouraging others to participate. **DISCUSSION/SIGNIFICANCE:** CEs are a crucial component of the research process, and their experiences should be utilized and reflected upon as we work to reduce health disparities. CE Studios serve to build trust, identify strategic areas of improvement in research, and provide a foundation to introduce community members to the multiple ways to engage in research.

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### Healing the Community: Lessons Learned from VaccinateLA, USC's Response to the COVID-19 Pandemic in Los Angeles Neighborhoods of Color

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**OBJECTIVES/GOALS:** To increase vaccination rates in Black and Latino communities, specifically in South LA and the Eastside of LA. **METHODS/STUDY POPULATION:** Multimedia campaign combined with vaccine navigation and assistance, led by the SC CTSI and conducted by an interdisciplinary team from 14 schools at USC and CHLA, >160 community partners. **RESULTS/ANTICIPATED RESULTS:** VaccinateLA was a highly interdisciplinary and multifaceted project that demonstrated increased vaccination rates in Black and Latino communities in South LA and Eastern part of LA. We vaccinated over 1000 people, facilitated vaccines for almost 10k people and reached 1.37M people through our digital campaign. **DISCUSSION/SIGNIFICANCE:** We have used community vaccine navigators, pop-up clinics, narrative storytelling and other unique approaches to encourage vaccine uptake in communities of color. We plan to expand activities to parents and children in these communities, encourage booster uptake, and evaluate and disseminate the program widely.