

Jeffress Trust Awards Program in Research Advancing Health Equity

2022 Research Awards

- **Michelle Brauns**

Chief Executive Officer

Community Health Center of the New River Valley

“Improving Implementation of Evidenced-Based Colorectal Screening Practices in a Multisite Federally Qualified Health Center in Appalachia Virginia”

This implementation science research project is being conducted by the Community Health Center of the New River Valley (CHCNRV) and the University of Virginia Comprehensive Cancer Center (UVACC). Importantly, CHCNRV is a Federally Qualified Health Center (FQHC) and the only health care entity in its rural, southwestern Appalachia Virginia service area that provides care regardless of patients’ ability to pay. The overall research goals are focused on advancing health equity and improving colorectal cancer (CRC) screening rates. CRC screening options include visual exams (e.g., colonoscopy) and stool-based tests [e.g., fecal immunochemical test (FIT)]. While FITs have demonstrated efficacy and cost-effectiveness among average at-risk populations, there are numerous system- and patient-level barriers. Due to these barriers, CRC screening rates remain substantially lower at FQHCs relative to the general age-eligible U.S. population. By concentrating on CHCNRV system-level practices and focusing on root causes to low CRC screening rates (e.g., structural/institutional barriers, distribution of resources, poverty), the long-term goal is to improve screening rates and reduce CRC-related morbidity and mortality in CHCNRV’s service area. The specific aims are to: 1) advance organizational/provider-level capacity to execute evidence-based CRC screening practices, 2) develop patient-level education materials and evaluate effectiveness at improving CRC screening rates, and 3) build external capacity and disseminate findings at local and state levels. The health equity goals include efforts to increase system-wide CRC screening rates, standardize CRC screening workflow processes among clinics, increase FIT-colonoscopy follow through (among FIT positive patients) and eliminate racial/ethnic disparities in CRC screening rates. The proposed case study and systems-based approach and is guided by the Consolidated Framework for Implementation Science and community-based participatory research strategies and includes a concurrent mixed-methods research design. Proposed data sources include provider/staff interviews and surveys, patient focus groups, systematically tracked meeting minutes and artifacts, and EMR CRC screening and demographic data.

- **Zach Conrad, PhD, MPH**

Assistant Professor

William & Mary

“Developing a Decision-Support Tool for Achieving Food Sovereignty on Native American Tribal Lands in Virginia”

Indigenous communities in Virginia face substantial health disparities driven by unequal access to healthy food and lack of community ownership over food production. Indigenous food sovereignty initiatives have not addressed the unique needs of tribal communities in Virginia, and this project aims to fill that gap. We have partnered with Indigenous community organizations and Virginia tribes to develop a computational tool for our community partners to make decisions about transitioning toward sustainable food production on Indigenous lands. A unique tool will be developed for each tribe in Virginia to reflect tribe-specific concerns and local environmental conditions. This tool will provide information on the number of people that can be fed a healthy diet from food produced on tribal lands, optimal sites for sustainable food production, amount of land and other agricultural resources needed, and the effects of future climate change scenarios. The objectives of this project are to 1) develop geospatial models to identify suitable tribal lands for sustainable food production, 2) develop biophysical models to estimate the number of people that can be fed a healthy diet from food grown on Indigenous lands, 3) develop user-friendly computer software that integrates the geospatial and biophysical models to create a decision-support tool for dissemination to community partners, and 4) incorporate novel geospatial data into an educational course titled Pilot GIS Training for Native American Tribes in Virginia hosted by the Institute for Integrative Conservation. This project uses mostly secondary, cross-sectional, publicly available geospatial and survey data collected from US government agencies, and will be supplemented with primary data collected from Indigenous communities using questionnaires and community conversations. To maximize impact, Indigenous communities will play critical roles at each stage of this project to create a circular flow of information that originates from the communities and ultimately feeds back into the communities.

2022 Partnership/Collaborative Establishment Awards

- **Michel Aboutanos, MD**

Director, VCU Injury and Violence Prevention
Virginia Commonwealth University

“Maternal Health and Mortality Research Partnership”

The purpose of the Maternal Health/Mortality Research Partnership is to enhance and build cross-collaboration across hospitals, local victim service agencies, and mental health community service boards to examine the root causes and barriers to health equity experienced by pregnant/postpartum people with a focus towards Black, Indigenous, and/or Women of Color who are also survivors of intimate partner/domestic violence at risk of risk of suicide and homicide. By further exploring barriers and risks to safety we can identify how to increase access to services and reduce fatalities. This research project will create a diverse advisory group to collectively study and develop best practices for programmatic and coordinated community response. We anticipate the data will illuminate how institutional practices and leadership, social norms, relationships, messaging, values, beliefs, and locality will greatly influence health outcomes for pregnant/postpartum survivors of violence. We seek funding to support general research activities to analyze, both within VCU HealthSystem and within our collaborating partners across the state, how institutional practices, social norms, relationships, leadership structures, modes of communication, values, and beliefs, community history, community settings, societal factors and/or social factors, can influence health either through advancing or undermining health promoting polities, practices, and programs.

Our project will link VCU hospital programs across OBGYN, Emergency Department, and a hospital-based program called EMPOWER with partner agencies across the state to study and develop best practices to respond to victims of violence and abuse and accompanying suicide risk. This program will engage established partnerships and engage new partnerships to expand our research into maternal mortality causes, impact, and best-practice response to reduce death due to domestic violence, suicide, and homicide. This project includes the creation of an Advisory Council of internal and external community partners to ensure a diverse arena in which to collect data and develop a robust research program.

- **Sarah Holland**

Chief Executive Officer

Virginia Health Catalyst

“Understanding Community Perceptions of Drinking Water in Virginia”

Virginia Health Catalyst (Catalyst), Concerned Citizens of Charles City County (C5), and the Virginia Polytechnic Institute and State University (VT) will establish a collaborative partnership to understand community concerns and perspectives on drinking water in Virginia. Specifically, Catalyst, C5, and VT will comprise the lead project team, with room to engage additional community members and organizations if that ultimately aligns with the needs of the community and the project's overall trajectory. Project collaborators aim to understand trust in drinking water, associated community concerns and barriers that erode trust, and existing water coping mechanisms of rural Virginians and communities of color in order to design effective, responsive health interventions. For the first year of the grant, collaborative partners will focus on relationship-building between the partnering organizations, co-learning activities, and project planning. During the second year of the grant period, the lead project team will engage directly with community members and residents in Charles City County, potentially replicating these efforts in other Virginia localities with rural and marginalized communities. Through both qualitative and quantitative research methods, including but not limited to mailed surveys, focus groups, and interviews, the lead project team will collect data about rural Virginians' perspectives on and trust in their drinking water and their associated water coping mechanisms. Ultimately, the lead project team will compile these data results into a final report, which will include both analysis of the data and key recommendations for next steps. This final report will inform future broader water research projects conducted by the lead project team, as well as policy solutions and community-based interventions guided by impacted community members.

- **Erin Maughan, PhD**

Associate Professor

George Mason University

“Virginia School Health Equity Research Consortium”

School health has been described as a ‘hidden healthcare system.’ Policies and funding siloes in health and education often exclude school health, causing a gap and perpetuating health inequities. We propose to establish a new and unique partnership, entitled the Virginia School Health & Equity Research Consortium (VSHERC). Co-Led by the Virginia Association of School Nurses (VASN) and a school nurse researcher from George Mason University (GMU), along with support from the Virginia Department of Education (VDOE) and the Virginia Department of Health (VDH) the core group will expand to include non-governmental organizations who address children health and inequities. A strategic plan will be developed to guide the VSHERC and regional contacts will create a network across the state to examine state and district policies and infrastructures through the lens of health inequities. Training will be provided for school nurses and school health personnel, and baseline information will be collected to determine how school health policies overtly or covertly perpetuate health inequities, especially among students of color. The baseline data will be used to develop a future research proposal that is action oriented. The ultimate goal of the VSHERC is to increase the percentage of students in VA schools with a school health program that facilitates child health and do not contribute to child health inequities. This will ultimately lead to a healthier, more equitable VA.

- **Iyabo Obasanjo, DVM, PhD**

Assistant Professor of Health Sciences
College of William & Mary

“Studying the Impact of Community Health Workers: Collecting Baseline Information for a Longitudinal Study”

Community Health Workers have been shown to help reduce the negative impact of social determinants of health on health outcomes for low-income communities of color and for immigrants and refugee communities. The government has started to fund Community Health Worker programs in health departments and health districts but most of the published research on the effectiveness of CHW are from their being employees of hospital systems or non-profit organizations. There is still no framework on the deployment of CHWs as part of the public health system at the health district level. There is no longitudinal study examining the long-term effect of CHWs who are staff of local health districts on social determinants of health when deployed to work in low-income communities. This partnership is to start a long-term collaboration to evaluate of impact of CHW intervention when deployed as health district employees to low-income communities of color by collecting baseline information about their clients in 3 low-income communities.

1. Long-term CHW intervention of 10 years in Richmond (Predominantly African-American and Hispanic population)

- 2: CHWs program on the Westside of Henrico (started in 2020) (Afghanistan Refugee population)

3. Pre-CHW Intervention in Eastside Henrico (mainly African-American population)

We will collect information on the following variables at our baseline evaluation: Employment Status, Health Insurance Status, Having a Primary Care Provider, COVID-19 vaccination status and take Blood Pressure measurement. Fifty individuals will be chosen from each community and matched on income, family size, age, and gender, across the communities for this evaluation. We will determine how these social determinants of health differ in the 3 populations at baseline. We then plan to follow-up on how these individuals on the same social determinants at the next evaluation time point which will be a year after the CHW program in the Eastside of Henrico

- **Moira O'Neill, JD**

Associate Professor of Urban and Environmental Planning
University of Virginia

“Building Resiliency of Virginia School Food Authorities through Virginia Food for Virginia Kids Initiative”

The Virginia Department of Education, Office of School Nutrition Programs (VDOE-SNP) serves a geographically diverse state spanning rural areas to population-dense urban and suburban areas. According to the Food Research and Action Center (2019), Virginia’s child poverty rate equates to 244,953 children under the age of 18 living in poverty. Many of these children rely on school meal programs and this need intensified during the COVID-19 pandemic. Pandemic-related supply chain shortages impacted student access to school meals and revealed the fragility of traditional school food systems. The VDOE-SNP launched Virginia Food for Virginia Kids (VFVK) with a committed public sector, academic, non-profit, and community-based stakeholders to advance systems change. The overall objective is support VFVK and the development of resilient and flexible local school meal programs prepared to meet the needs of every child—even in and especially in times of crisis. Eight volunteer pilot School Food Authorities from each of Virginia’s Superintendent’s Regions have partnered in VFVK. The goal of the proposed work is to develop an inclusive and equitable participatory research design that will support VFVK implementation and scaling what works across the state. The specific aims of this planning and collaboration stage will be to: (1) solidify emerging partnerships across the public and non-profit sectors, and at multiple levels of the public sector, through two team building and research design work sessions and regular virtual team meetings throughout the grant period; (2) produce a participatory spiraling research design that includes a refined scope of research and theory of change and completed protocols; (3) three topical framing papers that summarize the relevant knowledge gained during the research design period; and (4) a communications strategy to share out information about the initiative and future research findings.

- **Katherine Tossas, PhD**

Assistant Professor and Harrison Endowed Scholar
Virginia Commonwealth University

“The Chickahominy TRUTH (Trust, Research, Understand, Tell and Heal) Project”

The Virginia Chickahominy Tribe and the VCU Massey Cancer Center (MCC) propose a community-academic partnership to interrogate how structural factors (i.e., build environment, local policies, and healthcare access/resources) contribute to perceived cancer risk, and health-seeking behaviors among Charles City County residents. The partnership grew out of concerns brought by the Tribe leaders to MCC researchers that a potential community cancer cluster existed in proximity to a local landfill, in operations since 1990. Many of the cancers, which began surfacing in the 2000’s, are linked in the scientific literature to pollutants often found in landfill leachates. However, there are challenges investigating cancer clusters due to cancer’s long latency and complex, multifactorial etiology. But the Tribe sits in Charles City County, a majority (racial/ethnic) minority community in southeastern, VA, that ranks 113th in health outcomes out of 133 state counties and has two doctors serving roughly 7000 residents. Thus, we propose The Chickahominy TRUTH (Trust, Research Understand Tell and Heal) Project, which will adapt the Policies, Systems, and Environments seven-step change strategy, to: (1) Identify structural factors and barriers associated with perceived cancer risk, and cancer care (2) Assess cancer knowledge and access to care gaps as well as perceived risks, including testing individual (wells) and community (creeks) water sources using EPA-certified testing (3) Develop and deploy culturally-tailored cancer education and resource navigation, including groundwater safety education, policies and remediation. This collaborative investigation offers an opportunity to interrogate cancer health inequities across private, public, and tribal spaces, building research and health policy advocacy capacity, and acknowledging the power and knowledge of a historically underserved community and building the foundation for a longitudinal partnership to inform future research questions.