ABSTRACT

The COVID-19 pandemic has laid bare the inequities across the US in terms of access to quality healthcare, education, jobs, housing, transportation, food, energy, water, etc.. The impacts on Black and Brown communities, rural communities, poor communities, and intersections of those, have been significant. The murder of George Floyd, Breonna Taylor, Ahmaud Arbery, and many other Black women and men during this time, added contexts of inequitable criminal justice systems and policing, two pillars of the Black Lives Matter social justice movement. With only 2% of Black faculty in engineering in the US, and belonging to only a handful of Black women professors in environmental engineering, I reflect on my experience working with members of the majority Black East Tampa community, providing a personal journey with insights on challenges faced for research and training of students. The urban example used is like many where Black communities were disrupted by highways, red-lined for receiving housing loans, and today represent some of the most financially under resourced and polluted areas around our universities. As academia grapples with addressing Anti-Black racism, I offer some thoughts on how to partner locally as a civil and environmental engineering department in a city that is 24% Black, to meet community needs, train engineering students, and comprehend the long-lasting impacts our infrastructural designs and decisions have on people’s lives. While I speak as a Black woman working with a local Black community close to my university, the approach to understanding and addressing manifestations of structural racism should resonate wherever there are high levels of inequity in the areas surrounding our universities.

BIOSKETCH

Maya Trotz, PhD, is a professor of Civil and Environmental Engineering at the University of South Florida (USF). Her students are currently investigating reef and marine inspired land-based solutions that include green infrastructure for stormwater management and resource recovery for municipal and onsite wastewater in Tampa, Belize and Barbados. She currently directs STRONG Coasts, a collaborative National Research Traineeship program with the University of the Virgin Islands (UVI) to foster food, energy, and water solutions for coastal communities. She is the past President of the Association of Environmental Engineering & Science Professors (AEESP) and sits on the board of Fragments of Hope Corp, an NGO committed to coral restoration in Belize. Prof. Trotz holds a BS in Chemical Engineering with a minor in Theater Arts from the Massachusetts Institute of Technology and MS and PhD degrees in Environmental Engineering from Stanford University.