USING COMMUNITY BASED RESEARCH TO ADVANCE EQUITABLE INFRASTRUCTURE

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It is well known that communities of color experience disproportionate exposure to dangerous environmental pollutants, which has a negative impact on their health. The historical practices of discrimination, which have aided in residential racial segregation, can be linked to many of these exposures. While there has been substantial success in the environmental justice movement's incorporation of public health research into these issues, there hasn't been as much focus on the movement's inclusion of environmental engineering education. The NSF-funded research purpose was to implement a comprehensive, interdisciplinary, community-based training program with an anti-racism focus for undergraduate civil and environmental engineering students at the University of South Florida. The goal is to provide students with the tools they need to effectively address environmental justice issues.

In this project, fields of anthropology, environmental engineering, and STEM education are combined to rewrite current civil and environmental engineering curriculum, with an emphasis on promoting fair development in particular communities. At the same, a more comprehensive educational framework is offered to deal with environmental engineering problems, attend to demands indicated by the community, and take structural racism's systemic effects into account. The results of incorporating environmental engineering, anthropology, and justice themes into engineering curricula will be demonstrated in the presentation.

PRESENTER BIO: Beatriz is a senior in environmental engineering at the University of South Florida, passionate about tackling pressing environmental issues. She is engaged in research on environmental justice and strives for a more equitable and sustainable world. She's an active member of Engineers Without Borders (EWB) and the Society of Women Engineers (SWE).