Project Title: Facilitating Research on Global Genomic Medicine and Health Equity at Penn

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Topic Category: Research

Background, Significance of project:
Understanding and addressing the causes and treatment of health disparities is a major goal at the NIH and Penn. Yet 81% of genomic studies of disease risk focus on European populations. A critical need exists to facilitate research and training to explore the genetic and environmental risk factors contributing to health disparities.

Purpose/Objectives:
Multiple researchers at Penn focus on health disparities and there is an opportunity to create an integrative program. The immediate goals for this project are to conduct a feasibility study and pilot plan for implementing an integrative health disparities research program. My long term goal is to establish a Center for Global Genomic Medicine and Health Equity.

Methods/Approach/Evaluation Strategy:
My action plan included interviews of key stakeholders across campus to assess needs and identify faculty with research focused on health disparities; organizing interdisciplinary symposia on health disparities to inform the Penn community on approaches for studying causes of health disparities; identifying potential funding sources; bringing interdisciplinary researchers together to develop a pilot project for a larger initiative in the genomics and health disparities space.

Outcomes/Results:
I interviewed 22 faculty and leaders in the Schools of Medicine, Arts and Sciences, Law, and Public Policy. Although there are faculty members who do research related to health disparities across campus, there is currently no mechanism to bring them together to share resources and foster collaboration. To this end, I co-organized a symposium on genetic and environmental factors influencing health disparities which attracted a diverse audience of over 200 people. I presented a lecture, with faculty members from the schools of Nursing and Law, and facilitated a 30 minute open discussion panel. The presentations were posted on the Leonard Davis Institute of Health Policy website at The Wharton School. I identified potential funding sources from NIH, the Bill and Melinda Gates foundation and the Chan Zuckerberg foundations for a Center of Excellence. I organized an interdisciplinary team to develop a pilot project centered on clinical and basic research of causes and treatment of sickle cell disease.
ABSTRACT: 2018 ELAM Institutional Action Project

Discussion/Conclusion with Statement of Impact/Potential Impact:
A Center for Global Genomic Medicine and Health Equity would provide value to Penn by (1) establishing Penn as an international leader in the study of translational global genomics and health equity; (2) facilitating research that will alleviate health disparities in minority and immigrant populations in the Philadelphia area which would positively impact community relations; (3) enhancing interdisciplinary collaborations amongst Penn Faculty across the campus related to health disparities; (4) increasing funding from NIH and private foundations; (5) facilitating recruitment of diverse faculty, postdocs, and students; and (6) utilizing an interdisciplinary approach emphasizing global health, genomics, bioinformatics, bioethics, health policy, technology, and sociology to educate Penn students and researchers on issues relevant to health disparities.