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Ancillary Study Title: MH-GRID: Clinical and community based genomic resources defining the genetic, personal, and social-environmental determinants of severe hypertension in African Americans

Project Overview: The persistence of health disparities in medically underserved minority communities remains one of the most vexing public health problems facing our nation. The etiology of racial/ethnic differences in health involves dynamic interactions between genetic, behavioral and social-environmental determinants. Yet the field lacks robust, longitudinal datasets that integrate these multi-dimensional data elements with clinical assessments in minority patient cohorts. The Minority Health Genomics and Translational Research BIo-Repository Database (MH-GRID) Network infrastructure will facilitate the ascertainment of biospecimens, the collection of multi-dimensional data elements and the tracking of patient outcomes in an electronic health records (EHRs)-linked data warehouse within a consortium of minority-serving clinics.

The fulfillment of these specific aims will enable the MH-GRID to establish the largest genomic medicine database devoted to minority patients. A major objective of the MH-GRID is to utilize high-throughput sequencing technology to create a genome-wide catalogue of the 'Exome' in 2400 African-Americans (AA). Overall, this project provides a 'grand opportunity' to establish a novel national research resource that will advance genomic science while addressing a variety of health disparity conditions that currently plague under-served minority communities. This initiative will expand the diversity of bio-ancestral groups in national genomic medicine cohorts, provide a platform for 'virtual' disease registries catalyze comparative effectiveness research in high-health disparity settings and accelerate the translation of 'personalized medicine' into minority communities.