



MAGDI YACOUB
GLOBAL HEART
FOUNDATION

Pursuing Population Studies for Improved Quality of Care

Medical genomics—known by many as personalized medicine or healthcare that involves using an individual’s genome in guiding diagnosis and treatment choices—has left out the developing world. By embedding within a Western European context, the field has created a biased understanding of human health that neglects the unique needs of different ethnic and racial groups.

The Magdi Yacoub Global Heart Foundation is part of an effort to change that, by supporting population studies at the Aswan Heart Centre and the future Magdi Yacoub Global Heart Centre in Cairo.



Population science is particularly important as it lays the foundation for all other programs at the Centres. It helps us understand ethnic and racial disparities in the population burden of cardiovascular disease (CVD), which is crucial to effective prevention and treatment.

Important examples of population science include the Dallas Heart Study in the U.S. or the LOLIPOP Study in West London. The Dallas Study is well recognized for its contributions to the our understanding of CVD, and how to prevent and treat it—bringing together more than 6,000 participants, leading to over 200 papers published, and resulting in the discovery of two genes associated with fatty liver disease as well as a breakthrough drug class. Across the Atlantic, the LOLIPOP Study was a major investigation into multiple factors underlying and contributing to heart disease, stroke, diabetes, obesity and more.

Despite the incredible significance of studies like these to our medical understanding—impacting prevention, diagnosis and treatment—there have been no similar studies in Egypt or the Middle East to date, and data regarding CVD in African countries including Egypt is scarce.

To better respond to the needs of neglected populations, this reality must change—and that is why the Magdi Yacoub Global Heart Foundation is invested in population and epidemiological studies currently underway at the Aswan Heart Centre. We invite you to learn more about our Ballana Heart Study [\[link\]](#) and 1,000 Egyptian Genomes [\[link\]](#) to see how our teams are producing high quality data that are crucial to improving health policy and reducing preventable deaths.

Exterior

Before



After



Interior



New Green Space

