



Contribution ID: 533

Type: **Keynote Talk**

## **The South African 110K Human Genome Program: Enabling a Big Data in Health Environment for African Personalised Medicine**

*Wednesday, 3 December 2025 09:45 (45 minutes)*

Since 2016, the South African Medical Research Council (SAMRC) and the Department of Science and Innovation (DSI) have partnered to advance genomic and precision medicine research and innovation in South Africa. South Africa is embarking on a pioneering journey to transform its healthcare landscape through the South African 110K Human Genome Program. This ambitious initiative aims to leverage the existing talent pool and infrastructure to sequence 110,000 human genomes, creating a comprehensive database that will revolutionize personalized medicine in the country.

Understanding the genetic diversity of the South African population, Scientists and healthcare professionals can develop targeted treatments and interventions, leading to improved health outcomes and a more equitable healthcare system. This presentation will delve into the program's approach, highlighting the commencement of a pilot phase that aims to sequence 10,000 genomes from existing cohorts. Drawing from benchmarked large-scale genome programs globally. We will discuss the program's alignment with the National Decadal Plan, its potential to address health disparities, and its critical role in establishing robust big data for health environment. Furthermore, we will explore the program's contribution to economic growth, social development, and the creation of a capable state equipped to manage and support advanced scientific research.

Join us to discover how the South African 110K Human Genome Program is paving the way for a future where personalized medicine could be a reality for all South Africans.

**Presenting Author**

**Email**

**Student or Postdoc?**

**Institute**

**Registered for the conference?**

**CHPC User**

## **CHPC Research Programme**

**Primary author:** Dr MIA, Rizwana (South African Medical Research Council)

**Presenter:** Dr MIA, Rizwana (South African Medical Research Council)

**Session Classification:** Keynote

**Track Classification:** HPC Technology