



Inspiring Innovation and Discovery

Gift of \$2.5 million brings together the fields of genetics and statistics

Published: September 20, 2010

There is unprecedented opportunity to uncover the genetic basis of human disease through the combination of new technologies and the cellular machinery that contains our genes.

But to mine this data requires novel statistical and computational methods in order to generate information that can be used to prevent, diagnose and treat complex diseases.

A new endowed chair at McMaster University's Michael G. DeGroote School of Medicine, announced today, will allow a biostatistician with expertise in integrative genomics to work with a team of clinical researchers and basic scientists to make new discoveries in the rapidly expanding field of population genomics.

The **John D. Cameron Chair in Genetic Determinants of Chronic Diseases** was established by the estate of **Marjorie Cameron Foucar** in tribute to her father.

The inaugural chairholder is **Joseph Beyene**, associate professor in the [Department of Clinical Epidemiology and Biostatistics](#). A native of Ethiopia, he has his first degree from [Addis Ababa University](#), followed by a master of science from the [University of Guelph](#) and his PhD from the University of Toronto. Beyene came to McMaster from the [University of Toronto](#) and the [Hospital for Sick Children](#).

"When we look at the mechanics of a disease like cancer or heart disease, we know there must be a genetic cause, but it's a complex relationship because not everyone who is susceptible will get it," said Beyene.

"My research focuses on developing statistical methods for an integrative analysis of genomic, clinical and environmental data. McMaster's culture of interdisciplinary collaboration means we'll find practical applications. And, along with developing methods of computational tools, my research group is committed to building capacity in methods for statistical bioinformatics and integrative genomics through educational and training activities."

John Kelton, dean and vice-president of the **Faculty of Health Sciences** at McMaster, said: "This wonderfully remarkable gift will allow us to begin a new initiative of a [Population Genomics Program](#). This program, led by professor **Sonia Anand** will allow us to bring together major components of the university including its power of super computing and links to expert mathematicians, biostatisticians and physicians. The focus will be to analyze and ultimately influence the effect of our own genes and how environmental factors impact on the development of disease.

"Dr. Beyene is uniquely trained and an excellent choice to be the inaugural chair holder, and he will be a catalyst for other top-notch faculty and graduate students," said Kelton.



Joseph Beyene, associate professor in the Department of Clinical Epidemiology and Biostatistics

 [\[View Slideshow\]](#)

Stay connected with the Faculty of Health Sciences

