DNA, GENiES and GeNOMES: Understanding gene discovery and genetic testing *in cancer*.

ABOUT THIS LECTURE

Human genetics research has improved our understanding of a wide range of diseases including cancers, inherited disorders and infectious diseases. In many cases the discovery of genes that are linked to the risk of developing a disease, or to how that disease progresses, has resulted in the development of genetic tests that (in many countries) are routinely used for clinical diagnosis and for monitoring both disease progression and the effectiveness of treatment strategies.

In Trinidad and Tobago, genetic testing is still largely unavailable. Words like "DNA", "genes", "genetics" and its younger cousin "genomics" are not a part of the lay person's vocabulary, and public policy regarding human genetics research and the clinical applications that can arise from it lag behind the scientific advances. While the underlying reasons are multifaceted, the lack of integration of genomic research and technologies into the health care system in Trinidad and Tobago means that patients do not benefit. Lack of awareness about the nature of genetics research and genetic testing also limits the scope and depth of public participation in policy development.

This lecture is the first in a Public Lecture Series titled "**DNA, GENiES and GeNOMES: Understanding gene discovery and genetic testing**" that aims to educate the public about human genetics and to generate awareness about the field and its implications.

This first lecture will focus on cancer. Attendees will leave with a basic understanding of the link between genetics and cancer, the limitations and implications of gene discovery and genetic tests for cancer, the types of information that can be gained from genetic testing and their significance for both the individual being tested and their biological family members.