Maggie CY Ng, J Diabetes Metab, 2:8
doi: http://dx.doi.org/10.4172/2155-6156.S1.09

OMICS Group Conferences
Accelerating Scientific Discovery

2nd World Congress on
Diabetes & Metabolism

6-8 December 2011 Philadelphia Airport Marriott, USA

TITLE

Implications and challenges of genetic studies of type 2 diabetes in African Americans

Maggie CY Ng

Wake Forest University School of Medicine, USA

Type 2 diabetes (T2DM) is a major health problem affecting more than 24 million people in the United States. The highest prevalence is found in African Americans (13%), about double of that in European Americans. T2DM is characterized by the presence of insulin resistance and pancreatic _-cell dysfunction, resulted from the interaction of genetic and environmental factors. Recent advance in technologies and studies using genome-wide association (GWA) and meta-analyses approaches have led to great success in the identification of more than 40 loci associated with T2DM primarily in European-derived populations. Until recently, comparable studies in African Americans are lacking due to the challenges of their admixed genome derived from African and European ancestries and lower degree of linkage disequilibrium. In addition to differences in genetic background, environmental risk factors, body composition, insulin secretion and resistance patterns may affect the relative contribution of genetic variants on T2DM susceptibility in different populations. This talk will discuss recent works and challenges of GWA studies in African Americans as well as the opportunities to use African American populations to fine map known and identify novel loci for T2DM.

Biography

Dr. Maggie Ng completed her Ph.D. at the Chinese University of Hong Kong. She started to work on genetics of type 2 diabetes in Chinese as postdoctoral fellow and faculty in the Chinese University, with a period of training at the University of Chicago. Currently, she is the Assistant Professor at the Center for Diabetes Research at Wake Forest University School of Medicine, focusing of diabetes and obesity genetic studies in African Americans.