Speaker's Biosketch ICoLA 2024

Soo-Heon Kwak (Seoul National University, Republic of Korea)

Dr. Soo Heon Kwak, MD, PhD, is a professor at the Division of Endocrinology & Metabolism, Department of Internal Medicine, Seoul National University Hospital. Dr. Kwak's research focuses on identifying genetic and clinical risk factors of diabetes, cardiovascular disease and familial hypercholesterolemia in the East Asian population, with the goal of translating these findings into precision medicine. As a clinical endocrinologist trained in genetics, Dr. Kwak is well-suited to investigate these factors in Koreans. East Asian diabetes patients often have a lower BMI threshold and earlier onset compared to Europeans. Dr. Kwak's team demonstrated that these patients typically experience decreased beta-cell function years before diagnosis, leading Dr. Kwak to explore distinct genetic factors. Dr. Kwak has conducted extensive genetic research on the four major subtypes of diabetes in Koreans, utilizing resources from Seoul National University Hospital and the National Biobank of Korea. This includes the first genome-wide association study on gestational diabetes and exome sequence analysis for type 2 diabetes in East Asians, identifying key variants like PAX4 and GLP1R. Dr. Kwak also contributes to international collaborations such as the Asian Genetic Epidemiology Network and DIAbetes Meta-ANalysis of Trans-Ethnic association studies consortium.