

## ACADEMIC HIGHLIGHTS

## **Keynote lectures**

*Lecture 1* – Diabetes and Metabolic syndrome (Dr. Eun-Jung Rhee)

Dr. Eun-Jung Rhee



- Ewha Woman's University School of Medicine
- The Catholic University School of Medicine doctorate in medicine
- Endocrinology and Metabolism, Kangbuk Samsung Hospital.
  Sungkyunkwan University School of Medicine
- Cardiovascular Division, Brigham and Women's Hospital, Harvard University, Boston, MA, USA
- Current Assistant administrator of Committee of Research, Korean Diabetes Association
- Current Vice-secretary of Korean Society of Lipidology and Atherosclerosis

Research interests (Major) : Endocrinology and Metabolism, Vascular complications of Diabetes

The prevalence of diabetes was around 6% globally in 2010. It is expected to reach 7.8% in 2030. This increasing prevalence is similar around the world regardless of regions, from Europe, Africa, America and also in Asia. Asia is being focused with the mostly rapidly growing number of patients with diabetes. The complex nature of physiology of diabetes renders it difficult to cure with a single therapeutic option. Recently the concept of "Ominous Octet" by Prof. Defronzo in Texas University in USA, suggests that the pathophysiology of diabetes became even more complex with the development and the discovery of other pathways of insulin secretion and insulin resistance. Not only multifactorial therapeutic approach that targets multiple mechanistic abnormalities but also patient-centered and individualized treatment is warranted in the patients with diabetes.

In this talk, she will present the recent concept on the pathophysiology of type 2 diabetes focusing on "multi-organ failure-like" nature of insulin resistance and insulin secretory dysfunction.



## Lecture 2 – Atherosclerosis and Vascular Imaging (Dr. Sang-Wook Kim)

Dr. Sang-Wook Kim



- Chungang University (CAU) bachelor's degree in medicine
- CAU master's degree in medicine
- CAU doctorate in medicine
- CAU Hospital Cardiology professor
- Current Chief of CAU Cardiovascular Center
- Studied in Washington Hospital Heart Center
- 2005 George Town University Award for Outstanding Research
- 2007 Korean Society of Cardiology Award for Outstanding Research

Atherosclerosis is one of the most devastating chronic diseases in human life. The incidence of atherosclerotic disease has increased together with the elongation of lifespan. Moreover, vascular diseases, including cerebrovascular and cardiovascular diseases, are the most common cause of death in the country. The vulnerable plaque is especially important because the rupture of a thin-capped fibroatheroma (TCFA) can lead to thrombosis, acute coronary syndrome, or even sudden cardiac death.

Yet we are getting better equipped to fight these diseases. Amazing imaging tools have been developed with the advancement of technology. For example, we can get a closer view of the atheromatous plaque using the computed tomography(CT), intravascular ultrasound(IVUS), Magnetic resonance imaging(MR) and optical coherent tomography(OCT).



*Lecture 3* – A case of well managed chronic disease (Dr. Seok-Jun Yoon) Dr. Seok-Jun Yoon



- Seoul National University (SNU) bachelor's degree in medicine
- SNU doctorate in Health policy and management
- Korea University(KU) Hospital professor of Department of preventive medicine
- Current Head of KU graduate school of public health
- 2009 Director of Korea Academy of Health Policy and Management
- 2010 Director of Korea Health Promotion Foundation
- Current Chief of Health Insurance Review & Assessment Service

In this lecture, I will introduce you'Metabolic Syndrome Prevention Project in Seoul' as awell structured chronic disease prevention system in Korea. Increasing incidences of chronic diseases and importance of interventions for preventable diseases are background of this project. Because of limited resources, we need to build efficient management system from the starting point. For the efficiency, selection and focus on certain category of diseases are also crucial. On top of that, our vision in this project is making Seoul as 'metabo-free, healthy city' with One Stop Service.

Also, you will see how things progressed until now and strategies used in building the system. The management of whole intervention steps should be integrated to provide service without disturbance and inconveniences of patients. In addition, I would like to show you several campaigns, slogans, cultural contents on metabolic diseases for citizens which are introduced in many Seoul districts.

From 2009, this project is showing significant effect on reducing risk factors of metabolic diseases in Seoul. And I would like to conclude this lecture with future directions and predicted effects of chronic disease caring systems.