

# The 14<sup>th</sup> Research Symposium on Human Natural Defense System

## “Allergic Airway Inflammation”

October 20<sup>th</sup> (Sat), 2018

NEWILHAN Memorial Hall, Avison BioMedical Research Center (ABMRC) Severance Hospital, Yonsei University College of Medicine

08:50 Opening Remarks Joo-Heon Yoon (Yonsei Univ)

### Innate Immunity

Moderator: De Yun Wang (Natl. Univ. of Singapore)

09:00-09:20 Role of proprotein convertases in human nasal epithelial cell differentiation and airway inflammation Sang Nam Lee (Yonsei Univ)

09:20-09:40 The contribution of sirtuin 6 to innate and adaptive immune responses in allergic diseases Byung-Hyun Park (Chonbuk Natl. Univ)

09:40-10:00 Chronic rhinosinusitis and eosinophilic inflammation: Autophagy and NK cell perspectives Hun Sik Kim (Ulsan Univ)

10:00-10:30 Innate immunity in allergic inflammation Hideaki Morita (Natl. Research Institute for Child Health and Development, Japan)

10:30-11:00 Impairment of cilia architecture and ciliogenesis in common inflammatory nasal diseases De Yun Wang (Natl. Univ. of Singapore, Singapore)

11:00-11:20 *Coffee Break*

Moderator: Joo-Heon Yoon (Yonsei Univ)

### Special Lecture

11:20-11:50 Metabolic regulation of inflammasome activation: critical role of mitochondrial homeostasis Augustine MK Choi (Weill Cornell Medicine, USA)

11:50-12:20 Single cell analyses to personalise medicine Mikael Benson (Linköping Univ, Sweden)

12:20-13:30 *Lunch*

Moderator: Je Kyung Seong (Seoul Natl. Univ)

### OMICs and Precision Medicine

13:30-14:00 Endotyping chronic rhinosinusitis in Chinese Zheng Liu (Tongji Univ, China)

14:00-14:20 What drives eosinophil activation in aspirin-exacerbated respiratory disease Hae-Sim Park (Ajou Univ)

14:20-14:40 Application of metabolomics as a diagnostic and prognostic tool for children with corticosteroid-insensitive severe asthma Youngja H. Park (Korea Univ)

14:40-15:00 A leukotriene B4 receptor-2 BLT2 as a novel biomarker for severe asthmatic airway inflammation Jae-Hong Kim (Korea Univ)

15:00-15:20 *Coffee break*

Moderator: Hyung-Ju Cho (Yonsei Univ)

### Adaptive Immunity

15:20-15:40 Progranulyn, a new player in the development of allergic airway inflammation of asthma You Sook Cho (Ulsan Univ)

15:40-16:00 Regulation of Th2 cell responses by RORs Yeonseok Chung (Seoul Natl. Univ)

16:00-16:20 Regulation of Th2 cytokine expression by locus control region Gap Ryol Lee (Sogang Univ)

16:20-16:40 IL-7 plays a crucial role in the homeostasis of memory Th2 cells for the maintenance of asthma Yong Woo Jung (Korea Univ)

16:40-17:00 Protein arginine methyltransferases in development of allergic rhinitis Jong-Hwan Park (Chonnam Natl. Univ)

### Supported by

Global Research Laboratory for Allergic Airway Disease

The Airway Mucus Institute (TAMI)

Korea Mouse Sensory Phenotyping Center

EYE & ENT Hospital