

## Curriculum Vitae

**Name:** Myung-Shik Lee

**Degree:** M.D., Ph.D.

**Affiliation:** Soonchunhyang University

**Position Title:** Chair professor

### Education/Training

M.D. at College of Medicine, Seoul National University, 1981.

M.S. at College of Medicine, Seoul National University, 1984.

Ph.D. at College of Medicine, Seoul National University, 1990. The subject of doctoral thesis was 'Aberrant Expression of Class II MHC Antigen Induced by Interferon- and Its Immunological Impact'.

Postdoc, The Scripps Research Institute (1992-1995)

### Positions and Scientific Appointments

Chief, Division of Endocrinology and Diabetes, Dept. of Internal Medicine, Korea Cancer Center Hospital (1989-1991)

Staff physician, Division of Endocrinology & Metabolism, Dept. of Medicine, Samsung Medical Center (1995 ~2015 )

Associate Professor, Dept. of Medicine, Sungkyunkwan University Medical School (1997 ~2002)

Professor, Dept. of Medicine, Sungkyunkwan University Medical School (2002 ~2015)

Chairperson, Division of Endocrinology & Metabolism, Dept. of Medicine, Samsung Medical Center (2005 ~ 2009)

Chairperson, Graduate School for Health Sciences & Technology, Sungkyunkwan University (2010 ~2013)

Professor, Severance Biomedical Science Institute & Dept. of Internal Medicine, Yonsei University College of Medicine (2015 ~ 2022 )

Director, Severance Biomedical Science Institute, Yonsei University College of Medicine (2018 ~ 2022)

Chair Professor, Sunchunhyang Institute of Medi-bio Science, Sunchunhyang University (2022 ~ \_)

### Honors

Asan Award in Medicine, Asan Foundation (2015)

Sulwon Academic Award, Korean Diabetes Association (2014)

Wünsche Award from the Korean Academy of Medical Sciences (2013)

Academic Promotion Award from the Korean Association of Immunologists, 2013

Professor of the Year (the 1st), Samsung Medical Center, 2012

Distinguished Service Award from Samsung Medical Center, 2007 & 2013

Elected as Sungkyunkwan University (SKKU) Fellow, 2005

**Selected Publication**

- 1) Park K, Lim H, Kim J, Hwang Y, Lee YS, Bae SH, Kim H, Kim H, Kang SW, Kim JY, **Lee M-S**. Lysosomal Ca<sup>2+</sup>-mediated TFEB activation modulates mitophagy and functional adaptation of pancreatic  $\beta$ -cells to metabolic stress. *Nat Commun* 13:1300, 2022
- 2) Kim J, Kim SH, Kang H, Lee S, Park S-Y, Cho Y, Lim Y-M, Ahn JW, Kim Y-H, Chung S, Choi CS, Jang YJ, Park HS, Heo Y, Kim KH, **Lee M-S**. TFEB-GDF15 axis protects against obesity and insulin resistance as a lysosomal stress response. *Nat Metab* 3:410-427, 2021
- 3) Kim J, Park K, Kim MJ, Lim H, Kim KH, Kim S-W, Lee E-S, Kim H, Kim SJ, Hur KY, Kim JH, Ahn JH, Yoon K-H, **Lee M-S**. An autophagy enhancer ameliorates diabetes of human IAPP-transgenic mice through clearance of amyloidogenic oligomer. *Nat Commun* 12:183, 2021
- 4) Lim H, Lim Y-M, Kim KH, Jeon YE, Park K, Kim J, Hwang HY, Lee DJ, Pagire H, Kwon HJ, Ahn JH, **Lee M-S**. A novel autophagy enhancer as a therapeutic agent against metabolic syndrome and diabetes. *Nat Commun* 9:1438, 2018
- 5) Kim KH, Jeong YT, Oh H, Kim S-H, Cho JM, Kim Y-N, Kim SS, Kim D-H, Hur KY, Kim HK, Koh T, Han J, Kim H, Kim J, Back SH, Komatsu M, Chen H, Chan DC, Konishi M, Itoh N, Choi CS, **Lee M-S**. Autophagy deficiency leads to protection from obesity and insulin resistance by inducing FGF21, a ‘mitokine’. *Nature Medicine* 19:83-92, 2013
- 6) Jung H-S, Chung KW, Kim JW, Kim J, Komatsu M, Tanaka K, Nguyen YH, Kang TM, Yoon K-H, Kim J-W, Jeong YT, Han MS, Lee M-K, Kim K-W, Shin J, **Lee M-S**. Loss of autophagy diminishes pancreatic  $\beta$ -cell mass and function with resultant hyperglycemia. *Cell Metab* 8:318-324, 2008
- 7) Kim HS, Han MS, Chung KW, Kim S, Kim E, Kim MJ, Jang E, Lee HA, Youn J, Akira S, **Lee M-S**. Toll-like receptor 2 senses  $\beta$ -cell death and contributes to the initiation of autoimmune diabetes. *Immunity* 27:321-333, 2007