



•Field Immunometabolism, Aging, Genetics, Metabolic Disease,
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Educational Background

- Ph.D. Department of Genetics, Albert Einstein College of Medicine (2015)
- M.S. Department of Pharmacology, College of Medicine, Seoul National University (2007)
- B.S. Department of Life Science, Korea University (2004)

Major Careers

- 2020.07-2022.02 Associate Research Scientist, Department of Pathology, Comparative Medicine, and Immunobiology, Yale School of Medicine
- 2015.07-2020.06 Postdoctoral Associate/Fellow, Department of Comparative Medicine and Immunobiology, Yale School of Medicine
- 2008.07-2009.07 Postmaster Researcher, Department of Genetics, Albert Einstein College of Medicine
- 2007.12-2008.05 Researcher, Bio-tech Research Institute, Dong-A Pharmaceutical Co.

Research and Book

PUBLICATIONS

1. Olga Spadaro, Yun-Hee Youm, Irina Shchukina, **Seungjin Ryu**, Sviatoslav Sidorov, Anthony Ravussin, Kim Nguyen, Ekaterina Aladyeva, Alexander N. Predeus, Steven R. Smith, Eric Ravussin, Craig Galban, Maxim N.Artyomov, and Vishwa Deep Dixit. Caloric restriction in humans reveals immunometabolic regulators of healthspan. **Science**, 2022; 375(6581):671-677. PMID: 35143297
2. Emily L Goldberg, Irina Shchukina, Yun-Hee Youm, **Seungjin Ryu**, Takeshi Tsusaka, Kyrilia C Young, Christina D. Camell, Tamara Dlugos, Maxim N. Artyomov, and Vishwa Deep Dixit. IL-33 causes thermogenic failure in aging by expanding dysfunctional adipose ILC2. **Cell Metabolism**, 2021; 33(11):2277-2287. PMID: 34473956
3. **Seungjin Ryu***, Jeehae Han, Trina Norden-Krichmar, Quanwei Zhang, Seunggeun Lee, Gil Atzmon, Nir Barzilai, Zhengdong Zhang, Nicholas J. Schork, and Yousin Suh*. Genetic signature of human longevity in PKC and NF-κB signaling. **Aging Cell**. 2021; 20(7):e13362. PMID: 34197020 (*Co-corresponding author)

4. [Seungjin Ryu](#), Irina Shchukina, Yun-Hee Youm, Hua Qing, Brandon K. Hilliard, Tamara Dlugos, Xinbo Zhang, Yuki Yasumoto, Carmen J. Booth, Carlos Fernández-Hernando, Yajaira Suárez, Kamal M. Khanna, Tamas L. Horvath, Marcelo O. Dietrich, Maxim N. Artyomov, Andrew Wang, and Vishwa Deep Dixit. Ketogenic diet restrains aging-induced exacerbation of coronavirus infection in mice. *eLife*. 2021;10:e66522. PMID: 34151773

5. [Seungjin Ryu](#), Inkyung Baek, and Hyunjeong Liew. Sumoylated α -synuclein translocates into the nucleus by karyopherin $\alpha 6$. *Molecular & Cellular Toxicology*. 2019; 15(1):103-109

6. Anthony Ravussin, Yun-Hee Youm, Jil Sander, [Seungjin Ryu](#), Kim Nguyen, Luis Varela, Gerald I. Shulman, Sviatoslav Sidorov, Tamas L. Horvath, Joachim L. Schultze, and Vishwa Deep Dixit. Loss of Nucleobindin-2 causes insulin-resistance in obesity without impacting satiety or adiposity. *Cell Reports*. 2018. 24(5):1085-1092. PMID: 30067966

7. [Seungjin Ryu](#)*, Jeehae Han*, Trina Norden-Krichmar, Nicholas J. Schork, and Yousin Suh. Effective discovery of rare variants by pooled target capture sequencing: A comparative analysis with individually indexed target capture sequencing. *Mutation Research*. 2018. 809: 24-31. PMID: 29677560

8. Catherine Manix Feintuch, Archana Tare, Lucas R. Cusumano, Jacqueline Benayoun, [Seungjin Ryu](#), Alick Sixpence, Karl Seydel, Miriam Laufer, Terrie Taylor, Yousin Suh, and Johanna P. Daily. Type I Interferon Receptor Variants in Gene Regulatory Regions are Associated with Susceptibility to Cerebral Malaria in Malawi. *American Journal of Tropical Medicine and Hygiene*. 2018. 98(6): 1692-1698. PMID: 29677560

9. [Seungjin Ryu](#), Gil Atzmon, Nir Barzilai, Nalini Raghavachari, and Yousin Suh. Genetic landscape of *APOE* in human longevity revealed by high-throughput sequencing. *Mechanisms of Ageing and Development*. 2016. 155: 7-9. PMID: 26930295

10. [Seungjin Ryu](#), Francesca Teles, Tommaso Russo, Michael G. Rosenfeld, and Yousin Suh. An epigenomic role of Fe65 in the cellular response to DNA damage. *Mutation Research*. 2015. 776: 40-47. PMID: 26255939

11. Jeehae Han*, [Seungjin Ryu](#)*, David M. Moskowitz, Devorah Rothenberg, Daniel J. Leahy, Gil Atzmon, Nir Barzilai, and Yousin Suh. Discovery of novel non-synonymous SNP variants in 988 candidate genes from 6 centenarians by target capture and next generation sequencing. *Mechanisms of Ageing and Development*. 2013. 134(10): 478-85. PMID: 23376243 (*Co-first author)

PUBLICATIONS (In Progress)

1. [Seungjin Ryu](#), Sviatoslav Sidorov, Akiko Iwasaki, Andrew Wang, and Vishwa Deep Dixit. SPARC links energy balance to inflammatory interferon-response in macrophages. (Under revision in *Immunity*)

2. [Seungjin Ryu](#), Olga Spadaro, Aileen H. Lee, Sonia Caprio, Eric Ravussin, Christopher Morrison, Steven R. Smith, Eric Ravussin, Irina Shchukina, Andrew Wang, Maxim N. Artyomov, Yun-Hee Youm, and Vishwa Deep Dixit. Adipocyte-derived SPARC controls immunometabolic setpoint of healthspan. (Under review in *Cell Metabolism*)

3. Brenda Gonzalez*, Archana Tare*, [Seungjin Ryu](#)*, Simon C. Johnson, Matt Kaeberlein, and Yousin Suh. Discovery and functional genomics of nuclear-encoded mitochondrial gene variants in Ashkenazi Jewish centenarians implicates mitochondrial pathways in human longevity (*Co-first author) (Under review in *GeroScience*)

Miscellaneous

2019. Keystone Symposia Scholarship for "Integrating Metabolism and Immunity" Meeting

2019. Glenn Foundation for Medical Research Postdoctoral Fellowship in Aging Research

2013. Glenn/AFAR Scholarships for Research in the Biology of Aging

2012. Mogam Scholarship. The Mogam Science Scholarship Foundation