

Insuk Lee

Curriculum Vitae

Professor
Department of Biotechnology, Yonsei University, Korea



Educational Background & Professional Experience

2021.3–Present	Professor, Department of Biotechnology, Yonsei University
2017.3–2021.3	Assistant Professor, Department of Biotechnology, Yonsei University
2017.3–2021.3	Assistant Professor, Department of Biotechnology, Yonsei University

Research Interests

AI Models in Biology, Biological data mining, Computational Metagenomics; Human Microbiome

Publications

- Junyeong Ma, Nayeon Kim, Jun Hyung Cha, Wonjong Kim, Chan Yeong Kim, Yong–ho Lee, Han Sang Kim, Yoon Dae Han, Dongeun Yong, Eugene Han, Sunmo Yang, Samuel Beck, Insuk Lee, A human gut metagenome–assembled genome catalogue spanning 41 countries supports genome–scale metabolic models Nature Microbiology 2026 Jan 6; 11(1):317–334.
- Jun Hyung Cha, Nayeon Kim, Junyeong Ma, Sungho Lee, Geon Koh, Sunmo Yang, Samuel Beck, Iksu Byeon, Byunguk Lee, Insuk Lee, A high–quality genomic catalog of the human oral microbiome broadens its phylogeny and clinical insights, Cell Host & Microbes 2025 Nov 12;33(11):1977–1994.e8.
- Junha Cha, Chang Gon Kim, Nam Suk Sim, Gamin Kim, Wonrak Son, Dahee Kim, Yurim Jung, Hyun Jun Hong, Hae Been Lee, Jaehyung Kim, Jinna Kim, Sun Och Yoon, Seokhyeong Go, Jeongah Kim, Euijung Seong, Seungbyn Baek, Kyung Hwan Kim, Min Hee Hong*, Yoon Woo Koh*, Insuk Lee*, Hye Ryun Kim*, 4–1BB+ Tregs and inhibitory progenitor exhausted T cells confer resistance to anti–PD–L1 and anti–CTLA–4 combination therapy, Cell Reports Medicine 2025 Oct 21;6(10):102408.
- Chan Yeong Kim, Dong Jin Park, Beung Chul Ahn, Seungbyn Baek, Min Hee Hong, Linh Thanh Nguyen, Sun Ha Hwang, Nayeon Kim, Daniel Podlesny, Askarbek Orakov, Christian Schudoma, Shahriyar Mahdi Robbani, Hyo Sup Shim, Hong In Yoon, Chang Young Lee, Seong Yong Park, Dongeun Yong, Mina Han, Peer Bork, Byoung Choul Kim*, Sang–Jun Ha*, Hye Ryun Kim*, Insuk Lee*, A conserved pilin from uncultured gut bacterial clade TANB77 enhances cancer immunotherapy Nature Communications 2024 Dec 27;15:10726.