

Personal Statement

Biography: [Dr. Hee-Gyeong Yi](#) received a B.S. in Mechanical Engineering from Korea Polytechnique University, Korea in 2012, and a Ph.D. under the supervision by Professor Dong-Woo Cho in Mechanical Engineering at Pohang University of Science and Technology (POSTECH), Korea in 2018. She performed a postdoctoral fellowship under the supervision by Professor Sun Ha Paek, M.D. at Medical Research Center of Seoul National University and under the co-supervision by Professor D.-W. Cho in the Dept. of Mechanical Engineering of POSTECH during 2018 – 2019. She joined the Dept. of Convergence Biosystems Engineering, College of Agriculture and Life Sciences (CALs) in Chonnam National University (CNU), Korea in 2020. Since then, she has worked as an Assistant Professor on Bioprinting and Tissue Engineering.



Dr. Yi is directing the Bio-Manufacturing Systems Laboratory, where pursues research on development of biofabrication technologies for diverse applications to human and plant tissue engineering. During the period of her academic training, her primary works were development of 3D printing-based technologies for medical applications. In the line of this, she has worked on drug delivery systems, scaffold pore architecture engineering based on computational analysis, engineering of human tissues such as bone, cartilage, skeletal muscle, blood vessel, and nerve. In particular, her representative research is the development of bioprinting technology and decellularized extracellular matrix bioink to create a glioblastoma-on-a-chip for prediction of differential patient-specific outcomes to anti-cancer treatments (*Nature Biomedical Engineering*, 2019, 3, 509 – 519). After joining the CALs in CNU, she has expanded research interest to a plant tissue engineering to explore a potential of bioprinting technology in health functional/medicinal food engineering and agriculture technology, while she is still digging out bioprinting-based technologies for engineering human organs-on-chips.

Dr. Yi currently serves as Board Member of various academic societies, including the Korean Tissue Engineering and Regenerative Medicine Society, the Korean Biochip Society, the Korean Organoid Society, and the Korean Society for Biomaterials. She served as Organizing Committee Member of Tissue Engineering and Regenerative Medicine Society (TERMIS) – Asia Pacific in 2022 and International Conference of Brain Korea 21 FOUR in 2023. She is also Organizing Committee Member of World Biomaterials Congress 2024.

She served as a volunteer to organize the annual ISBF conference held in Pohang, Korea, 2014. Since then, she has participated in the ISBF meetings and has given oral presentations twice (2014 in Pohang and 2017 in Beijing). Ever since she was a very young academic trainee, she has witnessed the growth of ISBF and journal, *Biofabrication* last +10 years. Therefore, she understands well about the expanding impact of ISBF on the field of tissue engineering, biotechnology, regenerative medicine, and organs-on-chips, and truly hopes the continuous advancement of the society. Therefore, she would be greatly honored to serve as an Early Career Committee Member of ISBF and to have a chance to make a voice for the improvement of the society. She is eager in performing any roles and leading any activities for ISBF during her service.