

Professor Chan Hum Park's Biographical Sketch



Chan-Hum Park, MD, PhD

Professor, Chief of Department of Otorhinolaryngology H&N surgery,
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Dr. Chan Hum Park was born in 1969 in Korea(South), I graduated the Hallym University Medical School(M.D.) in 1996. He obtained Ph.D. degree from KangWon National University, Korea. I have been working in chief(professor) of the department of Otorhinolaryngology Head & Neck Surgery in Chunchon Sacred Heart Hospital of Hallym Medical Center and Nano Bio Regenerative Medical Institute of Hallym University. My major study's field of clinical part is the cancer surgery and reconstruction such as rhinoplasty, facial trauma, skin cancer etc. I founded the Nano Bio Regenerative Medical Institute. I developed the artificial dermis, tympanic membrane, absorbable fixation plate, artificial bone, and bioink materials using electrospinning, Bio 3D printing etc. And I developed the world's first artificial tympanic membrane from silk fibroin and achieved the KFDA's approval and commercialization in 2012. Another research's field is the developing of medical electronic devices. I worked the computer and electronic department of the Illinois University(USA) in 2009-2010. Recently, I am developing the wound healing system using non thermal-microplasma jet in regenerative medicine. Nowadays, I have focused on stem cell and 3D printing for regenerative medicine and tissue engineering. I am a board member of Tissue Engineering and Regenerative Medicine International Society, Society for Biomaterials, World rhinologic society. I have co-authored or edited 9 books and 31 patents and published over 180 original research papers related in this field. I believe that have great experiences and technology of biomaterial and biofabrication as a clinician as well as a researcher. And it will greatly contribute to the progress of **The International Society for Biofabrication (ISBF)**.

REPRESENTATIVE PUBLICATIONS

1. Park SR, Cho A, Park ST, **Park CH**, Lim S, Jin M, Lee HY, Hong IS. Double-edged sword of gonadotropin-releasing hormone (GnRH): A novel role of GnRH in the multiple beneficial functions of endometrial stem cells. *Cell Death Dis.* 2018 Aug 1;9(8):828. doi: 10.1038/s41419-018-0892-3.
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4. HS Park, HJ Park, JH Lee, PR Kim, JS Lee, YJ Lee, YB Seo, DY Kim, O Ajiteru, OJ Lee, **CH Park**. A 4-Axis Technique for Three-Dimensional Printing of an Artificial Trachea. 2018; *Tissue Engineering and Regenerative Medicine*. August 2018, Volume 15, Issue 4, pp 415–425.
5. Kim SH, Yeon YK, Lee JM, Chao JR, Lee YJ, Seo YB, Sultan MT, Lee OJ, Lee JS, Yoon SI, Hong IS, Khang G, Lee SJ, Yoo JJ, **Park CH**. Precisely printable and biocompatible silk fibroin bioink for digital light processing 3D printing, *Nature Communications*, 2018; 9(1):1620.
6. Chung EJ, Ju HW, Yeon YK, Lee JS, Lee YJ, Seo YB, **Park CH**. Development of an omentum-cultured oesophageal scaffold reinforced by a 3D-printed ring: feasibility of an in vivo bioreactor, *Artificial Cells, Nanomedicine, and Biotechnology*, 2018; E-pub
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9. Sultan MT, Jeong JY, Seo YB, Lee OJ, Ju HW, Park HJ, Lee YJ, Lee JS, Kim SH, **Park CH**. Fabrication and characterization of the porous duck's feet collagen sponge for wound healing applications, *Journal of Biomaterials Science, Polymer Edition*, 2018;29(7-9):960-971
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11. Song JY, Kim JH, Woo HW, Yoon BG, Park HJ, **Park CH**, Kang BJ. Repair of rabbit radial bone defects using bone morphogenetic protein-2 combined with 3D porous silk fibroin/ β -tricalcium phosphate hybrid scaffolds, *Journal of Biomaterials Science, Polymer Edition*, 2018;29(6):716-729.

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13. Ko NR, Cherukula MNK, Lee SJ, Hong SJ, Lim HN, **Park CH**, Park IK, Lee YK, Kwon IK. Microwave-Assisted Synthesis of Biocompatible Silk Fibroin-Based Carbon Quantum Dots, *Particle & Particle Systems Characterization*, 2017; E-pub
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