Kangwon National University

College of Agriculture and Life Sciences | Dept. of Biosystems Engineering
Chuncheon 24341, Kangwon-Do | South Korea

February 23 2024

Postdoctoral Research Fellow

A position for postdoctoral research fellow is available to join into the research areas of smart biomaterial platforms that can be controlled by stem cells at Kangwon National University, Chuncheon. The lab focuses on better understanding of interaction between cells and extracellular matrix for going deeply through cell activity and more dynamic, biomimetic, bioinspired smart ECM materials. Biostimuli technologies to address the limitations of unresponsiveness to changes in the ECM have been developed and biologically investigated relevant signals with physical aspects Out of there, we keep more watching on irreversible changes of ECM properties with feedback mechanisms to be processed a kind of signals and remodeling the cell microenvironment. Significant rationale of the lab is designing, fabricating, and modeling the smart hydrogels that control soft matters with tunable stress relaxation regulate stem cell fate and activity. Self-assembled peptide- and DNA binding dynamic properties can be involved when it comes to rational design in regulating dynamic interactions between cell molecules and ECM.
We use multi-disciplinary approaches including cell biology, biochemistry, and mechatronics to go deeply through the biophysics understanding in stimuli-responsive hydrogels. For details, please see our related publications (Biomaterials 2023, Small 2023, Bioactive Materials 2023-2022, Advanced Healthcare Materials 2023-2022, Carbohydrate Polymers 2023-2021, ACS AMI 2023-2022, Applied Surface Science 2023, Biomaterials Science 2023, IJBM 2023-2020, Macromolecular Bioscience 2023-2022, JBMR-Part A 2022, PLOS One 2021) and the lab website https://www.bioroboticseng.com/papers. Our lab has track record of training the best postdoctoral fellows to become independent principal investigators in different countries.
We are now seeking a highly self-motivated and candidate with excellent research training in cell biology, biochemistry, and tunable hydrogels. We prefer candidates who are about to graduate with PhD or have graduated within the last 12 months.

With interpersonal communication skills, a track record of excellent first author publication(s) is required. Should you have any questions, or to apply please send your curriculum vitae (CV) to Dr. Ki-Taek Lim via email: ktlim@kangwon.ac.kr

Yours Sincerely,

Ki-Taek Lim, PhD.
Full Professor
Department of Biosystems Engineering | Bio-Nanorobotics Group: Integrative Biology & Medicine | Kangwon National University | 1, Kangwondaehak-gil, 24341, Bldg. 307-Rm 205. Chuncheon, South Korea | http://www.bioroboticseng.com | Main: +82-33-250-6491 | Direct: +82-10-9032-2229