Prof. ChulhongKim

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Dr. Chulhong Kim studied for his Ph.D. degree and postdoctoral training at Washington University in St. Louis, St. Louis, Missouri under the supervision of Dr. Lihong V. Wang, Gene K. Beare Distinguished Professor (main advisor; currently, Bren Professor of Medical Engineering and Electrical Engineering at California Institute of Technology), Dr. Younan Xia, and Dr. Samuel Achilefu. He currently holds Mueunjae Chaired Professorship and is an Associate Professor of Creative IT Engineering, Mechanical Engineering, Electrical Engineering, and Interdisciplinary Bioscience and Bioengineering at Pohang University of Science and Technology (POSTECH, #1 in the world: The 100/50 Young University rankings for three consecutive years 2012-2014, #3 in the world: The world's best small universities 2017) in Republic of Korea. Before he joined the department, he was an Assistant Professor of Biomedical Engineering at the University at Buffalo, the State University of New York from Aug 2010 to Jan 2013. He was the recipients of the 2017 IEEE Engineering in Medicine and Biology Society (EMBS) Academic Early Career Achievement Award, the 2017 Korean Academy of Science and Technology Early Career Achievement Award (The Korean Presidential and Highest Award for Engineers under 40), and the 2017 Korean Society of Medical Biological Engineering Young **Award** "Contributions to multi-scale photoacoustic imaging from super-resolution atomic force photoactivated microscopy for research to systems for clinical applications." He has published 107 peer-reviewed journal articles (Nature Nanotechnology, Nature Materials, Chemical Reviews, Light Science & Applications, Nano Letters, Angewandt Chemie, Journal of the American Chemical Society, ACSNano, Advanced Functional Materials, Radiology, Biomaterials, Scientific Reports, Optics Letters, Applied Physics Letters, Journal of Biomedical Optics, etc) and 58 conference proceedings articles. His team also filed and/or registered 34 domestic/international patents. His Google Scholar h-index and citations have reached 40 and over 6,400, respectively. His group's works have been selected for the 2016 and 2017 Seno Medical Best Paper Award Finalists in Photons Plus Ultrasound Conference (the largest conference in the field), Photonics West, SPIE. He also co-authored six book chapters. He has currently served as an Editorial Board Member of Scientific Reports (Nature Publishing Group), Photoacoustics Journal, Applied Science, and American Journal of Nuclear Medicine and Molecular Imaging, and a Guest Editor of Journal of Biomedical Optics, BioMed Research International, and IEEE Pulse Magazine. He has served as an Organizing Committee for the conference on "Photons plus Ultrasound: Imaging and Sensing" and "High-Speed Biomedical Imaging and Spectroscopy: Toward Big Data Instrumentation and Management" held annually under auspices of SPIE (Photonics West) and as a Theme Co-Chair for the 39th and 40th Annual International Conference of the IEEE EMBS. He has served as a journal reviewer >100, including for Nature Photonics, Nature Communication, Light Science & Applications, Nano Letters, ACS Nano, Scientific Reports, Optics Letters, Optics Express, Journal of Biomedical Optics, IEEE Transactions, and etc. He has delivered a numerous invited presentations (>130) in technical conferences and seminars in universities. His research interests are

the development of novel biomedical imaging techniques including photoacoustic ultrasound-modulated optical tomography, fluorescence imaging, tomography, ultrasound imaging, and laser speckle contrast imaging. Particularly, his lab developed photoacoustic gastro-intestinal tract imaging using organic agents, photoacoustic cystography, clinical photoacoustic/ultrasound imaging scanner (clinically translated with Alpinion Medical), fast optical-resolution photoacoustic microscopy based on a 2-axis water-proof MEMS scanner (licensed to MGB; spinoff company, PAMsTECH and OPTICHO), virtual intraoperative photoacoustic surgical microscopy, raster scanning based photoacoustic whole body imaging of small animals, combined photoacoustic and optical coherence tomography using a single pulsed broadband laser source, acoustic-radiation force induced ultrasound-modulated optical tomography, etc.