

Curriculum Vitae

| Personal Information | |
|---|-------------------|
| Title | Dr |
| Name | You-Jin / Jeong |
| Degree | PhD |
| Country | Republic of Korea |
| Affiliation | Korea University |
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| Educational Background | |
| B.S. in Electronics and Information Engineering, Korea University, Republic of Korea (2011.03.-2015.02.) | |
| M.S. in Electronics and Information Engineering, Korea University, Republic of Korea (2015.03.-2017.02.) | |
| Ph.D. in Electronics and Information Engineering, Korea University, Republic of Korea (2017.03.-2024.02.) | |
| Professional Career | |
| Postdoctoral Researcher, Institute for Photonics and Materials, Korea University, Republic of Korea (2024.03.-2025.02.) | |
| Research Professor, Institute for Photonics and Materials, Korea University, Republic of Korea (2025.03.-Present) | |
| Research Field | |
| X-Nuclei MRI Hardware <ul style="list-style-type: none"> - RF coils for both proton and x-nuclei imaging - Dual-tuned and dual-mode RF coils for multi-nuclear imaging and spectroscopy in both clinical and preclinical systems | |
| Advanced MR Imaging and Reconstruction <ul style="list-style-type: none"> - Non-cartesian and projection reconstruction methods - Artifact reduction and SNR enhancement using advanced techniques including deep learning - Quantitative MR parameter mapping | |
| Electromagnetic and Safety Simulation <ul style="list-style-type: none"> - RF field optimization - SAR and RF-induced temperature analysis | |
| Main Scientific Publications | |
| <ul style="list-style-type: none"> • You-Jin Jeong, Suchit Kumar, Seon-Woo Park, Youngkyu Song, Jee-Hyun Cho, Chan Hong Moon, and Chang-Hyun Oh, "Self-Isolated Dual-Mode High-Pass Birdcage RF Coil for Proton and Sodium MR Imaging at 7 T MRI," <i>Applied Sciences</i>, 13(24), 2023, p.13227. • Jun-Sik Yoon, Jong-Min Kim, Han-Jae Chung, You-Jin Jeong, Gwang-Woo Jeong, Illwoo Park, Gwang-Won Kim, and Chang-Hyun Oh, "Development of a Proton-Frequency-Transparent Birdcage Radiofrequency Coil for In Vivo 13C MRS/MRSI Study in a 3.0 T MRI System," <i>Applied Sciences</i>, 11(23), 2021, p.11445. • Suchit Kumar, Han-Jae Chung, You-Jin Jeong, Heung-Kyu Lee, and Chang-Hyun Oh, "Design and Implementation of Split-Leg Type Elliptical Whole-Body Birdcage RF Coil at 1.5T MRI," <i>Applied Sciences</i>, 11(16), 2021, p.7448. • You-Jin Jeong and Chang-Hyun Oh, "MIRAGE: MR Image Replication without Repeated Data Acquisition using Generative Model," In: <i>Proc. ISMRM 2025</i>, 5155, 2025. • You-Jin Jeong, Min-Yeong Lee, Gwang-Min Im, Jee-Hyun Cho, Youngkyu Song, and Chang-Hyun Oh, "Optimizing Proton and Sodium Dual-mode RF Coil by Phase Error Compensation at 7 T," In: <i>Proc. ICMRI 2024</i>, 2024_KA-097, 2024. | |