
Name: **Hak Soo Choi, Ph.D.**

Position: Associate Professor of Radiology
Massachusetts General Hospital (MGH)
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A. Biography: Dr. Hak Soo Choi is an Associate Professor of Radiology at Harvard Medical School and faculty of Dana Farber/Harvard Cancer Center, and Director of the Bioengineering & Nanomedicine Program of Mass General Hospital (<https://projects.iq.harvard.edu/bioimaging>). Dr. Choi received a Ph.D. degree in Nanomedicine from Japan Advanced Science and Technology in 2004. After postdoc training in the field of Gene and Drug Delivery, he extended his research into Molecular Imaging at Harvard. Since 2008, his laboratory has focused on developing targeted contrast agents for tissue-specific imaging, which can be used to diagnose and treat human cancer by specifically visualizing the target tissue via “Structure-Inherent Targeting” while avoiding nonspecific uptake in normal background tissues.

B. Current Positions:

- Associate Professor of Radiology, Harvard Medical School
- Director, Bioimaging & Nanomedicine Program, GCMI, Department of Radiology, MGH
- Faculty, Dana Farber-Harvard Cancer Center (DF-HCC)
- Faculty, Harvard-MIT Division of Health Sciences and Technology (HST)
- Faculty, Cancer Research Institute at Beth Israel Deaconess Medical Center

C. Honors and Awards

- 2021 Distinguished Investigator Award, Academy for Radiology & Biomedical Imaging Research, Washington, DC
- 2018 Finalist, Johnson & Johnson Innovation QuickFire Challenge, New York, NY
- 2016 Boston Biomedical Innovation Center Pilot Award (2016)/Drive Award (2018), Boston, MA
- 2015 CAO Pilot Grant Award for Faculty Development, BIDMC, Boston, MA
- 2013 CFTCC Innovation Award, Center for Future Technologies in Cancer Care, NIH, Bethesda, MD
- 2010 Dana Foundation Faculty Development Award, Dana Foundation, NY
- 2009 Top 5 Young Investigator Award, World Molecular Imaging Congress, Montreal, Canada
- 2007 Charles A. King Trust Research Fellowship, The Medical Foundation, Boston, MA
- 2006 Young Scientist Award, Inoue Foundation for Science, Tokyo, Japan
- 2004 Best Ph.D. Degree Award of the Year, JAIST, Japan (summa cum laude)

D. Representative Publications (selected from over **175 publications**)

1. Renal clearance of quantum dots. **Nat Biotechnol.** 2007;25(10):1165-70.
2. Design considerations for tumour-targeted nanoparticles. **Nat Nanotechnol.** 2010;5(1):42-7.
3. Rapid translocation of nanoparticles from the lung airspaces to the body. **Nat Biotechnol.** 2010;28(12):1300-3.
4. Targeted zwitterionic near-infrared fluorophores for improved optical imaging. **Nat Biotechnol.** 2013;31(2):148-53.
5. Nanoparticle assembly: building blocks for tumour delivery. **Nat Nanotechnol.** 2014; 9(2): 93-4.
6. Structure-inherent targeting of near-infrared fluorophores for parathyroid and thyroid gland imaging. **Nat Med.** 2015;21:192-7.
7. Renal clearable nanochelators for iron overload therapy. **Nat Commun.** 2019;10(1):5134.
8. Multispectral image-guided surgery in patients. **Nat Biomed Eng.** 2020;4:245-6.