

HYUNGSOON IM, PhD

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EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Korea Advanced Institute of Science and Technology, South Korea	B.S.	02/05	Electrical Engineering
Korea Advanced Institute of Science and Technology, South Korea	M.S.	02/07	Electrical Engineering
University of Minnesota, Minneapolis, MN	Ph.D.	08/11	Electrical Engineering
Massachusetts General Hospital, Harvard Medical School, Boston, MA	Postdoctoral	09/15	Systems Biology

ACADEMIC APPOINTMENTS

06/2023 –	Associate Professor Department of Radiology, Harvard Medical School
11/2022 –	Associated Member Cancer Risk, Prevention, and Early Detection, Dana-Farber/Harvard Cancer Center
08/2019 –	Research Education Component Affiliate Massachusetts Alzheimer's Disease Research Center, Massachusetts General Hospital
09/2017 –	Principal Investigator Center for Systems Biology, Massachusetts General Hospital
12/2016 – 05/2023	Assistant Professor Department of Radiology, Harvard Medical School
10/2015 –	Assistant in Bioengineering Department of Radiology, Massachusetts General Hospital
10/2015 – 12/2016	Instructor Department of Radiology, Harvard Medical School

SELECTED HONORS AND AWARDS

2023	Distinguished Investigator Award, Academy for Radiology & Biomedical Imaging Research
2021	Best Presentation Award, 2021 UKC Conference
2020	Minister's Commencement, Minister of Science and ICT, Republic of Korea
2020-2023	Young Investigator Award, Human Frontiers Science Program (HFSP)
2018	Award of Excellence (1st Place), MGH Radiology Research Celebration
2017	Poster Award (1st place), 2017 UKC Conference
2015-2020	NIH Pathway to Independence Award (K99/R00)
2015	International Society for Extracellular Vesicles (ISEV) Scholarship
2013-2015	Ruth L. Kirschstein National Research Service Award (NRSA T32)
2011	MRS Graduate Student Award, Materials Research Society (MRS)
2010	Thesis Research Grant, University of Minnesota

2007-2011 3M Science and Technology Fellowship
 2007 Gold Award, 13th Samsung Human-Tech Thesis Award
 2007 The College of Biological Science Award, 6th Life Science Alley Conference

SELECTED PUBLICATIONS (> 90 journal publication, h-index = 42, citations > 13,000)

1. Leming M, Kim K, Bruffaerts R, **Im H**, Strategies for mitigating data heterogeneities in AI-based neuro-disease detection. *Neuron*. 2025;113(8):1129-1132
2. Leming M, **Im H**, Differential dementia detection from multimodal brain images in a real-world dataset. *Alzheimers Dement*. 2025;21:e70362
3. Kim JJ, Hong JS, Kim H, Choi M, Winter U, Lee H, **Im H**, CRISPR/Cas13a-assisted amplification-free miRNA biosensor via dark-field imaging and magnetic gold nanoparticles. *Sens Diagn*. 2024;3:1310-1318.
4. Hong JS, Son T, Castro CM, **Im H**, CRISPR/Cas13a-Based MicroRNA Detection in Tumor-Derived Extracellular Vesicles. *Advanced Science*. 2023;e2301766
5. Chin LK, Yang JY, Chousterman B, Jung S, Kim DG, Kim DH, Lee S, Castor CM, Weissleder R, Park SG, **Im H**, Dual-enhanced plasmonic biosensing for point-of-care sepsis detection. *ACS Nano*. 2023;17:3610-3619.
6. Jeong MH, Son T, Tae YK, Park CH, Lee HS, Chung MJ, Park JY, Castro CM, Weissleder R, Jo JH, Bang S, **Im H**, Plasmon-enhanced single extracellular vesicle analysis for cholangiocarcinoma diagnosis. *Advanced Science*. 2023;10:e2205148.
7. Leming MJ, Bron EE, Bruffaerts R, Ou Y, Iglesias JE, Gollub RL, **Im H**, Challenges of implementing computer-aided diagnostic models for neuroimages in a clinical setting. *npj Digital Medicine*, 2023;6:129.
8. Peterson HM, Chin LK, Iwamoto Y, Oh J, Carlson JCT, Lee H, **Im H**, Weissleder R, Integrated Analytical System for Clinical Single-Cell Analysis. *Advanced Science*, 2022;e2200415.
9. Leming M, Das S, **Im H**, Construction of a confounder-free clinical MRI dataset in the Mass General Brigham system for classification of Alzheimer's disease. *Artificial Intelligence Medicine*. 2022;129:102309.
10. Kim K, Son T, Hong JS, Kwak TJ, Jeong MH, Weissleder R, **Im H**, Physisorption of Affinity Ligands Facilitates Extracellular Vesicle Detection with Low Non-Specific Binding to Plasmonic Gold Substrates. *ACS Applied Materials & Interfaces*. 2022; 205:114094.
11. Chin LK, Son T, Hong JS, Liu AQ, Skog J, Castro CM, Weissleder R, Lee H, **Im H**, Plasmonic Sensors for Extracellular Vesicle Analysis: From Scientific Development to Translational Research. *ACS Nano*, 2020;14:14528.
12. Min J, Chin LK, Oh J, Landeros C, Vinegoni C, Lee J, Lee SJ, Park JY, Liu AQ, Castro CM, Lee H[#], **Im H[#]**, Weissleder R[#], CytoPAN—Portable cellular analyses for rapid point-of-care cancer diagnosis, *Sci Transl Med*. 2020;12:eaaz9746 (#Co-corresponding authors).
13. **Im H**, Pathania D, McFarland PJ, Sohani AR, Degani I, Allen M, Coble M, Kilcoyne A, Hong S, Rohrer L, Abramson JS, Dryden-Peterson S, Fexon L, Pivovarov M, Chabner B, Lee H, Castro CM, Weissleder R, Design and clinical validation of a point-of-care device for the diagnosis of lymphoma via contrast-enhanced microholography and machine learning, *Nature Biomedical Engineering* 2018;2:666-674.
14. Yang KS*, **Im H***, Hong S, Pergolini I, Del Castillo AF, Wang R, Clardy S, Huang CH, Pille C, Ferrone S, Yang R, Castro CM, Lee H, Del Castillo CF, Weissleder R, Multiparametric plasma EV profiling facilitates diagnosis of pancreatic malignancy. *Science Translational Medicine* 2017;9:eaal3226. (*Co-first authors)
15. **Im H**, Shao H, Park Y, Peterson VM, Castro CM, Weissleder R, Lee H. Label-free detection and molecular profiling of exosomes with a nano-plasmonic sensor. *Nature Biotechnology* 2014;32:490-495.