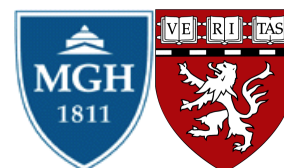


Hakho Lee, PhD

Hostetter MGH Research Scholar
Associate Professor in Radiology, Harvard Medical School
Director, Biomedical Engineering Program
Massachusetts General Hospital
185 Cambridge St. Boston, MA 02114 | hlee@mg.harvard.edu



Research Interests

- Developing new diagnostic platforms
 - Synthesis and characterization of nanoparticles
 - Magnetic, electric and optical biosensors
 - High throughput microfluidic systems
- Clinical applications
 - Cancer biomarkers (tumor cells, extracellular vesicles)
 - Infection diagnosis

Education

09/1998 – 06/2005 PhD Physics, Harvard University, Cambridge, Massachusetts
03/1992 – 02/1998 BS Physics, Seoul National University, Republic of Korea

Professional Experience

03/2017 Hostetter MGH Research Scholar
06/2015 – present Associate Professor in Radiology
 Harvard Medical School
10/2010 – present Director in Biomedical Engineering Program,
 Center for Systems Biology, Massachusetts General Hospital
10/2010 – 05/2015 Assistant Professor in Radiology
 Harvard Medical School

Recent Honors

2014 Milton Fund, Harvard University
2015 Final list, Blavatnik National Awards for Young Scientists, The New York Academy of Sciences
2017 Hostetter MGH Research Scholar
2019 Innovation Discovery Award, Partners Healthcare Inc.

Other Experience And Professional Memberships

1999- Member, American Physical Society
2004- Member, Material Research Society
2005- Member, The Institute of Electrical and Electronics Engineers
2009- Member, Biomedical Engineering Society
2011-2013 Member, NCI Alliance Imaging Working Group
2019- External Program Consultant NIH NCATS Extracellular RNA Communication Consortium

Selected Publications (Over 120 Publications)

1. Shao, H., Im, H., Castro, C. M., Breakefield, X., Weissleder, R. & Lee, H. New Technologies for Analysis of Extracellular Vesicles. *Chem Rev* **118**, 1917-1950 (2018).

2. Min, J., Im, H., Allen, M., McFarland, P. J., Degani, I., Yu, H., Normandin, E., Pathania, D., Patel, J. M., Castro, C. M., Weissleder, R. & Lee, H. Computational Optics Enables Breast Cancer Profiling in Point-of-Care Settings. *ACS Nano* **12**, 9081-9090 (2018).
3. Min, J., Nothing, M., Coble, B., Zheng, H., Park, J., Im, H., Weber, G. F., Castro, C. M., Swirski, F. K., Weissleder, R. & Lee, H. Integrated Biosensor for Rapid and Point-of-Care Sepsis Diagnosis. *ACS Nano* **12**, 3378-3384 (2018).
4. Huber, S., Min, C., Staat, C., Oh, J., Castro, C. M., Haase, A., Weissleder, R., Gleich, B. & Lee, H. Multichannel digital heteronuclear magnetic resonance biosensor. *Biosens Bioelectron* **126**, 240-248 (2018).
5. Lee, K., Fraser, K., Ghaddar, B., Yang, K., Kim, E., Balaj, L., Chiocca, E. A., Breakefield, X. O., Lee, H. & Weissleder, R. Multiplexed Profiling of Single Extracellular Vesicles. *ACS Nano* **12**, 494-503 (2018).
6. Bae, S. H., Jo, A., Park, J. H., Lim, C. W., Choi, Y., Oh, J., Park, J. M., Kong, T., Weissleder, R., Lee, H. & Moon, J. Bioassay for monitoring the anti-aging effect of cord blood treatment. *Theranostics* **9**, 1-10 (2019).
7. Lee, H. & Castro, C. M. Thermophoretically enriched detection. *Nat Biomed Eng* **3**, 163-164 (2019).