

# Stanford

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## Jihye Baek

Postdoctoral Scholar, Radiology

### Bio

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#### HONORS AND AWARDS

- School of Medicine Dean's Postdoctoral Fellowship, Stanford University (2024 - 2025)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Rochester , Electrical and Computer Engineering (2023)

#### STANFORD ADVISORS

- Jeremy Dahl, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Enhancing Ultrasound Molecular Imaging: RPCA-Based Filtering to Differentiate Tumor-Bound and Free Microbubbles**  
Hashemi, H. S., Hyun, D., Baek, J., Natarajan, A., Tabesh, F., Paulmurugan, R., Dahl, J. J., IEEE  
IEEE.2024
- **A multi-parametric model for progression of metabolic dysfunction-associated steatohepatitis (MASH) in humans**  
Baek, J., Sanabria, S., Oyarzabal, I., Echevarria-Uraga, J. J., Quesada, C., Dahl, J., Parker, K. J., IEEE  
IEEE.2024
- **Differentiable Beamforming for Distributed Attenuation Estimation and Spatial Gain Compensation (SGC)**  
Frey, B. N., Hyun, D., Simson, W., Brevett, T., Zhuang, L., Baek, J., Sanabria, S. J., Dahl, J. J., IEEE  
IEEE.2024
- **Frequency estimator to improve H-scan tissue characterization**  
Baek, J., Brevett, T., Hyun, D., El Kaffas, A., Parker, K. J., Dahl, J., IEEE  
IEEE.2024
- **Nondestructive ultrasound molecular imaging based on a neural network approach utilizing post-processed ultrasound images**  
Baek, J., Hyun, D., Nataraj, A., Tabesh, F., Paulmurugan, R., Dahl, J. J., IEEE  
IEEE.2024
- **Improving breast cancer diagnosis by incorporating raw ultrasound parameters into machine learning** *MACHINE LEARNING-SCIENCE AND TECHNOLOGY*  
Baek, J., O'Connell, A. M., Parker, K. J.  
2022; 3 (4): 045013