

Stanford



Brian Lee

Postdoctoral Research Fellow, Radiology

Bio

HONORS AND AWARDS

- Moses and Sylvia Greenfield Paper Award, AAPM (Apr 2018)
- NIH F-31 Ruth L. Kirschstein Predoctoral Individual National Research Service, National Institute of Health (NIH) - NIBIB (Jan 2016 - Dec 2017)
- National Scholarship for Science and Engineering, Korea Student Aid Foundation (Mar 2006 - Jan 2010)
- Federal Work-Study Assistantship Recipient, School of Engineering, Stanford (Mar 2011 - Jun 2011)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , Mechanical Engineering & Radiology (2019)
- Master of Science, Stanford University , Mechanical Engineering (2012)
- Bachelor of Science, Korea Advanced Institute of Science and Technology (KAIST) , Mechanical Engineering (2010)

Research & Scholarship

LAB AFFILIATIONS

- Sanjiv Gambhir, Multimodality Molecular Imaging Lab (MMIL) (4/1/2019)
- Craig Levin, Molecular Imaging Instrumentation Laboratory (2/18/2013 - - 3/29/2019)

Publications

PUBLICATIONS

- **Performance evaluation of RF coils integrated with an RF-penetrable PET insert for simultaneous PET/MRI** *MAGNETIC RESONANCE IN MEDICINE*
Lee, B. J., Watkins, R. D., Lee, K., Chang, C., Levin, C. S.
2019; 81 (2): 1434–46
- **Performance evaluation of RF coils integrated with an RF-penetrable PET insert for simultaneous PET/MRI.** *Magnetic resonance in medicine*
Lee, B. J., Watkins, R. D., Lee, K. S., Chang, C., Levin, C. S.
2018
- **MR Performance in the Presence of a Radio Frequency-Penetrable Positron Emission Tomography (PET) Insert for Simultaneous PET/MRI** *IEEE TRANSACTIONS ON MEDICAL IMAGING*
Lee, B. J., Grant, A. M., Chang, C., Watkins, R. D., Glover, G. H., Levin, C. S.
2018; 37 (9): 2060–69
- **Performance Study of a Radio-Frequency Field-Penetrable PET Insert for Simultaneous PET/MRI** *IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES*
Chang, C., Lee, B. J., Grant, A. M., Groll, A. N., Levin, C. S.

2018; 2 (5): 422–31

- **Performance study of a radio-frequency field-penetrable PET insert for simultaneous PET/MRI.** *IEEE transactions on radiation and plasma medical sciences*
Chang, C. M., Lee, B. J., Grant, A. M., Groll, A. N., Levin, C. S.
2018; 2 (5): 422–31
- **Low eddy current RF shielding enclosure designs for 3T MR applications.** *Magnetic resonance in medicine*
Lee, B. J., Watkins, R. D., Chang, C., Levin, C. S.
2017
- **Simultaneous PET/MR imaging with a radio frequency-penetrable PET insert.** *Medical physics*
Grant, A. M., Lee, B. J., Chang, C., Levin, C. S.
2017; 44 (1): 112-120
- **Successful demonstration of simultaneous PET/MR Imaging with a RF-penetrable PET insert.** *EJNMMI physics*
Lee, B., Grant, A., Chang, C., Glover, G., Levin, C.
2015; 2: A17-?
- **Technical Note: Characterization of custom 3D printed multimodality imaging phantoms.** *Medical physics*
Bieniosek, M. F., Lee, B. J., Levin, C. S.
2015; 42 (10): 5913-?
- **Performance characterization of compressed sensing positron emission tomography detectors and data acquisition system.** *Physics in medicine and biology*
Chang, C., Grant, A. M., Lee, B. J., Kim, E., Hong, K., Levin, C. S.
2015; 60 (16): 6407-6421
- **Prototype positron emission tomography insert with electro-optical signal transmission for simultaneous operation with MRI** *PHYSICS IN MEDICINE AND BIOLOGY*
Olcott, P., Kim, E., Hong, K., Lee, B. J., Grant, A. M., Chang, C., Glover, G., Levin, C. S.
2015; 60 (9): 3459-3478
- **Mode-Matching of Wineglass Mode Disk Resonator Gyroscope in (100) Single Crystal Silicon** *JOURNAL OF MICROELECTROMECHANICAL SYSTEMS*
Ahn, C. H., Ng, E. J., Hong, V. A., Yang, Y., Lee, B. J., Flader, I., Kenny, T. W.
2015; 24 (2): 343-350
- **RF-Penetrable PET insert for simultaneous PET/MR imaging.** *EJNMMI physics*
Lee, B. J., Grant, A. M., Chang, C., Levin, C. S.
2014; 1: A5-?
- **RESONANT PRESSURE SENSOR WITH ON-CHIP TEMPERATURE AND STRAIN SENSORS FOR ERROR CORRECTION** *26th IEEE International Conference on Micro Electro Mechanical Systems (MEMS)*
Chiang, C., Graham, A. B., Lee, B. J., Ahn, C. H., Ng, E. J., O'Brien, G. J., Kenny, T. W.
IEEE.2013: 45–48
- **Characterization of PET Data Acquisition System with Compressed Sensing Detectors** *60th IEEE Nuclear Science Symposium (NSS) / Medical Imaging Conference (MIC) / 20th International Workshop on Room-Temperature Semiconductor X-ray and Gamma-ray Detectors*
Chang, C., Olcott, P. D., Hong, K. J., Grant, A. M., Lee, B. J., Kim, E., Levin, C. S.
IEEE.2013
- **Studies of Electromagnetic Interference of PET Detector Insert for Simultaneous PET/MRI** *60th IEEE Nuclear Science Symposium (NSS) / Medical Imaging Conference (MIC) / 20th International Workshop on Room-Temperature Semiconductor X-ray and Gamma-ray Detectors*
Lee, B. J., Olcott, P. D., Hong, K. J., Grant, A. M., Chang, C., Levin, C. S.
IEEE.2013
- **3D Printing for Cost-Effective, Customized, Reusable Multi-Modality Imaging Phantoms** *60th IEEE Nuclear Science Symposium (NSS) / Medical Imaging Conference (MIC) / 20th International Workshop on Room-Temperature Semiconductor X-ray and Gamma-ray Detectors*
Bieniosek, M. F., Lee, B. J., Levin, C. S.
IEEE.2013