Benjamin Lopez

Curriculum Vitae

1155 Pressler St. Unit 1352
Houston, TX 77030
713-745-3647
bplopez@mdanderson.org

Education and Research Experience

Present - 2015 | **Ph.D. Candidate in Medical Physics**. *MD Anderson Cancer Center UTHealth GSBS*. Houston
Thesis: Quantification of ^{99m}Tc-sestamibi uptake in Molecular Breast Imaging
Mentor: S. Cheenu Kappadath PhD

2015 - 2011 | **B.S. Bioengineering.** *Rice University*. Houston
Research Assistant. *MDACC, Dept. Imaging Physics*. Mentor: O Mawlawi PhD. 2014-2015.
Design Capstone. *Rice U, Dept. Engineering*. Industry Collaborator: Procyrion Inc. 2014-2015.
Research Assistant. *TWU, Dept. Physical Therapy*. Mentors: S-H Chang PT PhD and S-C Tseng PT PhD. 2014.

Scientific Publications

1. **Lopez BP**, Mahvash A, Lam MGEH, Kappadath SC. Calculation of lung mean dose and quantification of error for ^{90}Y-microsphere radioembolization using ^{99m}Tc-MAA SPECT/CT and diagnostic chest CT. *Med Phys* (2019) 46 (9): 3929-3940.
2. Wendt III RE, Hua AA, Meier JG, **Lopez BP**, Fahrenholtz SJ, Mawlawi OR. A measurement of the attenuation radiation from F-18 by a PET/MR scanner. *J Appl Clin Med Phys* (2018) 19(6): 336-340.

Conference Posters and Presentations

SIR 2019 | Kappadath SC, **Lopez BP**, Mahvash A. A Novel Lung Dose Calculation Methodology for Y90-Radioembolization using diagnostic chest-CT and Tc99m-MAA SPECT/CT. *JVIR* (2019) 30(3):S144–S145.

AAPM 2019 | Beijst C, **Lopez BP**, de Jong HWAM, Kappadath SC. Y-90 PET/CT with Long Axial Field-Of-View Digital Detectors. *Med Phys* (2019) 46(6):e194. Oral Presentation.

EANM 2018 | Kappadath SC, **Lopez BP**, Mahvash A. A novel lung dose calculation methodology with precision analysis for 90Y-radioembolization using diagnostic chest-CT and 99mTc-MAA SPECT/CT. *Eur J Nucl Med Mol Imaging* (2018) 45 (Suppl 1): S196. Oral Presentation.

AAPM 2018 | John R. Cameron Young Investigator Finalist.
Lopez BP, Mahvash A, Kappadath SC. Novel SPECT/CT-based lung dose calculation for treatment planning in 90Y-microsphere radioembolization therapy. *Med Phys* (2018) 45(6): e390. Oral Presentation.

SNMMI 2018 | 1st Place Instrumentation and Data Analysis Track.
Lopez BP, Balagopal A, Mahvash A, Kappadath SC. Evaluation of errors in common lung mass estimation methods used for lung mean dose (LMD) calculation in 90Y-microsphere therapy planning. *J Nucl Med* (2018) 59 (Suppl 1): 1706. Poster Presentation.
Lopez BP, Kappadath SC. Improving the sensitivity of molecular breast imaging using a novel detector response function. *J Nucl Med* (2018) 59: 581. Oral Presentation.

EANM 2017 | Kappadath SC, **Lopez BP**, Adrada B, Hess K, Rauch G. Prediction of breast tumor response to neoadjuvant chemotherapy through quantitative 99mTc sestamibi Molecular Breast Imaging (MBI). *Eur J Nucl Med Mol Imaging* (2017) 44 (Suppl 2): 5660. Oral Presentation.

AAPM 2017 | **Lopez BP**, Rauch G, Adrada B, Bache S, Hess K, Kappadath SC. Quantification of in vivo tumor uptake in clinical molecular breast imaging (MBI) examinations. *Med Phys* (2017) 44(6): 3263. Oral Presentation.

EANM 2016 | Bache S, **Lopez BP**, Rauch G, Adrada B, Jessop A, Kappadath SC. Quantification of tumor uptake with molecular breast imaging. *Eur J Nucl Med Mol Imaging* (2016) 43 (Suppl 1): S149. Oral Presentation.

AAPM 2016	Meier J, **Lopez BP**, Mawlawi O. Impact of 4D PET/CT on PERCIST Classification of Lung and Liver Metastases in NSCLC and Colorectal Cancer. *Med Phys* (2016) 43(6): 3460. Poster Presentation.
SNMMI 2015	Lorsakul A, Li Q, Mawlawi O, **Lopez BP**, Laine A, El Fakhri G. The assessment of lesion detection on respiratory-gated clinical PET/CT using 4D numerical observer. *J Nucl Med* (2015) 56 (Suppl 3): 371. Oral Presentation.
NEURO-MODEC 2015	Chang SH, Choi J, Tseng SC. Effects of tDCS on stepping reaction in healthy adults and individuals with chronic stroke. *Brain Stimulation* (2017) 10: e4-5.