

SSBH 2021 Curriculum Vitae

Name	Seungyong Lee
Organization	Midwestern University - Glendale
Position & Title	Assistant Professor

Educational background & Professional experience

2021 - Present	Assistant Professor in Physiology at the Midwestern University, Glendale, AZ
2020 - 2021	Dean's Postdoctoral to Faculty Transition Fellow in Physiology and Pharmacology at the University of Toledo College of Medicine and Life Sciences, Toledo, OH
2018 - 2020	Postdoctoral Research Fellow in Pathology at Johns Hopkins University School of Medicine, Baltimore, MD
2016 - 2018	The University of Texas at Arlington, Arlington, Texas, Ph.D.
2013 - 2016	University of Delaware, Newark, Delaware, Ph.D. Candidate
2010 - 2013	University of Kentucky, Lexington, Kentucky, M.S.

Research Interests

- Exercise and neuro-vascular interactions targeting skeletal health; understanding and manipulating the complex physiological interactions that occur during exercise implants for bone tissue regeneration and bone disease application
- Influence of sensory nerves on bone health and diseases
- Influence of blood vessels on bone health and diseases
- Effects of Nutraceutical supplementation on bone health and diseases
- Effects of Aging on bone health and diseases

Publications

LEE S*, Hwang C*, Marini S, Tower R, Pagani C, Stepien DM, Qin Q, Negri S, Sorkin M, Kubiak C, Visser ND, Meyers CA, Wang Y, Rasheed HA, Xu J, Miller S, Huber A, Minichiello L, Cederna PS, Kemp SWP, Clemens TL, James AW, and Levi B. NGF-TrkA signaling dictates neural ingrowth and aberrant osteochondral differentiation after injury. (*Co-first author). *Nature Communication*, **2021**. (Accepted).

LEE S, and Prisby RD. Short-Term Intermittent PTH 1-34 Administration Increases Angiogenesis and Matrix Metalloproteinase-9 in Femora of Mature and Middle-Aged C57BL/6 Mice. *Experimental Physiology*, **2020**, 105(7): 1159-1171.

Meyers CA*, **LEE S***, Sono T*, Negri S, Xu J, Wang Y, Li Z, Miller S, Chang L, Gao Y, Minichiello L, Clemens TL, and James AW. A neurotrophic mechanism directs sensory nerve transit in cranial bone. (*Co-first author). *Cell Reports*, **2020**, 31(8): 107696.

Zhu L*, Meyers CA*, Chang L*, **LEE S**, Zhi L, Tomlinson R, Hoke A, Clemens TL, and James AW. Fracture repair requires TrkA signaling by skeletal sensory nerves. *Journal of Clinical Investigation*, **2019**, 129(12): 5137-5150.

LEE S and Prisby RD. Short-Term Intermittent PTH 1-34 Administration and Bone Marrow Blood Vessel Ossification in Mature and Middle-Aged C57BL/6 Mice. *Bone Reports*, **2019**, 10: 100193.

LEE S, Bice A, Hood B, Ruiz J, Kim J, and Prisby RD. Intermittent PTH 1-34 Administration Improves the Marrow Microenvironment and Endothelium-Dependent Vasodilation in Bone Arteries of Aged Rats. *J Appl Physiol*. **2018**, 124: 1426-1437.