Curriculum Vitae

Young Charles Jang, PhD

Associate Professor
Emory University School of Medicine, Department of Orthopaedics

Educational Background & Professional Experience

2022–Present	Emory School of Medicine, Associate Professor
2021–2022	Georgia Institute of Technology, Associate Professor
2014–2021	Georgia Institute of Technology, Assistant Professor
2012–2014	Harvard University, Research Faculty
2010–2012	Harvard University, Postdoctoral Fellow
2009–2010	Barshop Institute, Postdoctoral Fellow
2004–2009	University of Texas, Ph.D.
2001–2004	University of Florida, M.S.

Research Interests

Jang lab uses multi-disciplinary approaches to study muscle stem cell biology and develops bioengineering tools for regenerative medicine applications. Jang lab studies both basic aspects of musculoskeletal biology, especially systemic/metabolic regulations of stem cell and stem cell niche, as well as more translational aspects of muscle stem cell and mesenchymal stem cell for use in therapeutic approaches for musculoskeletal aging, neuromuscular diseases, and traumatic injuries.

Publications

1. Larouche J*, Mohiuddin M*, Choi JJ*, Ulintz P, Fraczek P, Sabin K, Pitchiaya S, Kurpiers S, Castor-Macias J, Liu W, Hastings R, Brown L, Markworth J, De Silva K, Levi B, Merajver, Valdez G, Chakkalakal JV, Jang Y*, Brooks SV*, Aguilar CA*. Murine muscle stem cell response to perturbations of the neuromuscular junction are attenuated with aging, eLife 2021;10:e66749 DOI: 10.7554/eLife.66749.
2. Lee Y, Choi JJ, Ahn SI, Lee, NH, Shin E, Wood, L, Park, KD, Kim YT, and Jang Y Engineered heterochronic parabiosis on 3D microphysiological system for identification of rejuvenating skeletal muscle factors, Advanced Functional Materials 2020, August 26, https://doi.org/10.1002/adfm.202002924.
3. Han WM, Anderson S, Mohiuddin M, Nakhai S, Barros D, Shin E, Garcia AJ, and Jang Y Synthetic matrix enhances transplanted satellite cell engraftment in dystrophic and aged skeletal muscle with comorbid trauma, Science Advances, Aug 15 Vol. 4, no. 8, eaar4008.
4. Sinha M*, Jang Y*, Oh J, Khong D, Shadrach J, Miller C, Lee R, and Wagers AJ. Restoration of systemic GDF/BMP11 levels reverses age-associated dysfunction in skeletal muscle, *equal contribution, Science 2014 May 5 Vol. 344 no. 6184 pp. 649-652.
5. Cerletti M, Jang Y, Finley L, Haigis M, and Wagers AJ. Short-term calorie restriction (CR) enhances skeletal muscle stem cell function, Cell Stem Cell 2012 May 4;10(5):515-9.