



Wei Yao, Ph.D.

Research/Academic Interests

Dr. Yao's key research interests include:

1. Discovery of bone-targeted, regenerative therapy for musculoskeletal disorders.
2. Define the role of progesterone receptor in regulating sex dimorphism of peak bone mass, osteoarthritis and inflammatory arthritis.
3. Chronic glucocorticoid or other bone active agents on bone quality and quantity.

Title Professor

Specialty Metabolic Bone Disease, Musculoskeletal Disorders

Division General Medicine

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Languages Chinese (Mandarin), English

Education M.D., Xianya Medical University, ChangSha, China 1992
Bone Biology, University of Utah, Salt Lake City UT 1997-2000
Ph.D., Internal Medicine, XianYa Medical University, ChangSha, China 1996

Internships Internal Medicine, XianYa Medical University, ChangSha, China

Residency Internal Medicine, Beihai, Baihai, China

Professional Memberships American Society for Bone and Mineral Research
International Chinese Musculoskeletal Research Society
Orthopaedic Research Society

Honors and Awards Deans Team Award, Excellency in Research, UC Davis, School of Medicine, 2013
UC Davis Academic Federal Excellency in Research Award, 2012
Mentor Award, Internal Medicine, UC Davis Medical Center, 2011
Alice Jee Travel Award to Sun Valley Hard Tissue Workshop, 1997, 1998
American Society of Bone and Mineral Research Young Investigator Award, 2003
Betterment of mankind award, The Pauchon Research Foundation, C2016

Select Recent Publications Guan M, Yao W (co-first author, corresponding author), Liu R, Lam KS, Nolte J, Jia J, Panganiban B, Meng L, Zhou P, Shahnazari M, Ritchie RO, and Lane NE. (2012) Directing mesenchymal stem cells to bone to augment bone formation and increase bone mass. Nature medicine 18, 456-462.



Wei Yao, Ph.D.

PMCID: PMC3755884

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Yao W (corresponding author), Lay YE, Kot A, Liu RW, Xhang HL, Chen HY, Lam KS, and Lane NE. (2016) Improved mobilization of exogenous mesenchymal stem cells to the bone for fracture healing and sex difference. *Stem cells* 34:2587-2600. PMCID: PMC5690802

Zhang HL, Kot A, Lay YE, Fierro F, Chen HY, Lane NE, and Yao W. (2017) Acceleration of fracture healing by overexpression of basic fibroblast growth factor in the mesenchymal stromal cells. *Stem Cells Trans Med* 6 (10):1880-1893. PMID: 28792122 DOI:10.1002/sctm.17-0039

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Zhong Z. A., Kot A., Zhang H.L., Lay Y.E., Chen H.Y., Lane N E, and Yao W*. (2017) Sex-dependent, osteoblast stage-specific effects of progesterone receptor on bone acquisition. *JBMR* 32 (9): 1841-1852. PMCID: PMC5611815

Kot A, Zhong, ZA, Zhang HL, Lay YE, Lane N E, and Yao W*. (2017) Sexual dimorphic regulations of progesterone receptor in bone stromal cells. *J Mol. Endo* 59(4):351-363. PMCID: PMC5633481

Yao W, Cheng Z, Busse C, Pham A, Nakamura MC, and Lane NE. (2008) Glucocorticoid excess in mice results in early activation of osteoclastogenesis and adipogenesis and prolonged suppression



Wei Yao, Ph.D.

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Yao W, Dai W, Jiang L, Lay EY, Zhong Z, Ritchie RO, Li X, Ke H, and Lane NE. (2016) Sclerostin-antibody treatment of glucocorticoid-induced osteoporosis maintained bone mass and strength. *27*, 283-294. PMID: PMC4958115

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