

ZHANG Zhenlin (M.D.)

Academic qualifications:

- 1994-1995: M. Med. Pediatrics, Kunming Medical College, Yunnan, China
1997-2000: M.D. Endocrinology, Beijing Union Medical College

Previous academic positions held:

- 1987-1996: Director, Central Hospital of Shipu District, Xiangshan County, Zhejiang, China
2000-2002: Postdoctoral Research Fellow, School of Medicine, Fudan University; Institute of Biochemistry and Cell Biology, Shanghai Academy of Life Sciences, Chinese Academy of Sciences, Shanghai, China

Present academic position:

- 2008-now Executive director, Physician-in-Charge, Department of Osteoporosis and Bone Diseases, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, Shanghai, China
2019-now Executive Director, Shanghai Clinical Research Center of Bone Diseases, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, Shanghai, China
2018-now Chairman, Osteoporosis and Bone Mineral Diseases Branch of Chinese Medical Association

Previous relevant research work:

Identify *SLCO2A1* as the causative gene of PHO for the first time, and elucidate the pathogenesis, making PHO become a treatable monogenic bone disease, and the discovery changed the classification criteria of osteosclerotic diseases, the famous database of human Mendelian genetic diseases (OMIM) named the "PHO" caused by mutations in the *SLCO2A1* gene as autosomal recessive genetic type 2 (OMIM 61441).

Identify *PFNI* as the causative gene of early-onset Paget's disease of bone with giant cell tumor for the first time.

Establish the largest sample size of the Chinese osteogenesis imperfecta (OI) family database so far reported in China and establish a genetic screening platform for monogenic bone diseases.

Lead ten multicenter phase III clinical trials of osteoporosis drugs in China.

Publication records:

Section A-Five most representative publications in the recent five years (*

Corresponding Author)

1. Xu Y, Zhang Z, Yue H, Li S, **Zhang Z***. Monoallelic mutations in SLCO2A1 cause autosomal dominant primary hypertrophic osteoarthropathy. *Journal of Bone and Mineral Research*. 2021 Aug;36(8):1459-1468. Epub 2021 May 5.
2. Wei Z, Li S, Tao X, Zhu G, Sun Z, Wei Z, Jiao Q, Zhang H, Chen L, Li B, **Zhang Z***, Yue H. Mutations in Profilin 1 Cause Early-Onset Paget's Disease of Bone with Giant Cell Tumors. *Journal of Bone and Mineral Research*. 2021 Jun;36(6):1088-1103.
3. Xu Y, Li L, Wang C, Yue H, Zhang H, Gu J, Hu W, Liu L, **Zhang Z***. Clinical and molecular characterization and discovery of novel genetic mutations of China patients with COL2A1-related dysplasia. *International Journal of Biological Sciences*. 2020; 16(5): 859-868.
4. Li S, He J, Fu W, Liu Y, Hu Y, **Zhang Z***. Clinical, Biochemical, and Genetic Features of 41 Han Chinese Families with Primary Hypertrophic Osteoarthropathy, and Their Therapeutic Response to Etoricoxib: Results from a Six-Month Prospective Clinical Intervention. *Journal of Bone and Mineral Research*. 2017; 32(8):1659-1666.
5. Xi L, Zhang H, **Zhang Z***. Clinical and genetic analysis in 185 Chinese probands of osteogenesis imperfecta. *The Journal of Bone and Mineral Metabolism*. 2020 Oct 17.

Section B - Five representative publications beyond the recent five-year period with the latest publication entered first

6. Li H, Liu P, Xu S, Li Y, Dekker JD, Li B, Fan Y, **Zhang Z**, Hong Y, Yang G, Tang T, Ren Y, Tucker HO, Yao Z, Guo X. FOXP1 controls mesenchymal stem cell commitment and senescence during skeletal aging. *The Journal of Clinical Investigation*. 2017 Apr 3;127(4):1241-1253.
7. Wang J, Yan D, Hou X, Bao Y, Hu C, **Zhang Z***, Jia W. Association of bone turnover markers with glucose metabolism in Chinese population. *Acta Pharmacologica Sinica*. 2017 Dec;38(12):1611-1617.
8. Gu J, Ke Y, Yue H, Liu Y, Zhang Z, Zhang H, Hu W, Wang C, He J, Hu Y, Li M, Fu W, **Zhang Z***. A novel VCP mutation as the cause of atypical IBMPFD in a Chinese family. *Bone*. 2013 Jan;52(1):9-16.
9. Wang C, Zhang Z, Zhang H, He J, Gu J, Hu W, Hu Y, Li M, Liu Y, Fu W, Yue H, Ke Y, **Zhang Z***. Susceptibility genes for osteoporotic fracture in postmenopausal Chinese women. *Journal of Bone and Mineral Research*. 2012 Dec;27(12):2582-91.
10. **Zhang Z**, Xia W, He J, Zhang Z, Ke Y, Yue H, Wang C, Zhang H, Gu J, Hu W,

Fu W, Hu Y, Li M, Liu Y. Exome sequencing identifies SLCO2A1 mutations as a cause of primary hypertrophic osteoarthropathy. *American Journal of Human Genetics*. 2012 Jan 13;90(1):125-32.

Award:

Zhang Z. Shanghai Outstanding Discipline Leader. Shanghai, China, Shanghai Science and Technology Committee, China, 2008/2011

Zhang Z. Zhang H, He J, Yue H, Wang C, et al. Genetic mechanism and clinical application of osteoporosis and monogenic bone disease. **First Prize of Shanghai Science and Technology Progress.** Shanghai Health Bureau, Shanghai, China, 2012

Zhang Z. Genetic mechanism and clinical application of osteoporosis and monogenic bone disease. **First Prize of Shanghai Science and Technology Progress.** Shanghai Health Bureau, Shanghai, China, 2012

Zhang Z. Outstanding Medical Academic Leader in Shanghai, Program for Outstanding Medical Academic Leader, China, 2012

Zhang Z. Special Allowances of the State Council. State Council of China, 2017

Zhang Z. Famous Doctors of the Nation. People's Daily News Agency, 2018