

简 历

➤ 个人信息

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➤ 教育:

1997.9-2002.7 博士. 中科院上海植物生理生态研究所, 分子遗传学
1993.9-1997.7 学士. 武汉大学, 遗传学

➤ 工作经历:

2008-现在 特聘教授 上海交通大学 Bio-X 研究院, 发育遗传学
2003.1-2008.01 博士后 美国国立卫生研究院访问学者, 发育遗传学

➤ 参与专业协会

2005-2018 美国骨骼及骨矿物质研究学会会员
2017- 中国骨质疏松与骨矿盐学会基础转化研究组理事
2017- 上海细胞生物学会理事
2017- 中华医学会运动医学分会常委

➤ 研究领域和方向

骨髓间充质干细胞分化和衰老调控;
骨与脂肪代谢

➤ 发表文章:

- 1) Pei Liu, Sixia Huang, Shifeng Ling, Fuhua Wang, Wei Zhang, Shuqin Xu, Rujiang Zhou, Lin He, Xuechun Xia, Zhengju Yao, Ying Fan, Niansong Wang, Congxia Hu, Xiaodong Zhao, Haley O. Tucker, Jiqu Wang*, Xizhi Guo*. Foxp1 controls brown/beige adipocyte differentiation and thermogenesis through regulating β 3-AR desensitization. **Nature Communications** (in press)
- 2) Shuqin Xu, Pei Liu, Yuanxin Chen, Yi Chen, Wei Zhang, Haixia Zhao, Yiwei Cao, Fuhua Wang, Nana Jiang, Shifeng Lin, Baojie Li, Zhenlin Zhang, Zhanying Wei, Ying Fan, Yunyun Jin, Lin He, Rujiang Zhou, Joseph D. Dekker, Haley O. Tucker, Simon E. Fisher, Zhengju Yao, Quansheng Liu*, Xuechun Xia*, Xizhi Guo* (2018). Foxp2 regulates anatomical features required for vocalization and bipedal behavior. **PNAS**. Aug 28; 115(35):8799-8804.
- 3) Hanjun Li, Pei Liu, Shuqin Xu, Yinghua Li, Joseph D. Dekker, Baojie Li, Zhenlin Zhang, Yang Hong, Gong Yang, Tingting Tang, Yongxin Ren, Haley O. Tucker, Zhengju Yao, Xizhi Guo*. Foxp1 controls mesenchymal stem cell commitment and senescence of during skeletal aging

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- 4) Jian Yu, Jingjing Cao, Hanjun Li, Pei Liu, Xuqin Xu, Rujiang Zhou, Zhengju Yao* and Xizhi Guo* (2016) Bone marrow fibrosis with fibrocytic and immunoregulatory responses induced by β -catenin activation in osteoprogenitors. **Bone**. Mar; 84:38-46.
 - 5) Jianzhi Zhao, Hanjun Li, Rujiang Zhou, Gang Ma, Joseph D. Dekker, Haley O. Tucker, Zhengju Yao, Xizhi Guo* (2015) Foxp1 Regulates the Proliferation of Hair Follicle Stem Cells in Response to Oxidative Stress during Hair Cycling. **Plos One**. Jul 14;10(7):e0131674.
 - 6) Jingjing Cao, Lingling Zhang, Yong Wan, Hanjun Li, Rujiang Zhou, Heyuan Ding, Yongzhong Liu, Zhengju Yao, and Xizhi Guo* (2015) Ablation of Wntless in endosteal niches impairs lymphopoiesis rather than HSC maintenance. **European Journal of Immunology** Sep;45(9):2650-60.
 - 7) Haixia Zhao, Wenrong Zhou, Zhengju Yao, Yong Wan, Jingjing Cao, Lingling Zhang, Jianzhi Zhao, Hanjun Li, Rujiang Zhou, Baojie Li, Gang Wei, Zhenlin Zhang, Catherine A. French, Joseph D. Dekker, Yingzi Yang, Simon E. Fisher, Haley O. Tucker, Xizhi Guo* (2015) Foxp1/2/4 regulate endochondral ossification as a suppresser complex. **Developmental Biology** 398:242-254.
 - 8) Lingling Zhang; Hanjun Li; Jian Yu; Jingjing Cao; Huihui Chen; Haixia Zhao; Jianzhi Zhao; Yiyun Yao; Lifang Wang; Rujiang Zhou; Zhengju Yao, Xizhi Guo* (2014) Ectodermal Wnt signaling regulates abdominal myogenesis during ventral body wall development. **Developmental Biology** 387: 64–72
 - 9) Bing Qi, Qian Cong, Ping Li, Gang Ma, Xizhi Guo, James Yeh, Min Xie, Michael D. Schneider, Huijuan Liu Baojie Li (2014) Ablation of Tak1 in osteoclast progenitor leads to defects in skeletal growth and bone remodeling in mice. **Scientific Report** 4: 7158
 - 10) Xuming Zhu, Yumei Wu, Sixia Huang, Yingwei Chen, Yixin Tao, Yushu Wang, Shigang He, Sanbing Shen, Ji Wu, **Xizhi Guo**, Baojie Li, Lin He, and Gang Ma* (2014) Overexpression of Wnt5a in mouse epidermis causes no psoriasis phenotype but an impairment of hair follicle anagen development. **Experimental Dermatology** 23(12): 926-928.
 - 11) Guan Yang, Jian Zhou, Yan Teng, Jing Xie, Jingting Lin, Xizhi Guo, Yuanrong Gao, Miao He, Xiao Yang,*and Songlin Wang* (2014) Mesenchymal TGF- β Signaling Orchestrates Dental Epithelial Stem Cell Homeostasis Through Wnt Signaling. **Stem Cells**. 32(11): 2939–2948
 - 12) Xuming Zhu, Sixia Huang, Lingling Zhang, Yumei Wu, Yingwei Chen, Yixin Tao, Yushu Wang, Shigang He, Sanbing Shen, Ji Wu, Baojie Li, Xizhi Guo*, Lin He*, Gang Ma* (2014) Constitutive Activation of Ectodermal β -Catenin Induces Ectopic Outgrowths at Various Positions in Mouse Embryo and Affects Abdominal Ventral Body Wall Closure. **Plos One** 9(3): e92092
 - 13) Shasha Zou, Tingting Chen, Yanan Wang, Ruhui Tian, Lingling Zhang, Pingping Song, Shi Yang, Yong Zhu, Xizhi Guo, Yiran Huang, Zheng Li, Lixin Kan*and Hongliang Hu* (2014) Mesenchymal stem cells overexpressing Ihh promote bone repair. **Journal of Orthopaedic Surgery and Research**, 9:102
 - 14) Wenrong Zhou, Huang Zhu, Jinazhi Zhao, Hanjun Li, Yong Wan, Jingjing Cao, Haixia Zhao, Jian Yu, Rujiang Zhou, Yiyun Yao, Lingling Zhang, Lifang Wang, Lin He, Gang Ma, Zhengju Yao,

- Xizhi Guo* (2013) Misexpression of Pknox2 in mouse limb bud mesenchyme perturbs zeugopod development and deltoid crest formation. **PLoS One**. 8(5):e64237
- 15) Yong Wan, Cheng Lu, Jingjing Cao, Rujiang Zhou, Yiyun Yao, Jian Yu, Lingling Zhang, Haixia Zhao, Hanjun Li, Jianzhi Zhao, Xuming Zhu, Lin He, Yongzhong Liu, Zhengju Yao, Xiao Yang and Xizhi Guo* (2013) Osteoblastic Wnts differentially regulate bone remodeling and the maintenance of bone marrow mesenchymal stem cells. **Bone**. 55(1):258-67
 - 16) Cheng Lu, Yong Wan, Jingjing Cao, Xuming Zhu, Jian Yu, Rujiang Zhou, Yiyun Yao, Lingling Zhang, Haixia Zhao, Hanjun Li, Jianzhi Zhao, Lin He, Gang Ma, Zhengju Yao, and Xizhi Guo* (2013) Wnts-mediated reciprocal regulation between cartilage and bone development during endochondral ossification. **Bone**. 53(2):566-74.
 - 17) Huang Zhu, Jianzhi Zhao, Wenrong Zhou, Hanjun Li, Rujiang Zhou, Lingling Zhang, Haixia Zhao, Jingjing Cao, Xuming Zhu, Hongliang Hu, Gang Ma, Lin He, Zhengju Yao, Libo Yao, Xizhi Guo* (2012) Ndr2 regulates vertebral specification in differentiating somites. **Developmental Biology**. 369(2):308-18.
 - 18) Xuming Zhu, Huang Zhu, Lingling Zhang, Sixia Huang, Jingjing Cao, Gang Ma, Guoying Feng, Lin He, Yingzi Yang, **Xizhi Guo*** (2012) Wls-mediated Wnts differentially regulate distal limb patterning and tissue morphogenesis. **Developmental Biology**. 365(2):328-38.
 - 19) Sixia Huang, Xuming Zhu, Yanfang Liu, Yixin Tao, Guoyin Feng, Lin He, Xizhi Guo*, Gang Ma (2012) Wls Is Expressed in the Epidermis and Regulates Embryonic Hair Follicle Induction in Mice. **PLoS One**. 7(9):e45904.
 - 20) Lin An, Xiwen Zhao, Jian Wu, Jianguo Jia, Yunzeng Zou, **Xizhi Guo**, Lin He, Hongxin Zhu (2012) Involvement of autophagy in cardiac remodeling in transgenic mice with cardiac specific over-expression of human programmed cell death 5. **PLoS One**. 7(1):e30097
 - 21) Jun Yang, Shengying Qin, Chengqing Yi, Gang Ma, Huang Zhu, Wenrong Zhou, Yuyu Xiong, Xuming Zhu, Yujiong Wang, Lin He, **Xizhi Guo*** (2011). MiR-140 is co-expressed with Wwp2-C transcript and activated by Sox9 to target Sp1 in maintaining the chondrocyte proliferation. **FEBS Letter** Oct 3;585(19):2992-7.
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 - 23) Lun Yang, Kejian Wang, Jian Chen, Anil G. Jegga, Heng Luo, Leming Shi, Chunling Wan, **Xizhi Guo**, Shengying Qin, Guang He, Guoyin Feng, Lin He (2011). Exploring off-targets and off-systems for adverse drug reactions via chemical-protein interactome--clozapine-induced agranulocytosis as a case study. **PLoS Comput Biol**. 2011 Mar; 7(3):e1002016.
 - 24) Yue Xiao, Lingling Zhang, Kuanjun He, Xiang Gao, Lun Yang, Lin He, Gang Ma, **Xizhi Guo*** (2011). Characterization of a novel missense mutation on murine Pax3 through ENU mutagenesis. **Journal of Genetics and Genomics**, 38 (2) 333-339.
 - 25) Zhengfeng Yang, Chenghai Li, Xiu Wang, Chunyan Zhai, Zhengfang Yi, Lei Wang, Bisheng Liu, Bing Du, Huihui Wu, **Xizhi Guo**, Mingyao Liu, Dali Li, Jian Luo (2010). Dauricine induces apoptosis, inhibits proliferation and invasion through inhibiting NF-kappaB signaling pathway in colon cancer cells. **J Cell Physiol**. Oct;225(1):266-75
 - 26) **Xizhi Guo**, Kingston Kunlun Mak, Makoto Taketo, Yingzi Yang (2009). The Wnt/beta-catenin

pathway interacts differentially with PTHrP signaling to control chondrocyte hypertrophy and final maturation. **PLoS One**. 26;4(6):e6067.

- 27) Chuwen Lin, Xuan Jiang, Zhongquan Dai, **Xizhi Guo**, Yinghui Li, Tujun Weng, Jun Wang, Guoyin Feng, Xiang Gao, Lin He (2009). Sclerostin Mediates Bone Response to Mechanical Unloading via Antagonizing Wnt/beta-Catenin Signaling. **J Bone Miner Res**. Oct;24(10):1651-61
- 28) Jian Zhou, Junwei Meng, Shenzhen Guo, Bo Gao, Gang Ma, Xuming Zhu, Jianxin Hu, Yue Xiao, Chuwen Lin, Hanyi Wang, Lushen Ding, Guoyin Feng, **Xizhi Guo**, Lin He (2007). IHH and FGF8 coregulate elongation of digit primordia. **Biochem Biophys Res Commun**. 363(3):513-8.
- 29) Xianzhong Feng, Zhao Zhong, Zaoxia Tian, Yonghai Luo, Zhigang Cai Z, Jun Yang, Zeng Wang, Lin Weng, Jianghua Chen, Liying Zheng, **Xizhi Guo**, Jianghong Luo, Sato S, Tabata S, Wei Ma, Cao X, Xiaohe Hu, Congrong Sun, Da Luo (2006). Control of petal shape and floral zygomorphy in *Lotus japonicus*. **Proc Natl Acad Sci U S A**. 103(13): 4970-5.
- 30) Timothy F. Day**, **Xizhi Guo****, Lisa Garrett-Beal and Yingzi Yang. (2005) Wnt/ β -Catenin Signaling in Mesenchymal Progenitors Controls Osteoblast and Chondrocyte Differentiation during Vertebrate Skeletogenesis. **Developmental Cell** 8 (5): 739-750 (** authors contribute equally to the paper)
- 31) **Xizhi Guo**, Timothy F. Day*, Xueyuan Jiang, Lisa Garrett-Beal, Lilia Topol and Yingzi Yang. (2004) Wnt/ β -catenin signaling is sufficient and necessary for synovial joint formation. **Gene & Development** 18:2404-2417
- 32) **Xizhi Guo**, Zhong Zhao, Jianghua Chen, Xiaohe Hu, Da Luo. (2005). A putative CENTRORADIALIS/TERMINAL FLOWER 1-like gene, *Ljcen1*, plays a role in phase transition in *Lotus japonicus*. *Journal of Plant Physiology*. 163(4): 436-44

➤ 承担的科研项目

- 1) 首席科学家：信号通路对骨骼发育及相关疾病影响的分子机理研究，科技部重大科学研究计划项目（2007CB947300，2007—2011），项目资助 2400 万，结题。
- 2) 项目负责人：miRNA 在骨关节炎病理发生过程中的作用，上海市科委浦江人才计划项目(08PJ1407200，2008-2010)，项目资助 18 万，结题。
- 3) 自然科学基金面上项目，31271553，《Ndr $g1/2/4$ 基因家族在调控脊椎骨结构形成过程中的作用》，2013-2016，80 万，结题，主持。
- 4) 国家重大科学研究计划子课题，2012CB966903，《Wnt 信号蛋白在骨髓微环境中的作用》，2012-2016，91 万，结题，技术骨干参与。
- 5) 自然科学基金面上项目，31171396，《Foxp1/2/4 蛋白家族在骨骼发育和疾病形成过程中的作用研究》，2012-2015，60 万，结题，主持。
- 6) 973 重大科学研究计划课题，2014CB942902，《脊柱形态建成及发育畸形的细胞与分子机制研究》，2014-2018，428 万，结题，主持。
- 7) 自然基金重大研究计划项目培育项目，91749103，Foxp1 的蛋白修饰对间充质干细胞衰老的影响；2018/01-2021/12，60 万，在研，主持。

➤ 荣誉：

2008 上海“浦江人才”计划获得者

2005 美国骨骼及骨矿物质研究学会青年科学家奖

2005 美国国立卫生研究院优秀博士后奖

➤ 国际/国内会议报告

- 1) 2018, 6th Tripartate Conference on tooth and bone development and regeneration, Hongkong, China, oral presentation, "Foxp2 regulates anatomical features that may be relevant to vocal and bipedal locomotion"
- 2) 2018, 第九届国际骨质疏松及骨矿盐学会年会, 苏州, oral presentation, "Foxp2 regulates anatomical features that may be relevant to vocal and bipedal locomotion"
- 3) 2018, 全国发育生物学大会, 昆明, 中国, 大会报告, "Foxp2 regulates anatomical features that may be relevant to vocal and bipedal locomotion"
- 4) 2018, 中国细胞生物学会年会, 南京, 中国, 大会报告, "Foxp1 controls BAT differentiation and energy expenditure by regulating beta3-adrenergic receptor expression"
- 5) 2016, Cold Spring Harbor Asia, Bone and Cartilage Development, Suzhou, China, oral presentation, "Foxp1 controls the cell fate commitment and senescence of bone marrow mesenchymal stem cells during skeletal aging"
- 6) 2014, Annual meeting of American Society for Bone and Mineral Research, Houston, TX, poster "Foxp1 regulates the aging of bone marrow mesenchymal stem cells"
- 7) 2014, Cold Spring Harbor Asia, Bone and Cartilage Development, Suzhou, China, oral presentation, "Foxp1/2/4 complex regulates endochondral ossification"
- 8) 2014, 7th International Conference on Osteoporosis and Bone Research, Xiamen, China, oral presentation, "Foxp genes in bone development and disorders"
- 9) 2013, 中国遗传学会年会, 2013.07.02, 新疆, oral presentation, "Foxp1/2/4 complex regulate endochondral ossification".
- 10) 2012 Annual meeting of American Society for Bone and Mineral Research, Minneapolis, Minnesota, USA, poster "Foxp1/2/4 complex regulate osteoblast differentiation and chondrocyte hypertrophy".
- 11) 2011 Annual meeting of American Society for Bone and Mineral Research, San Diego, USA, poster presentation, "The niche role of osteoblastic Wnts in bone remodeling and BMSC maintenance".
- 12) 2011 Wnt meeting, Los Angeles, USA, poster presentation, "The niche role of osteoblastic Wnts in bone remodeling and BMSC maintenance".
- 13) 2010 Wnt meeting, Stockholm, Sweden, oral presentation, "Ectodermal and mesodermal Wnts differentially regulate distal limb morphogenesis"
- 14) 2010 Annual meeting of American Society for Bone and Mineral Research, Oronto, Canada, oral presentation, "The role of Wnt signaling mediated by Wntless in limb patterning"
- 15) 2010 Animal Model and Human Health meeting, Nanchang, oral presentation, "SCF/c-Kit signaling acts as a new etiological factor for depression by regulating adult hippocampal neurogenesis"
- 16) 2010 Molecular Cell Biology Symposium, Hangzhou, oral presentation, "The role of Wnt signaling mediated by Wntless in skeletal development"
- 17) 2010 Bio-X Symposium on Skeletal Developmental and Disorders, Shanghai, oral presentation, "The role of Wnt signaling mediated by Wntless in skeletal development"
- 18) 2009 Mouse Functional Genomics meeting, Shanghai, oral presentation, "The role of Wnt signaling in skeletal development and mechanotransduction"
- 19) 2008 Annual meeting of American Society for Bone and Mineral Research, Montreal, Canada
- 20) 2006 Annual meeting of American Society for Bone and Mineral Research, Nashville, USA, poster, "The role of canonical Wnt signaling in promoting chondrocyte hypertrophy and maturation"

- 21) 2005 Mouse Molecular Genetics, New York, USA, poster, "Wnt/ β -catennin signaling is necessary and sufficient for synovial joint formation"