

Postdoctoral positions and Visiting Scholar/PhD student positions in Dr. Baohong Zhao's laboratory at Cornell University Medical School and Hospital for Special Surgery

Dr. Baohong Zhao's laboratory at Cornell University Medical School, an Ivy League university in Manhattan, New York, is recruiting two postdoctoral fellows with full scholarships (\$72,000/year) and a visiting scholar/PhD student (stipend \$30,000-34,000/year provided).

Two NIH funded postdoctoral positions and a visiting scholar/PhD student position are immediately available in the laboratory of Dr. Zhao (<https://baohongzhaolab.com>; <https://gradschool.weill.cornell.edu/faculty/baohong-zhao>, https://www.hss.edu/research-staff_zhao-baohong.asp

) at the Hospital for Special Surgery, Weill Medical College of Cornell University in the upper east side, Manhattan, New York City.

The postdoctoral fellows and students can choose projects from the below two directions:

- 1) Identification, function and regulation of bone marrow skeletal stem/progenitors in physiological and pathological settings;
Recent publication: Bone marrow AdipoQ-lineage progenitors are a major cellular source of M-CSF that dominates bone marrow macrophage development, osteoclastogenesis and bone mass. eLife, 2023;12:e82118. PMID: 36779851
 - 2) Inflammatory regulation of macrophage polarization and differentiation into osteoclasts in osteoimmunology field, an exciting interdisciplinary research field linking bone biology and immune system.
Recent publication: TGF β reprograms TNF stimulation of macrophages towards a non-canonical pathway driving inflammatory osteoclastogenesis. Nature Communications, 2022; 13(1), 3920. PMID: 35798734
- We apply cutting edge cellular and molecular techniques including RNAseq, ATACseq, ChIPseq and scRNAseq, and use various genetic mouse models to accomplish the study.
 - Relevant publications: *Nature Medicine, 15 (9):1066-71, 2009; Journal of Experimental Medicine, 209(2):319-34, 2012; Journal of Clinical Investigation, 124 (11):5057-73, 2014; Nature Communications, 9(1):4108, 2018; eLife, 2020; 9: e59659; Nature Communications, 13:3920, 2022; eLife, 2023 Feb 13;12:e82118.*
 - The qualified candidate must have a recent Ph.D. (or a PhD student with 1-2 year experience) and/or M.D. in molecular and cellular biology, immunology, bone biology or a related field and have at least one first author research article.
 - Expertise in cellular and molecular techniques, such as Cloning, ChIP, IP, FACS, confocal microscopy and histology/immunofluorescence staining, as well as genetic mutant mouse breeding are required. Candidates with experience and interest in bioinformatics analysis, such as RNAseq analysis and/or analysis of scRNAseq using Seurat, are preferred. Fluent English communication skills are required. High level of motivation, problem-solving ability, responsibility, and independence are expected.
 - PhD candidates expected graduation soon are welcome to apply.
 - The salary for these postdoctoral fellows plus housing supplement is in the range of \$72,000, and an excellent benefit package (Medical and Dental insurances, relocation support (air ticket), retirement plans, yearly conference trip and retreats) are available.

Full applications including CV, career goals, three references (names and contact information) and expected availability date should be submitted via email to:

Baohong Zhao, DMD, PhD

Associate Professor
Department of Medicine, Weill Medical College of Cornell University
Associate Scientist, Hospital for Special Surgery
Director of the laboratory of Pathological Bone Metabolism and Osteoimmunology
535 E70th Street, New York, NY10021 USA
Email: zhaob@hss.edu