

Description:

The He lab at UC-Berkeley is one of the pioneers in studying the functions of the non-coding genome in mammalian development and disease. We employ novel approaches in mouse genetics, human genetics, comparative genomics, cell and molecular biology to understand the functional importance and the molecular regulation of various non-coding elements, including microRNAs (miRNAs), long ncRNAs and more recently, transposon elements. Combining new technology of mouse CRISPR genome engineering and innovative live cell imaging technologies, the He lab pioneers *in vivo* studies to elucidate the new cellular functions and new molecular mechanisms of non-coding elements. The discoveries of the He lab have been well recognized by publications in prestigious journals, including *Nature*, *Science* and *Cell*.

The PI, Dr. Lin He, was awarded the MacArthur Fellowship, the Searle Scholar, a Howard Hughes Medical Institute (HHMI) Faculty Scholar, and is currently a Thomas and Stacey Siebel distinguished chair professor at UC-Berkeley, and a biohub investigator funded by the Chan-Zuckerberg Initiative (CZI). More information about the He Lab can be found via <https://www.helabucb.org/>.

The He lab is in the MCB department at UC-Berkeley, which encompasses a breadth of disciplines spanning all levels of organization and encompassing diverse organisms. UC-Berkeley is at a central location in the San Francisco bay area, surrounded by many excellent academic institutions and biotech/pharmaceutical companies. The breath of training, combined with the unique location of Berkeley in the center of biomedical research, offer a nurturing environment for the next-generation scientist to launch on a successful career in biomedical research in academia and industry.

Responsibilities:

The He Lab is seeking a curious, creative and highly motivated postdoctoral scholars to work within our graduate students and postdoctoral fellows. The postdoctoral fellow will work closely with the PI and junior students/staff members to study the roles of non-coding elements in mammalian preimplantation development and reproductive aging, with a particular focus on the role of transposable elements. The postdoc fellow will have a unique opportunity to learn our novel *in vivo* CRISPR-genome editing tool, to delve into genomics studies using large GWAS datasets or genomics datasets, to establish exciting developmental biology and cell biology experimental systems, and to explore exciting light sheet microscopy tools. Emerging evidence has supported an important role of non-coding elements in preimplantation development and reproductive aging. Genetics, developmental biology and cell biology studies will likely review exciting new mechanisms that will have profound impact in IVF practices in human.

Minimum/Basic Qualifications Required (At the time of application):

Ph.D. in Genetics, Genomics, Cell Biology, Molecular Biology, Biochemistry or related field, with a track record of first-author publication(s) in peer-reviewed journals. Successful trainees are those who are truly excited about science, who often have prior experiences in mouse genetics, RNA biology, imaging, or genomics. Excellent writing and communication skills in English is preferred.

To Apply:

Interested individuals should submit an updated CV, and contact information for 3 recommendation letters, and a cover letter. (Letters of reference may be requested of the finalists). Please send these documents to Dr. Lin He at glinhe@gmail.com