

**POST-DOCTORAL FELLOWSHIP
SKELETAL BIOLOGY
Long non-coding RNAs Regulating Chondrogenesis**

The Department of Orthopaedic Surgery at Washington University School of Medicine in St Louis, Missouri will have an opening (beginning April 1, 2018) for a post-doctoral research associate in the field of **long non-coding RNAs (lncRNAs)**. The motivated individual will work on an NIH-funded study to determine the function and mechanism of specific lncRNAs in regulating stem/progenitor cell differentiation toward the chondrocyte lineage. The long-term goals of these studies are to determine new mechanisms and/or identify novel targets that can be exploited for future approaches to engineer new cartilage tissue or ameliorate cartilage breakdown resulting from conditions such as joint trauma and osteoarthritis.

The candidate should have a strong background in a range of molecular biology and RNA-based approaches (e.g. cloning and construct design, shRNA techniques, RNA pulldown assays, FISH, RNA-Seq analysis). Previous experience working with primary stem / progenitor cells and differentiation assays would be expected. Knowledge of other specialized techniques such as ChIRP-Seq, proteomics and CRISPR technology is advantageous.

You will join a multidisciplinary orthopaedic research laboratory, which is part of the Musculoskeletal Research Center (<http://www.musculoskeletalcore.wustl.edu/>). The post-doc will be based in the lab of Dr. Audrey McAlinden (<http://audreymcalinden.org>) and will collaborate with the co-investigator of this project, Dr. Farshid Guilak (<http://www.orthoresearch.wustl.edu/content/Laboratories/2965/Farshid-Guilak/Guilak-Lab/Overview.aspx>). There are excellent opportunities to interact with other cartilage/bone biologists and biomechanical engineers in the Center as well as PIs in basic science departments at Washington University specializing in RNA biology and stem cell differentiation.

Applicants must possess a Ph.D. in the field of molecular/cellular biology, biochemistry or closely-related field. Some experience in musculoskeletal research would be an advantage but not necessary. The appointment is for a period of 2 years.

Qualified candidates should apply by sending a cover letter, CV and the names of three references to:

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<http://medschool.wustl.edu>



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