

**Postdoc fellow position to study the transcription factors that control the formation of articular cartilage stem cells.**

The Lassar lab at Harvard Medical School (in the Department of Biological Chemistry & Molecular Pharmacology) has an opening for a postdoctoral fellow to study the transcriptional regulatory network that controls both the formation and maintenance of articular cartilage. Prior work in the lab determined that Prg4/lubricin expressing cells in the embryo constitute a progenitor cell population for the articular cartilage. Building on this knowledge, current work in the lab is focused on elucidating how extracellular signals promote the expression and regulate the activity of Creb5, a newly identified articular cartilage transcription factor that is essential for both Prg4/lubricin expression and articular cartilage formation. The lab seeks to understand the gene regulatory networks that control synovial joint formation and generation of articular chondrocytes by employing novel strains of genetically engineered mice, isolation of articular chondrocyte precursor populations, RNA-Seq, ATAC-Seq, and ChIP-Seq technologies. Fundamental knowledge gained from these approaches will be leveraged to develop novel regenerative approaches to treat joint pathology in murine models of osteoarthritis.

Applicants should possess a Ph.D. and/or M.D. degree in Molecular Biology, Cell Biology, Biochemistry, Genetics or a related field. In addition, the applicant should be highly motivated, have an excellent working knowledge of molecular biology techniques and be able to work constructively with others, with both honesty and enthusiasm. The applicant should have a record of accomplishment that has either been published or is in press in highly regarded international journals. Prior work with genetically engineered mice, regulation of gene expression and/or bioinformatics would be a plus. Interested individuals should send a cover letter, curriculum vitae, and the names/e.mail addresses of three people who could provide letters of reference by email to [Andrew.Lassar@hms.harvard.edu](mailto:Andrew.Lassar@hms.harvard.edu).

For more information visit: <https://bcmp.hms.harvard.edu/faculty-staff/andrew-b-lassar>