Postdoctoral position

Craniofacial muscle heterogeneity

We are looking for a highly motivated and creative developmental biologist to join our lab. The Postdoctoral position is funded by an ANR-JCJC grant and is open with a flexible starting date until Jan 2022.

Research topic: This project aims at uncovering the mechanisms defining functional heterogeneity of craniofacial muscles, with particular focus on extraocular and esophagus striated muscles, two cranial mesoderm-derived muscle groups.

Craniofacial muscles and their resident muscle stem cells (MuSCs), have unique properties that distinguish them from other muscle groups. Notably, Extraocular muscles are spared in Duchenne muscular dystrophy, the most frequent neuromuscular disorder of childhood that causes progressive muscle wasting. Remarkably, some cranial MuSC populations outperform the limb counterparts in terms of expansion capacity, regenerative potential and contribution to myonuclear turnover of the respective fibers. The global objective of this project is to provide an integrated view of muscle heterogeneity by means of single cell- and single-nuclei RNA-seq analysis, genetic approaches, confocal microscopy and quantitative image analysis using the mouse as a model system.

Location: Our Lab is located at the Developmental and Stem Cell Biology Department at Pasteur Institute, which offers state-of-the-art core facilities and platforms in a highly dynamic and interdisciplinary environment in downtown Paris.

Profile: The candidate should have a PhD in Life Sciences and interest in studying muscle development and regeneration. Prior expertise in muscle biology is not required but practical skills in cell culture, molecular biology, mouse genetics, transcriptomic and image analysis are a plus. The candidate should feel comfortable working in English, show autonomy and ability to drive a project, and be able to critically discuss experimental results with colleagues and collaborators.

Application: Please send a cover letter describing your relevant work experience and research interests, a CV and two reference letters to comai@pasteur.fr and shaht@pasteur.fr. Funding is expected to be available for 2 years in the first instance, with possibility of extension. Salary will be commensurate to previous experience and in line with Pasteur Institute guidelines. The candidate will be expected to also apply for independent funding; assistance and mentoring will be provided throughout the application process.

We are reviewing applications as they arrive; candidates are encouraged to submit their application as soon as possible. Deadline: 15th November 2021.