CDB SEMINAR

Speaker: **Frederic Relaix**

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Genetique Moleculaire du Developpement
http://www.pasteur.fr/externe

Title: " Pax3 and Pax7 functions in myogenic progenitor cells : from the embryo to the adult "

Date: Thursday, December **1**
Time: 16:00 P.M.～17:00 P.M.
Place: Auditorium of Building C, CDB

Summary

I am interested in understanding how a muscle progenitor/stem cell acquire a myogenic identity during mouse development, in the adult and during muscle repair.

I investigated the functions of Pax3 and Pax7 during myogenesis using targeted alleles of these genes. Notably, I have created a serie of Pax3 gain of function, loss of function and dominant negative alleles which provide new insights into the genetic hierarchies that regulate myogenesis. Use of these alleles demonstrated the importance of Pax3 and Pax7 during the successive phases of embryonic and fetal myogenesis, with the identification of a new population of resident Pax3/Pax7-dependent progenitor cell population of major importance for skeletal muscle formation. I also analyzed the functions of Pax3 and Pax7 in satellite cells, the main muscle stem cell population in the adult. I will discuss my results in the context of evolution, myogenic specification and the importance of cell survival in controlling the stem cell populations of adult tissues.

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