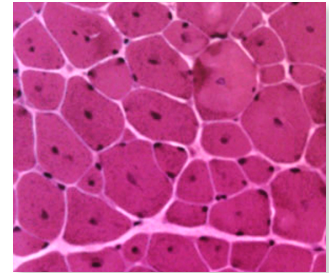


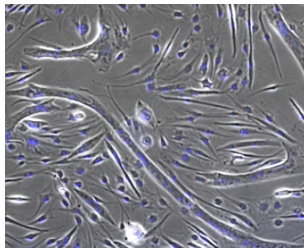
POSTDOCTORAL POSITION IN MUSCLE DEVELOPMENT AND PHYSIOLOGY

A postdoctoral position is available in the laboratory of Functional and Medical Genetics at the Alfort school of veterinary medicine, close to Paris (<http://genetics.vet-alfort.fr>). The position is funded by ANR for two years and is open from November 2013.

Our research focuses on the molecular mechanisms leading to centronuclear myopathies (CNM). In Man, these congenital disorders are characterized by muscle atrophy and general muscle weakness. To date, mutations have been identified in seven different genes. Connecting the corresponding proteins to a unified functional interacting pathway is a major goal to ultimately conceive innovative common therapies.

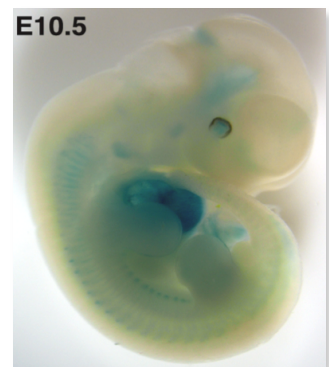


Our lab contributed to the identification of three spontaneous dog models of CNM. We focused on the characterization of *Ptpla/Hacd1* gene that encodes an ER-resident enzyme required for the elongation of very long chain fatty acids, which are components of complex lipids displaying specific structural and signalling properties.



Using combined dog, mouse and cellular models, we identified original roles for *Hacd1* in myoblast fusion and muscle metabolism (Blondelle *et al.*, submitted). Proteomic analysis of *Hacd1*-deficient cell and muscle samples identified deregulated proteins. The candidate will select the most relevant ones and evaluate their implication in pathological mechanisms using in vitro and in vivo gain- or loss-of-function approaches. Validated actors will be tested on muscle samples of other

CNM models. In parallel, *Hacd2*-deficient mice have been recently generated and the first experiments revealed *Hacd2* as an essential gene; indeed deficient mice die within one month, exhibiting a pleiotropic phenotype. The candidate will participate to the functional characterization of this phenotype. In all models, lipid analyses will be performed and rescue experiments will be launched.



Our team is part of an international network of leading groups in CNM and lipid biochemistry. We dispose of core facilities and benefit from imaging, proteomic and lipidomic platforms. Proximity with the Université Paris-Est Créteil offers a dynamic research environment. Our lab is located at 20min from downtown Paris and 15min from the UPEC by public transport.

Candidates should be motivated to use and develop functional assays to screen selected proteins and lipids. Experience and skills in cellular and molecular biology is required. Additional experience in myology and cell imaging would be appreciated. Application received by the end of October 2013 will be given priority but the position will remain open until filled.

Please send a CV and names of two references **Fanny Pilot-Storck** at fstorck@vet-alfort.fr