



**The Brain and Spinal Cord Institute in Paris  
(Institut du Cerveau et de la Moelle épinière, ICM) is looking for a :**

**Post-doctoral fellow to join Dr. Kabashi's group in the newly opened, Brain and Spinal Cord Institute in the heart of Paris.**

**Starting February-March 2012**

**Duration: 1-2 years (possibility to renew)**

*ICM, private foundation designated of public utility, is located in the heart of the Pitié-Salpêtrière University Hospital. The building, 22 000 sqm of laboratories and cutting-edge technical facilities host 600 researchers: researchers, engineers and technicians, all working together on fundamental and clinical research ([www.icm-institute.org](http://www.icm-institute.org))*

#### **Mission**

To study the role that mutant TDP-43 and FUS play in the molecular mechanisms of amyotrophic lateral sclerosis (ALS).  
Description of the study: These studies will involve in vitro (cell lines and primary motor neuron cultures) as well as in vivo (embryo and adult zebrafish) models. Both overexpression of these mutant genes and/or knockdown/knockout of these genes will be performed in these models. In order to study degeneration and development of motor neurons an array of techniques will be used.

#### **Main activities**

The applicant should be competent in a few of these techniques:  
Molecular biology: DNA cloning, PCR, site directed mutagenesis, in situ hybridization.  
Biochemistry: protein purification, immunoprecipitation, pull-down and Western blotting  
Microinjection of RNA and antisense morpholino oligonucleotides. Generation and maintenance of transgenic zebrafish lines.  
Immunohistochemistry and live imaging of zebrafish embryos.  
Behavioral assays and electrophysiological recordings  
High-throughput chemical screens

#### **Qualities**

Motivated and enthusiastic candidate  
Willing to learn and establish novel techniques in the lab  
Good team spirit and work well in collaboration

#### **Expected background**

PhD in life or health sciences. Experience with zebrafish, C.elegans or Drosophila are encouraged to apply  
Strong background in molecular biology, genetics, or biochemistry

Fondation Reconnue d'Utilité Publique