

Oct/2012: Three new positions at the Laboratoire de Recherche en Neuroimagerie (LREN) at Lausanne, Switzerland, with available funds to start immediately. Applicants are invited for 1 PhD position in neuroimaging investigation of recovery after stroke (ref. 301) and 1 PhD and 1 Post-Doc positions in neuro-genetic factors in dementia (ref 302 and 303). Please see details below or at http://www.unil.ch/lren/page77638_en.html.

To apply send (one single file with the appropriate ref. number) CV, motivation letter and contact details of three academic referees to ferah.kherif@chuv.ch.

A) PhD in stroke recovery (Reference 301):

The PhD candidate will join the COMPASS project led by Dr Ferath Kherif. In collaboration with neurologists, neuropsychologists and speech therapists, COMPASS aim is to investigate longitudinally the brain reorganisation after stroke. The successful candidate will be in charge of analyzing neuroimaging (MRI/CT) and clinical data of the patients from the stroke unit at the Department des Neurosciences Cliniques (DNC/CHUV). Part of the work will be dedicated to developing dedicated inference tools for stroke data and predictive models of patients outcome.

The candidate should have an MSc degree or equivalent in Biomedical informatics, Neuroscience or Neuropsychology. Previous experience in neuroimaging and statistics and with programming skills are desirable.

B) PhD (Reference 302) and Post-Doc (Reference 303) on dementia.

Applications are invited for a post-doctoral position at the Laboratoire de Recherche en Neuroimagerie (LREN), Lausanne to work on a new project entitled "Predictive neuro-genetic association in Alzheimer's disease". This is a collaborative project between LREN (Richard Frackowiak, Ferath Kherif) and Pharnext (Daniel Cohen, Michael Guedj) in the context of the HPB FET-flagship. The goal of the project is to understand how individual differences in genetic and brain anatomy contribute to the making of Alzheimer's disease. The successful candidates will be working on large databases with genomically and anatomically characterized individuals and will be responsible for the development of statistical/computational methods for combining neuroimaging and genetic features predictive of Alzheimer's disease. In addition, the post-doctoral fellow will conduct data



mining based on biological pathways principle as well as teaching/supervising students works on similar topics.

The requirement for the Post-Doc position is a PhD in at least one of the relevant topics of the project (computational biology, bioinformatics, genetics, or neuroimaging,).

The requirement for the PhD position is an MSc degree or equivalent in Biology, Biomedical informatics, Neuroscience.

For both positions, deep knowledge and previous experience in mathematical modelling and statistical/computational data analysis of genetic data as well as good programming skills are essential.

About LREN

LREN Current investigations range from brain plasticity to the mechanisms of neurodegeneration. LREN is located within the Département des Neurosciences Cliniques (DNC) at Lausanne university-hospital (CHUV) allowing close collaborative research with clinicians, easy access to patients and own dedicated multimodal neuroimaging platforms (MRI, EGG). LREN is well connected with the neurosciences community in the Lemanic area (UNIL\EPFL\UNIGE).