



Dépt des neurosciences cliniques  
Bâtiment hospitalier  
Rue du Bugnon 46  
CH-1011 Lausanne



**Two Research Fellow positions** are available at LREN, Department of Clinical Neurosciences – CHUV, Lausanne, Switzerland – [www.unil.ch/lren](http://www.unil.ch/lren) as part of the Swiss National Science Foundation-funded project “Urban maps of the brain” led by Bogdan Draganski. The positions will be suitable for highly talented and motivated candidates with interests in data science, computer science and human brain imaging. The researchers are expected to follow LRENs research programme, but will be encouraged to formulate own ideas and proposals for projects.

The goal of our project is to build a simulation model of brain - environment interactions in the context of ageing. To this end, we have collected large-scale data from  $\approx$  1600 participants from the general population aged 45 - 90 years, consisting of multi-parameter MRI maps, multi-shell DWI and task-related fMRI, additionally to a rich set of behavioural, demographic and clinically relevant data.

The Research Fellow full-time positions are available for a period of 2 years in the first instance renewable on annual basis and require the following qualifications:

- *Neuroscientist* – should be a holder of a PhD awarded in the areas of imaging neuroscience, computer science, and statistics or similar. The candidate should be a power-user of Matlab, Python and have good knowledge in statistics. Familiarity with common MRI image processing software packages (such as SPM, FSL, or AFNI) is a must. Job description: Development and application of multi-variate statistical analysis methods in the context of multi-contrast anatomical MRI data. Maintain and further develop workflow management and MRI processing pipelines for MPM and DWI data. The post holder will be responsible for software releases and ensure data quality control and validation of new applications.
- *Data scientist/engineer* - should be a holder of a PhD awarded in the areas of data science/informatics, mathematics, statistics, computer science, or similar with experience in software development. *Job description:* implementation and application of cutting-edge ML/SL techniques to imaging and non-imaging data. The post holder will be responsible for software releases and ensure data quality control and validation of new applications.

Please send your CV, a letter of motivation, and names of at least two references to Bogdan Draganski - [bogdan.draganski@chuv.ch](mailto:bogdan.draganski@chuv.ch). Review of applications will begin June 1st, 2020; applications will be accepted until the positions are filled.

## CHUV

**centre hospitalier universitaire vaudois**

**Pr. Bogdan Draganski - Médecin associé**

Directeur Laboratoire de recherche en neuroimagerie - LREN

Directeur Plateforme IRM

Département des neurosciences cliniques

Bureau MP16\_05 512

Mont Pausible 16, CH-1011 Lausanne

mailto: [bogdan.draganski@chuv.ch](mailto:bogdan.draganski@chuv.ch)

[www.unil.ch/lren](http://www.unil.ch/lren); <https://twitter.com/bogdandraganski>