

UNIL is a leading international teaching and research institution, with over 5,000 employees and 15,500 students split between its Dorigny campus, CHUV and Epalinges. UNIL and CHUV encourage excellence, individual recognition and responsibility. The Faculty of Biology and Medicine ([FBM](#)) and the Lausanne University Hospital ([CHUV](#)) are inviting applications for a position of:

## **Senior lecturer (MER1) Head of the research MRI platform of the Department of Clinical Neurosciences (DNC)**

Starting date: 01/01/2023

Place: Lausanne, Switzerland

The MRI research platform of the DNC is a departmental unit primarily devoted to research studies on neurological or psychiatric disorders of the central nervous system. The platform, and its Siemens Prisma 3 Tesla machine, are installed in the immediate vicinity of the main hospital building of the CHUV, within the MP16 building which houses two other DNC entities, the Leenaards Memory Center (CLM) which takes care of patients suffering from dementia, and the neuroimaging research laboratory (LREN) which coordinates the academic activities of the MRI platform. The latter is used 70% for research work, open to the entire scientific community, and 30% for clinical activities coordinated by the CHUV radiology department. The platform develops innovative methodologies in molecular MR imaging, and participates in the exploitation of large cohorts from Lausanne. The DNC includes nearly 500 employees, five clinical divisions treating more than 10,000 patients per year, and a clinical neuroscience research center (CRN).

### **Main missions:**

- Technical management of the MRI platform: supervision of its staff, quality assessment tests, scanner repairs and user training.
- Organization and monitoring of all research projects conducted on the platform
- Support in MRI physics to the research projects conducted on the platform by developing acquisition protocols tailored for each study.
- Development of methods for correcting the effects of patient motion on the quality of MR images.
- Development of MRI-relaxometry biomarkers of the microscopic properties of brain tissue.
- Supervision of master's and doctoral students, and post-docs.
- Funding, running and publishing its own research work

### **Required profile:**

- PhD in MRI physics.
- Established track-record of scientific publications on the development of MRI pulse sequences for relaxometry and fMRI, and of methods for correcting the effects of patient motion in the MRI scanner.
- Proficiency in the IDEA sequence programming environment, Matlab, SPM and hMRI toolbox.
- Experience in line-managing technical staff, quality assurance of MRI scanners and troubleshooting of identified faults.
- Previous experience in providing physics support to neuroimaging studies.
- Proficiency in French (level at least B2, C1 ideally) and excellent knowledge of English.

Further information may be obtained from Prof. Philippe Ryvlin, Chef du DNC ([olga.Borrajo-Rouyer@chuv.ch](mailto:olga.Borrajo-Rouyer@chuv.ch)).

Applications, in English, should include i) a motivation letter, ii) a curriculum vitae, iii) a list of publications highlighting the five most significant ones, iv) a brief statement (5 pages max.) of the past and future research, v) a summary of previous teaching experience (if applicable), vi) and the names and contact information of at least three references, vii) a copy of diplomas, and viii) a valid identity card.

They should be submitted online by **October 16<sup>th</sup>, 2022 (23:59 GMT+1)** to [www.fbm.unil.ch/releve/application/](http://www.fbm.unil.ch/releve/application/) as a single PDF file. The job description is available on [the same link](#) (or QR code).

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