

## Title: Postdoctoral position in neuroimmunology clinical research laboratory

### Position Summary:

The Laboratory of Neuroimmunology at the University Hospital of Lausanne

(<https://www.chuv.ch/fr/neurologie/nlg-home/recherche/axes-de-recherche/neuro-immunologie/laboratory-of-neuroimmunology>) is primarily devoted to research in Multiple Sclerosis (MS). We are studying the interaction between the immune response, and environmental factors, in particular, Epstein-Barr virus (EBV). To extend our understanding of autoimmunity in central nervous system (CNS) disorders including MS, we have developed a unique autologous model using human induced pluripotent stem cells derived CNS cells. We are now seeking a highly motivated **Postdoctoral researcher** to join our team to specifically investigate the role of autoreactive CD8+ T cells in the MS pathogenesis, with an emphasis on their interactions with central nervous system (CNS) cells and EBV infection. This position offers an exciting opportunity to work with cutting-edge techniques and contribute to discoveries in the field of neuroimmunology.

### Key Responsibilities:

- Design and conduct of experiments
  - To characterize the pool of autoreactive CD8+ T cells in MS patients versus healthy controls including TCR repertoire analyses
  - To assess the cross-reactivity between EBV antigens and hiPSC-derived CNS cells.
- Collaborate with laboratory and clinical team members and external partners
- Manuscript writing and contribution to grant applications
- Present findings at national and international conferences

### Qualifications:

- Ph.D. in Immunology, Neuroscience, Cell Biology, or any equivalent
- Strong background in T cell immunology AND/OR neurobiology including
  - Experience with hiPSC culture and differentiation,
  - AND/OR proficiency in immunological assays such as flow cytometry, ELISPOT, etc.
  - AND/OR Experience with -omics large-scale dataset analyses such, in particular scRNAseq.
- Problem-solving and organization skills
- Excellent written and oral communication skills
- Commitment to teamwork and collaboration

### Resources:

Our laboratory offers state-of-the-art facilities, including:

- Culture laboratory for hiPSC reprogramming and differentiation into CNS cells
- Advanced flow cytometry and cell sorting systems
- Genomic and proteomic analysis tools
- Bioinformatics and computational biology support

The CHUV offers a large array of advantages including:

- First-rate social benefits such as a Paternity Leave of 20 days and a Maternity Leave of 4 months (there is also the possibility to obtain a complementary breastfeeding leave of 1 month)
- Regular salary progression adapted to your responsibilities
- 25 days of vacations per year
- A right to at least three days of training per year, by accessing a wide offer of courses not only from the CHUV Training Center but also from external providers
- Possibility to access one of the 500 furnished apartments offered in the surrounding neighborhoods in case of relocation in Switzerland

- Discounts proposed on social and cultural events, goodies and other services, thanks to the “H-Oxygène” association
- Signing up to our Mobility Plan and benefit from different advantages (discounts on public transportation, promotion of “Mobility” car fleet and discounts on electric bikes)
- Being able to enjoy our high-quality corporate restaurants, located in every hospital building, with employees’ discount.

**Application:**

Interested candidates should submit the following documents to <https://recrutement.chuv.ch/vacancy/postdoctoral-position-in-neuroimmunology-clinical-research-laboratory-303748.html> :

- Curriculum vitae
- Cover letter detailing research interests
- Contact information for three professional references
- Relevant publications

Application deadline: TBD

Starting date: first trimester of 2025.

Project duration: 4 years (contract renewed annually)