The position is available at the Ophthalmic and Neural Technologies Laboratory (https://ghezzilab.org) at the Fondation Asile des Aveugles (www.ophtalmique.ch).

Ideally situated along the Leman lake in Lausanne’s city center, the Fondation Asile des Aveugles (FAA) is a private institute composed, among other of the Jules-Gonin Eye Hospital and Research Center on Vision Science. FAA is closely linked to the University of Lausanne (UNIL) and the Ecole Polytechnique Fédérale de Lausanne (EPFL) campus that brings together over 120 nationalities.

The Ophthalmic and Neural Technologies Laboratory is a multidisciplinary environment promoting cross-fertilization among diverse expertise. We bring materials science, engineering, computer science, life science, and medicine together by the convergence of physicists, engineers, neuroscientists, and ophthalmologists cooperating to accomplish innovative projects. Our mission is to develop innovative ophthalmic and neural technologies to better understand diseases and, eventually, improve the quality of life of people with ophthalmic and neural disorders. Ultimately, we aim at translating our research findings into clinical practice.

We are looking for a highly motivated and enthusiastic Postdoc (100%) joining our effort in understanding functional alteration in retinas of patients with Retinitis Pigmentosa.

A striking piece of evidence from research in retinitis pigmentosa is retinal remodelling: a group of anatomical retinal changes triggered by the death of photoreceptors. Remodelling has been described also in human retinitis pigmentosa, and its clinical implications are profound. As a consequence of remodelling, functional changes in retinal physiology have been observed during degeneration in animals. Unfortunately, to date, there is no direct evidence of functional alterations in human retinas with retinitis pigmentosa. A fundamental limitation is lacking a proper method to investigate alterations of background retinal activity in-vivo in humans. The project leverages this timely scientific question to develop a noninvasive monitoring technique to investigate alterations to background retinal activity in humans.

**Your responsibilities**

- Perform experimental research and data processing
- Collaborate with research and clinical partners towards the project goal
- Develops new ideas within the project scope and goal

**Your qualifications**

The ideal candidate must

- hold a PhD in a relevant discipline (e.g. neuroscience, bioengineering, MD-PHD)
- have interest in conducting a project at the interface of fundamental research in mice, data science, and translation activity with patients
- be able to work within a multifunctional team
- have documented experience of in-vivo electrophysiology with animals (preferentially ERG in mice)
- have experience in data processing, analysis and interpretation
- have knowledge of Python or Matlab
- experience in eye manipulation in mice is a plus
- Scientific writing: proven publication record
- Fluency in English (oral and written), French is an advantage
- Flexible, adaptable, multi-skilled, solutions oriented, well organized and reliable
- Self-sufficient, self-reflective capacities, conscientiousness, able to work under pressure and to assess the risks
- Listening skills, ability to communicate with all the groups and to argue and be able to give feedbacks

**What the position offers you**

You will work within an interdisciplinary, multicultural and dynamic group. We offer opportunities for personal development and professional training.

Fondation Asile des Aveugles is an equal opportunity employer. It encourages excellence, individual recognition and responsibility.

**Job information**

Expected start date : ideally 01.01.2024

Contract length : for one year, renewable for up to three years

Activity rate: 100%

Workplace: Fondation Asile des Aveugles in Lausanne
Your application
Interested candidates can request more information to info@ghezzilab.org

Deadline: 15.11.2023, the application package should include: cover letter, comprehensive CV, complete publication list, and a list of 3 referees that can provide recommendation letters. If letters are already available they can be attached.

Only online applications will be reviewed, https://emploi.ophtalmique.ch