
Postdoctoral position on resistance to radioligand and radiotherapy in prostate cancer in the Functional Cancer Genomics Lab – Prof. Jean-Philippe Theurillat

PostDoc in the Functional Cancer Genomics laboratory directed by Prof. Jean-Philippe Theurillat at the IOR – Institute of Oncology Research in Bellinzona, Switzerland

The Institute of Oncology Research (IOR)

The IOR, affiliated with the Università della Svizzera italiana (USI), is located in a brand-new, high-tech research building that hosts more than 20 different research groups. It offers state-of-the-art facilities together with the neighboring Institute for Research in Biomedicine (IRB). It offers a thriving environment with leading edge research projects and multiple occasions of interaction with world leaders in the fields of cancer, immunology, and DNA biology (see Ph.D. lecture series at [PhD Program](#)).

The **Functional Cancer Genomics Lab**, led by Prof. Jean-Philippe Theurillat investigates the molecular mechanisms of prostate cancer progression and therapeutic resistance. The group combines functional genomics, translational pathology, and cutting-edge experimental models to drive discoveries from bench to bedside. A full list of our publications is available on [PubMed](#).

Research Projects

The successful candidate will investigate the **mechanisms of sensitivity and resistance to Lu-PSMA radioligand therapy (RLT)**, a promising emerging therapeutic modality and its **cross-resistance with external beam radiotherapy (EBRT)**. The is timely and clinically impactful project leverages a **unique set of resources already in place**:

- Existing genome-wide CRISPR screening data from RLT and EBRT models, with compelling hits already identified and a clear path towards clinical translation
- Isogenic radio-resistant and radioligand-resistant cell line panels
- Clinical patient tissue samples for mechanistic validation via multiplexed immunohistochemistry and single-cell sequencing

Collaborative Environment

You will join an active network of world-class international collaborations, including:

- The Institute of Cancer Research (ICR), London, UK — a global leader in cancer genomics and therapy
- The Paul Scherrer Institute (PSI), Switzerland — home to world-leading radiobiology and proton/heavy-ion research

Requirements

- PhD in biology, biomedicine, or a closely related field
- Expertise in functional investigations in the DNA damage response (DDR)
- At least one first-author peer-reviewed publication in the DDR field
- Pro-active, collaborative attitude and a genuine passion for leading-edge research
- Strong communication skills (English is mandatory) and team player spirit

Advantageous

- Experience with CRISPR-based functional genomic screens
- Experience with in vivo mouse models of cancer

What we offer

- A fully funded position in a world-class research environment
- Access to state-of-the-art core facilities (genomics, imaging, flow cytometry, bioinformatics, and more)
- Multidisciplinary training at the interface of cancer biology, functional genomics, and clinical translation
- A dynamic, supportive, and international team culture
- Strong mentoring with an emphasis on career development

The Application

Applications must contain:

- Motivation letter describing your research background and interest in the project
- Detailed curriculum vitae with publications list
- List of two references (including their email addresses). No letter of support required right now.

Applications must be submitted online by filling out the form accessible through the following link: **CANDIDATES**. You will also need to upload the documents listed above.

Salary will be in line with the guidelines of the Swiss National Science Foundation.

For scientific and position-related questions, please contact: jean-philippe.theurillat@ior.usi.ch
For administrative questions, please contact humanresources@ior.usi.ch

Applications that do not meet the requirements, sent to different contacts, in other formats, or after the deadline will not be considered.

Deadline: July 31st, 2026

Starting date: Negotiable.

More information about the IOR is available at www.ior.usi.ch and <https://ior.usi.ch/en/group/functional-cancer-genomics>

IOR strives to be an equal opportunity and family-friendly employer. As an institution that values diversity, IOR particularly encourages applications from women and all individuals from underrepresented groups.

Bellinzona, 19.05.2026