Open Postdoc position (24 months) in the **INSERM Fundamental & Translational Oncology Team "Streinth"** U1113 (IRFAC) located in Strasbourg, starting September / October 2022.

Highly motivated candidates with a competitive publication track record are encouraged to apply with the perspective of **a possible tenure tract position (Inserm concours).**

The team is focusing on the understanding of the **molecular mechanisms of tumoral ecosystem response towards anticancer therapies** in order to identify resistance mechanisms that can represent biomarkers for personalized protocols or novel potentially actionable therapeutic target. We mainly focus on **Gastric** and **Head and Neck cancers** for which we have/establish cell lines, organoids, patient-derived xenografts, genetic cancer models, and patient's tissues collections. This allows us to develop a **fundamental and translational research** in interaction with the clinic (Hopitaux Universitaires de Strasbourg, ICANS). To decipher the mechanisms underlying the response to therapy, we proceed via a two-ways strategy by focusing on the **p53 family and the connected pathways, such as the Hippo and the ER stress pathways,** and by using un-biased **"omic" approaches (scRNAseq, proteomics…).** The contribution of the involved **epigenetic regulation processes** (acetylation, methylation) is also addressed. One of our currents focuses is to understand the mechanisms allowing a **dynamic interaction between cancer cells and the tumor infiltrating immune system**, notably via the **Immune Cell Death**. Based on our findings, we collaborated with a network of national and international chemistry labs to develop innovative anticancer strategies aiming at stimulating the antitumoral immune response.

The project financed by INCa (the French Cancer National Agency) focused on the development and the use of a novel and unique strategy to identified novel regulators (e.g., Ubiquitine ligase, USP) of wildtype p53 or neo-interactants of p53 mutants found in cancers. It involved a collaboration with 3 additional teams, including a chemistry team. The fellow will also be participating in other project of the team that include the use of omics approaches (scRNAseq and CRSIPR/Cas9 phenotypic screening) to identify novel mechanisms of sensitivity and resistance to the existing therapies and the role of the p53 related pathways. For instance, a particular attention will be focus on the mechanisms that can modulate the antitumoral immune response. **In parallel, the postdoctoral fellow will have the opportunity to develop her/his own project within the frame of the team's strategic orientations.**

Our major goal is to refine the therapeutic strategy for the management of gastric and head and neck cancers by gaining a better understanding of the molecular mechanisms governing the interactions between the tumor and the immune system to constitute the basis for a new generation of powerful drugs improving the activity of check-point inhibitors.

Your profile:

- PhD in the field of biology
- Previous post-doctoral experience preferred
- Possible expertise in the field oncology and immuno-oncology
- Strong technical background and know-hows in molecular biology, cell culture and mouse model animals
- Team-spirit oriented, well-developed collaborative skills & Mentoring skills

We offer: support by a dynamic group including senior researchers, PhD and master students and technical staff, with access to standard biochemistry and molecular biology platforms, imaging, cell cytometry and cell sorting, cell culture and animal facility, tumor biobanks. The salary remuneration follows Inserm guidelines. **The postdoc will be trained and prepared to apply for a Inserm research associate tenure position.**

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