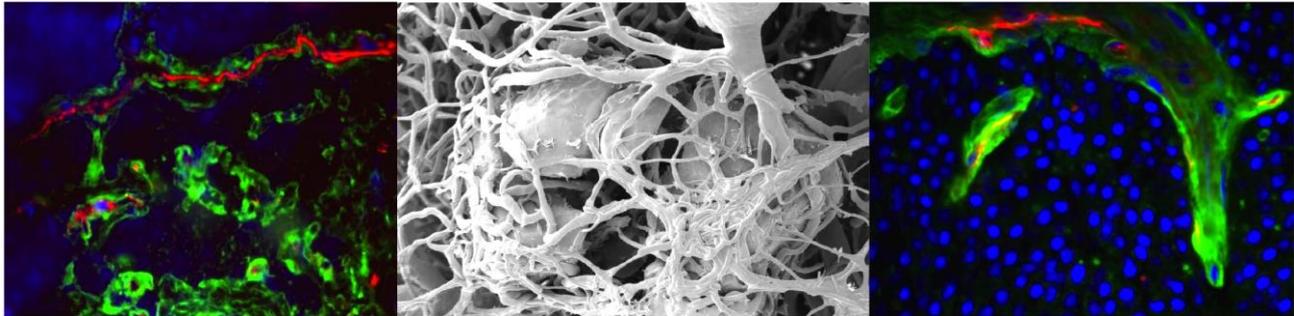


Two Postdoctoral Research Positions available

To study the Roles of Radiotherapy on the Tumor Microenvironment



In the INCa (Institut National contre le Cancer)-funded project “**RADIO-3R: Understanding and REFINING the influence of RADIOtherapy on the tumor microenvironment, by applying novel models to REDUCE and REPLACE animal models**” two research laboratories in Strasbourg will collaborate in developing and applying photon and proton irradiation protocols in 3D cell cultures and in tumor mice with the goal to understand the impact of radiotherapy on the tumor microenvironment and to develop surrogates for tumor mouse models. In this project the impact of proton and photon therapy on the tumor microenvironment in breast cancer and oral squamous cell carcinoma (OSCC) models will be determined. A major goal is to enhance on-target effects of radiotherapy with the future aim to improve immune checkpoint therapy.

One postdoc position (36 months) is available in the **Radiobiology laboratory of the Institut de Cancérologie Strasbourg Europe, Paul Strauss Comprehensive Center of Pr Georges Noël** (UMR 7178, Strasbourg). The Radiobiology laboratory is an expert in radiobiology and is specialized in the establishment and application of radiotherapy protocols (photon and proton irradiations) in cultured cells and tumor mice (*Waissi et al., submitted; Beddok et al., 2019, Acta Oncol, Ohnleiter et al., 2017, Cancer Radiother, Bibault et al., 2017, Int J Radiat Oncol Biol Phys*). In frame of this project proton and photon irradiation protocols will be established and applied to autochthonous tumor mice and to novel to-be-established tumor spheroid cultures of murine breast and tongue tumor models. Mechanistic studies will follow by applying gene expression analysis and proteomics to fully understand responses to the radiotherapy protocols.

We offer: access to irradiation production facilities and expertise in radiobiology, support by a group of radiobiologist expert scientists, technical personal and a biostatistician and a high-level interdisciplinary platform of radiation treatment with highly engaged physicians, physicists and technical personnel. The salary remuneration follows UNICANCER guidelines.

We search: a highly motivated scientist with background in radiobiology, cell biology and cell culture and mouse tumor models, high team spirit and good English communication skills.

One postdoc position (36 months) is available in the **Tumor Microenvironment group of Gertraud Orend** (INSERM U1109, Strasbourg). This laboratory (<https://orend-tme-group.com>) is specialized in the analysis of the tumor microenvironment with particular emphasis on the extracellular matrix molecule tenascin-C (*Midwood et al., 2016, J Cell Sci*) in tumor angiogenesis (*Saupe et al., 2013, Cell Reports, Rupp et al., 2016, Cell Reports*), metastasis (*Sun et al., 2018, Cancer Res, Sun et al., 2019, Mat Bio*) and tumor immunity (*Deligne 2020, Cancer Immun Res*). In frame of this project the candidate will investigate irradiated tumor mice and tumor organoids in a comprehensive manner by using flow cytometry, tissue staining, gene expression analysis, proteomics and gain and loss of function approaches.

We offer: a highly dynamic and supportive group of colleagues including researchers, postdocs, PhD and master students and technical personnel with expertise in extracellular matrix research, murine tumor models and tumor immunity. The salary remuneration follows INSERM guidelines taking into account previous experience.

We search: a highly motivated scientist with background in tumor biology, mouse tumor models, immunology and cell culture, high team spirit and good English communication skills.

Interested candidates are invited to send their CV together with a motivation letter and the names of three referees to **Georges Noël** (g.noel@icans.eu) and **Gertraud Orend** (gertraud.orend@inserm.fr).