**Postdoctoral position in Onco-immunology**

**Offer:** The extracellular matrix does not only provide three-dimensional physical cues but also directs the cellular responses through multiple mechanisms. Extracellular matrix can provide local niches, serving as substratum and sequestering soluble factors thereby orchestrating cell behaviour. In cancer the composition of the extracellular matrix is altered and thereby impacts cell properties leading to enforcement of cancer stemness, proliferation, survival and formation of new blood vessels, altogether promoting metastasis. Cancer probably can only be cured when the tumor bed is cleaned and the extracellular matrix is normalised which represents a challenge that the laboratory is addressing. Our research is aiming to understand how the extracellular matrix molecule tenascin-C is orchestrating an immune suppressive tumor microenvironment. The laboratory recently discovered several mechanisms how the matrix orchestrates immune suppression and developed novel tools to block these matrix actions. By using tumor models with a tumor microenvironment phenocopying that of human cancer we are applying RNA seq, mass spec analysis, and cell culture work to define targetable mechanisms which include our novel targeting tools and CAR T cells targeting the matrix. We like to understand how these treatments normalise the tumor microenvironment to achieve long lasting tumor remission. The postdoc will use state of the art technology in immunology and matrix research and will work within a consortium of colleagues experienced in matrix biology, immunology, omics and network analysis. Recent publications:Benn 2023, **Sci Adv***,* Fonta 2023, **Matrix Biol**; Loustau 2022, **Matrix Biol**; Yilmaz 2022, **J Cell Sci**; Murdamoothoo 2021, **EMBO Mol Med**; Deligne 2020, **Cancer Immun Res**; Spenle 2020, **Cancer Immun Res**; Sun 2019, **Matrix Biol**, Sun 2018, **Cancer Res**.

This international laboratory **(https://orend-tme-group.com)** is situated within the INSERM U1109, a research unit with over 100 members in the center of Strasbourg that is dedicated to immunology research on autoimmune diseases, virology and cancer.

The position is offered for 24 months with a possible extension.
Keywords: tumor microenvironment, extracellular matrix, tenascin-C, tumor immunity, genetic engineered mouse models, immunology research

**Candidate profile:** We are seeking a highly motivated PhD who wants to develop his/her own research project in a good team-working spirit. The candidate must be strongly motivated for comprehensive research using multiple technologies.
- Knowledge on cancer immunology is wanted
- Experience in murine tumor models, histology, cell culture, biochemistry and flow cytometry is wanted
- Expertise on bioinformatics is wanted

**Application:** Please send a concise cover letter with a statement of research interests and a summary of previous research activity and achievements. Please, also send a detailed curriculum vitae and two reference letters to Gertraud Orend: gertraud.orend@inserm.fr.