The LIT - Leibniz Institute for Immunotherapy (foundation under civil law) (https://lit.eu/) - is a biomedical research center focusing on translational immunology in the fields of cancer immunotherapy, transplant rejection and autoimmunity. The objective of the LIT is to develop efficient immune therapeutic strategies in these areas. Close networking between University and University Hospital thus offers high research efficiency and an excellent research environment.

The Division of Functional Immune Cell Modulation, led by Professor Luca Gattinoni, is recruiting a highly motivated

Postdoctoral fellow (m/f/d) – LG-2026-1

The position is available starting immediately and is initially limited until October 31, 2027, with the possibility of extension.

Position Description

The successful candidate will join an exciting research program exploring a newly emerging paradigm in immunology: mitochondrial transfer and synthetic organelle therapy.
Using newly developed genetically engineered mouse models, the researcher will determine where and when mitochondrial transfer occurs in vivo, and how mitochondrial exchange shapes T cell differentiation and memory formation. In addition, the researcher will explore the therapeutic potential of synthetic organelle-based interventions as a novel strategy to enhance T cell-based immunotherapies.
This project integrates cutting-edge approaches in immunometabolism, organelle biology, and adoptive T-cell therapy, with implications for both fundamental immune regulation and innovative clinical strategies.

Responsibilities include, but are not limited to:

- Designing and conducting experiments using advanced genetically engineered mouse models
- Applying organelle-tracking reporter systems to map mitochondrial transfer events in vivo
- Utilizing fluorescence and confocal microscopy to investigate mitochondrial dynamics
- Performing comprehensive phenotypic and functional profiling of T cells, including:
    - High-dimensional flow cytometry
    - Metabolic profiling (Seahorse bioenergetics assays, SCENITH)
    - Proliferation and cytotoxicity assays
    - Cytokine multiplex analyses

- Isolating immune cell populations using state-of-the-art separation techniques
- Preparing samples for high-throughput multi-omics analyses, such as:
    - Single-cell RNA-seq
    - ATAC-seq
- Co-supervising students and contributing to a highly collaborative laboratory environment

The ideal candidate possesses:

- A Ph.D. in Immunology, Cell Biology, Molecular Biology, or a related discipline
- Proven experience working with mouse models and in vivo experimental systems
- In-depth knowledge of cellular metabolism and mitochondria biology.
- Expertise in T-cell immunobiology and immune memory formation
- Demonstrated proficiency in advanced techniques such as imaging, high-parameter flow cytometry, and genetic engineering approaches
- A strong track record of publications in high-impact peer-reviewed journals
- Excellent written and oral communication skills, with fluency in English
- High motivation to work in an interdisciplinary, innovative, and collaborative research environment

We offer:

- A vibrant international research environment at the forefront of immunotherapy innovation
- Access to state-of-the-art technologies in immunometabolism and organelle engineering
- Strong infrastructure for translational and clinical development
- Flexible working hours
- Flat hierarchies and rapid decision-making processes
- A highly motivated and supportive team
- Job ticket and excellent benefits
- Outstanding funding and long-term scientific perspectives

The remuneration is based on TV-L.

The Leibniz Institute for Immunotherapy targets to increase the share of women in the workforce. Therefore, qualified female candidates are explicitly encouraged to submit their applications. Moreover, the LIT advocates for the compatibility of family and career.

Disabled applicants (m/f/d) with equal qualifications will receive preferential treatment within the recruitment procedure. Please refer to your disability status already in your application.

Please note that expenses that may arise in the context of an eventual job interview cannot be reimbursed.

For more information, please contact Prof. Dr. Luca Gattinoni (luca.gattinoni@lit.eu). We are looking forward to receiving your detailed application. Please apply via our Online - Application Portal the reference **LG-2026-1.**

Application **deadline** is **March 01st, 2026**.