



Translational Pediatric Cancer Research Action - Institute of Pathology
Children's Cancer Research Center - Department of Pediatrics
TUM School of Medicine - Technical University of Munich

Post-Doc position at the Burdach lab (full time or part time)

Topic: Exploiting Immunometabolism as a Therapeutic Principle in Childhood Cancer

Contact us if

- (1) You are a physician scientist and consider a PhD degree
- (2) You are a biologist or biochemist

Who are we?

The lab of Stefan Burdach has decades of expertise in both preclinical and clinical pediatric cancer research. The current work mainly focuses on Exploiting Immunometabolism as a Therapeutic Principle in Childhood Cancer. In our lab we apply cutting edge technologies including multi-dimensional single cell profiling as well as methods of basic molecular and cellular biology.

Your mission with us

As senior coinvestigator (together with Professor Stefan Burdach) you will oversee 3 projects, which are based on our previous publication studying the role of MondoA in pediatric leukemia¹:

- The Role of MLXIP (MondoA) in Stress Response, Longevity and Prevention of Exhaustion of CAR and other Transgenic Therapeutic T-Cells
- Regulation of MYC-DNA binding by MondoA in ALL: Competitive Transcriptional vs. Epigenetic Mechanisms
- MondoA inhibition as a novel therapeutic approach in pediatric B-ALL - MondoA expression as a biomarker of resistance against metabolic treatment modalities

What do we expect?

You have to contact us if (1) you are a team player and enjoy helping and consulting younger researchers, (2) if you are knowledgeable in methods of cell culture, molecular biology, in vivo experiments, and have basic bioinformatic expertise.

Coming from a background of tumor biology, immunology, T cell engineering or metabolism would be very helpful, but is not a pre-requisite.

What can you expect?

A highly professional and friendly work environment with appreciation and trust. You will lead and support a team of 3 junior researchers. Your motivation to thrive will be our

common goal to better understand and therapeutically target and exploit immune-metabolic features in childhood leukemia.
Funding is ensured for 2 years and can be prolonged for another year.

Where can I apply?

A comprehensive application including a letter of motivation, CV and supporting documents should be sent to stefan.burdach@tum.de

We are looking forward to welcoming you in our team!

1 Sipol A, Hameister E, Xue B, Hofstetter J, Barenboim M, Öllinger R, Jain G, Prexler C, Rubio RA, Baldauf MC, Franchina DG, Petry A, Schmah J, Thiel U, Gorlach A, Cario G, Brenner D, Richter G, Grünewald TGP, Rad R, Wolf E, Ruland J, Sorensen PH, Burdach SEG. MondoA Drives B-ALL Malignancy through Enhanced Adaptation to Metabolic Stress. *Blood*. 2021 Apr 28;blood.2020007932. doi: 10.1182/blood.2020007932. Epub ahead of print. PMID: 33908607.