LMU KLINIKUM

Postdoc – translational research in childhood IBD & epithelial barrier biology (m/f/d)

Kinderklinik und Kinderpoliklinik im Dr. von Haunerschen Kinderspital

The Hospital of the University of Munich, Germany, is one of the largest and most competitive university hospitals in Germany and Europe. 48 specialized hospitals, departments and institutions harbouring excellent research and education provide patient care at the highest medical level with around 11.000 employees.

WORKPLACE	Campus Innenstadt	DATE OF ENTRY	01.07.2026
WORKING HOURS	Full time	APPLICATION DEADLINE	15.05.2026
INSTITUTION	Kinderklinik und Kinderpoliklinik im Dr. von Haunerschen Kinderspital	REFERENCE NUMBER	2026-K-0138
DEPARTMENT	Forschung / Research, AG Kotlarz		

Scope of duties

For a DFG-funded project of the TRR425 initiative "DEFINE" (Desmosomal dysfunction in epithelial barriers), the research group headed by Prof. Dr. med. Dr. (PhD) Daniel Kotlarz at the Comprehensive Childhood Research Center of the Dr. von Hauner Children's Hospital (CCRC Hauner) is seeking to recruit a highly motivated and intellectually curious Postdoc in translational research in childhood IBD & epithelial barrier biology.

The overall goal of our interdisciplinary and international research group is to explore molecular causes in children with life-threatening very early onset inflammatory bowel disease (VEO-IBD). Our laboratory applies human genetics, multi-omics technologies, and state-of-the-art preclinical models to decode molecular disease mechanisms and translate discoveries into improved diagnostics and targeted therapies for children with this intractable condition.

The project will be conducted within the vibrant research environment of the CCRC-Hauner (>130 interdisciplinary scientists) that has an outstanding track record in translational sciences and provides state-of-the-art core facilities (CF) (e.g., NGS, flow cytometry, microscopy). In parallel, we have a bioinformatics team at Helmholtz Munich that supports all projects leveraging advanced multi-omics, computational biology, and AI-driven infrastructures within the Computational Health Center, an emerging European hub for AI-driven precision medicine (>40 PIs). Our institutes follows the guiding mission "Concept Pediatrics – the Child at the Center of Science", bridging fundamental discovery with patient-oriented clinical applications.

You will take a leading role in driving innovative experimental strategies to dissect epithelial barrier dysfunction and immune–epithelial interactions in VEO-IBD.

Your responsibilities will include:

- Designing and executing experiments using CRISPR/Cas9 and viral genome engineering
- Differentiating, culturing and manipulating human intestinal organoids
- Establishing and analyzing immune cell-organoid co-culture systems and infection models
- Investigating epithelial barrier integrity, junctional dynamics, and signaling pathways
- Applying advanced imaging and molecular techniques
- Performing and supporting studies in mouse models of intestinal inflammation
- Analyzing complex datasets (e.g., RNA-seq, proteomics, interactomics) in collaboration with our bioinformatics team
- Contributing to high-impact publications and presenting at international conferences
- Collaborating closely within the TRR 425 consortium and international networks

Our requirements

- We are looking for a passionate scientist who thrives in a collaborative and translational research environment.
- You are highly motivated and share our enthusiasm for translational science.
- You want to help pediatric patients by dissecting disease mechanisms of inflammatory bowel disease.
- You have team-oriented mindset.
- You hold a PhD in medicine, veterinary medicine, life sciences, pharmacy, or a related discipline.
- Strong expertise in at least one of the following areas: immunology, stem cell biology (iPSC) and intestinal organoids, molecular biology and genome editing, epithelial biology/ barrier function.
- Experience with advanced imaging, protein biochemistry or omics technologies is advantageous.
- Experience in handling and analyzing high-throughput datasets (e.g. transcriptomics, proteomics) is desirable.
- You are a flexible and proactive person with strong interpersonal skills.

Our offer

- The position offers the opportunity to work in a dynamic, highly motivated, collaborative, and international team in a research environment at one of Germany's top universities.
- Postdocs will have access to state-of-the-art infrastructure and core facilities.
- The lab is well-funded and well-equipped, with excellent support from core facilities.
- Candidates are expected to have documented expertise in immunological, molecular, cell biological, and genetic experimental techniques.
- An established state-of-the-art experimental pipeline is available, with mentoring provided by advanced researchers.
- The position offers opportunities for scientific independence and career development.
- You will be integrated into strong international alliances and networks with worldwide leading research institutes.
- A fully funded postdoctoral position is offered, initially for two years with the potential for extension.
- Remuneration is based on the Collective Agreement for the Public Sector of the Länder (TV-L) including all allowances customary in the public sector.

The Ludwig-Maximilians-University (LMU) Hospital is committed to a family-oriented policy and an equal opportunity employer. Applications should include a motivation letter (maximum one page) and a CV (maximum two to three pages).

Offers and services of the employer

- Further education and training
- Company pension scheme
- Childcare services
- Mobile work (if suitable)
- Job ticket
- Discounts
- Staff accommodation (if available)

Mr. Dr. Illig, David

089 4400 57985

Mrs. Dr.rer.nat. Kreuzeder, Marina

089 4400 57359

Application format

Please use the Online-Form for your application

http://www.lmu-klinikum.de/9f2f3051e2d11252

Disabled persons will be preferentially considered in case of equal qualification. Presentation costs cannot be refunded.

Please note that we cannot reimburse travel expenses incurred through interviews.

We ask you for your understanding that postal applications will not be returned, but will be destroyed in accordance with data protection regulations. The data usage information also applies to postal applications