T cells are an essential part of our adaptive immune system that protects us from invading pathogens. To ensure appropriate immune responses the activation and differentiation of T cells is tightly controlled. Conversely, monogenic mutations that cause the break-down of these control mechanisms have been identified to lead to autoimmune disease.

Our lab has studied the RNA-binding protein Roquin that regulates mRNA expression in T cells. Roquin loss-of-function induces spontaneous activation and differentiation of T cells and causes autoimmunity and autoinflammation.

In this project we will analyze the contribution of a set of potential cooperating factors that we have identified to be in close proximity to Roquin.

The Research Unit Molecular Immunoregulation is looking for a

**PhD Position in Immunology, Biology (f/m)**

**Job Description**

Analyzing post-transcriptional mechanisms in immune regulation.

**Methods:**

The project is interdisciplinary in nature and involves

- Immune phenotyping by multicolor flow cytometry
- Cell culture work
- Molecular biology
- Immunizations of mice
- Adoptive cell transfer experiments
Your Qualifications
- Very good marks in Biology, Biochemistry or related topics
- Good practical and theoretical background in Immunology
- Good expertise in genetics and molecular biology
- Interest in studying the immune responses of mice
- The ability to work self-motivated in an international team
- Good skills in spoken and written English

Our Offer
At the Helmholtz Zentrum München, you can contribute together with leading researchers to the investigation of the development, prevention and treatment of environmental diseases such as diabetes, chronic lung diseases and allergies. In order to further promote your professional development, we offer extensive and targeted research training and career programmes. We support the reconciliation between work and private life with flexible working time models, occupational health management, day care facility for children, a childcare subsidy, Elder Care, as well as other counseling and support services.

Remuneration and benefits are in accordance with the collective agreement for the public service (EG 13 50% TV EntgO Bund). In addition, there is also the possibility of granting an allowance amounting to 15% if the necessary conditions are fulfilled.

The position is (initially) limited to three years.

The activity involves special knowledge and experience specific to own scientific skills.

As a holder of the Total E-Quality Award, we promote equality of opportunity. In order to increase the proportion of women in management positions, we would be pleased to receive corresponding applications. Qualified applicants with physical disabilities will be given preference.

Please send your application (motivation letter, CV, names of two referees, and if possible, transcripts of your studies).

Our previous research publications on this topic:

Cleavage of roquin and regnase-1 by the paracaspase MALT1 releases their cooperatively repressed targets to promote T(H)17 differentiation. Jeltsch et al., Nat Immunol. 2014; 15:1079-89.

Roquin paralogs 1 and 2 redundantly repress the Icos and Ox40 costimulator mRNAs and control follicular helper T cell differentiation. Vogel et al., Immunity. 2013;
Review articles:

**Regulation of T cell signaling and autoimmunity by RNA-binding proteins.**

**Molecular control of Tfh-cell differentiation by Roquin family proteins.**

Apply now

Prof. Dr. Vigo Heissmeyer  
Telefon: 089 3187-1214

Helmholtz Zentrum München  
Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH)  
Research Unit Molecular Immunoregulation  
Marchioninistraße 25

81377 München

www.helmholtz-muenchen.de/en