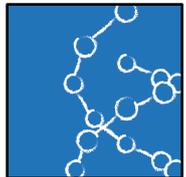




LUDWIG-  
MAXIMILIANS-  
UNIVERSITÄT  
MÜNCHEN

GENE CENTER MUNICH  
DEPARTMENT OF BIOCHEMISTRY  
AG JAE



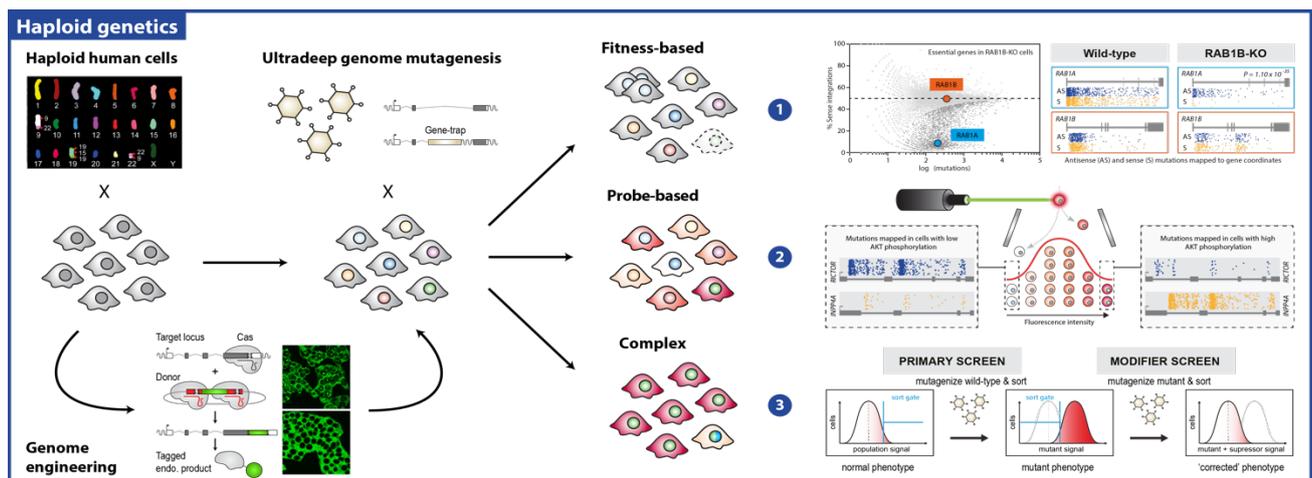
## PhD and MSc Thesis Positions in Functional Genomics

The [Jae lab](#) at the Gene Center (Genzentrum) of the Ludwig-Maximilians University Munich (LMU) is looking for highly motivated and skilled

### PhD students and MSc Thesis students in human genomics

Our lab studies the genetic profile of human disease processes with a focus on mitochondrial defects using a combination of CRISPR/Cas9 genome engineering and unbiased genome-wide mutagenesis in haploid human cells (Science, 2013; 2014). High-resolution genetic interaction mapping can be used to discover novel factors in important cellular pathways, annotate the function of 'orphan genes' and yield new strategies to therapeutically combat disease (Science, 2015). Recently, we have cracked a technical problem, which now allows us to directly dissect virtually any cellular phenotype that can be quantified at the single cell level by flow cytometry. First applications of this novel strategy identified novel factors controlling immune checkpoints (Nature, 2017a), as well as AKT signaling and other key cellular processes (Nature 2017b).

The successful candidates will employ state-of-the-art techniques ranging from large-scale genome-wide screens to genome engineering and mechanistic dissection of candidate gene function. Possible projects revolve around signal transduction, cellular stress response, and the role of mitochondria in neurodegeneration/aging.



### Profile

We are seeking highly motivated candidates who share our dedication to science and enthusiasm for interdisciplinary research with an excellent degree in biomedicine, human biology, biology, biochemistry, or similar. You are expected to be able to perform experiments independently (or with minimal supervision for MSc Thesis students), analyze data of high complexity, and work well in a team. Excellent communication skills and a solid background in molecular and cellular biology techniques, as well as genetics are required. Expertise in bioinformatics and a sense of humor are a plus.

We are a young, independent group located in the brand-new BioSys research center with access to excellent instrumentation and facilities. Embedded in the LMU life sciences campus Großhadern, downtown Munich and Bavarian lakes can be reached by public transport within 20 minutes, the German Alps in ca. 1 hour.

### Application

The application should include a CV, a letter of motivation, relevant certificates, and contact information for 2 references. PhD salaries will be in accordance with the German model for the public sector (TV-L).

Since we work with continuous selection and appointment, we encourage you to send your bundled application as soon as possible to Lucas Jae [jae@genzentrum.lmu.de](mailto:jae@genzentrum.lmu.de).

The University of Munich is an equal opportunity employer. Handicapped candidates with equal qualifications will be given preference.

For more information visit [www.genzentrum.uni-muenchen.de/research-groups/jae/](http://www.genzentrum.uni-muenchen.de/research-groups/jae/)