



Comprehensive Pneumology Center :: Max-Lebsche-Platz 31 :: 81377 Munich :: Germany

Validation of new antifibrotic drugs in human tissue cultures for interstitial lung diseases

Master thesis in drug discovery and development

Pneumology - Drug Development – 3D Cell and Tissue Culture – Translational
Research

- **Start: immediately and fulltime**
- **Opportunity to work in a dynamic and young team with comprehensive supervision**
- **Contribute as co-author to publications**

About research group:

Multiple master thesis positions are available in the laboratory of Dr. Gerald Burgstaller at the Institute of Lung Health and Immunity (LHI), Comprehensive Pneumology Center (CPC), Helmholtz Munich, 85764 Munich, Germany. In the group of Immunotherapeutic Technologies, we have a strong focus on establishing and applying advanced tools leading to the discovery and development of novel therapeutics, and thereby efficiently tackling chronic lung diseases.

Position Overview:

We are seeking highly motivated master students to join our dynamic team. The successful candidate will have the opportunity to work on cutting-edge research projects aimed at discovering and developing new therapies for chronic lung diseases. You will gain hands-on experience with advanced techniques and contribute to impactful translational research.

Your tasks:

- Participate in the generation of human ex vivo disease models (Precision Cut Lung Slices).
- Conduct phenotypic high-throughput small molecule testing.
- Validate the readouts of single cell and proteomic data.
- Assist in the development and optimization of assays and immunofluorescence imaging.
- Investigate mode-of-action of drug and identify new molecular targets.
- Application of AI-methods and microscopy.

Your profile:

- Currently enrolled in a master's program in a relevant field (e.g. Biology, Biomedicine, Pharmaceutical Sciences).

- Strong interest and background in translational research and drug development.
- Experience with lab techniques (e.g., Western blot, RT-PCR, & cell culture) and data analysis.
- Ability to work collaboratively in a multidisciplinary team. Excellent communication and organizational skills.

How to apply:

If you are passionate about advancing research in chronic lung diseases and meet the qualifications, we invite you to apply for this position. Please send your CV, a cover letter detailing your research interests and experience, and contact information to **arunkumar.verma@helmholtz-munich.de**.

For more information about our research group, visit Burgstaller Lab (<https://www.helmholtz-munich.de/en/lhi/research-groups/burgstaller-lab>). We look forward to receiving your application.

