



# Kurse Lung Biology & Disease

## Coordinator

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## Introductory Seminars

### Orientation Courses (1 ECTS)

Introductory seminars on good scientific practice, ethics, security in the lab, through which PhD students acquire the necessary basic knowledge and awareness of important general scientific issues before starting their research project.

Prerequisites: none

Date: during the winter semester

Duration: 2 days

Location: CPC

*Registration necessary.*

### Lung Basics (0.5 ECTS)

Introductory module aiming at familiarizing with lung anatomy and histology, lung physiology, non-immune cells and immune cells in the lung, and lung disease. Lectures are given by senior PhD students or postdocs.

Prerequisites: required

Date: during the winter semester

Duration: 1 day

Location: CPC

*Registration necessary.*

### Method Seminars (2 ECTS)

Practical introductory seminars during which PhD students present the most significant biomedical methods and technologies, which they will mostly use within the framework of their doctoral work. Topics addressed are: animal models, cell cultures, functional analysis and cellular imaging, flow cytometry, immunohistochemistry, immunofluorescence, generation of antibodies, microscopy, nucleic acid analysis, protein analysis, protein-DNA interaction, protein-protein interaction, screening animals, transgene animals and knockout animals.

Prerequisites: required

Date: during the winter semester

Duration: 3 days

Location: CPC

*Registration necessary.*

## Interdisciplinary Training

### Lecture Series (3 ECTS)

Seminars given by participating faculty members from partner institutions in Munich (LMU and the university hospital, HMGU, Asklepios Hospital) or further experienced scientists and clinicians from international universities and research centers. Doctoral students have the opportunity to learn about the latest trends in lung research worldwide, to improve their interdisciplinary knowledge and broaden their scientific network. The lecturers are either basic scientists or clinical experts from the lung field, which enhances the translational dimension of the training program.

Prerequisites: required

Date: bi-weekly, Thursdays from 17:00 - 18:00

Duration: 1 hour each

Location: CPC

*Registration necessary.*

### Industry Courses (0.5 ECTS)

Industry representatives are regularly invited to share their professional experience with the doctoral students. These one-day seminars give them the possibility to get an insight into the private sectors, broaden their network of professional contacts and their career perspectives.

Prerequisites: none

Date: various

Duration: various

Location: various

*Registration necessary.*

## Advanced Scientific Training

### Journal Club (3 ECTS)

Practical seminars during which PhD students present and analyse articles from renowned scientific journals of the lung field. This approach seeks to familiarize students with retrieval, critical evaluation and proper presentation of scientific literature.

Prerequisites: required

Date: biweekly, Thursdays from 15:00 - 17:00

Duration: 2 hours each

Location: CPC

*Registration necessary.*

### Scientific Writing Seminars (2 ECTS)

During these practical seminars, PhD students learn about the norms and standards used for research papers published in English.

Prerequisites: none

Date: various

Duration: 4 days

Location: CPC

*Registration necessary.*

### **Annual Lung Retreat (3 ECTS)**

The year's work is anchored by an annual Lung Retreat during which topic-specific seminars and lectures are given by invited faculty and guest speakers and in which all students present the progress of their research project. The students act as session chairs, thus getting familiar with having to introduce speakers and lead a scientific discussion at a very early career stage. At the retreat, students also have the possibility to practice the presentation of their results and in return receive constructive criticism by their fellow students, faculty and invited speakers. They are encouraged to actively take part in reasoning processes among themselves and in interaction with their teachers. The educational part of the retreat is extended by "Meet-the Professor-Seminars", in which the students are introduced to scientists of international reputation, working in a wide range of research areas relating to (path) physiologic mechanisms of chronic lung disease. In this personal setting, 5 - 8 students have the opportunity to direct questions to "role-models" and learn about individual careers in academia, industry and businesses, as well as personal and scientific visions of the respective scientists.

Prerequisites: required

Date: various

Duration: 3 - 4 days

Location: various

*Registration required.*

### **Downloads**

- [Kurse Lung Biology & Disease](#) (133 KByte)