

## STUDENTS STUDY THESE MODULES

1. Sem.	Core Module 1 (CM1): Basics in Infection Biology Core Module 2 (CM2): Immunology Core Module 3 (CM3): Introduction to OMICs Technologies	
	Core Module 5 (BM5): Key Competences	
2. Sem.	Advanced Modules (AM):	Core Module 4 (CM4): Applied Data Science
3. Sem.	Free choice from 13 AMs on offer with 6 or 12 ECTS each, a total of 36 ECTS must be attained.	Work Placement: 5 weeks, 10 ECTS
		Research Practical: 4 weeks, 8 ECTS
4. Sem.	Master's Dissertation and Defence: 6 Months, 30 ECTS	

### **CONTACT AND INFORMATION**

### Department

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### Academic Counselling and Course Enquiries

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Consultations are possible outside of office hours.

#### #wissenlocktmich





Ask your questions via (9) (0) +49 151 6701 2813

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# INFECTION BIOLOGY **AND IMMUNOLOGY**

Master of Science



# STUDENTS REQUIRE THE FOLLOWING SKILLS

The master's degree course 'Infection Biology and Immunology' is aimed at graduates of bachelor's degree courses in areas such as biology, biochemistry, human biology or degree courses with similar contents. The students should have sound knowledge of biological disciplines such as biology, biotechnology, biochemistry and molecular medicine

### **Language Skills**

- Proven proficiency in English at a level of at least B2 of the 'Common European Framework of Reference for Languages'
- Alternatively, proof of at least seven years of English at school
- Furthermore, proven proficiency in Germany at a level of at least B1

# DEGREE COURSE 'INFECTION BIOLOGY AND IMMUNOLOGY'

The master's degree course aims to educate graduates so that they can independently identify and structure questions in research and/or practice and answer them by selecting and applying suitable scientific methods. These goals are achieved through research-oriented training with significant practical components.

After commencing studies in winter semester, students first gain basic knowledge of infection biology and immunology and are introduced to OMICs technologies and Data Science. These modules are complemented by key competences such as bioethics and laboratory animal science.

Based on this foundation, students have a free choice of advanced modules and are able to specialise in areas that reflect their strengths and that they are interested in. During their studies, students receive an extensive/multifaceted methodological education that includes advanced biomedical laboratory methods in infection biology, immunology and modern OMICs technology, as well as clinical research.

Students learn how to use their knowledge to solve problems and to critically reflect and analyse complex matters. By attending these courses, students acquire practical and theoretical competences and are able to transfer principles of infection biology, immunology and biomedicine to specific problems.

#### CAREER OPPORTUNITIES

By focusing on scientific theory and practice and fostering independence and solution-oriented thinking, graduates receive the best possible preparation for careers at scientific and industrial institutions. Having gained the degree of Master of Science, graduates have access to managerial positions on the international job market or also in the public service sector. Jobs can be found at higher education institutions, research institutions, authorities and in the industrial sector, for example, in the pharmaceutical industry, at clinical laboratories or in medical technology. Furthermore, graduates are able to commence a doctorate and thus pursue a scientific career in research inside or outside of higher education.

#### THE RESEARCH LOCATION

Projects in the field of infection biology and immunology, including clinical and patient-oriented questions, constitute a key field of research at the University and University Medicine Greifswald. The combination of university facilities and external research institutions such as the Friedrich-Loeffler-Institut — Federal Research Institute for Animal Health — and the Helmholtz Institute for One Health (founded in 2022), provides Greifswald with an infrastructure unique to Germany in the field of infection biology and immunology of humans and animals in viral, bacterial or parasitic infections. The excellent infrastructure provided by the research institutions with laboratories up to biosafety level 3 and 4, as well as state-of-the-art technological equipment in the field of proteogenomics and high resolution microscopy enable teaching and research at a high and internationally competitive level.

# GREIFSWALD AND THE UNIVERSITY

The University of Greifswald was founded in 1456 and has welcomed students ever since. The large proportion of young adults shape the lives of both the University and the town. 'The Draw of Knowledge' has been the University of Greifswald's claim since 2006 — when the university turned 550 — and stands for all those drawn to the university for its venerable character. People from far afield are attracted to the University for its academic tradition and to the town for its large number of cultural highlights, family friendliness and the sea. Greifswald is a town with approximately 59 000 inhabitants and is located on the banks of the small river Ryck, which flows into the Bay of Greifswald, a basin of the Baltic Sea. Greifswald itself is the scientific and technological heart of Vorpommern, situated between the islands of Rügen and Usedom.

A number of renowned academics have taught and performed research at the University of Greifswald. These include, for example, the Nobel laureate Gerhard Domagk (Nobel Prize for Medicine) and the microbiologist and virologist Friedrich Loeffler.

