



UNIVERSITÄT ZU LÜBECK



Research Center Borstel

Leibniz-Center for Medicine and Biosciences



*Introductory Meeting  
of the  
1<sup>st</sup> Master Semester  
"Infection Biology"  
October 11, 2023*

*See Recording: [WebEx](#)*



UNIVERSITÄT ZU LÜBECK



**Research Center Borstel**

Leibniz-Center for Medicine and Biosciences

# Information & Communication

## We welcome you ...



Head of Infection Biology  
Prof. Dr. rer. nat. Ulrich Schaible  
Research Center Borstel



Study Coordinator & Lecturer  
Dr. math. et. dis. nat. Jeroen Mesters  
Uni Lübeck - Institute for Biochemistry



Study Coordinator & Lecturer  
Prof. Dr. rer. nat. Stefan Taube  
Uni Lübeck - Institute for Virology and Cell  
Biology



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**Research Center Borstel**

Leibniz-Center for Medicine and Biosciences

# Information & Communication

We welcome you ...



[Study Service Center](#)

Silke Karmann



[International Office](#)

Una Doherty

Jutta Passarger (Office Ulrich Schaible)



UNIVERSITÄT ZU LÜBECK



**Research Center Borstel**  
Leibniz-Center for Medicine and Biosciences

# Universität zu Lübeck

- **University Since 1985**
  - **5,000 Students**
  - **150 Professors**
  - **100 Private Lectures**





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**Research Center Borstel**  
Leibniz-Center for Medicine and Biosciences

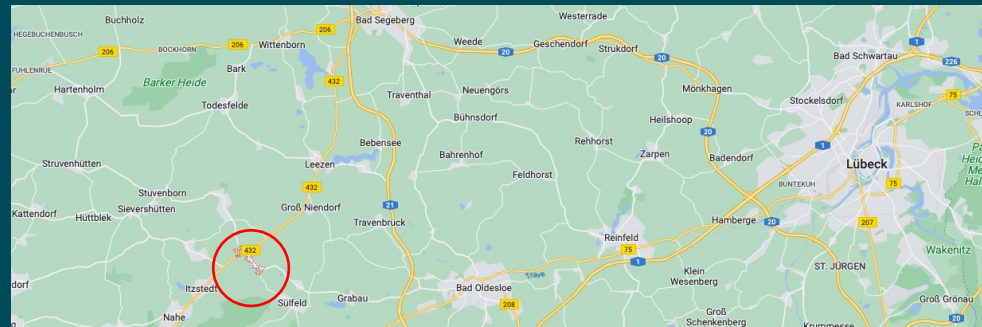
# Research Center Borstel

- The Research Center Borstel RCB  
(German: Forschungszentrum Borstel FZB)  
“Leibniz Lung Center”

is a German interdisciplinary biomedical research institution (Leibnitz)  
main focus on tuberculosis and leprosy  
located in Borstel in Schleswig-Holstein, ca 45 km West of Lübeck.



founded 1947  
ca 520 employees





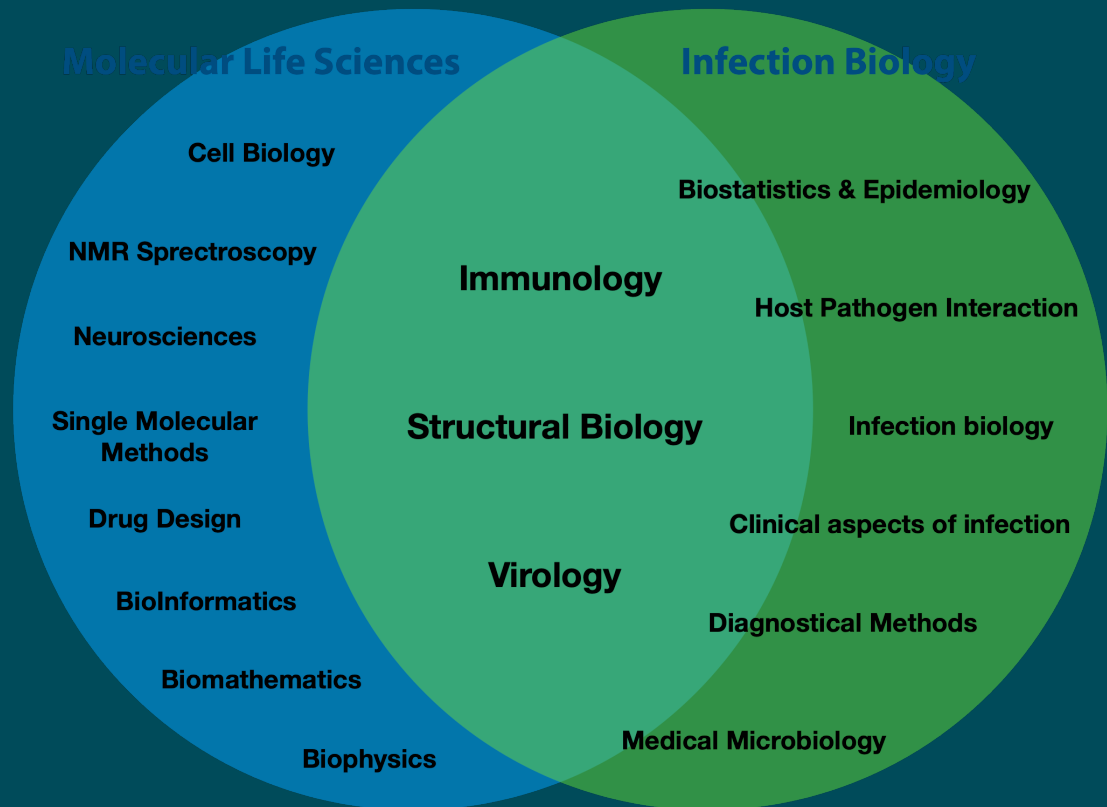
# Infection Biology

- Prepares for or scientific and applied research in the field of human and animal pathogens
- Conveys broad basic theoretical knowledge of biological systems combined with practice-oriented training investigating infectious diseases
- Focus on the study of infection and structural biology





# Infection Biology



Compulsory  
modules

Compulsory  
modules

Elective module

Interdisciplinary

1. Semester (30 KP)	2. Semester (31 KP)	3. Semester (29 KP)	4. Semester (30 KP)
LS4015-KP06 Infection Biology 1 6 KP (4V)	LS4145-KP05 Infection Biology 2 5 KP (2V+3P)	LS4115-KP16 Internships 16 KP (24P)	LS5995-KP30 Masterthesis in Infection Biology 23 KP
LS4035-KP06 Immunology 6KP (2V+2S)	LS4165-KP09 Model Systems of Infection 9 KP (3V+2S+2P)		
LS4045-KP06 Diagnostical Methods in Microbiology and Pathology 5 KP (2V+2P)	LS4155-KP06 Anti-microbial Therapy and Prophylaxis 6 KP (2V+2S)	LS5205-KP06 Consolidation Courses 6 KP (4S/P)	PS4610-KP07 Ethic in Science / Scientific Writing 7 KP (4S)
MA1610-KP05 Biostatistics and Epidemiology 6 KP (5V+1Ü)	Clinical and Experimental Aspects of Host Pathogen Interaction 6 KP (2V + 2S/P)		
LS4021-KP06 Structural Biology of Infection 6 KP (4V)	LS4175-KP06 Medical Microbiology 6 KP (4S)	LS5995-KP30 Begin Masterthesis in Infection Biology 7 KP	
<b>6 Exams</b>	<b>4 Exams</b>	<b>4 Exams</b>	<b>1 Exam</b>
Semester hours per week (SWS): Vorlesung / Übung / Praktikum / Seminar (Lecture / Exercise / Practical / Seminar)			KP: Kreditpunkte / ECTS-Points
<b>Compulsory modules</b>	<b>Elective module</b>	<b>Compulsory modules</b>	<b>Interdisciplinary</b>

“Course Regulations”



# InfBiol Calendar

**Infection Biology Course Calendar** Administrator

Today **Oct 16 - 22, 2023**

Scheduler Day 3 Days **Week** 4 Weeks Month Year Timeline Agenda List

W42	Oct 16, 2023	Tue 17	Wed 18	Thu 19	Fri 20	Sat 21	Sun 22
Fall School Vacation (Herbstferien)							
Lecture Time WS2023/24							
WS2023/24							
8am				9am ↻ Lecture: Applied Biostatistics and Epidemiology (BiostatEpi) - MA1610-KP06 Part A (Dr. rer. hum. biol. Nora			
9am				9am ↻ Exercise: Applied Biostatistics and Epidemiology (BiostatEpi) - MA1610-KP06 Part A (Dr. rer. hum. biol. Nora			
10am	10am ↻ Lecture Structural Biology of Infection - Bioanalytics A (BioanalyA) (Optical Methods LS4027-V (Prof. Dr. rer. nat. Gereon Hüttmann)	10am ↻ Lecture: Infection Biology 1 (InfBio1) - LS4015 (Prof. Dr. rer. nat. Stefan Taube)	10am ↻ Lecture Structural Biology of Infection - Bioanalytics A (BioanalyA) (Crystallography LS4021-V (Dr. Jeroen Mesters)	10am ↻ Lecture: Diagnostic Methods in Microbiology and Pathology (DiagMIPat) - LS4045 (Dr. med. Dennis Nurjadi)	10am ↻ Lecture: Clinical Aspects of Infection (ClinAsp) - LS4025-L1 (Prof. Dr. med. Jan Rupp)		
11am							
12pm			12pm ↻ Lecture Structural Biology of Infection - Bioanalytics B (BioanalyB) (NMR-Spectroscopy) (Prof. Dr. rer. nat. Ulrich Günther)		12pm ↻ Lecture Structural Biology of Infection - Bioanalytics B (BioanalyB) (Single Molecule Methods) (Prof. Dr. rer. nat. Christian Hübner)		
1pm							
2pm	2pm ↻ Lecture: Infection Biology 1 (InfBio1) - LS4015 (Prof. Dr. rer. nat. Stefan Taube)	2pm ↻ Lecture Immunology (Immunol) - LS4035 (Prof. Dr. rer. nat. Christian Karsten)					
3pm							
4pm							

- Web-based: <https://teamup.com/ksfd7w2vr3p6p8zse5>
- Subscribe i.e. in Outlook via
- <https://ics.teamup.com/feed/ks2rjcwojpwzjfs5d/0.ics>.

# 1<sup>st</sup> Semester

1. Semester (30 KP)
LS4015-KP06 Infection Biology 1 6 KP (4V)
MZ5111-KP06 Immunology 6KP (2V+2S)
MA1610-KP06 Applied Biostatistics 6 KP (5)
LS4037-KP06 Clinical and Infection 6 KP
LS4045-KP05 Diagnosical Methods in Microbiology and Pathology 5 KP (2V+2P)
LS4021-KP06 Structural Biology of Infection 6 KP (4V)
<b>6 Prüfungen</b>

- **Infection Biology 1** (LS4015-KP06, InfBio1):  
written exam  
prerequisite for InfBio2 + PC
- **Immunology** (LS4035-KP06, Immunol):  
graded seminar + written exam
- **Applied Biostatistics and Epidemiology**  
(MA1610-KP06, BiostatEp1):
  - 1<sup>st</sup> (Winter)-Semester: MA1610-L1  
Part A: **Applied Biostatistics (3 KP)**  
Lecture (graded oral exam)  
Exercise
  - 2<sup>nd</sup> (Summer)- Semester: MA1610-L2  
Part B: **Epidemiology (3KP)**  
(graded oral exam)

# 1<sup>st</sup> Semester

1. Semester (30 KP)
LS4015-KP06 Infection Biology 1 6 KP (4V)
MZ5111-KP06 Immunology 6KP (2V+2S)
MA1610-KP06 Applied Biostatistics 6 KP (5)
LS4037-KP06 Clinical and Infection 6 KP
LS4045-KP05 Diagnostical Methods in Microbiology and Pathology 5 KP (2V+2P)
LS4021-KP06 Structural Biology of Infection 6 KP (4V)
<b>6 Prüfungen</b>

- **Clinical and Experimental Aspects of Host Pathogen Interaction (LS4037-KP06)**
  - 1<sup>st</sup> (Winter)-Semester:
    - Clinical Aspects of Infection (LS4025-L1, ClinAsp)**
    - partial exam (graded exam, 2 KP)
  - 2<sup>nd</sup> (Summer)-Semester:
    - Analysis of Host Pathogen Interaction (LS4185-L1, HostPatInt)**
    - Choice of 1 of 2 courses:
      - LS4185 A:
        - Analysis of Host-Pathogen Interaction**
        - or
      - LS4185 B:
        - Rational Drug Design**
    - partial exam (graded exam, 4 KP)

# 1<sup>st</sup> Semester

1. Semester (30 KP)
LS4015-KP06 Infection Biology 1 6 KP (4V)
MZ5111-KP06 Immunology 6KP (2V+2S)
MA1610-KP06 Applied Biostatistics 6 KP (5)
LS4037-KP06 Clinical and Infection 6 KP
LS4045-KP05 Diagnostical Methods in Microbiology and Pathology 5 KP (2V+2P)
LS4021-KP06 Structural Biology of Infection 6 KP (4V)
<b>6 Prüfungen</b>

- **Diagnostical Methods in Microbiology and Pathology** (LS4045-KP05, DiagMiPat):  
graded seminar, written exam and practical course
- Practical starts January 10<sup>th</sup> (4x Wednesdays)  
**prerequisite for InfBio2 + PC**

# 1<sup>st</sup> Semester

1. Semester (30 KP)
LS4015-KP06 Infection Biology 1 6 KP (4V)
MZ5111-KP06 Immunology 6KP (2V+2S)
MA1610-KP06 Applied Biostatistics 6 KP (5)
LS4037-KP06 Clinical and Infection 6 KP
LS4045-KP05 Diagnostical Methods in Microbiology and Pathology 5 KP (2V+2P)
LS4021-KP06 Structural Biology of Infection 6 KP (4V)
<b>6 Prüfungen</b>

- LS4021-KP06: Structural Biology of Infection, (StrucBioI)  
select two out of six courses, all written exams
- 1<sup>st</sup> (Winter)-Semester
- LS4026: Bioanalytics A (BioanalyA)
  - Module part LS4021  
**Crystallography**
  - Module part LS4027:  
**Optical Methods**
- LS4027: Bioanalytics B (BioanalyB)
  - Module part LS4020B:  
**NMR Spectroscopy**
  - Module part LS4020C:  
**Single Molecule Methods**
- 2<sup>nd</sup> (Summer)-Semester (not confirmed yet)
  - Module part LS4020 E: (MemBiophy)  
Basic Membrane Biophysics
  - Module part LS4020 F: (ProBioPhy2)  
Protein-Biophysics

## 2<sup>nd</sup> Semester

2. Semester (31 KP)
LS4145-KP05 Infection Biology 2 5 KP (2V+3P)
LS4165-KP09 Model Systems of Infection 9 KP (3V+2S+2P)
... and Epidemiology (V+1Ü)
Experimental Aspects of ... (2V + 2S/P)
LS4155-KP06 Anti-microbial Therapy and Prophylaxis 6 KP (2V+2S)
LS4175-KP06 Medical Microbiology 6 KP (2S)
<b>4 Prüfungen</b>

- LS4145-KP05 **Infection Biology 2** (InfBiol2):  
graded presentation with interrogation  
**prerequisite for Master Thesis**
- LS4165-KP09 **Model Systems of Infection** ( ModSysInf):  
presentation + written exam + practical
- 2nd (Summer)- Semester: MA1610-L2  
Epidemiology (3KP)  
(graded oral exam)
- 2nd (Summer)-Semester:  
Analysis of Host Pathogen Interaction  
(LS4185-L1, HostPatInt)  
Choice of 2 courses:
- LS4185 A:  
Analysis of Host-Pathogen Interaction  
or
- LS4185 B:  
Rational Drug Design

## 2<sup>nd</sup> Semester

2. Semester (31 KP)
LS4145-KP05 Infection Biology 2 5 KP (2V+3P)
LS4165-KP09 Model Systems of Infection 9 KP (3V+2S+2P)
and Epidemiology (V+1Ü)
Experimental Aspects of (2V + 2S/P)
LS4155-KP06 Anti-microbial Therapy and Prophylaxis 6 KP (2V+2S)
LS4175-KP06 Medical Microbiology 6 KP (2S)
<b>4 Prüfungen</b>

- LS4155-KP06 **Anti-Microbial Therapy and Prophylaxis** (AntTherPro):  
written exam + graded seminar
- LS4175-KP06 **Medical Microbiology** (MedMicro):  
select two courses out of four,  
graded presentation

## 3/4 Semester

3. Semester (29 KP)	4. Semester (30 KP)
<p>LS4115-KP16 Internships 16 KP (24P)</p>	<p>LS5995-KP30 Masterthesis in Infection Biology 23 KP</p>
<p>LS5205-KP06 Consolidation Courses 6 KP (4S/P)</p>	
<p>LS5995-KP30 Begin Masterthesis in Infection Biology 7 KP</p>	<p>PS4611-KP07 Ethics in Science / Scientific Writing 7 KP (4S)</p>
<b>4 Prüfungen</b>	<b>1 Prüfung</b>

- LS4115-KP16 **Internships** ( PC):
  - two parts (no fixed start dates)
  - can be done world-wide
  - separate information event
  - One **Moodle course** for all semesters <<[here](#)>>
  - Exam as a colloquium
    - Exam offered twice a year (spring/fall)
    - Exam registration via: <https://masters-lifescience.uni-luebeck.de>
    - One internship => seminar presentation
    - One internship => poster presentation
  - Next exam March 15<sup>th</sup> 2024 you can



## 3/4 Semester

3. Semester (29 KP)	4. Semester (30 KP)
<p>LS4115-KP16 Internships 16 KP (24P)</p>	<p>LS5995-KP30 Masterthesis in Infection Biology 23 KP</p>
<p>LS5205-KP06 Consolidation Courses 6 KP (4S/P)</p>	
<p>LS5995-KP30 Begin Masterthesis in Infection Biology 7 KP</p>	<p>PS4611-KP07 Ethics in Science / Scientific Writing 7 KP (4S)</p>
<b>4 Prüfungen</b>	<b>1 Prüfung</b>

- LS5205-KP06 **Consolidation Courses** (ConsoleIB):

- You choose two courses
  - Some courses are offered
  - 1 week in spring
  - Once a week through-out the semester
- separate information event
- ungraded exam

## 3/4 Semester

3. Semester (29 KP)	4. Semester (30 KP)
<p>LS4115-KP16 Internships 16 KP (24P)</p>	<p>LS5995-KP30 Masterthesis in Infection Biology 23 KP</p>
<p>LS5205-KP06 Consolidation Courses 6 KP (4S/P)</p>	
<p>LS5995-KP30 Begin Masterthesis in Infection Biology 7 KP</p>	<p>PS4611-KP07 Ethics in Science / Scientific Writing 7 KP (4S)</p>
<b>4 Prüfungen</b>	<b>1 Prüfung</b>

- PS4611-KP07 **Ethics in Sciences / Scientific Writing** (EthScWrIB): two parts

### 1<sup>st</sup> and 3<sup>rd</sup> (Winter)-Semester

- PS4611-S **Scientific Writing** (3 KP) (ungraded exam, seminar and project work)
- Organized by Prof. Jens Mittag

- 4<sup>th</sup> (Summer)-Semester

- Could be done in the 2<sup>nd</sup> Semester as well
- PS4621-S: **Ethics in Infection Biology and Public Health** (4KP) (ungraded exam)

## 3/4 Semester

3. Semester (29 KP)	4. Semester (30 KP)
<p>LS4115-KP16 Internships 16 KP (24P)</p>	<p>LS5995-KP30 Masterthesis in Infection Biology 23 KP</p>
<p>LS5205-KP06 Consolidation Courses 6 KP (4S/P)</p>	
<p>LS5995-KP30 Begin Masterthesis in Infection Biology 7 KP</p>	<p>PS4611-KP07 Ethics in Science / Scientific Writing 7 KP (4S)</p>
<b>4 Prüfungen</b>	<b>1 Prüfung</b>

- **Master Thesis Infection Biology** (LS5995-KP30, MScThesis):
  - Can be done world-wide
  - Can be done internally
    - University of Lübeck
    - UKSH
    - Research Center Borstel
    - Fraunhofer IMTE
  - One internship or the Master thesis needs to be done internally
  - Registration via Study Service Center (SSC)

# Module leaders

If you have course specific questions, contact the module leader

- Prof. Ulrich Schaible (Borstel)
  - Infection Biology 1
- Prof. Stefan Taube
  - Infection Biology 2
  - Medical Microbiology
  - Internship
  - Consolidating in Infection Biology
  - Master Thesis Infection Biology
- Prof. Jan Rupp
  - Clinical and Experimental Aspects of Host Pathogen Interaction
  - Diagnostical Methods in Microbiology and Pathology
- Dr. Nora Eisenmann
  - Biostatistic /
- Prof. Christian Karsten
  - Immunology
- Prof. Rehmann Sutter
  - Ethics in Science
  - Scientific Writing (also Prof. Dr. Jens Mittag)
- Prof. Christian Hübner
  - Structure Biology
- Prof. Peter König
  - Host Pathogen Interaction
- Prof. Thomas Krey
  - Antimicrobial Therapy
- Dr. Christoph Hölscher (Borstel)
  - Model Systems
- Epidemiology



## Practicals

- Diagnostical Methods in Microbiology and Pathology
  - Starting January 10<sup>th</sup> 2024 (4 single days)
- Infection Biology 2
  - Basic Labtraining SS2024  
(2 individual appointments in the SS)
  - September 2024 t.b.d. (2 weeks)
- Model Systems of Infection
  - Starting September t.b.d. (1 week)
- Internships (3<sup>rd</sup> Semester)
  - Info [here](#)
- Consolidation Courses (3<sup>rd</sup> Semester)
  - Info [here](#)



## Exams Policies

- <https://www.uni-luebeck.de/studium/studiengaenge/infection-biology/master/examination-policy.html>
- The exams of the MINT-study courses are centrally organized.
- A regular and successful participation in the teaching modules, apart from the self-study, is strongly recommended as a solid preparation for the examinations.
- The total amount of time allocated to a written examination is usually between 60 and 180 minutes (Examination Regulations).
- Exam participation must be registered via QiS before the registration deadline.

## Exams Policies

- <https://www.uni-luebeck.de/studium/studiengaenge/infection-biology/master/examination-policy.html>
- For more information about date/time and place consult the UnivIS and follow the link for the IB studies. In case of inconsistencies, please immediately inform the module responsible person
- Persons who, due to physical/mental limitations, can obtain a "[green-card](#)" and can apply for a change of examination conditions may submit a formal request to the examination board 2 weeks before the exam takes place.







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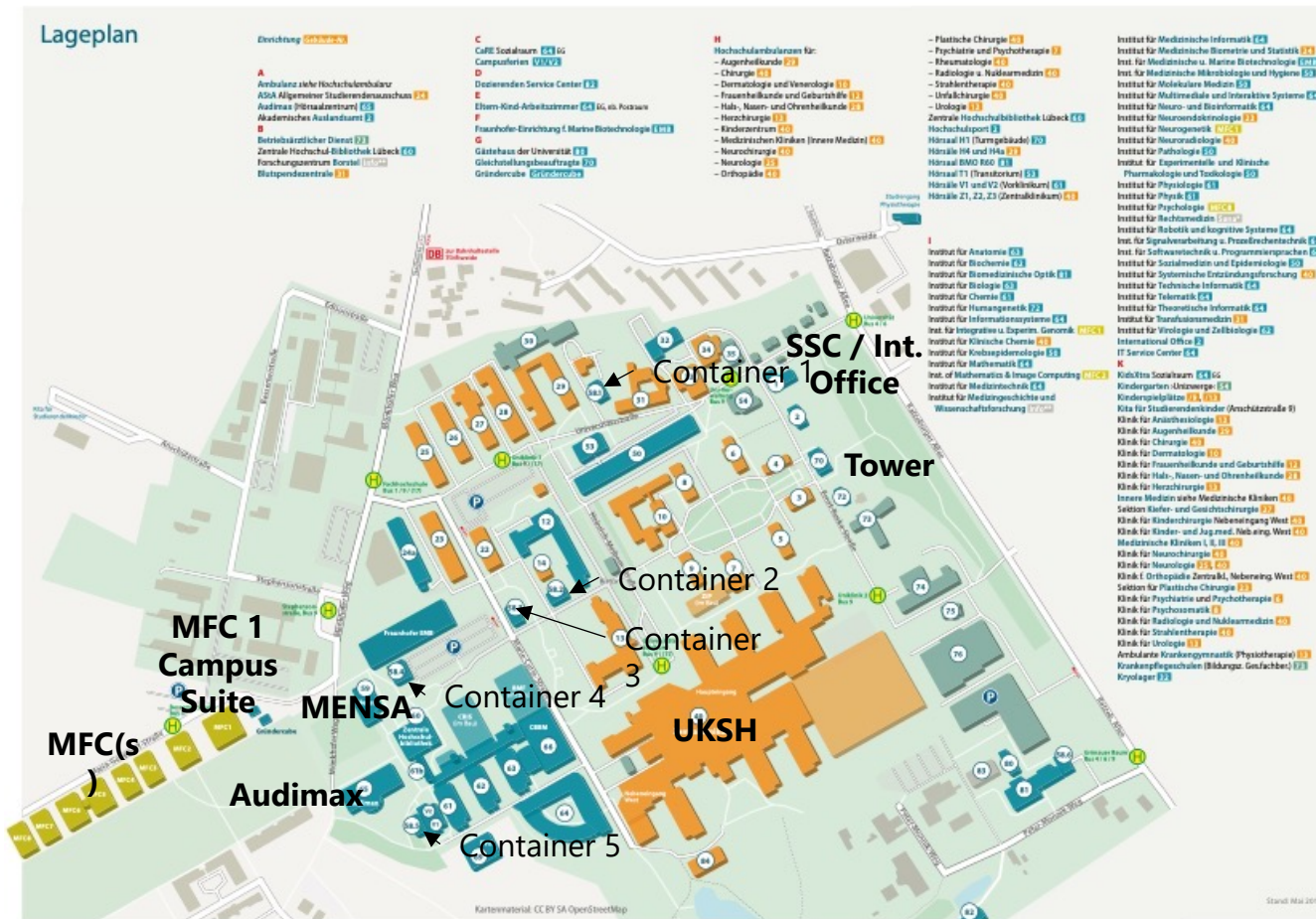
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## Examination committee



# Campusplan





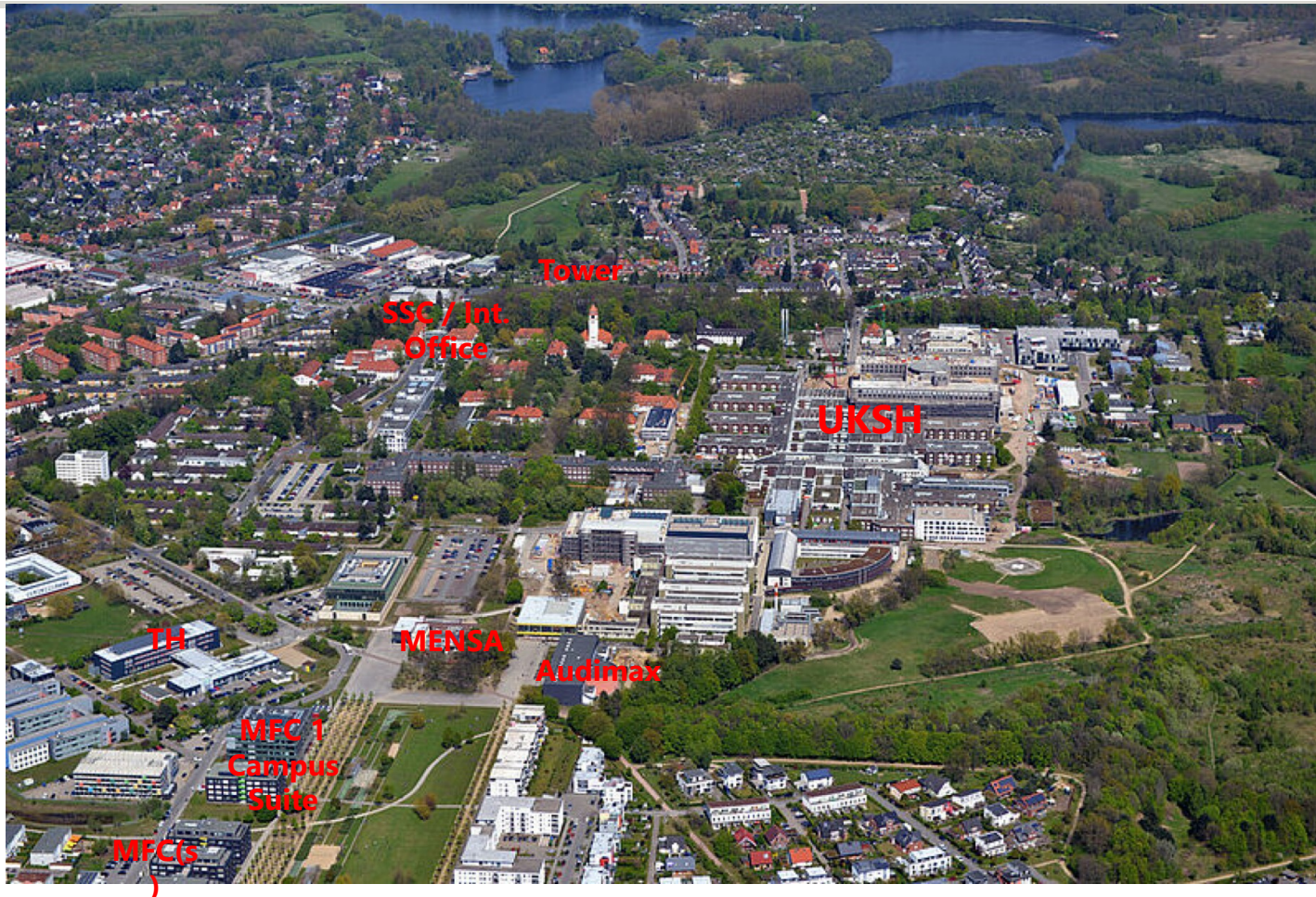
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Research Center Borstel  
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# Campusplan

Lübeck  
City



Groß  
Grönau

# International Office



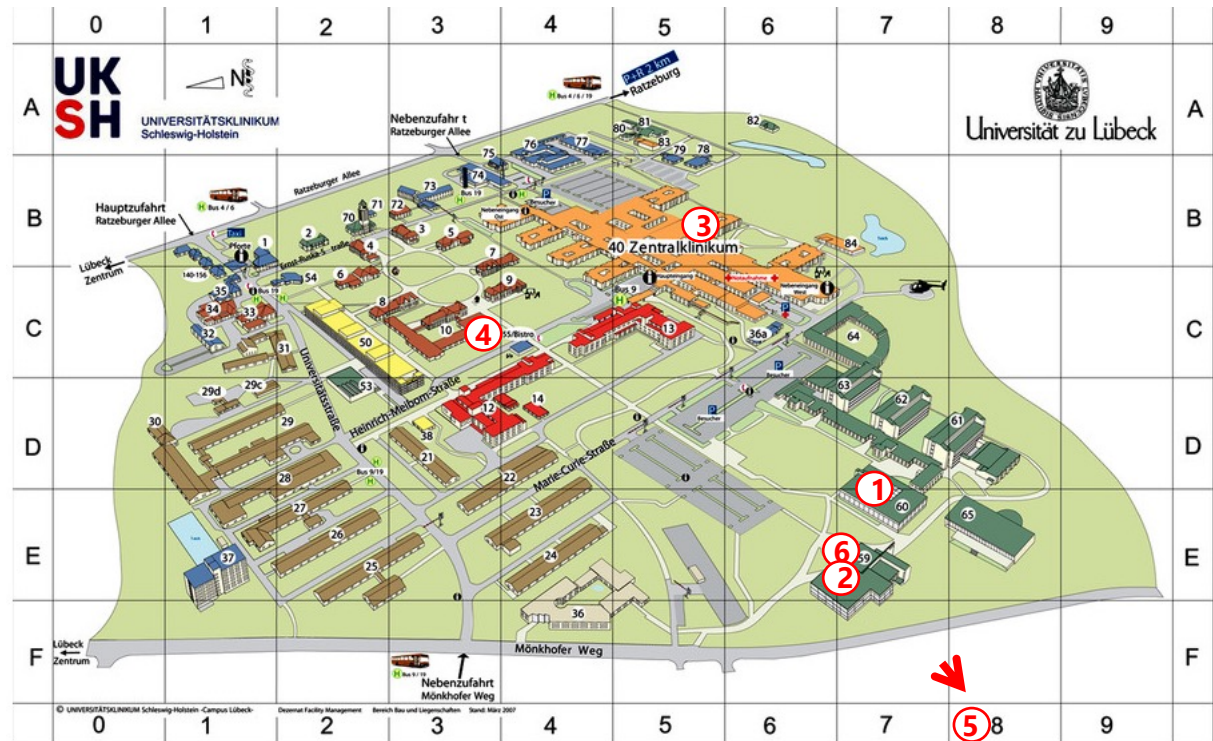
## Building 2

- information and services regarding your studies or your research stay
- information on opportunities for studying abroad
- Language Courses
- Scholarships
- Student ID



# „Hot spots“

- **Library:** **1**  
Mon - Fri: 9 am - 11.30 pm  
Sat: 9 am - 6 pm  
Sun: 1 pm - 6 pm
- **Canteen:** **2**  
Mon - Fri: 11 am - 2 pm
- **“Personalcasino”:** **3**  
Mon - Fri: 7 - 10:30 am  
and 11:15 am - 6 pm
- **Bakery “Junge”:** **4**  
Mon - Fri: 6.30 am - 6 pm  
Sat and Sun: 7.30 am - 5 pm
- **Campus Suite:** **5** (MFC)  
Mon - Thu: 7.30 am - 5.30 pm  
Fri: 7.30 am - 5 pm
- **Cafeteria:** **6**  
Mon - Fri: 8.00 am - 4.00 pm



# Lecture halls

Name	Building	
AM/AMS	65	“Audimax”
Banach	64	3 <sup>rd</sup> floor, room 3.014
H1	70	the tower building
Hilbert	64	3 <sup>rd</sup> floor, room 3.015
ITCS	64	2 <sup>nd</sup> floor, room 2.021
KT	53	
“Mikroskopiersaal”	63	ground floor, room 40
Minsky	64	ground floor, room 0.067
S3b	40	“Zentralklinikum”
“Seminarraum 1”	50	1 <sup>st</sup> floor, room 512
V1/V2	61	



H4  
Diagnosis lecture

29



# Semester Ticket



Since May 1st, the nationwide valid “Deutschlandticket” will be available for €49 per month. In the following, we want to inform you about this ticket and its connection to the semester ticket  
Overview:

- The **semester ticket remains valid only in Schleswig-Holstein and Hamburg**.
  - There is an **upgrade option** by which an existing semester ticket can be converted to a Deutschlandticket for the monthly price difference of **€16.40**.
  - You may order the semester ticket upgrade at <https://www.nah.sh/de/fahrkarten/landesweites-semesterticket/semesterticket-upgrade/>.
  - The semester ticket upgrade is – as well as the ordinary Deutschlandticket – only available as **monthly terminable subscription**. The upgrade is optional.
  - The price for the semester ticket upgrade must be paid by **SEPA Direct Debit Scheme** (your bank account is charged monthly).
  - To order the upgrade, your semester fee must be paid and listed correctly in the uni system. The verification process is the same as in the ordering of the normal semester ticket.
  - The upgrade ticket subscription terminates automatically at the end of the semester. Furthermore, you may terminate the subscription anytime. Note that **the termination for the following month must then be submitted until the 10th of a month**.
  - The upgrade is available as mobile ticket in the [Nah.SH](#) app and DB Navigator, and can be ordered any time, also for each current month until the 28th.
  - When using the digital Deutschlandticket in the Nah.SH-App, note that it can hold only one ticket at a time. To insert a Deutschlandticket into the app, a potential semester ticket must be removed from the app beforehand, and after the Deutschlandticket subscription has expired, the “old” semester ticket must be inserted again using ticket number and date of birth.
  - From August on, you can alternatively get a paper ticket for self-print. The ticket must be ordered until the 15th of the previous month, will be sent to you by mail at the end of each month and must be printed on DIN A4.
- Note that “DB Vertrieb GmbH | Abo-Center der Deutschen Bahn” is in charge of the upgrade ticket. You may manage your subscription online at <https://www.bahn.de/abportal>.

<https://www.asta.uni-luebeck.de/service/deutschlandticket/>

## Student ID card



- **Identification @ Uni Lübeck**  
i.e. for examinations
- **Free Bus+Train:**  
Lübeck , SH + Hamburg
- **Free Ferry:**  
Travemünde "Privall"
- **You will also get a discount at:**
  - Public libraries
  - Museums and theaters
  - Indoor swimming pools





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Any Questions ?

If you have any questions send us an email or make an appointment



Head of Infection Biology  
Prof. Dr. rer. nat. Ulrich Schaible  
Research Center Borstel



Study Coordinator & Lecturer  
Dr. math. et. dis. nat. Jeroen Mesters  
Uni Lübeck - Institute for Biochemistry



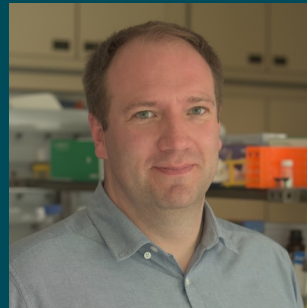
Study Coordinator & Lecturer  
Prof. Dr. rer. nat. Stefan Taube  
Uni Lübeck - Institute for Virology and Cell Biology

Any Questions ?

## Mental health safety net

<https://moodle.uni-luebeck.de/course/view.php?id=6191>

Guidance Lecturer (Vertrauensdozent):



Prof. Dr. Lars Redecke  
by telephone between 9 a.m. and 5 p.m.

Email: [redecke@biochem.uni-luebeck.de](mailto:redecke@biochem.uni-luebeck.de)

Tel.: +49 0451 3101 3117

- [Trusted Student Representatives](#)
- [Student telephone counselling:  
Providing a sympathetic ear](#)
- [Learning and exam coaching \(for Lübeck students, free of charge and confidential\)](#)



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<https://www.hochschulsport-luebeck.de>



Enjoy your time in Lübeck