

Hannover Medical School

Hannover Biomedical Research School



Curriculum

MD / PhD Program "Molecular Medicine"

PhD Programs "Infection Biology" and "DEWIN: Dynamics of Host-Pathogen Interactions"

PhD Program "Regenerative Sciences"

PhD Program "Auditory Sciences"

PhD Program "Epidemiology"

PhD Program "BIOMEDAS (Biomedical Data Sciences)"

Winter and Summer Semester 2026/27

www.mhh.de/hbrs

Academic Year

Winter Semester 2026 / 2027

Start Lecture Period: October 12th, 2026
(Opening ceremony October 5th)

End Lecture Period: February 26th, 2027

Intermediate Examinations

MD / PhD "Molecular Medicine": January 4th to March 2nd, 2027

PhD "Infection Biology" / "DEWIN": March 9th, 2027

PhD "Regenerative Sciences": TBD

PhD "Epidemiology", PhD "Auditory Sciences" and PhD "BIOMEDAS": To be determined on an individual basis, depending on the status of the PhD thesis.

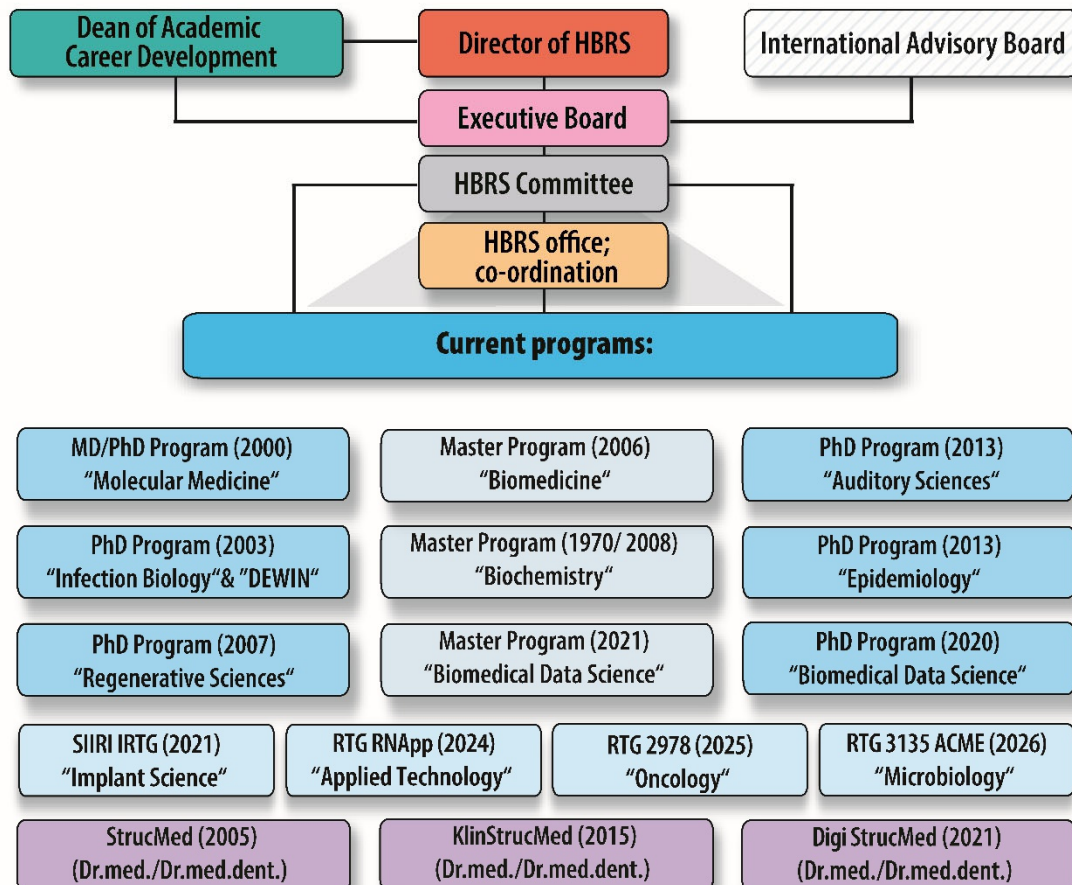
Summer Semester 2027

Start Lecture Period: April 5th, 2027

End Lecture Period: July 16th, 2027

Organization of Hannover Biomedical Research School

Hannover Biomedical Research School



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Prof. Dr. Halyna Shcherbata

PD. Dr. Christian Bär

Dr. Siegfried Weiß

Student members / class speakers: Friederike Flögel / Shubham Rana (class of 2023), Abdul Rahman (class of 2024),

Parham Pourabbas Tahvildari / Maja Stankewitz (class of 2025), NN

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Prof. Dr. Axel Schambach, PhD

Prof. Dr. Dagmar Wirth

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Dörthe Meyerdirks & Yaw Awuku-Larbi (student representatives)
Prof. Dr. Thomas Schulz (guest)
Dr. Susanne Kruse (guest)

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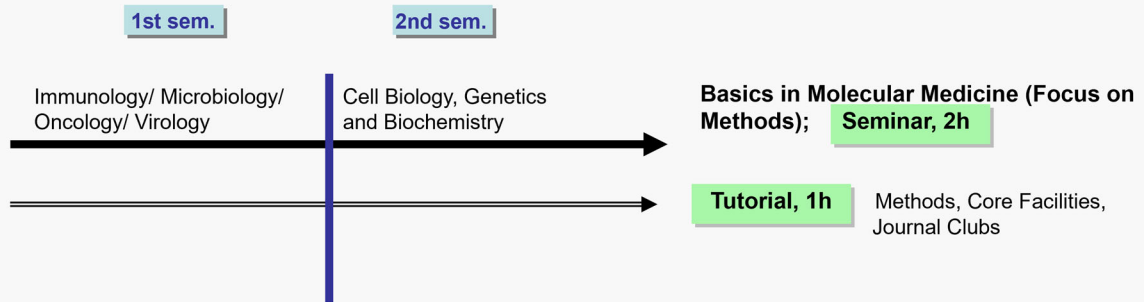
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Content:

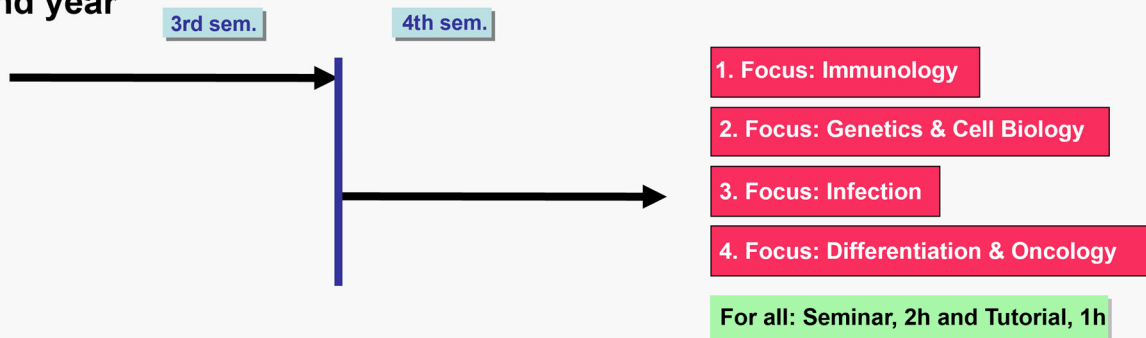
	Page
Obligatory seminars for PhD programs, Good Scientific Practice	12
1 st Semester MD / PhD „Molecular Medicine“	13
2 nd Semester MD / PhD „Molecular Medicine“	17
3 rd Semester MD / PhD „Molecular Medicine“	19
4 th Semester MD / PhD „Molecular Medicine“	21
1 st Semester PhD „Infection Biology / DEWIN“	23
2 nd Semester PhD „Infection Biology / DEWIN“	25
3 rd Semester PhD „Infection Biology / DEWIN“	26
4 th Semester PhD „Infection Biology / DEWIN“	28
1 st Semester PhD „Regenerative Sciences“	30
2 nd Semester PhD „Regenerative Sciences“	33
3 rd Semester PhD „Regenerative Sciences“	34
4 th Semester PhD „Regenerative Sciences“	36
Additional Offers PhD „Regenerative Sciences“	37
PhD program „Auditory Sciences“	39
PhD program „Epidemiology“	41
PhD program „Biomedical Data Science (BIOMEDAS)“	43
Specific seminars	45
- <i>organized by HBRS</i>	45
Optional courses	46
Rules and Requirements	47
Map	61

Curriculum MD / PhD “Molecular Medicine”

1st year



2nd year



3rd year: concentration on individual research projects

Structure of the MD/PhD program “Molecular Medicine”

Year 1	Year 2	Year 3
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- Sem. + Lect. in basic sciences Monday (4.30 - 6.00 pm; 6 cp)
- Tutorials Mondays; until Christmas separate tutorials for medical students and life scientists (3.15- 4.15 pm; 2 cp)

- Complex and clinical system; choice between the foci Immunology, Infection, Oncology and Differentiation, Cell Biology / Genetics, Biochemistry Mondays, Seminar and Tutorial (3.00 - 6.00 pm; 8 cp)

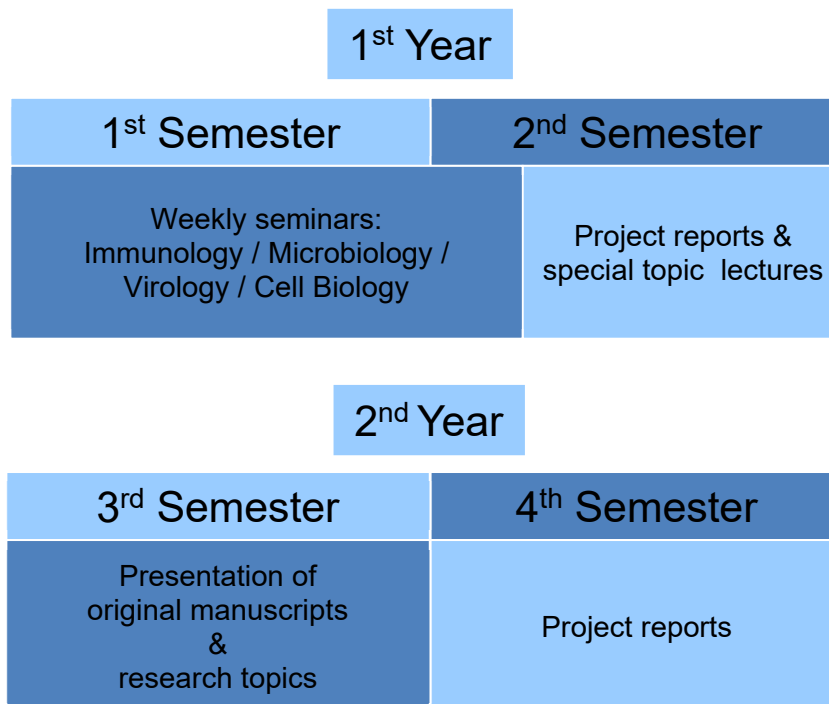
- 3-year PhD project work (125 cp)
- Three presentations in department over three years (10 cp)
- Three presentations of manuscripts at the departments Journal Club over three years (3 cp)
- Public annual presentation / project report (10 cp)
- Talk / presentation at international congress (2 cp)
- Project-orientated seminars / courses; including practicals (80 h, 8 cp)
- Participation in summer schools / interdisciplinary seminars (e. g. soft skills) / congress (60 h, 6 cp)

cp: credit points

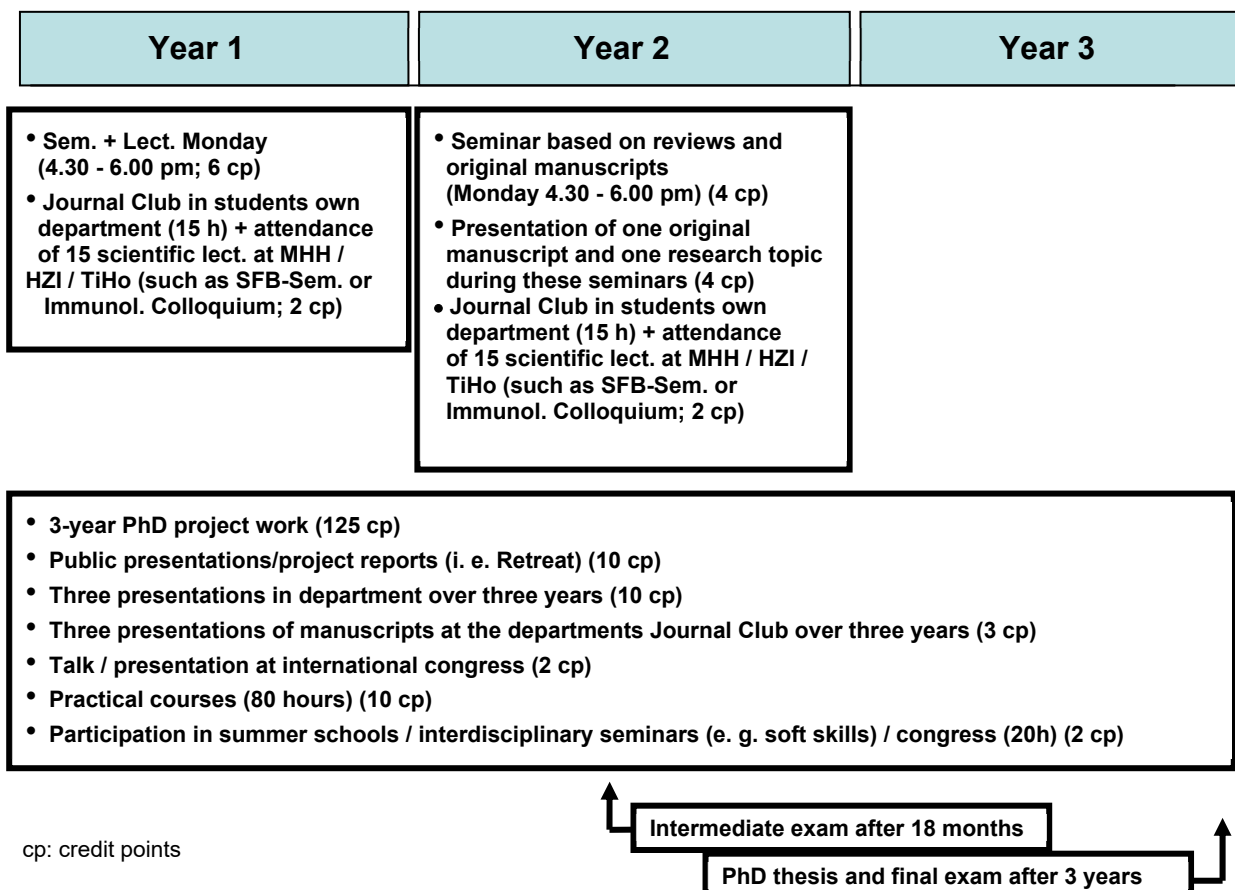
Intermediate exam after 18 months

PhD thesis and final exam after 3 years

Curriculum PhD “Infection Biology” and “DEWIN”

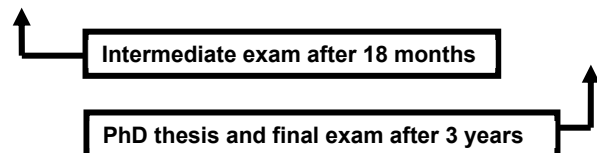


Structure of the PhD Program “Infection Biology” and “DEWIN”



Structure of the PhD-Program "Regenerative Sciences"

Year 1	Year 2	Year 3
• Seminars + Lectures in basic sciences Thursday (4.15 - 5.45 pm) • Tutorials Thursday (3.00 - 4.00 pm)	• Seminars + Lectures in basic sciences Thursday (4.15 - 5.45 pm) • Tutorials Thursday (3.00 - 4.00 pm)	Focus on experimental work
• 3-year PhD project work • Three presentations in department within three years (regular attendance) • 3 Presentations of manuscripts at the department's Journal Club within three years (regular participation, i. e. 10 times per year) • Public annual presentation/project report (i. e. retreat) • Talk / presentation at international congress • Project-orientated seminars / courses; including practicals and summer schools (80 h) • Participation in interdisciplinary seminars (e. g. soft skills / congresses) (40h)		

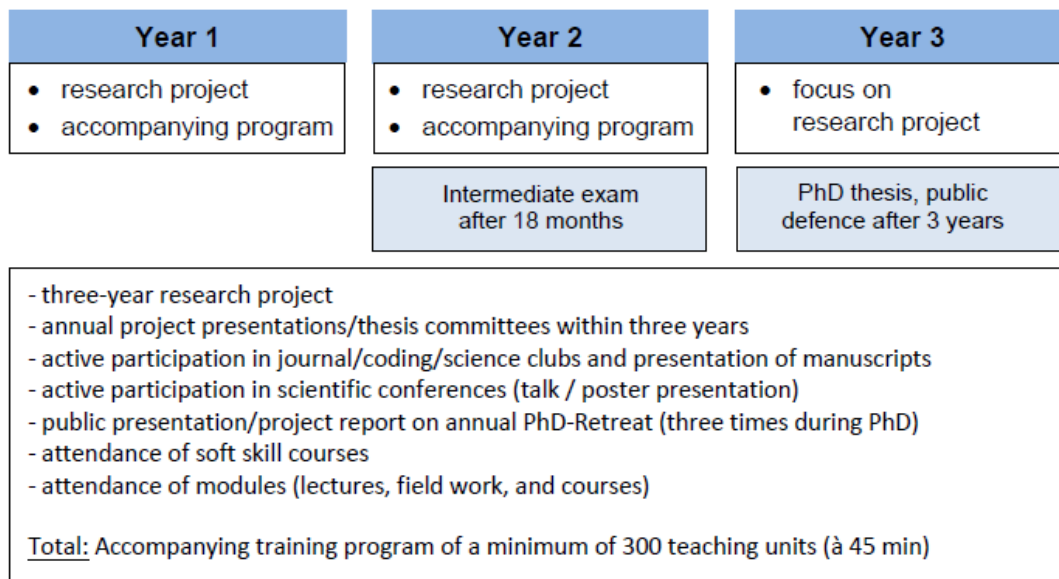


You may replace up to 30 hours of the Thursday seminars and tutorials by the additional offers

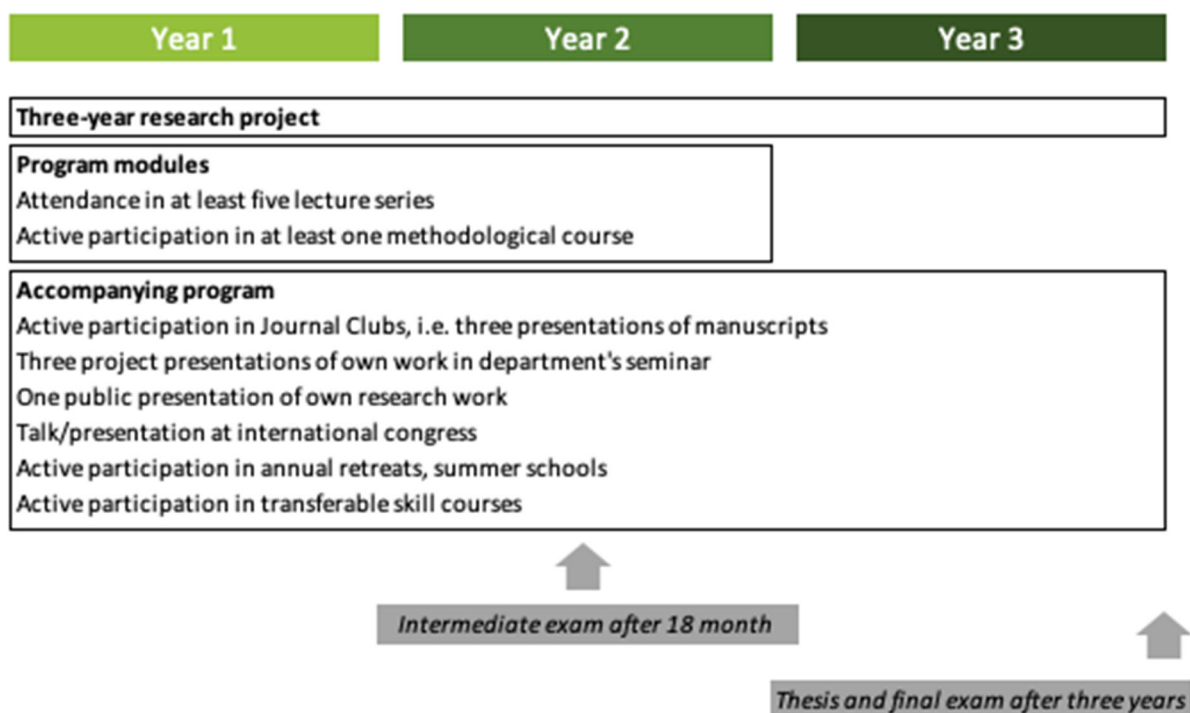
"Meet the Investigator" or "Method based seminar"

see page 46

Structure of the PhD-Program “Epidemiology”



Structure of the PhD-Program BIOMEDAS (“Biomedical Data Science”)



1.15- 2.45 pm Third Seminar: Good Scientific Practice
Ethics and Statistics
Building J2, Lecture Hall A

MD / PhD Program Molecular Medicine

1st Semester

The curriculum of the first year is orientated towards basics and methods in the different disciplines.

Seminars together with PhD students from Infection Biology: building J2, lecture hall A (I02-H0-1180)

MM Seminars only MD / PhD "Molecular Medicine": Hannover Biomedical Research School, building J4, level 01 (2nd floor), PhD seminar room 1140 (I04-01-1140)

The content and learning objectives of the individual MM courses are available in ILIAS.

HBRS Opening: Monday, 5 October 2026, 5.00 pm (building J6, lecture hall R)

IMMUNOLOGY

General introduction (courses, expectations, etc.), Q&A, election of class speakers		Monday, 12.10.2026	3.45 - 4.15 pm	PhD room I04-01-1140	Susanne Kruse
Haematopoiesis - Episode 1 and Team Clock (Immunology I)	Seminar	Monday, 12.10.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Christine Falk
Super Resolution Light Microscopy	MM Seminar	Monday, 19.10.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Rudolf Bauerfeind
Innate Immunity (Immunology II)	Seminar	Monday, 19.10.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Annett Ziegler
Hannover Unified Biobank	MM Seminar	Monday, 26.10.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Thomas Illig
B Cells & Antibody Responses (Immunology III)	Seminar	Monday, 26.10.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Siegfried Weiß
Molecular Imaging	MM Seminar	Monday, 02.11.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Annika Heß
T Cell Development and T Cell Responses (Immunology IV)	Seminar	Monday, 02.11.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Hristo Georgiev
Electron Microscopy in Life Sciences	MM Seminar	Monday, 09.11.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Stephanie Groos
Cytotoxic T Cell Responses (Immunology V)	Seminar	Monday, 09.11.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Berislav Bosnjak

Now you have the choice between either Oncology *OR* Microbiology:

ONCOLOGY FOCUS (in HBRS PhD seminar room I04-01-1140)

Flow Cytometry and Cell Sorting	MM Seminar	Monday, 16.11.2026	2.45 - 4.15 pm	PhD room I04-01-1140	Matthias Ballmaier
Leukaemia: A Clinical View (Oncology I)	MM Seminar	Monday, 16.11.2026	4.30 - 6.00 pm	PhD room I04-01-1140	Matthias Eder/ Hanna Kirchhoff
Gene Technology and Biosafety	MM Seminar	Monday, 23.11.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Ruth Knorr
Tertiary Lymphoid Structures: Development and Role (Oncology II)	MM Seminar	Monday, 23.11.2026	4.30 - 6.00 pm	PhD room I04-01-1140	Tamar Kapanadze
Organoids: Bridging the Gap between <i>in vitro</i> Models and Cutting-Edge Research	MM Seminar	Monday, 30.11.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Manuela Büttner
From Overexpression to Suppression: The Lentiviral Toolbox in Action (Oncology III)	MM Seminar	Monday, 30.11.2026	4.30 - 6.00 pm	PhD room I04-01-1140	Tobias Mätzig
Clinical Immunology: Pathogenesis of an Autoimmune Disease (Lupus erythematosus)	MM Seminar	Monday, 07.12.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Torsten Witte
Gene Expression Analysis in Cancer Research (Oncology IV)	MHH Seminar	Monday, 07.12.2026	4.30 - 6.00 pm	PhD room I04-01-1140	Michael Morgan
Informal Get-Together and Biscuits: Feedback/ Discussions/ Questions		Monday, 14.12.2026	3.15 – 4.15 pm	PhD room I04-01-1140	Susanne Kruse/ Catharina Mehl
Induced Pluripotent Stem Cell Resources for the Treatment of Congenital Diseases (Oncology V)	MHH Seminar	Monday, 14.12.2026	4.30 - 6.00 pm	PhD room I04-01-1140	Nico Lachmann
No courses		Monday, 21.12.2026			
Mouse Models (Oncology VI)	MHH Seminar	Monday, 04.01.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Teng Cheong Ha

MICROBIOLOGY FOCUS (in lecture hall A and HBRS PhD seminar room I04-01-1140)

Flow Cytometry and Cell Sorting	MM Seminar	Monday, 16.11.2026	2.45 - 4.15 pm	PhD room I04-01-1140	Matthias Ballmaier
Introduction to Medical Microbiology – Listeria (Microbiology I)	Seminar	Monday, 16.11.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Dirk Schlüter
Gene Technology and Biosafety	MM Seminar	Monday, 23.11.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Ruth Knorr
Salmonella (Microbiology II)	Seminar	Monday, 23.11.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Guntram Graßl
Organoids: Bridging the gap between in vitro models and cutting-edge research	MM Seminar	Monday, 30.11.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Manuela Büttner
C. difficile and Host Responses at the Intestinal Barrier (Microbiology III)	Seminar	Monday, 30.11.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Matthias Lochner
Clinical Immunology: Pathogenesis of an autoimmune disease (Lupus erythematosus)	MM Seminar	Monday, 07.12.2026	3.15 - 4.15 pm	PhD room I04-01-1140	Torsten Witte
Malaria (Microbiology IV)	Seminar	Monday, 07.12.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Nishanth Gopala Krishna
Informal get-together and biscuits: Feedback/ Discussions/ Questions		Monday, 14.12.2026	3.15 – 4.15 pm	PhD room I04-01-1140	Susanne Kruse/ Catharina Mehl
Role of the Commensal Bacteria for Human Health (Microbiology V)	Seminar	Monday, 14.12.2026	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Marius Vital
No courses		Monday, 21.12.2026			
Klebsielle pneumoniae (Microbiology VI)	Seminar	Monday, 04.01.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Leonard Knegendorf

VIROLOGY (for all MM students in lecture hall A and HBRS PhD seminar room I04-01-1140)

Organoid Models	MM Seminar	Monday, 11.01.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Lika Drakhlis
Roundabout: Virus Assembly, Egress and Cell Entry (Virology I)	Seminar	Monday, 11.01.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Katinka Döhner
Non-Viral Gene Therapy	MM Seminar	Monday, 18.01.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Felix Warnecke
RNA-binding Proteins in Viral Infections (Virology II)	Seminar	Monday, 18.01.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Nora Schmidt
Stem Cells and Immune Cells – Conjoined Twins for Optimization of Implants	MM Seminar	Monday, 25.01.2027	3.15 - 4.15 pm	Kurslabor 26 I01-01-1031	Andrea Hoffmann
Known and Emerging RNA Viruses, and Novel Antivirals (Virology III)	Seminar	Monday, 25.01.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Thomas Pietschmann
Immunotherapy and Cancer Vaccines	MM Seminar	Monday, 01.02.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Tetyana Yevsa
Applications of Nanopore Sequencing to the RNA biology of DNA viruses (Virology IV)	Seminar	Monday, 01.02.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Daniel Depledge
Group 1: Presentation of your own project (à 5 minutes)	Tutorial	Monday, 08.02.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Students / Susanne Kruse
Establishing <i>in vivo</i> Infection Models to Study Emerging Zoonotic Viruses (Virology V)	Seminar	Monday, 08.02.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Julia R. Port
Group 2: Presentation of your own project (à 5 minutes)	Tutorial	Monday, 15.02.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Students / Susanne Kruse
Mpox in Germany and its Clinical Consequences (Virology VI)	Seminar	Monday, 15.02.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Silja Kreibohm
Group 3: Presentation of your own project (à 5 minutes)	Tutorial	Monday, 22.02.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Students / Susanne Kruse

GENERAL CELL BIOLOGY

The Cell Cycle and its Implication in Diseases (Cell Biology I)	Seminar	Monday, 22.02.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Hansjörg Hauser (HZI)
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MD / PhD Molecular Medicine

2nd Semester

MD / PhD MM: Please attend all the seminars and tutorials listed below.

The content and learning objectives of the individual courses are available in ILIAS.

GENERAL CELL BIOLOGY

The Cell Cycle and its Implications in Diseases (Focus Cell Biology I)	Tutorial (JC)	Monday, 05.04.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Hansjörg Hauser (HZI)
Molecular Mechanisms of Gene Regulation (Focus Cell Biology II)	Seminar	Monday, 05.04.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Dagmar Wirth (HZI)
	Tutorial (JC)	Monday, 12.04.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Dagmar Wirth (HZI)
The Structure of the Cell's Interior (Focus Cell Biology III)	Seminar	Monday, 12.04.2027	4.30 - 6.00 pm	Lecture Hall A I02-H0-1180	Theresia Stradal (HZI)
	Tutorial (JC)	Monday, 19.04.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Theresia Stradal (HZI)

BIOCHEMISTRY AND GENETICS (for MM students only; for tutorials: JC = Journal Club; E = Exercises)

Single-cell RNA sequencing (scRNA seq)	Seminar	Monday, 19.04.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Matthias Bruhn / Abdus Salam (TWINCORE)
Choosing the Right Experimental Model: Strengths, Limitations and Translational Relevance	Seminar	Monday, 26.04.2027	3.15 - 4.15 pm	PhD room I04-01-1140	I. Karen Lopez-Cayuqueo
Transcriptomics	Seminar	Monday, 26.04.2027	4.30 - 6.00 pm	Multimedia Lab I06-S0-4112	Ahmed Hassan
	Tutorial (E)	Monday, 03.05.2027	3.15 - 4.15 pm	Multimedia Lab I06-S0-4112	Ahmed Hassan
Biophysical Methods in Biochemistry: Characterization of Protein-Protein Interactions	Seminar	Monday, 03.05.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Ute Curth
	Tutorial (E)	Monday, 10.05.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Ute Curth
The Adaptive Immune System and Immunological Methods	Seminar	Monday, 10.05.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Agnes Bonifacius/ Sabine Tischer-Zimmermann
	Monday, 17.05.2027		No courses		Public holiday

The Adaptive Immune System and Immunological Methods	Tutorial (JC)	Monday, 24.05.2027	3.15 - 4.15 pm	Sem. room 6 I2-S0-1081	Agnes Bonifacius / Sabine Tischer-Zimmermann
Oncogenic Fusion Proteins as Drivers of Myeloid Blood Cancers	Seminar	Monday, 24.05.2027	4.30 - 6.00 pm	Sem. room 6 I2-S0-1081	Florian Perner
Targeted Protein Degradation as a Tool to Study Direct Oncogenic Functions	Tutorial (JC)	Monday, 31.05.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Florian Perner
Genome-Wide Association Studies and Functional Validation	Seminar	Monday, 31.05.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Dhanya Ramachandran
	Tutorial (E)	Monday, 07.06.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Dhanya Ramachandran
Stem Cells	Seminar	Monday, 07.06.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Axel Schambach
	Tutorial (JC)	Monday, 14.06.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Axel Schambach
Translational Non-Coding RNA Therapeutics	Seminar	Monday, 14.06.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Jan Fiedler (Fraunhofer ITEM)
	Tutorial (JC)	Monday, 21.06.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Jan Fiedler (Fraunhofer ITEM)
Proteomics	Seminar	Monday, 21.06.2027	4.30 - 6.00 pm	PhD room I04-01-1140	Andreas Pich
Metabolomics	Seminar	Monday, 28.06.2027	3.15 - 4.15 pm	PhD room I04-01-1140	Heike Bähre
<i>Back-up in case rescheduling becomes necessary</i>		<i>Monday, 28.06.2027</i>	<i>4.30 - 6.00 pm</i>	<i>PhD room I04-01-1140</i>	
<i>Back-up in case rescheduling becomes necessary</i>		<i>Monday, 05.07.2027</i>	<i>3.15 - 4.15 pm</i>	<i>PhD room I04-01-1140</i>	
<i>Back-up in case rescheduling becomes necessary</i>		<i>Monday, 05.07.2027</i>	<i>4.30 - 6.00 pm</i>	<i>PhD room I04-01-1140</i>	

MD / PhD program "Molecular Medicine"

3rd Semester

The curriculum of the second year is orientated towards research and applied aspects in the different disciplines. The content and learning objectives of the individual courses are available in ILIAS.

Location: Hannover Biomedical Research School, building J4, level 01 (2nd floor), Biomedicine seminar room 1031

HBRS Opening: Monday, 5 October 2026, 5.00 pm (building J6, lecture hall R)

IMMUNOLOGY (for tutorials: JC = Journal Club; E = Exercises)

Immune Response in HIV	Seminar & Tutorial (JC)	Monday, 12.10.2026	3.30 - 6.00 pm	Biomed room I04-01-1031	Georg Behrens
Tumor Immunity and Oncogenic Signalling	Seminar	Monday, 19.10.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Christine Falk
	Tutorial (JC)	Monday, 26.10.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Christine Falk
Inborn Errors of Immunity- Cellular and Molecular Mechanisms of Immunodeficiency and Immune Dysregulation	Seminar	Monday, 26.10.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Georgios Sogkas
	Tutorial (JC)	Monday, 02.11.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Georgios Sogkas
Major Histocompatibility Complex in Tolerogenic Cell Therapies	Seminar	Monday, 02.11.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Constanca Ferreira de Figueiredo
	Tutorial (JC)	Monday, 09.11.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Constanca Ferreira de Figueiredo
Immunity in Pulmonary Pediatric Malformations and Biliary Atresia: Organoids as Keys to Understanding Rare Structural Pediatric Conditions	Seminar	Monday, 09.11.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Adan Chari Jirmo
	Tutorial (JC)	Monday, 16.11.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Adan Chari Jirmo
Protective Adaptive Immunity to Viral Infections	Seminar	Monday, 16.11.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Agnes Bonifacius et al.
	Tutorial (JC)	Monday, 23.11.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Agnes Bonifacius et al.
Mononuclear-Phagocyte System: Development and the Role in Homeostasis	Seminar	Monday, 23.11.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Jaba Gamrekelashvili
	Tutorial (JC)	Monday, 30.11.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Jaba Gamrekelashvili

Immunodermatology	Seminar	Monday, 30.11.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Lennart Rösner
	Tutorial (JC)	Monday, 07.12.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Lennart Rösner

GENETICS AND CELL BIOLOGY

The Vasculature in Health, Disease and Aging: From Cells and Animal Models to Organ-on-Chip	Seminar	Monday, 07.12.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Yulia Kiyan
	Tutorial (JC)	Monday, 14.12.2026	3.30 - 4.15 pm	Biomed room I04-01-1031	Yulia Kiyan
Small GTPases as Targets of Bacterial Toxins	Seminar	Monday, 14.12.2026	4.30 - 6.00 pm	Biomed room I04-01-1031	Harald Genth
	No courses	Monday, 21.12.2026			
	Tutorial (JC)	Monday, 04.01.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Harald Genth
Molecular Mechanisms of Heart Failure	Seminar	Monday, 04.01.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Melanie Ricke-Hoch
	Tutorial (JC)	Monday, 11.01.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Melanie Ricke-Hoch
Molecular Mechanisms in Cardiorenal Syndrome	Seminar	Monday, 11.01.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Maren Leifheit-Nestler
	Tutorial (JC)	Monday, 18.01.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Maren Leifheit-Nestler
RNA Biology in Eukaryotes	Seminar	Monday, 18.01.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Halyna Shcherbata
	Tutorial (JC)	Monday, 25.01.2027	3.30 - 4.15 pm	I11-S0-1420 (access via Transplant Center)	Halyna Shcherbata
Non-coding RNAs from Disease Mechanisms to Therapeutic Approaches	Seminar	Monday, 25.01.2027	4.30 - 6.00 pm	I11-S0-1420 (access via Transplant Center)	Shambhabi Chatterjee
	Tutorial (JC)	Monday, 01.02.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Shambhabi Chatterjee
Interactions between Signaling, Metabolic Pathways and miRNAs in HCC	Seminar	Monday, 01.02.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Asha Balakrishnan
	Tutorial (JC)	Monday, 08.02.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Asha Balakrishnan
From Gene to Function - Gene Hunting in the Area of Whole-Genome Sequencing	Seminar	Monday, 08.02.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	I. Karen Lopez-Cayuqueo
	Tutorial (JC)	Monday, 15.02.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	I. Karen Lopez-Cayuqueo
Glycosylation and Diseases	Seminar	Monday, 15.02.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Christoph Garbers
	Tutorial (JC)	Monday, 22.02.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Christoph Garbers

MD / PhD program "Molecular Medicine"

4th Semester

The content and learning objectives of the individual courses are available in ILIAS.

DIFFERENTIATION AND ONCOLOGY

Liquid Biopsies and Biomarkers	Seminar	Monday, 05.04.2027	4.30 - 6.00 pm	Online	Anja Thorenz
	Tutorial (JC)	Monday, 12.04.2027	3.30 - 4.15 pm	Online	Anja Thorenz
Adeno-Associated Viruses (AAV)	Seminar	Monday, 12.04.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Hildegard Büning
	Tutorial (JC)	Monday, 19.04.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	NN
Epigenetics in Cancer	Seminar	Monday, 19.04.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Ulrich Lehmann- Mühlenhoff
	Tutorial (JC)	Monday, 26.04.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Ulrich Lehmann- Mühlenhoff
Tumor Vaccinations	Seminar	Monday, 26.04.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Thomas Wirth
	Tutorial (JC)	Monday, 03.05.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Thomas Wirth
Cell Signaling in Stem Cell Aging and Myeloid Neoplasms	Seminar	Monday, 03.05.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Tina Schnöder
	Tutorial (JC)	Monday, 10.05.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Tina Schnöder
Onco-Immunology: Translational Research at the Interface between Immunology and Oncology	Seminar	Monday, 10.05.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Friedrich Feuerhake
		Monday, 17.05.2027		No courses	Public holiday
	Tutorial (JC)	Monday, 24.05.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Friedrich Feuerhake
Cancer Immunotherapy: from the Idea, Animal Models, Patent to Clinical Trials – a CAR-T Cell Case Study	Seminar	Monday, 24.05.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Renata Stripecke
	Tutorial (JC)	Monday, 31.05.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Renata Stripecke
Adoptive T Cell Therapies in Hematopoietic Stem Cell Transplantation	Seminar	Monday, 31.05.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Martin Sauer
	Tutorial (JC)	Monday, 07.06.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Martin Sauer

INFECTION AND IMMUNITY

HLA-Mediated Adverse Drug Reactions	Seminar	Monday, 07.06.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Christina Bade- Döding
	Tutorial (JC)	Monday, 14.06.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Christina Bade- Döding

Genetic Engineering of Cells and Mice for Development of Disease Models	Seminar	Monday, 14.06.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Dagmar Wirth (HZI)
	Tutorial (JC)	Monday, 21.06.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Dagmar Wirth (HZI)
Vaccine Responsiveness	Seminar	Monday, 21.06.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Stephanie Trittel (HZI)
	Tutorial (JC)	Monday, 28.06.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Stephanie Trittel (HZI)
Host-Pathogen Interactions	Seminar	Monday, 28.06.2027	4.30 - 6.00 pm	Biomed room I04-01-1031	Eva Medina (HZI)
	Tutorial (JC)	Monday, 05.07.2027	3.30 - 4.15 pm	Biomed room I04-01-1031	Eva Medina (HZI)
<i>Back-up in case rescheduling becomes necessary</i>		<i>Monday, 05.07.2027</i>	<i>4.30 - 6.00 pm</i>	<i>Biomed room I04-01-1031</i>	
Presentation of your own project		Monday, 12.07.2027	2.00 - 6.00 pm	Biomed room I04-01-1031	Students / Susanne Kruse

Retreat

March 4th-5th, 2027 at TWINCORE for all classes

Intermediate Exam

January 4th to March 2nd, 2027, for the class of 2025 (students organize dates)

PhD Final Exams

November 13th, 2026

June 18th, 2027

November 12th, 2027

PhD Program "Infection Biology"

1st Semester Seminars: Mondays, 16:30-18:00 hrs Location: Lecture Hall A, Building J2				
DATE	TYPE	FOCUS	LECTURER	SUBJECT
05.10.2026	HBRS Opening: 17:00 - 19:00 hrs (Building J6, Lecture Hall R)			
12.10.2026	Seminar	Immunology I	Falk	Haematopoiesis - Episode 1 and Team Clock
19.10.2026	Seminar	Immunology II	Ziegler	Innate Immunity
26.10.2026	Seminar	Immunology III	Weiß	B cells and antibody responses
02.11.2026	Seminar	Immunology IV	Georgiev	T cell development and T cell responses
09.11.2026	Seminar	Immunology V	Bošnjak	Cytotoxic T cell responses
16.11.2026	Seminar	Microbiology I	Schlüter	Introduction to Medical Microbiology, Listeria
23.11.2026	Seminar	Microbiology II	Graßl	Salmonella
30.11.2026	Seminar	Microbiology III	Lochner	C. difficile and host responses at the intestinal barrier

DATE	TYPE	FOCUS	LECTURER	SUBJECT
07.12.2026	Seminar	Microbiology IV	Gopala	Malaria
14.12.2026	Seminar	Microbiology V	Vital	Role of the commensal bacteria for human health
04.01.2027	Seminar	Microbiology VI	Knegendorf	Klebsielle pneumoniae
11.01.2027	Seminar	Virology I	Döhner	Roundabout: Virus Assembly, egress and cell entry
18.01.2027	Seminar	Virology II	Schmidt	RNA-binding Proteins in viral infections
25.01.2027	Seminar	Virology III	Pietschmann	Known and Emerging RNA Viruses, and Novel Antivirals
01.02.2027	Seminar	Virology IV	Depledge	Applications of Nanopore Sequencing to the RNA biology of DNA viruses
08.02.2027	Seminar	Virology V	Port	Establishing in vivo infection models to study emerging zoonotic viruses
15.02.2027	Seminar	Virology VI	Kreibohm	Mpox in Germany and its clinical consequences
22.02.2027	Seminar	Cell Biology I	Hauser	The cell cycle and its implication in diseases

PhD Program "Infection Biology"**2nd Semester****Seminars:** Mondays, 16:30-18:00 hrs**Location:** Lecture Hall A, Building J2

DATE	TYPE	FOCUS	LECTURER	SUBJECT
05.04.2027	Seminar	Cell Biology II	Wirth	Molecular mechanisms of gene regulation
12.04.2027	Seminar	Cell Biology III	Stradal	The structure of the cell's interior

Times & Location: Mondays, 16:30-18:00/18:30 hrs, MHH, TPFZ/I-11, Seminar Room S0-1410

DATE	FOCUS	SUPERVISOR	STUDENT	SUBJECT
19.04.2027	Project Presentation			
	Project Presentation			
26.04.2027	Project Presentation			
	Project Presentation			
03.05.2027	Project Presentation			
	Project Presentation			
10.05.2027	Project Presentation			
	Project Presentation			
24.05.2027	Project Presentation			
	Project Presentation			
31.05.2027	Project Presentation			
	Project Presentation			
07.06.2027	Project Presentation			
	Project Presentation			
14.06.2027	Project Presentation			
	Project Presentation			
21.06.2027	Project Presentation			
	Project Presentation			
28.06.2027	Project Presentation			
	Project Presentation			

PhD Programs "Infection Biology / DEWIN"

3rd Semester Times & Location: Mondays, 16:30-18:00 MHH, TPFZ/I-11, Seminar Room S0-1420				
DATE	FOCUS	SUPERVISOR	STUDENT	SUBJECT
05.10.2026	HBRS Opening: 17:00 - 19:00 hrs (Building J6, Lecture Hall R)			
12.10.2026	Topic	Galardini	De Sousa Miranda	In vivo bacterial evolution and strain diversity
	Original Paper		Li, Xuening	A multi-hospital, clinician-initiated bacterial genomics programme to investigate treatment failure in severe Staph. aureus infections; Nature Com 2025, S. Giulieri et al.
19.10.2026	Topic	Weiß	Haal	B cell responses during infection
	Original Paper		Nübling	Consult with mediator
26.10.2026	Topic	Viejo-Borbolla	Ashraf	Modulation of T cell activity by HCMV
	Original Paper		Garn	Human cytomegalovirus expands a CD8+ T cell population with loss of BCL11B expression and gain of NK cell identity. Science Immunol 2026, Sottile et al.
02.11.2026	Topic	Pietschmann	Akbarysedigh	Role of RNA modifications during herpesvirus infection
	Original Paper		Oyinloye	The role of N6-methyladenosine (m6A) mRNA modifications in herpesvirus infections. Journal of Virology 2026, Verhamme et al.
09.11.2026	Topic	Döhner	Barnard	Antiviral innate immune response of human neurons and glial cells
	Original Paper		Elajiry	TMEFF1 is a neuron-specific restriction factor for herpes simplex virus. Nature 2024., Dai et al.
16.11.2026	Topic	Graßl	Li, Xuening	Immune escape mechanisms of bacteria
	Original Paper		De Sousa Miranda	Salmonella effector SteE reprograms the macrophage regulatory network to drive specific hyperactivation of STAT3 target genes. Molecular Cell 2026, Diaz-del-Olmo et al.
23.11.2026	Topic	Bošnjak	Gharaman	Differentiation and function of T-helper cells during infection
	Original Paper		Berks	Nasal CD4+ tissue-resident memory T cells provide cross-protective immunity to influenza, JEM 2026, Mathew et al.
30.11.2026	Topic	Woller	Nübling	Anti-viral therapies
	Original Paper		Li, Taosan	Sofosbuvir for Previously Untreated Chronic Hepatitis C Infection. NEJM 2026. Lawitz et al.

DATE	FOCUS	SUPERVISOR	STUDENT	SUBJECT
07.12.2026	Topic	Carpentier	Elajiry	Host genetic susceptibility to respiratory viruses
	Original Paper		Youssef	Hepatitis E virus replication is maintained in proliferative cells within the intestinal crypt. Virology 2026, Prallet et al.
14.12.2026	Topic	Boartsch	Zimmer	The inflammasome and its modulation by bacterial and viral infections
	Original Paper		Baszczok	The soluble G protein of respiratory syncytial virus promotes viral dissemination via TLR2-mediated NLRP3 priming and pyroptosis. Npj viruse 2026, Meineke et al.
04.01.2027	Topic	Depledge	Garn	Host and virus transcription during hepatitis E virus infection
	Original Paper		Akbarysedigh	Host mature tRNAome as a decoding switch regulates antiviral and proviral responses. Nature Communications 2026, Ou et al.
11.01.2027	Topic	Cornberg	Baszczok	Intestinal immunity to pathogens
	Original Paper		Haal	Effector differentiation by stem-like intraepithelial $\gamma\delta$ T cells is required for host defense against infection. Immunity. 2026. Xie et al.
18.01.2027	Topic	Behrendt	Oyinloye	Host factors influencing hepatitis D virus infection
	Original Paper		Zielinski	Combined small molecule and loss-of-function screen uncovers estrogen receptor alpha and CAD as host factors for HDV infection and antiviral targets. Gut 2020, Verriers et a.
25.01.2027	Topic	Behrens	Bellmann	Antigen presentation in bacterial and viral infection
	Original Paper		Ghahraman	mRNA vaccines engage unconventional pathways in CD8+ T cell priming. Nature 2026, Jo et al.
01.02.2027	Topic	Kay-Fedorov	Youssef	Viral vectors for vaccine development
	Original Paper		Ashraf	CD8+ T cell targeting of tumor antigens presented by HLA. Sci. Adv. 2024, Iyer et al.
08.02.2027	Topic	Peßler	Berks	Innate immune responses against infections: PAMPs, TLR, NOD
	Original Paper		Bellmann	
15.02.2027	Topic	Dölken	Saha	Interferon response to RSV infection
	Original Paper		Barnard	Respiratory syncytial viral load drives ciliated cell dedifferentiation and suppresses antiviral immunity. Science Adv. 2026. Berg et al.
22.02.2027	Topic	Kefalakes	Li, Taosan	Balancing immunity and tolerance in the intestine
	Original Paper		Zimmer	Single-cell profiling reveals diverse $\gamma\delta$ T cell subsets in ulcerative colitis. Sci. Immunol. 2026, Mayer et al.

PhD Programs "Infection Biology / DEWIN"

4th Semester Times & Location: Mondays, 16:30-18:00 hrs MHH, TPFZ/I-11, Seminar Room S0-1420				
DATE	FOCUS	SUPERVISOR	STUDENT	SUBJECT
05.04.2027	Topic	Sheldon	Zielinski	Role of cytokines and antimicrobial peptides in eczema herpeticum
	Original Paper		Saha	Role for NF- κ B in herpes encephalitis pathology in mice genocopying an inborn error of IRF3-IFN immunity. JEM 2025, Idorn et al.
12.04.2027	Topic	t.b.a.		
	Original Paper			
19.04.2027	Topic	Depledge	Akbarysedigh	Interrogating the biology of modified RNAs through nanopore sequencing
	Original Paper	Vollmer Barbosa	Zimmer	Mechanisms of a multivalent RNA inhalation treatment against viral infection and regenerative lung disease
26.05.2027	Project Presentations	Kay-Fedorov	Ashraf	HCMV Immuno-evasion by the pUL11 and pUL10 glycoproteins in the Immunocompromised Host
		Bošnjak	Baszczok	Integrative analysis of clonal, transcriptional, and epigenetic signatures to elucidate functional diversity of CMV-specific CD8 ⁺ T cells
03.05.2027	Project Presentations	Viejo-Borbolla	Barnard	Comparative analysis of varicella zoster virus spread, immune control and evasion employing complex skin and neuronal organoids
		Rösner	Nübling	Influence of <i>Staphylococcus aureus</i> on the inflammation and comorbidities in atopic dermatitis
10.05.2027	Project Presentations	Gopala	Li, Xuening	Hepatocyte-specific function of the deubiquitinating enzyme OTUD7B in bacterial and parasitic infections
		Carpentier	Oyinloye	New Host Factor of Hepatitis D Virus in Hepatocytes
24.05.2027	Project Presentations	Engel / Taubert	Ghahraman	Multi-parametric characterization of graft injury in the context of infection in liver transplant recipients
		Behrendt	Garn	Deciphering Hepatitis E Virus Infection Dynamics in Hepatocyte Models Using Single-Cell RNA Sequencing

DATE	FOCUS	SUPERVISOR	STUDENT	SUBJECT
31.05.2027	Project Presentations	Sheldon	Youssef	Principles controlling Vesicular Stomatitis Virus HCV E1-E2 vaccine vector immunogenicity and safety
		Peßler	Li, Taosan	Pharmacologic inhibition of ACOD1 to enhance dendritic cell function and vaccine responses
07.06.2027	Project Presentations	Döhner	Zielinski	The role of thymic stromal lymphopoietin (TSLP) and other epithelial mediators in herpes simplex virus (HSV) infections of human skin
		Wedemeyer/Woller	Berks	Characterizing the Interplay between the Bile Microbiome and Immune Cells in Primary Sclerosing Cholangitis (PSC): A Translational Approach from Biliary Organoids to Blood
14.06.2027	Project Presentations	Pietschmann	Elajiry	Genetic Mechanisms of Severe Respiratory Syncytial Virus Infections
		Bošnjak	Bellmann	Immune control of murine cytomegalovirus salivary gland infection
21.06.2027	Project Presentations	Pietschmann	Saha	Host factors influencing the severity of RSV infection
		Schlüter	de Sousa Miranda	Molecular Mechanisms Regulating <i>S. aureus</i> Control by Macrophages and Keratinocytes
		Cornberg	Haal	Mucosal-associated invariant T cells as a potential target for immune intervention strategies in patients with decompensated liver cirrhosis and spontaneous bacterial peritonitis
28.06.2027	Project Presentations	t.b.a.		

Retreat:
16-17 June 2027 for all Classes

Intermediate Exam for the Class of 2025:
09 March 2027

PhD Final Exams:
29 January 2027
25 June 2027

PhD Program "Regenerative Sciences"

Times (unless otherwise stated and indicated in **bold**):

Tutorials: **Thursdays, 3:00 – 4:00 pm**

Seminars: **Thursdays, 4:15 – 5:45 pm**

Locations: *Please note the changes!*

Semester 1 & 2 MHH, building J11, Hans-Borst-Zentrum (**HBZ**), level S0, seminar room 6040

Semester 3 & 4 MHH, building J04, level 01, **HBRS** seminar room 1140

Other Locations*:

NIFE*:

Niedersächsisches Zentrum für Biomedizintechnik, Implantatforschung und Entwicklung - NIFE
(Lower Saxony Centre for Biomedical Engineering, Implant Research and Development)
Stadtfelddamm 34
30625 Hannover

Feodor-Lynen Str. 21*:

Dr. Sarah Strauß
Ambystoma Mexicanum Bioregeneration Center & Spider Silk Laboratory
Feodor-Lynen Str. 21, 30625 Hannover
Building M05 level S0 seminar room 0110

Hannover Unified Biobank (HUB)*:

Dr. Norman Klopp
Building M23 (CRC)
Feodor-Lynen-Str.15, 30625 Hannover

1st semester: HBZ seminar room (J11-S0-6040) unless otherwise indicated				
Introductory lecture - Welcoming speech - The curriculum of RegSci & HBRS - Principles of regenerative sciences	seminar	Friday, 02.10.2026	10:00 – 11:30, lecture hall C, J2	Ulrich Martin, Gaby Froriep
Principles of growth factor signaling 1 - Paracrine and juxtacrine signaling Signaling pathways involved in the regulation of growth	seminar	08.10.2026	4:15 – 5:45 pm	Rainer Niedenthal
	tutorial	15.10.2026	3:00 – 4:00 pm	
Principles of growth factor signaling 2 Cytokines, hormones, and their receptors	seminar	15.10.2026	4:15 – 5:45 pm	Michael Morgan
	tutorial	22.10.2026	3:00 – 4:00 pm	
Good Scientific Practice Part 1: Introduction and Data Management (MANDATORY!)	seminar	Tuesday, 27.10.2026	2:00 - 3:30 pm, lecture hall A, J2	Olga Halle
Good Scientific Practice Part 2: Scientific misconduct and plagiarism (MANDATORY!)	seminar	Wednesday, 28.10.2026	2:00 - 3:30 pm, lecture hall A, J2	Olga Halle
Good Scientific Practice Part 3: Ethics & Statistics (MANDATORY!)	seminar	Thursday, 29.10.2026	2:00 - 3:30 pm, lecture hall A, J2	Olga Halle, Stephan Halle
Principles of developmental biology and organogenesis 1 - Main processes: Fertilization, Cleavages, gastrulation, organogenesis, growth - Commitment, differentiation, apoptosis, patterning - Developmental mechanisms, Determination, Induction (Morphogenetic gradients and cell-cell communication) - Heart development	seminar	29.10.2026	4:15 – 5:45 pm	Andreas Kispert
How to complete your study book	Seminar & tutorial	TUESDAY 03.11.2026	3:00 – 4:30	Clara Plötner & Nabhonil Chatterji
Principles of developmental biology and organogenesis 1 Tutorial: paper presentation: cell fate analyses	tutorial	05.11.2026	3:00 – 4:00 pm	Andreas Kispert
Principles of developmental biology and organogenesis 2 - Organogenesis and regeneration - Model systems and regenerative Embryogenesis and fetal development	seminar	05.11.2026	4:15 – 5:45 pm	Andreas Kispert
Basic mechanisms of inflammation 1 - Innate and adaptive immunity and differentiation	Seminar & tutorial	12.11.2026	3:00 – 4:30 pm	Siegfried Weiß
			4:45 – 5:45 pm	
Principles of developmental biology and organogenesis 2 - Organogenesis and regeneration - Model systems and regenerative Embryogenesis and fetal development - Tutorial: paper presentation: Regenerative mechanisms	tutorial	26.11.2026	3:00 – 4:00 pm	Andreas Kispert

Principles of stem cell biology 1 - Embryonic derivation of stem cells - Culture methods	seminar & tutorial	03.12.2026	3:00 – 4:30 pm	Thomas Müller
			4:45 – 5:45 pm	
Principles of translational bioinformatics <i>Please bring a laptop for the tutorial!</i>	seminar & tutorial	10.12.2026	3:00 – 4:30 pm	Maximilian Fuchs
			4:45 – 5:45 pm	
Principles of organoid modelling - principles of organoid formation - different organoid models and applications - cardiac tissue models - multi-tissue organoid models	seminar	17.12.2026	3:00 – 4:30 pm	Lika Drakhlis
	tutorial	07.01.2027	3:00 – 4:00 pm	
Principles of stem cell biology 2 - Reprogramming and regeneration - RNA therapeutics in regenerative biology	seminar	07.01.2027	4:15 – 5:45 pm	Amar Deep Sharma
Principles of cell engineering 1 - Non-coding RNAs in heart failure - Tool box to validate disease relevant non-coding RNAs - Therapeutic approaches to support cardiac healing	seminar	14.01.2027	4:00 – 5:30 pm ITEM	Jan Fiedler
Principles of stem cell biology 2 - Reprogramming and regeneration - RNA therapeutics in regenerative biology	tutorial	21.01.2027	3:00 – 4:00 pm	Amar Deep Sharma
Principles of cell engineering 2 - Transient DNA delivery - Episomal maintenance - Stable DNA delivery - Homologous recombination - Site-specific DNA modification	seminar	21.01.2027	4:15 – 5:45 pm	Axel Schambach
	tutorial	28.01.2027	3:00 – 4:00 pm	
Basic mechanisms of inflammation 2 - Infection & cancer	seminar	28.01.2027	4:15 – 5:45 pm	Ulrich Lehmann-Mühlenhoff
	tutorial	04.02.2027	3:00 – 4:00 pm	
Synthetic biology and options for regeneration	seminar	04.02.2027	4:15 – 5:45 pm	Dagmar Wirth
	tutorial	11.02.2027	3:00 – 4:00 pm	
Principles of cell engineering 3 - Cell expansion Bioreactors	seminar	11.02.2027	4:15 – 5:45 pm	Kevin Cyrys
	tutorial	18.02.2027	3:00 – 4:00 pm	
Basics of epigenetic gene regulation - Critical principles in embryonic development, tissue regeneration and malignant transformation	seminar	25.02.2027	4:15 – 5:45 pm	Florian Perner
The histone-code - How complex networks of post-translational modifications control protein complex assembly on chromatin	seminar	04.03.2027	4:15 – 5:45 pm	Florian Perner

PhD Program "Regenerative Sciences"

2nd semester: HBZ seminar room (J11-S0-6040) unless otherwise indicated				
Laser technology in medicine - Imaging - Basics of microscopy - Contrast mechanisms - Modern approaches in imaging - Superresolution microscopy	seminar & tutorial	08.04.2027	3:00 – 4:30 pm NIFE*	Alexander Heisterkamp
			4:45 – 5:45 pm NIFE*	
Principles of growth factor engineering - Engineering growth factors and their receptors for regenerative medicine	seminar	15.04.2027	4:15 – 5:45 pm	Michael Morgan
	tutorial	22.04.2027	3:00 – 4:00 pm	
Animal models of human disease 1: Genetically modified mice - Reproductive biology of the mouse - Generation of mice by zygote pronuclear injection of DNA - Generation of transgenic mice using genetically modified ES cells - Cre-mediated site-specific recombination	seminar	22.04.2027	4:15 – 5:45 pm	Andreas Kispert
Animal models of human disease 2: Humanized mouse models	seminar & tutorial	29.04.2027	3:00– 5:45 pm	Fatih Noyan
Animal models of human disease 3: Drosophila melanogaster - Neuromuscular disorders (tutorial)	seminar & tutorial	13.05.2027	3:00 – 4:30 pm	Halyna Shcherbata
			4:45 – 5:45 pm	
Large animal models in biomedical research - Transgenic pigs - Xenotransplantation - Donor animal engineering	seminar	27.05.2027	4:15 – 5:45 pm	Heiner Niemann
	tutorial	03.06.2027	3:00 – 4:00 pm	
Mass-Spectrometry-based proteomics	seminar	03.06.2027	4:15 – 5:45 pm	Felix Polten
Cardiovascular tissue engineering: Principles	seminar	10.06.2027	4:15 – 5:45 pm	Birgit Andree
	tutorial	17.06.2027	3:00 – 4:00 pm	
Stem cell based organ regeneration Heart and clinical translation	seminar	17.06.2027	4:15 – 5:45 pm	Robert Zweigerdt
	tutorial	24.06.2027	3:00 – 4:00 pm	
Principles of organ transplantation 2 Liver, pancreas, and β -cells	seminar	24.06.2027	4:15 – 5:45 pm	Sebastian Hook
	tutorial	01.07.2027	3:00 – 4:00 pm	
Principles of organ transplantation 1 - Heart, lung, and vessels	seminar	01.07.2027	4:15 – 5:45 pm	Johanna Illner
	tutorial	08.07.2027	3:00 – 4:00 pm	

PhD Program "Regenerative Sciences"

3rd semester: HBRS seminar room (I4-01-1140) unless otherwise indicated				
Regenerative approaches: Blood and immunity 1 - Thymus and T-cell development - B-cell development - Flow cytometry	seminar	08.10.2026	3:00 – 4:30 pm	Siegfried Weiß
	tutorial	08.10.2026	4:45 – 5:45 pm	Jenny Kühne
AAV capsid engineering for in vivo gene therapy	seminar	15.10.2026	2:45 – 3:45 pm	Hildegard Büning
	tutorial	22.10.2026	3:00 – 4:00 pm	Martin Bentler
Regenerative approaches: Blood and immunity 2 - Principles of hematopoietic stem cell transplantation and lymphocyte infusions HLA system and HLA compatibility (tutorial)	seminar	22.10.2026	4:15 – 5:45 pm	Matthias Eder
	tutorial	29.10.2026	3:00 – 4:00 pm	Rabea Dettmer
Regenerative approaches: Liver 1 - Physiology and pathophysiological changes of the liver - Early and end-stage liver disease	seminar	05.11.2026	4:15 – 5:45 pm	Asha Balakrishnan
	tutorial	12.11.2026	3:00 – 4:00 pm	
Regenerative approaches: Blood and immunity 3 - Genetic disorders of hematopoiesis, - Leukemia, and leukemogenic stem cells	seminar	12.11.2026	4:15 – 5:45 pm	Michael Morgan
	tutorial	19.11.2026	3:00 – 4:00 pm	
Regenerative approaches: Liver 2 - Liver regeneration and stem cells Stem cell-derived hepatocytes	seminar	19.11.2026	4:15 – 5:45 pm	Tobias Cantz
	tutorial	26.11.2026	3:00 – 4:00 pm	Tobias Cantz, Reto Eggenschwiler
Regenerative approaches: Liver 3 - Liver tissue engineering - Artificial liver / extracorporeal devices	seminar	26.11.2026	4:15 – 5:45 pm	Tobias Cantz
	tutorial	03.12.2026	3:00 – 4:00 pm	Tobias Cantz, Reto Eggenschwiler
Regenerative approaches: Blood and immunity 4 - Embryonic stem cell derived haematopoiesis	seminar	03.12.2026	4:15 – 5:45 pm	Nico Lachmann
Genotoxicity & monitoring	seminar & tutorial	10.12.2026	3:00 – 4:30 pm	Michael Rothe
			4:45 – 5:45 pm	
Animal models of human disease 2 Humanized mouse models	seminar & tutorial	10.12.2026	3:00– 5:45 pm	Fatih Noyan
Non-coding RNAs in cardiovascular disease - Regeneration and therapeutic approaches	seminar	07.01.2027	3:00 – 4:30 pm	Christian Bär
	tutorial		4:45 – 5:45 pm	Shambhabi Chatterjee
Molecular Imaging of Regenerative Medicine - Molecular Imaging (seminar) - Tour of the Department of Nuclear Medicine (tutorial)	seminar & tutorial	14.01.2027	3:00 – 4:30 pm	James Thackeray
			4:45 – 5:45 pm	

Cell sorting - Method based seminar - Visit to MHH sorter lab → instrumentation (tutorial)	seminar & tutorial	21.01.2027	3:00 – 4:30 pm	Matthias Ballmaier
			4:45 – 5:45 pm	
Design of clinical trials & regulation	seminar	28.01.2027	4:15 – 5:45 pm	Heiko von der Leyen
Immunotoxicity & immunomonitoring	seminar	04.02.2027	4:15 – 5:45 pm	Christine Falk
	tutorial	11.02.2027	3:00 – 4:00 pm	Jenny Kühne
Patent protection of academic inventions	seminar & tutorial	11.02.2027	4:15 – 5:45 pm, online	Torben Söker, Ascenion GmbH

PhD Program "Regenerative Sciences"

4th semester: HBRS seminar room (I4-01-1140) unless otherwise indicated				
Regenerative approaches: Lung 1	seminar	08.04.2027	4:15 – 5:45 pm	Ruth Olmer
	tutorial	15.04.2027	3:00 – 4:00 pm	
Regenerative approaches: Lung 2	seminar	15.04.2027	4:15 – 5:45 pm	Carola Voss
	tutorial	22.04.2027	3:00 – 4:00 pm	
Regenerative approaches: Heart and vessels 1 - Protein therapeutics for cardiovascular repair	seminar	22.04.2027	4:15 – 5:45 pm	Marc Reboll
Regenerative approaches: Heart and vessels 2 - Pathogenesis and regeneration of the heart in response to cancer und anti-cancer treatment	seminar	29.04.2027	4:15 – 5:45 pm	Melanie Ricke-Hoch
	tutorial	13.05.2027	3:00 – 4:00 pm	
Regenerative approaches: Heart and vessels 3 - Angiogenesis and arteriogenesis in development and disease	seminar	13.05.2027	4:15 – 5:45 pm	Jaba Gamrekelashvili
	tutorial	20.05.2027	3:00 – 4:00 pm	
Regenerative approaches: Heart and vessels 4 Cardiac differentiation of pluripotent stem cells & myocardial TE	seminar	20.05.2027	4:15 – 5:45 pm, online	Ina Gruh
	tutorial	27.05.2027	3:00 – 4:00 pm, online	
Good Manufacturing Practice (GMP), Advanced Therapy Medicinal Products (ATMP)	seminar & tutorial	03.06.2027	4:15 – 5:45 pm online!	Stephan Klöß
Conditioning of autologous cells for Tissue Engineered products	seminar	10.06.2027	3:00 – 4:30 pm NIFE*	Cornelia Blume, Sebastian Heene
	tutorial		4:45 – 5:45 pm NIFE*	
Regenerative Approaches: Nerve - Degeneration and regeneration in the central and peripheral nervous system - Animal models of acute and chronic neurotoxicity - Cell therapy in the nervous system: neuronal and non-neuronal cells - Application modes & Clinical trials	seminar	17.06.2027	4:15 – 5:45 pm, online	Nadine Thau-Habermann
The Axolotl – an Amphibian Model Organism of Regeneration	seminar & tutorial	24.06.2027	3:00 – 4:30 pm Feodor-Lynen-Str. 21*	Sarah Strauß
			4:45 – 5:45 pm Feodor-Lynen-Str. 21*	
Hannover Unified Biobank (HUB)	seminar & tutorial	01.07.2027	3:00 – 4:30 pm	Norman Klopp
			4:45 – 5:45 pm HUB*	

Additional offers:

Limited number of participants. **Registration required!**

Meet The Expert

High-Throughput qPCR Molecular Diagnostics: Understanding Allies and Adversaries of Industry Occupation	Thomas Müller, Molecular Biology, Synlab Medical Care Unit Weiden	HBZ	FRIDAY, 04.12.2026	10:30 am– 12:00 pm
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Method-based Seminars

Tissue regeneration in axolotl	Prayag Murawala, MDIBL	<i>online</i>	WEDNESDAY, 04.11.2026	04:15-05:45 pm
Insight into working as a scientist in forensic medicine	Julia Leonardy	HBRS	WEDNESDAY, 11.11.2026	12:30-01:30 pm
Animal experiments Introduction to animal experiments & presentation of the animal house	André Bleich, Central Animal Facility	Central Animal Facility	TUESDAY, 17.11.2026	03:15 – 05:45 pm
Basics of Machine Learning & Deep Learning I & II* <i>(*Participation requires attendance of both seminars)</i>	Joachim Wolff Hematology & Oncology	106-S0- 4140	WEDNESDAY, 02.12.2026 WEDNESDAY, 09.12.2026	04.00 – 05:30 pm
Isolation and analysis methods for extracellular vesicles	Anton Selich, IMTTS	RPZ, J11- S0-1410	WEDNESDAY, 13.01.2027	03:00 – 05:00 pm
Application of human stem cells to study cardiac ageing: from development to disease	Shambhabi Chatterjee, IMTTS	HBZ	TUESDAY, 26.01.2027	04:30 – 06:30 pm
Methods for transcript expression and splicing analysis	Dhanya Ramachandran, Molecular Gynecology	HBZ	TUESDAY 02.02.2027	04.00 – 06:00 pm
Models of lung inflammation induced by environmental cues	Afshin Noori, LEBAO	HBZ	TUESDAY, 16.02.2027	03:00 – 04:30 pm
Seq-ing for answers in chromatin & Deciphering transcription: ChIP-seq, ATAC-seq, HiC-seq - Step-by-Step introduction to key methods of chromatin biology & using Next-Generation Sequencing to determine different measures of transcriptional output - from PRO-Seq, GRO-Seq and SLAM-Seq to total RNAseq	Florian Perner, Hematology, Hemostaseology, Oncology and Stem Cell Transplantation	HBZ	WEDNESDAY, 04.05.2027	03:00 – 05:00 pm

Functional genomics screening: revealing unbiased functional perspectives using pooled CRISPR-Cas9 screens	Florian Perner, Hematology, Hemostaseology, Oncology and Stem Cell Transplantation	HBZ	WEDNESDAY, 26.05.2027	03:00 – 05:00 pm
The cytoplasmic contribution to epigenetics	Dustin Updike, MDIBL	online	WEDNESDAY, 12.05.2027	04:15 - 05:45 pm
Mesenchymal stem cells: One for all?	Andrea Hoffmann, NIFE	NIFE	WEDNESDAY, 19.05.2027	03:00 - 04:30 pm
Laser based methods for imaging and manipulation of cells and tissue	Stefan Kalies, IQO, LUH	NIFE	THURSDAY, 22.07.2027	10:00 am - 12:00 pm
The science of aging: Understanding Senescence and Longevity	Stevan Stojanovic, IMTTS	HBZ	WEDNESDAY, 18.08.2027	03:30 – 05:00 pm

Locations:**HBZ:**

Hans-Borst-Zentrum (HBZ), MHH, building J11, level S0, seminar room 6040

NIFE:

Niedersächsisches Zentrum für Biomedizintechnik, Implantatforschung und Entwicklung - NIFE
(Lower Saxony Centre for Biomedical Engineering, Implant Research and Development)
Stadtfelddamm 34
30625 Hannover

PhD Program “Auditory Sciences”

Course offer of the PhD Program “Auditory Sciences: Physics and Engineering, Physiology and Therapy of Hearing”

For further information and registration, please contact (if not noted otherwise):

baumhoff.christine@mh-hannover.de

for courses in Hannover

mark.pottek@uni-oldenburg.de

for courses in Oldenburg

Obligatory courses:

Title	Instructor(s)	Credit	Time and place
1.1 Clinic, Diagnostic and Therapy of Peripheral and Central Hearing Disorders	Prof. Dr. Thomas Lenarz	25 hours 3 CP	MHH building K6, node B, 6 th floor, seminar room S66 Date t.b.d.
1.2 Audiology and Physics of Hearing	Prof. Dr. Hannes Maier	15 hours 11,5 CP	MHH NIFE, M20-01-1140 Date t.b.d.
1.3 Sensory Neuroscience	Prof. Dr. Andrej Kral	25 hours 3 CP	MHH NIFE, M20-01-1140 19.01.2026-23.01.2026
1.4 Imaging Methods in Medicine	Prof.'in Dr. Lilli Geworski	25 hours 3 CP	MHH Building K7, floor S0, seminar room 1321 Date t.b.d.
1.5 Psychophysical Methods in Hearing Research	Prof. Dr. Andreas Büchner, PD Dr. Daniel Schurzig, Dr. Sabine Haumann	15 hours 1,5 CP	MHH Seminar room “DHZ”, Hannover January/February 2026
1.6 Audio signal processing	Prof. Dr. Waldo Nogueira	15 hours 1,5 CP	MHH Hannover Date t.b.d.
1.7 Introduction to Biomaterials, Laser Spectroscopy and Microelectronics	Prof. Dr. Andreas Heisterkamp, Prof.'in Cornelia Blume, Prof. Dr. Holger Blume	25 hours 3 CP	LUH Hannover Date t.b.d.
1.8 Fundamentals in Auditory Physiology	Prof.'in Christine Köppl, Prof. Georg Klump	30 hours 3 CP	UOL Block course during SuSe
1.9 Summer School and Internal Retreat	N.N.	20 hours 2 CP	Summer 2026 Visselhövede

Elective courses at MHH:

Title	Instructor(s)	Credit	Time and place
2.1 Nanotechnology in Medicine	Prof. Dr. Theo Doll	12 hours 1 CP	MHH, NIFE On request
2.2 Sound Coding Strategies and Signal Processing Methods for Cochlear Implants and Hearing Aids	Prof. Dr. Waldo Nogueira	15 hours 1.5 CP	MHH On request
2.3 Modulation of Basal Ganglia Activity in Movement Disorders by Functional Neurosurgery	Prof. Dr. Joachim Krauss	1.5 hours	MHH On request
2.4 Animal Models for Psychiatric Disorders	Prof.'in Dr. Kerstin Schwabe	1.5 hours	MHH On request
2.5 Auditory Plasticity	Prof. Dr. Andrej Kral	25 hours 3 CP	MHH, NIFE On request
2.6 Scientific Writing	Prof. Dr. Andrej Kral	30 hours 3 CP	MHH, NIFE On request
2.7 Statistical Approaches in Auditory Sciences	Prof. Dr. Andrej Kral, Dr. Wiebke Konerding	10 hours 1 CP	MHH, NIFE On request
2.8 Lab Meeting Otolaryngology	N.N.	1 hour / meeting	MHH, NIFE, M20-S0-2520, Wed noon
2.9 Journal Clubs and Colloquiums	Prof. Dr. Andrej Kral Prof. Dr. Waldo Nogueira Prof.'in Dr. Lilli Geworski	1 hour/ meeting	MHH
2.10 Hearing(4all) Research Seminar	N.N.	1 hour / meeting	MHH Place: t.b.a.
2.11 Audio Signal Processing for Cis and Hearing Aids in Python	Prof. Dr. Waldo Nogueira	15 hours 2 CP	MHH, NIFE On request

Combined electives:

Medizinische Hochschule
Hannover



Leibniz
Universität
Hannover

2.12 Combined Hot Topic Seminar (Web Conference)	Dr. Christine Baumhoff, Dr. Mark Pottek	1 h / seminar	MHH/UOL/LUH Dates t.b.a.
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PhD Program "Epidemiology"

Module	Type	Dates 2026/ 2027**	Units*/TUs***
Journal Club	Presentations by students	Monthly	Regular attention and one own presentation required (1 TU per meeting)
R Coding Club	Presentations by students and postdocs	Monthly	Regular attention and one own presentation required (1 TU per meeting)
Science Club	Presentations by students and postdocs	Monthly	Regular attention and one own presentation required (1 TU per meeting)
Outbreak & Surveillance Investigations		Every two years	tbd
Introduction to Infectious Disease Epidemiology		Dec. 2026	2 units (4 TUs)
Regression Models		Dec. 2026	4 units (8 TUs)
Basics of Infectious Diseases		Dec. 2026	3 units (6 TUs)
Good Epidemiological Practice (GEP)		Dec. 2026	2 units (4 TUs)
Introduction Stata/R/Python		Dec. 2026	5 units (10 TUs)
Qualitativ study design		Dec. 2026	2 units (4 TUs)
One Health & Climate		Dec. 2026	1 unit (2 TUs)
Planetary Health		Dec. 2026	1 unit (2 TUs)
Social Determinants of Health		Dec. 2026	1 unit (2 TUs)
Basics of Lab		Dec. 2026	3 units (6 TUs)
Survival Analysis		June 2027	3 units (6 TUs)
How to publications		June 2027	1 unit (2 TUs)
Vaccinology		June 2027	1 unit (2 TUs)
Empirical Methods		June 2027	4 units (8 TUs)

Advanced statistical and epidemiological methods		June 2027	2 units (4 TUs)
Digital epidemiology		June 2027	2 units (4 TUs)
Machine Learning		June 2027	8 units (16 TUs)
Systematic Reviews und Metaanalysis		June 2027	6 units (12 TUs)
Inter-/trans-/multidisciplinary		June 2027	1 unit (2 TUs)

* Units = 1 unit á 90 minutes. Teaching modules in the PhD Programme "Epidemiology" are usually organized as compact courses.

** Additional modules or courses may take place, depending on capacity and need.

*** TU=Teaching Unit (à 45 min)

Students enrolled in the PhD Programme "Epidemiology" and conducting their research work at the HZI are offered to attend courses and symposia organized by the HZI Graduate School.

Students of the PhD Programme "Epidemiology" are encouraged to attend courses at institutes of the MHH and of the HBRS at the MHH. Teaching units are accredited after consulting with the coordinating team and in line with the requirements of the programme.

The annual PhD retreat of the Programme "Epidemiology" is taking place annually in Braunschweig; the next meeting is scheduled for Summer 2027.



PhD Program "Biomedical Data Sciences"

Curriculum Winter and Summer Semester 2026/2027

The BIOMEDAS curriculum builds upon the fields of:

- Computer Science: discipline of formalisms and scalable algorithmic processes;
- Data Science: discipline for discovering intrinsic data properties, value, and actionable insights;
- Open Science: field for enabling access to research outcomes; and
- Biomedicine: area that combines natural sciences, especially the biological and physiological sciences, to clinical medicine

and thus, offers a multidisciplinary curriculum to train data scientists with the required skills to address the challenges of transforming biomedical data into actionable knowledge that will support the discovery and interpretation of insights in biomedicine.

Depicted program modules below develop the required skills using mathematical and computational models to draw reliable conclusions from biomedical data. The accompanying program provides efficient further qualification.

Information given as of Sept 2026.

The actual curriculum can be viewed [here](#) at any time:



In case of questions, please contact the BIOMEDAS office: biomedas@translationsallianz.de

Program modules

The program modules group into four clusters (Biomedical Science, Computational Method Development, Machine Learning and Data Mining, Interdisciplinary) and consists of lecture series and related methodological courses.

Journal Club and Progress Seminar

Title	Lecturer/Organizer	Duration/Credit	Time/Place
BIOMEDAS Journal Club	BIOMEDAS students	45 min/bi-weekly	tba/web-based
BIOMEDAS Progress Seminar	BIOMEDAS students	45 min/bi-weekly	tba/web-based

Annual Retreat

The annual PhD retreat of the Program BIOMEDAS is taking place annually. More information to follow.

Soft Skill Courses

Please refer to the courses offered via the HBRS.

Alternative Courses

Students enrolled in BIOMEDAS are encouraged to attend courses with relevant content from other graduate programs or university lectures of partner institutions. Hours of lessons can be accredited after consulting with the thesis committee and in line with the requirements of the program.

Specific seminars and practical courses

(see special announcements provided by the HBRS office, program offices and the respective departments)

Organized by the HBRS Office:

Presentation of projects / retreat (weekend, 2 days; for MD / PhD MM: 4th / 5th March 2027)

Gene Technology Security (September 2027, in English)

Translation workshop (Drug development, Patenting, Clinical Studies etc.: TBA)

Career Day (March 19th, 2027)

Scientific communication / writing, "tips and tricks" (January 15th, 2027, Kruse)

Animal Experiments (3 days theory: November 3^d to 5th, 2026; exam November 19th 2 pm, 2026)

2-day practical courses: Nov./Dec. 30th/1st or 7th/8th 2026 Bleich / Dorsch)

Conflict Management (November 20th and November 27th, 2026; Lipski / Golin)

Time Management (January 12th, February 3^d and 16th, 2027, Golin)

Team Work and Leadership (March 9th, 2027, Golin)

ISeminars on career perspectives (continuously)

Bioinformatics: TBA

Further courses: Career Coaching, Project Management, Team Leadership, Drug Development, Presentation workshops (German and English), Story Telling, Change Management, Mental Health, Stress Management, Weekend Workshop German Culture in Berlin etc. will be announced in course of the year.

Seminars offered by Helmholtz Centre for Infection Research Braunschweig, TWINCORE, Fraunhofer Institute or TiHo: see announcements

Lectures (see special announcements and websites)

Interdisciplinary

- Seminars of the SFBs
- Seminars of Clusters of Excellence"
- Immunological Colloquium
- Gastroenterology Colloquium
- Microbiological Colloquium, Virological Colloquium

In the departments (a must!!)

- Lab-Seminars
- Journal-Clubs

(these should be in English!)

Internal practical courses

The supervisors will provide you with special practical trainings if needed. You might also ask your co-supervisors or fellow PhD students for help.

Program offices and HBRS will offer a number of short practical courses (see announcements).

German Classes

Tuesdays: 3.30 - 5.00 pm (beginners, Ms Anna Kiefer, seminar room 1031 (J4, level 01);

Tuesdays: 5.15 - 6.45 pm (advanced A2, Ms Anna Kiefer); seminar room 1031 (J4, level 01)

English conversation and language skills

Tuesdays: 5.30 pm - 6.45 pm (Ms Lidia Lange), HBRS seminar room 1140 (J4, level 01)

Optional

Note: You are welcome to visit most of the seminars / courses organized for the German Biology and Biochemistry students, as well as medical students. You are also welcome to visit seminars / courses offered by all programs of HBRS [including the Graduate School at the University of Veterinary Medicine Hannover (TiHo)].

<http://www.mhh.de/hbrs>

<http://www.helmholtz-hzi.de>

Rules and Requirements for Postgraduate (PhD) Studies and Examinations in structured doctoral programs of Hannover Biomedical Research School (HBRS), Hannover Medical School

On December 15th, 2000 the Senate of the Hannover Medical School approved the following **Rules and Requirements for Postgraduate (PhD) Studies and Examinations in structured doctoral programs of Hannover Biomedical Research School (HBRS)** [alternatively Dr. rer. nat.]. (*Modifications on June 4th 2002, February 11th 2004, April 21st 2005, March 14th 2007, April 15th 2009, November 9th 2011, November 14th 2012, June 18th 2014, May 11th, 2016, February 1st, 2017, October 17th, 2018, January 15th, 2020, November 9th, 2022, June 4th, 2025 and December 3rd, 2025*)

§ 1

Objective of PhD Studies

Research studies at the Hannover Medical School (MHH) for the purpose of obtaining a PhD or Dr. rer. nat. degree (hereinafter referred to as PhD studies) shall facilitate postgraduate training with a focus on specific research projects with a view to enabling the candidate to do in-depth scientific work on his or her own and to provide him or her with additional professional qualifications for future assignments in research or related areas of work. PhD studies shall foster the development of outstandingly gifted up-and-coming academics. The standard time allowed for completing PhD studies shall be three years. Once these PhD studies have been successfully completed, and the PhD examination has been passed, the MHH will award the degree of a Doctor of Philosophy (PhD) to medical students (including dentists), veterinarians, pharmacists, engineers, life scientists, and graduates with biomedical or health science related focus or Dr. rer. nat. to natural and life scientists and pharmacists (not to medical students).

§ 2

Requirements for Access and Admission

(1) Anybody having successfully completed university studies in medicine, veterinary medicine, engineering, pharmacy, natural sciences or biomedical / health science focus (normally Master, Diploma or Staatsexamen / MBBS) shall have access to PhD studies.

(2) Applicants are required to render evidence of above-average results obtained at university. The applicant's past career must reveal his or her particular qualification for and dedication to scientific work. Decision on whether or not a candidate qualifies for access to PhD studies is up to the PhD Program Committee (§ 4).

§ 3

Admission to PhD Studies

(1) The number of applicants that can be admitted to PhD studies is limited; the number depends on the respective program. The respective PhD Program Committee shall select the applicants to be admitted (§ 4). As a rule, the President of the MHH will give notice of the date of commencement of PhD studies once a year.

(2) Details of the as a rule three-step selection process (written application, written test in home countries or selection by program committee, interview) are regulated in the respective program 'rules of admission'.

(3) Application papers shall be submitted to the chairperson of the PhD Program Committee. Details of current application procedures are described on the website of HBRS.

(4) On the basis of the results of the selection process, the PhD Program Committee shall decide on admission to PhD studies.

(5) At MHH, candidates are enrolled as PhD students for the whole duration of their PhD work. Matriculation is done at the beginning of studies (usually winter semester).

§ 4**PhD Program Committee**

(1) The respective PhD Program Committee shall be responsible for the conduct of PhD studies according to the Rules and Requirements for postgraduate studies and examinations to obtain a PhD (Dr .rer .nat.) degree. In the PhD program Infection Biology / DEWIN the steering committee of the Centre for Infection Biology (ZIB) is acting as PhD program committee.

(2) As a rule, the PhD Program Committee shall be composed of four professors (or competent habilitated/senior scientists), a university scientist with a doctoral degree, and student representatives of every study year who have a joint vote. Students suggest on person from every batch to act as "class-speaker". Members of the PhD Program Committee shall be appointed by the scientists of a respective program for a period of four years, or two years in case of student members. Re-election shall be possible. The respective PhD Program Committee shall be affirmed by the Research Committee of MHH. The PhD Program Committee is then constituted by the Director of HBRS and shall elect a professor from among its ranks as chairman. The steering committee of ZIB is elected by its members. The steering committee then appoints a speaker among their ranks.

(3) The PhD Program Committee will meet regularly.

(4) The PhD Program Committee will evaluate proposed projects (open projects) according to quality (with external referees if necessary), financial support, guarantee of independence for PhD students.

(5) The PhD Program Committee shall appoint a team of co-supervisors (thesis advisory board) for each PhD student. Team members shall be habilitated or equally qualified. The team of co-supervisors shall be composed of the student's personal supervisor at the MHH or partner institutes, and two further scientists qualified as university teachers whose professional activity shall be closely related to the subject of the project. Members of the thesis advisory board usually come from different departments/institutes. In case of several PhD students doing research in the same line, the respective co-supervisors' teams can be composed of the same individuals.

§ 5**Contents of Studies**

(1) The contents to be learned shall be conveyed to the students through their experimental or equivalent theoretical research work and through project-related as well as inter-disciplinary research-oriented courses and seminars. For that purpose, the PhD Program Committee shall prepare and submit, after consultation with the university institutions or partner institutes involved in these studies, a curriculum indicating compulsory and recommended courses or seminars for each discipline.

The courses and seminars shall be held by the teachers and professors of the MHH as well as partner institutes, including visiting professors. Teaching shall be in English. Lectures and seminars of different programs are mutually acknowledged. PhD students may also register for suitable courses or seminars offered by other scientific schools (Leibniz University, University of Veterinary Medicine, etc.). Students are encouraged to do active teaching themselves, e. g. by giving lectures at seminars or postgraduate research training programs [Graduiertenkolleg]. PhD students independently maintain a study book, in which all training activities and presentations are documented. Each student's individual progress at PhD courses and seminars shall be monitored by the respective teachers (by signatures in study books).

(2) PhD students shall design, after consultation concert with their co-supervisors, their respective individual schedules pursuant to the curriculum established by the PhD Program Committee. Such individual schedule shall require approval by the respective co-supervisors' team. The student must complete a minimum of 300 hours at courses and seminars during his or her PhD studies; as a rule, at least 80% thereof must be taken at project-related courses and seminars and up to 20% may be spent on interdisciplinary learning (e. g. experimental techniques and bio-informatics, molecular biology, bio-statistics, scientific communication etc.).

During the first year of PhD studies, courses for physicians, dentists and veterinarians are intended to provide participants with a chance to consolidate their knowledge of the fundamental principles of natural sciences and courses for natural scientists are intended to consolidate their knowledge in medical aspects.

(3) PhD students could apply for a leave if justified (e. g. in case of pregnancy), but for no more than 12 months. Short time stays abroad are very much appreciated and will be supported. If students take seminars and courses abroad, they could be acknowledged for the respective PhD program.

§ 6 Supervision

(1) PhD students shall supervised by the members of their respective thesis advisory board (§ 4) appointed by the PhD Program Committee. The responsibilities of the team shall be:

- a) To act as co-supervisors and to give individual expert advice to PhD students all through their PhD studies.
- b) Within the scope of their research project, students have to work with appropriate methods on a clearly defined subject so that, with some realistic prospect of success, scientific knowledge can be expected to be incremented and the results of such research should be published in international peer-review journals. The co-supervisors shall make sure, and satisfy the PhD Program Committee to that effect, that students are not entrusted with any tasks unrelated to their PhD studies.
- c) To evaluate PhD students' progress during their studies by receiving their reports (annually) and conducting exams; and to assess their written final examination papers. The thesis advisory board meeting is conducted at least once a year. It is documented by a written protocol.
- d) Within a time of probation of 6 months from start of the PhD project, PhD students have to prove themselves and are evaluated mainly by the main supervisors. Within this time period, student status can be changed easily on both sides in agreement with the team of co-supervisors and PhD Program Committee. Upon request, the PhD Program Committee can decide about the termination of collaboration with the student.
The termination of collaboration after the time of probation requires first a moderated discussion by a member of the PhD Program Committee between the student and the respective thesis advisory board. A student member of the PhD Program Committee is allowed to join as well. Afterwards, the PhD Program Committee announces their recommendations.

(2) The supervisors shall be responsible for the financing of the respective research project and shall make efforts, during the whole period of PhD studies (standard period of study three years), to raise the money needed for the PhD students they are in charge of. Any scholarships available at the MHH shall be awarded or distributed to the individual PhD programs by resolution of the HBRS Committee of MHH.

(3) (Co-)supervisors should assist PhD students in planning their further professional career.

(4) The responsibilities of (co-)supervisors for PhD students shall end upon the date when the latter pass their PhD examination (§ 10), which is normally three years but no later than five years after commencement of PhD studies. The duration of PhD could only be extended in exceptional cases for a maximum of one year. Reasons could be: a) intermittent medical training (specialization) by medical students during their PhD studies, b) prolonged parental leave or c) serious illness.

§ 7**Scientific Colloquia (retreats)**

(1) PhD students shall be invited annually by the PhD Program Committee to attend a public colloquium (retreat), giving them an opportunity to give an oral or poster presentation on the current status of their research (§5). The contents of such presentation, constituting an interim / project report, shall be submitted in writing by the PhD student to the PhD Program Committee.

(2) The PhD Program Committee shall decide whether or not this progress report constitutes a sufficient step towards the successful completion of the student's research. If the Committee's comment is negative, such result shall be communicated in writing to the student and his or her co-supervisors' team, indicating the reasons.

(3) Pursuant to a period of one month, the student shall submit a modified work plan for the next year of his research, giving due consideration to the recommendations made.

§ 8**Intermediate Examination**

(1) The oral intermediate examination shall be held no later than 18 months after commencement of PhD studies. By way of exception, which must be well-founded, the intermediate examination can be taken at a later date. If a student wishes such exception, he shall apply in writing to the PhD Program Committee adding a comment prepared by his co-supervisors' team.

(2) The dates for intermediate examinations shall be determined by the PhD Program Committee. The intermediate examination shall be held by an expert in the special field and an additional member of the HBRS faculty (chairman). These two examiners are elected by the PhD Program committee. The exam shall cover topics from the student's research project and from the courses and seminars the student has registered for. The examination usually is held in English.

(3) The following grades are given: excellent / very good / good / sufficient/ failed

(4) If the student fails the intermediate examination he shall be allowed to retake it once, pursuant to a period of at least three and no more than six months as the examiners may decide. If the student fails again, he or she shall be deemed to have finally and absolutely failed. Following such final and absolute failure the student shall be taken off the register.

(5) The "chairman" shall report the result of the intermediate examination to the PhD Program Committee. The result of the exam will account for 20% of the final grade (PhD or Dr. rer. nat.).

§ 9**Requirements for Signing up for PhD Examination**

(1) After completion of PhD studies, which is normally at the end of the third year, the PhD examination shall be held. The PhD student shall submit the following documents when signing up for the PhD examination:

- a) Certificate of regular attendance at and completion of courses and seminars according to the curriculum, i.e. a total of at least 300 hours, and of three colloquia pursuant to § 7;
- b) Certificate of attendance of a course on "good scientific practise",
- c) Certificate of intermediate examination;
- d) A scientific thesis (dissertation) prepared as a Monograph in English or German by the PhD student on the research project the student worked on during his or her PhD studies, with introduction, materials and methods, results, discussion and summary. The thesis shall constitute an essential original scientific contribution to the discipline the student's research project pertains to;
- e) Alternatively (instead of a Monograph), usually two first author publications in internationally peer reviewed science journals (published or accepted) as a cumulative thesis. Shared first authorships are allowed. The PhD student's personal contribution to such publications must be clearly identified as well as the contribution of the other authors. In that context, "accepted" shall be deemed equivalent to "published". As for this publication requirement, exceptions are possible with reasons to be given by the supervisor.
The publications must be in one scientific context, and shall be supplemented by a newly composed, detailed description under a joint title in English or German of the research subject, including an overall summary and a discussion of results. Hereby, current literature shall be considered.
- f) A written agreement to a potential screening of the thesis with plagiarism detection software (appendix 1).

(2) The final version of the dissertation should be submitted in up to three printed copies as well as a digital version (appendix 2).

(3) Before evaluation by the internal/external examiners, the dissertation can be checked for the agreement with the MHH guidelines on "good scientific practice". This includes the screening of primary data as well as screening for plagiarism. In case of suspicion of scientific fraud, the dissertation is passed on to an ombudsman, who can initiate proceedings according to the guidelines on „good scientific practice“. During the ombudsman proceedings, the PhD process is paused.

(4) The PhD is obliged to follow the Artificial Intelligence guidelines of MHH (including all supplementary instructions). Patent as well as data protection rules and implications have to be observed.

(5) The registration for the PhD examination (the submission of the PhD thesis) can be withheld after the PhD student had announced this to the PhD committee in written form. The PhD program committee informs the office of president.

(6) To assess the thesis, the PhD Program Committee shall procure at least two independent expert opinions. Usually there is one external expert's opinion, as well as one internal expert's opinion. Experts are experienced researchers with a habilitation (or equivalent qualification). The external expert shall not be a member of MHH or HBRS faculty. The internal expert is not a member of the thesis advisory board. To be on the safe side, one expert shall be nominated as substitute in case of unforeseen drop outs. For the Dr. rer. nat., at least one of the experts (internal or external) has to have a natural scientist qualification. In addition, the co-supervisors' team shall prepare an expert report on the dissertation, and such report together with the external and internal expert's opinion shall serve to make the final assessment.

The following grades can be given in the reports:

excellent / very good / good / sufficient / failed

or

ausgezeichnet / summa cum laude,

All three reports are considered equally for the final assessment, together 60% for the final mark.

(7) If one of the expert reports detects any shortcomings in the dissertation, the PhD Program Committee can be requested to have such shortcomings eliminated or remedied as a precondition for acceptance of the thesis. The chairperson can allow a reasonable period for the PhD candidate to remedy the shortcomings and recommend that he or she submit the thesis anew. In that respect, the chairperson of the PhD Program Committee can extend this period once only. The experts or the thesis advisory board shall assess the thesis again once the shortcomings have been remedied.

(8) If, based on such second experts' vote, the PhD Program Committee declines to accept the thesis, the candidate shall be deemed to have failed the PhD examination finally and absolutely. In that case, the PhD student shall be taken off the register.

§ 10 PhD Examination

(1) The PhD examination consists of a public presentation (usually 15-20 min, in English) held by the PhD student at the Hannover Medical School on the subject of his research, a subsequent public disputation of the project of at least 30 minutes of duration to assess the knowledge acquired by the student on the subject of his specific area of research as well as on interdisciplinary subjects. The interview also serves to assess whether the candidate has acquired, and is able to apply, any knowledge and skills relating to the scientific environment of the subject of his research.

(2) The examination is taken by an examination board: the external and internal examiner as well as a member of the PhD Program Committee (with PhD degree) who acts as chairman.

(3) The final grade results from: the intermediate exam (20%), the written reports of dissertation by thesis advisory board/ the two experts' opinions (60%), the oral examination (20%). In justified exceptional cases, the examination committee may deviate from the latter rule.

(4) The oral examination shall be taken on record in abridged form and shall indicate:

A short summary of the examination content
the grade earned for the intermediate examination
the grade earned for the thesis (three independent written reports),
the grade earned for the oral examination,
the overall grade average earned for the PhD examination.

It shall be signed by the chairman of the board of examiners.

(5) The following grades can be awarded:

Excellent/ very good/ good / sufficient / failed

Equivalent to
ausgezeichnet / summa cum laude,
sehr gut / magna cum laude,
gut / cum laude,
genügend / rite,
Nicht bestanden / non sufficient.

The overall grade „excellent - summa cum laude“ is usually awarded only if at least one first-author manuscript is accepted for publication. Shared first-authorships are considered equally.

(6) If the candidate fails the final examination, he or she shall be allowed to retake it once with the same board of examiners, pursuant to a period of at least three and no more than six months as the thesis advisory board may decide. Should the student then fail again, he or she shall be deemed to have finally and absolutely failed the PhD examination. Following such final and absolute failure the student shall be taken off the register.

(7) The result of the PhD examination shall be communicated to the PhD Program Committee and the President's office (in case of failure with reasons and instructions about a person's available legal remedies) as well as to all German universities.

§ 11 Publication

(1) PhD students are obliged to publish their dissertation.

(2) Once the student has passed the PhD examination, he or she has to distribute within one year up to six copies of the dissertation (plus one electronic version). In case of an online publication with the library, three final copies are sufficient. Formatting has to be done according to the rules of MHH library. The publication in form of a monograph is allowed if it is clearly indicated that the dissertation has been published by MHH.

(3) If the deadline of one year is missed all rights acquired by the PhD exam are extinct.

(4) The PhD student together with the supervisor can apply at the 'Forschungsdekanat' for a so called 'Hold of the dissertation for publication' in order to protect intellectual property or patent issues. This application form needs to be handed in at the library together with the copies of the dissertation. In case of discordance of student and supervisor, the president of MHH or a designated person will decide on granting a 'Hold'. All information concerning the hold needs to be protected from unwanted distribution by a written agreement on confidentiality, for example in an application process. The PhD office can certify that the obligatory copies of the dissertation had been handed in and that the electronic version matches the printed version.

(5) In consequence, there is a delay in making the dissertation publicly available. The "Hold" can be applied for one year. It can be extended twice for another year upon request.

(6) At the end of the „Hold“, the library is automatically publishing the dissertation if there is no further application for extension.

§ 12 Award of the Academic Degree of a Doctor of Philosophy (PhD)

(1) After successful PhD examination and distribution of the final printed copies and an electronic version, as well as a declaration that all documentation, electronic data, lab books and materials had been handed over in the respective department/institute, he or she shall be awarded the academic degree of a Doctor of Philosophy (PhD) or a Dr. rer. nat. degree by the MHH.

(2) A document as shown in Appendix 3 and 4 shall be issued to him or her in evidence of such award. The award shall authorize the candidate to use the academic title of a PhD or Dr. rer. nat..

§ 13 Abrogation, invalidity and revocation of the doctorate

(1) The examination board suspends the PhD examination procedure, if an investigative or criminal procedure concerning the doctorate is pending against the PhD student.

(2) If the doctoral candidate is found to be guilty of a serious breach of good scientific practice or deception regarding the doctoral achievements or that there are no essential requirements for admission to the doctorate, the Senate declares upon suggestion of the president, the immediate termination of the procedure and the invalidation of the PhD work performed so far. In this case, it is not permitted to conduct a PhD again at the MHH.

(3) If, after completion of the PhD, it turns out that the doctoral candidate committed a deception, threat or bribery during a doctoral thesis, the Senate can subsequently withdraw the doctoral degree after hearing the doctoral candidate. This applies in particular to deceptions about the circumstances mentioned in paragraph 2. If the doctoral degree is withdrawn, the president revokes the doctoral certificate and title. Paragraph 2 sentence 2 and paragraph 48 of the Administrative Procedure Act apply accordingly. Withdrawal affects the time of completion of the doctorate.

(4) The doctoral degree - including an honorary doctorate - can be withdrawn by the Senate, if the doctoral candidate has been legally sentenced to at least one year in prison for an intentional crime or if he or she has been legally sentenced for an intentional crime in its preparation and perpetration of the doctoral degree. Paragraph 48 of the Administrative Procedure Act applies accordingly.

§ 14

Joint Doctoral Degree (Cotutelle)

(1) A joint doctoral degree (cotutelle) with another university is generally possible if it is in the interests of the Hannover Medical School. An agreement is to be made with the other university. The agreement must be based on these PhD regulations and the PhD regulations of the Partner University or faculty, but can deviate from it in individual points. The jointly conducted doctoral degree procedure leads to the academic degree of a Doctor of Philosophy (PhD) or a Doctor of Natural Sciences (Dr. rer. nat.). This procedure requires a joint supervision by responsible professors from each university and successful participation in courses of both universities. In particular, the requirements for admission to the PhD program and the opening of the examination phase must be fulfilled by both universities. The dissertation must be written in English.

(2) For the purpose of a joint doctoral degree, a cooperation agreement for each PhD candidate must be concluded between the Hannover Medical School and the other university in accordance with Annex 6.

For its effectiveness, the agreement requires the signature of the President of the Hannover Medical School. The agreement regulates a jointly conducted doctoral degree procedure by the responsible authority of the other university and the HBRS, including the appointment of a joint supervisory group and a joint examination and evaluation of the examination performance of §§ 4, 6, 9, and 10.

(3) The agreement can provide exceptions to the regulations of these PhD rules, for example:

- the composition and responsibility of the supervisor group (§ 6)
- the creation of expert opinions (§ 9)
- the form and duration of the oral examination (§ 10)

The HBRS Commission can allow further exceptions in justified cases.

(4) The evaluation of the examination performance is carried out both in accordance with these PhD rules and in accordance with the law applicable to the other participating university.

(5) The obligation to publish the dissertation and the rights to it are governed by the regulations of both universities.

(6) The certificate contains the award of a single academic degree, which can be led in the form awarded by the other university or in the form awarded by the Hannover Medical School. This certification is made in a joint certificate. It is signed by the responsible representative of the other university and the President of the Hannover Medical School and bears the seals of both universities. A certificate in accordance with Annex 5 is issued on the award. The award entitles to lead the academic degree of a PhD or a Dr. rer. nat.

§ 15
Coming into Effect

The Rules and Requirements for Postgraduate Studies and Examinations in structured doctoral programs of Hannover Biomedical Research School (HBRS) to obtain a PhD degree (or Dr. rer. nat.), as approved by the senate of MHH, are hereby published within the Hannover Medical School and are coming into effect.

Hannover,

The President
Professor Denise Hilfiker-Kleiner, PhD

Declaration

Herewith, I confirm that I have written the present PhD thesis myself and independently, in compliance with "the policy of Hannover Medical School on the safeguarding of good scientific practice and procedural rules for dealing with scientific misconduct" and that I have not submitted it at any other university worldwide.

Herewith, I agree that MHH can check my thesis by plagiarism detection software as well as randomly check the primary data. I am aware that in case of suspicion, ombudsman proceedings according to § 9 of MHH 'Guidelines of Hannover Medical School to guarantee good scientific practice and dealing with scientific fraud' will be initiated. During such proceedings, the PhD process is paused.

Hannover, (Month Year)

Appendix 2. Front pages of thesis (example)

Title

Logo of PhD Program

A thesis submitted for the degree of
Doctor of Philosophy (PhD) [or Doctor of Natural Sciences (Dr. rer. nat.)]
in the subject of XXX
by
First name Last name, Degree (e.g. Master)
Month Year

Hannover Medical School
International PhD program "XXX"
in Hannover Biomedical Research School (HBRS)
Department of XXX

2nd page

Acknowledged by the PhD committee and head of Hannover Medical School

President: Prof. Denise Hilfiker-Kleiner, PhD
Supervisor:
Co-supervisors:
External expert:
Internal expert:
Day of final exam/public defense:

Example of PhD certificate (According to § 11)Appendix 3

(MHH Logo)

Die Medizinische Hochschule Hannover unter der Präsidentschaft der Professorin / des Professors

Name Vorname verleiht

Frau / Herrn Vorname Name

geboren am TT Monat JJJJ in Stadt, Land

den Grad einer / s

Doktorin / Doktors der Naturwissenschaften (Dr. rer. nat.)

bzw. Doctor of Philosophy (PhD)

nachdem sie / er im Rahmen der Hannover Biomedical Research School unter Teilnahme am PhD Programm

XXXX durch ihre / seine Dissertation

TITEL

angefertigt in der Abteilung, Institut, Einrichtung,

sowie der öffentlichen Disputation der Arbeit ihre / seine Befähigung zu vertiefter selbstständiger wissenschaftlicher

Arbeit nachgewiesen und dabei das Gesamturteil

Summa Cum Laude (exzellent) / Magna Cum Laude (sehr gut) / Cum Laude (gut) / Rite (genügend)

erhalten hat.

Hannover, den TT Monat JJJJ

(Siegel)

Unterschrift

Programmsprecher/in

Unterschrift

Präsident / in der Medizinischen Hochschule Hannover

Appendix 4

(MHH Logo)

Hannover Medical School under its President Professor first name last name confers upon

first name last name

Born on DD Month YYYY in town, country

the degree of

Doctor rerum naturalium (Dr. rer. nat.) / Doctor of Philosophy (PhD)

having participated in the PhD Program xxx within Hannover Biomedical Research School and having demonstrated

the ability to undertake advanced independent research in his/her thesis

TITEL,

completed at the Institute of xx, Hannover Medical School, and a public defense of this thesis, which has been

awarded the overall grade of

excellent (summa cum laude) / very good (magna cum laude) / good (cum laude) / sufficient (rite)

Hannover, DD Month YYYY

Signature

Chairman / woman PhD Program

Signature

President

**Example of PhD certificate
(According to § 14)**

(MHH Logo), (Partnerinstitution Logo)
Hannover Medical School under its President Professor (Firstname Lastname) and
(Name of Partner University) under its President/Rector (Name of President/Rector)
confer upon
(Name of Doctoral Candidate)
born on DD.MM.YYYY in (town), (country)
the degree of
Doctor rerum naturalium (Dr. rer. nat.) or Doctor of Philosophy (PhD)
having participated in the
PhD Program xxx within Hannover Biomedical Research School and Program (Partner University) having
demonstrated the ability to undertake advanced independent research in his thesis
'Full title of thesis'
completed in the Institute of xx, Hannover Medical School, and (Name of Institute, Partner University) a public
defense of this thesis, which has been awarded the overall grade of
excellent (summa cum laude) / very good (magna cum laude) / good (cum laude) / sufficient (rite)

Hannover, DD.MM.YYYY
Town partner University,

Signature
President (MHH)
Signature
Director HBRS

Signature
President/Rector (Partner University)
Signature
Dekan, (Name of faculty)

Example for Cooperation Contract (According to § 14)

Joint Doctoral Supervision Agreement (Convention de Cotutelle de Thèse) at the Hannover Biomedical Research School (HBRS) of Hannover Medical School (MHH)

Between

[Partner University]

represented by the Rector / President

and

Hannover Medical School (MHH)

represented by the President

The legal basis for the MHH is § 9 of the Lower Saxony Higher Education Act (NHG) and the rules for the Natural Sciences PhD Programs / Structured Doctoral Programs at the Hannover Medical School within the Hannover Biomedical Research School (HBRS).

The legal basis for the partner institution is (§§§) and the Faculty/University's PhD Regulations (Name of the Faculty).

Administrative Modalities

The admission of [Name of the Doctoral Candidate] to the PhD program at Hannover Medical School (MHH) took place on [Date], and the admission at the [Cotutelle Partner University] took place on [Date].

The Hannover Medical School (MHH) and the partner university can be referred to as "Organizational Unit" in the following.

For research and preparation of the dissertation, three years are foreseen. In case of need, this period can be extended in accordance with the PhD regulations of both organizational units. The duration of the dissertation is distributed between the two organizational units, with alternating stays in each of the two countries. The duration of the stay in the two countries is in a balanced ratio. The schedule for the stay at the two universities is attached as an appendix. In total, the doctoral candidate will spend at least 12 months at the other university.

The doctoral candidate will enroll at both universities, but will be exempt from paying the enrollment fees at one of the universities.

The enrollment fees will be paid at the organizational unit (Name of the University).

Study and Examination Modalities

The protection of the dissertation topic and the publication of the dissertation manuscript, as well as the utilization and protection of the research results achieved by the doctoral candidate in both organizational units, will be governed by the relevant regulations applicable to each organizational unit.

The supervisors of the dissertation are:

- at the MHH: [Name of the Supervisor]
- at the [Name of the University]: [Name of the Supervisor]

Both supervisors commit to fully exercising their duties as supervisors and to making the necessary arrangements. The written dissertation will be evaluated by the supervisor group and two independent examiners; the evaluation will be documented in a separate report.

The defense of the dissertation/oral examination will take place at the organizational unit (Name of the University). It will only be held at one organizational unit and will be recognized by both organizational units.

Upon justified request, the examination committee may conduct the defense through a video conference procedure in accordance with the regulations of the organizational unit.

The examination committee will be appointed in accordance with the agreement between the two partner institutions. It will be composed of experts from both countries in a balanced ratio. The PhD regulations of the HBRS of the Medical University of Hannover (in the version of [Date]) and the corresponding regulations of the partner university (in the version of [Date]) will be taken into account.

External examiners who are not affiliated with either of the universities can be appointed as members of the examination committee.

The examination committee will be composed in accordance with § 10 (2) or the corresponding regulation of the partner university.

The dissertation will be written in English.

The language in which the defense will be held is English.

The performance of the written work, the performance of the defense, and the overall grade will be evaluated and documented in a report by the examination committee in accordance with the following scale:

German standard marks	Anglosaxon standard marks
Summa cum laude (mit Auszeichnung)	With Distinction
Magna cum laude (sehr gut)	Passed
Cum Laude (gut)	
Rite (genügend)	
Non sufficit (ungenügend)	Failed

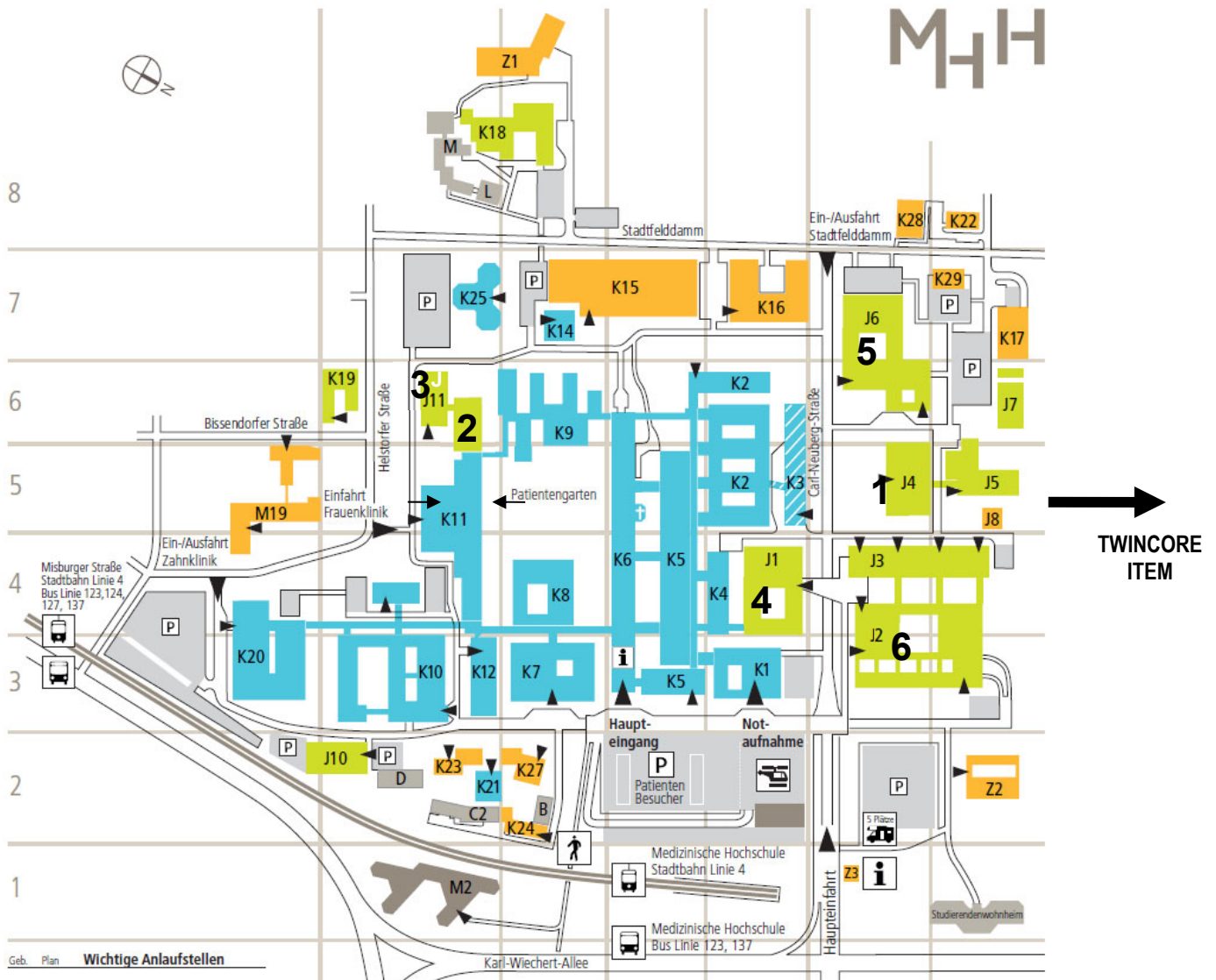
The two organizational units commit to issuing a certificate of the examination performance in English after submission of the examination report.

Upon fulfillment of all requirements for the award of the title, a joint certificate of both universities with both seals will be issued (Appendix 5).

Hannover Medical School will award the title Dr.rer.nat. or PhD in the field of [Promotion Field].

The [Name of the Partner University] will award the title PhD in the field of [Promotion Field].

The obligation to publish the dissertation and the rights to it will be governed by the regulations of both universities.



1: Building J4 (Forschungswerkstätten)

MD/PhD/ HBRS Office; HBRS seminar room 1140; level 1
Seminar room 1031, level 01,
Seminar room S 1400 (ground floor),

2: TPFZ Research building

(for entrance see arrows)

PhD Infection Biology and DEWIN Office, level 2
Seminar room 1420, ground floor

3: HBZ Building (Hans Borst Zentrum, J11)

PhD Regenerative Science Office, level 2
Seminar room, ground floor

4: Main lecture hall building (F-N), Library, registrar's office

5: Lecture halls Q, R

6: Lecture halls A - E