

## Borstel Biomedical Research School, curriculum 2023/2024

Date	Topics	Lecturer	Lecture (approx. 9.15- 12.15 a.m.)	Topics	Lecture (approx. 13.00 – 15.15 p.m.)
06.03.2023		Holger Heine Andra Schromm	<ul style="list-style-type: none"> <li>– Principles of innate immunity I</li> <li>– Principles of innate immunity II</li> </ul>	<b>General Graduate Assembly</b>	<ul style="list-style-type: none"> <li>– Review on 2022</li> <li>– Annual report of the graduate representatives</li> <li>– Election of graduate representatives and ombudspersons</li> </ul>
03.04.2023	Immunology and Cell biology	Ulrich Schaible Holger Heine	<ul style="list-style-type: none"> <li>– Research Center Borstel: Behind the scenes of the Leibniz Lung Center and its global allocation in the scientific community</li> <li>– Principles of acquired immunity I: T-lymphocytes</li> </ul>	Andra Schromm Michael Wegmann	<ul style="list-style-type: none"> <li>– The road towards a PhD thesis</li> <li>– Modelling Asthma in Mice</li> </ul>
08.05.2023		Holger Heine Zane Orinska	<ul style="list-style-type: none"> <li>– Power-point presentations</li> <li>– Principles of acquired immunity II: B-lymphocytes and antibodies</li> </ul>	Christian Nehls Nestor González Roldán Silke Meiners	<ul style="list-style-type: none"> <li>– How to prepare a perfect poster</li> <li>– Principles of allergic inflammation</li> <li>– How to read a scientific paper</li> </ul>
05.06.2023	Infection and Microbiology		<b>Current aspects of TB research</b> Lecturers and exact program is in preparation		
<b>Additional Day:</b> 12.06.2023			<b>Current aspects of TB research</b> Lecturers and exact program is in preparation		
<b>Summer Break</b>					
04.09.2023	Cytometry and Structural biology	Cordula Stamme Thomas Gutschmann Christian Nehls	<ul style="list-style-type: none"> <li>– Good Scientific Practice at the Research Center Borstel</li> <li>– Principles of infectious pneumonia</li> <li>– High-resolution microscopic technique: Atomic force microscopy</li> <li>– Lab demonstration of the Atomic force microscope</li> </ul>		
09.10.2023			Dominik Schwudke Nicolas Gisch Dominik Schwudke & Nicolas Gisch Thomas Scholzen & Jochen Behrends	<b>Joint day with the LCI Graduate School, All-day course – Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry</b> <ul style="list-style-type: none"> <li>– How can my research project profit from mass spectrometry?</li> <li>– Introduction to NMR - Theoretical aspects and applications at the FZB</li> <li>– Lab tours: Insights into NMR and MS analyses</li> <li>– Fluorescence: Indispensable for Microscopy and Flow Cytometry</li> </ul>	

06.11.2023	Infection and Microbiology	Katarzyna Duda	– Basic principles in microbiology: composition and structure of microorganisms	Holger Heine Sebastian Marwitz	– Let`s discuss! Discussion culture at the Research Center Borstel – Ways to a Postdoc position: discussion of experiences
04.12.2023		Christoph Hölscher David Hertz	– <i>Trypanosoma cruzi</i> infections – Sex matters. Influence of sex on infectious disease	Holger Heine  Cordula Stamme Karoline Gaede	– How to deal with scientific literature: Introduction in PubMed, EndNote, Mendeley and other tools – How to write a scientific paper – Biobanking
08.01.2024	Lung and Pulmonary diseases	Cordula Stamme Sebastian Marwitz	– Innate and acquired pulmonary immunity – From images to data: Aspects of imaging techniques for lung research	Frauke Schocker/ Andra Schromm Frauke Schocker Cordula Stamme Christoph Rehmann-Sutter (Lübeck)	– How does the Research Center Borstel support Good Scientific Practice? – DFG codex and guidelines – Good Scientific Practice at the Research Center Borstel – Scientific misconduct and Good Scientific Practice: ethical perspectives
05.02.2024		Cordula Stamme Michael Wegmann	– Principles of infectious pneumonia – Animal model of functional analysis of the lung	Silke Meiners Holger Heine	– How to read a scientific paper – How to organize a scientific meeting
04.03.2024		Espen Groth (Großhansdorf) Silke Meiners Markus Weckmann Susanne Krauss-Etschmann	<b>Current aspects of COPD and Epigenetics research</b> – COPD - clinical diagnosis and therapy – Molecular determinants of COPD – Epigenetic determinants in COPD and exacerbations – N.N.		
25.03.2024	Allergy	Holger Heine  Uta Jappe  Uta Jappe	– Allergy: Innate consequences for an adaptive disease – how the innate immune system influences allergy and asthma – From allergen extracts to single allergenic components: Issues to improve diagnosis and therapy – Allergy: clinical symptoms – diagnostic procedures – treatment	Ilka Monath  Nina Grohmann/Silke Meiners Torsten Stachelhaus (Ascenion)	– Using animals in research: requirements and legal issues – Short overview on gender equality and compatibility of family and career – Intellectual property rights

\* Mandatory for all PhDs registered at UzL, starting after 01.04.2021, for all others mandatory starting after October 2022