

Borstel Biomedical Research School, Curriculum 2021

Date	Topics	Lecturer	Lectures (approx. 9:15 – 12:15)	Lecturer	Soft Skills (approx. 13:15 – 16:15)
18.01.2021	Immunology and Cell Biology	Zane Orinska	<ul style="list-style-type: none"> – Principles of acquired immunity II: B-lymphocytes and antibodies 	Bettina Brand Christian Nehls	<ul style="list-style-type: none"> – Organisation of a scientific meeting – How to prepare a perfect poster
01.02.2021	Cytometry and Structural Biology	Dominik Schwudke Sven Müller-Loennies & Nicolas Gisch	Joint day with the LCI Graduate School , All-day course – Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry <ul style="list-style-type: none"> – How can my research project profit from Mass Spectrometry? – Modern Nuclear Magnetic Resonance (NMR)-Spectroscopy in the analysis of molecular structures and complexes 		
22.02.2021		Thomas Scholzen & Jochen Behrends Christian Nehls/Thomas Gutsmann	<ul style="list-style-type: none"> – Fluorescence: Indispensable for Microscopy and Flow Cytometry – High-resolution microscopic technique: Atomic force microscopy 		
29.03.2021	Infection and Microbiology	Gabriele Schramm Christoph Hölscher David Hertz	<ul style="list-style-type: none"> – Immunomodulation by parasites – Trypanosoma cruzi infections – Sex matters. Influence of sex on infectious diseases 	Andra Schromm General Graduate Assembly (graduate representatives)	<ul style="list-style-type: none"> – The road towards a PhD thesis – Overview of 2020 – Election of new graduate representatives and ombudspersons
03.05.2021		Katarzyna Duda Uwe Mamat	<ul style="list-style-type: none"> – Basic principles in microbiology: composition and structure of microorganisms – Virulence and pathomechanisms 	NEW! Sebastian Marwitz	<ul style="list-style-type: none"> – Ways to a Postdoc position: discussion of experiences
07.06.2021		Christoph Lange Julius Brandenburg Doris Hillemann Stefan Niemann Sven Müller-Loennies Norbert Reiling Tobias D./Ulrich Sch. Christoph Lange/ Jan Heyckendorf / Barbara Kalsdorf	Current aspects of TB research <ul style="list-style-type: none"> – Tuberculosis – a patient’s perspective – Introduction: Tuberculosis – a global health threat (epidemiology, pathogenesis, animal models for research, current issues) – Mtb Resistance / Work at NRC – <i>Mycobacterium tuberculosis</i> complex: genetics, molecular epidemiology, population structure, genomic and transcriptomic analyses – Structural biology of the mycobacterial cell wall – <i>Mycobacterium tuberculosis</i>: life inside the macrophage – Mechanisms of killing <i>Mycobacterium tuberculosis</i>: imaging in culture and in vivo – Personalized TB Therapy in the Medical Clinic Borstel 		
Summer Break					

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06.09.2021	Lung and Pulmonary Diseases	Cordula Stamme NEW!! Sebastian Marwitz	<ul style="list-style-type: none"> – Innate and acquired pulmonary immunity in infection – From images to data: Aspects of imaging techniques for lung research 	Torsten Stachelhaus (Ascenion) Ilka Monath Ilka Monath	<ul style="list-style-type: none"> – Intellectual property rights – Using animals in research: requirements and legal issues – Short overview on gender equality and compatibility of family and career
27.09.2021		Cordula Stamme Michael Wegmann	<ul style="list-style-type: none"> – Principles of infectious pneumonia – Animal model of functional analysis of the lung 	Holger Heine Holger Heine	<ul style="list-style-type: none"> – Power-Point-Presentations – Let`s discuss! Discussion culture at the Research Center Borstel
01.11.2021	Allergy	Gabriele Schramm Nestor González Roldán	<ul style="list-style-type: none"> – Principles of allergic inflammation I – Principles of allergic inflammation II 	Cordula Stamme Holger Heine	<ul style="list-style-type: none"> – How to write a scientific paper – How to deal with scientific literature: Introduction in PubMed, EndNote, Mendeley and other tools
06.12.2021		Holger Heine Uta Jappe Uta Jappe	<ul style="list-style-type: none"> – Allergy: Innate consequences for an adaptive disease – how the innate immune system influences allergy and asthma – Allergy: Clinical symptoms – diagnostic procedures – treatment – From allergen extracts to single allergenic components: Issues to improve diagnosis and therapy 	Frauke Schocker/ Andra Schromm Cordula Stamme Christoph Rehmann-Sutter (Lübeck)	<ul style="list-style-type: none"> – How does the Research Center Borstel support Good Scientific Practice? – Good Scientific Practice at the Research Center Borstel – Scientific misconduct and Good Scientific Practice: ethical perspectives