



Curriculum for Structured Doctoral Candidate Training

Heinrich Pette Institute, Leibniz Institute for Experimental Virology (HPI)

Please choose lectures and courses according to your interests and requirements. According to the guidelines of the structured doctoral candidate training it is mandatory for each graduate to participate in the 4 seminar days of the HPI (Hepatitis, Herpes, HIV and Influenza) and on 2 seminar days of both other LCI institutes (BNI and FZB). Furthermore, graduates have to participate in at least one practical all-day course during his/her thesis.

Please document your participation in the Course Record Book that was provided by the HPI at the beginning of the thesis

Unless otherwise stated the seminar days and courses will take place at the indicated times and at the following locations:

BNI Historical Lecture Hall, Bernhard-Nocht-Institut

FZB Seminar room of the Reflectorium, Forschungszentrum Borstel, Parkallee 30

HPI Seminar room 2; Ferdinand-Bergen-Auditorium; Heinrich-Pette-Institut

Should you have any further questions please contact:

BNI Eleonora Setiadi
mail: setiadi@bnitm.de
phone: 040 42818-264

FZB Susanne Pätzold
mail: spaetzold@fz-borstel.de
phone: 04537-188-5840

HPI Martina Hintz/ Dorothea Pieper
mail: martina.hintz@hpi.uni-hamburg.de / vorstandsreferat@hpi.uni-hamburg.de
phone: 040-48051-350/ 040-48051-104

Date	Location	Lecturer	Topic
Tue, Sept 11	HPI 	Eva Herker Hans Will	Seminar day (1.00 pm – 5.00 pm) - Hepatitis viruses - HBV and HCV
Tue, Oct 02	BNI 	Jürgen May Iris Bruchhaus Rolf Horstmann Egbert Tannich Ingrid Müller Tobias Spielmann Thomas Jacobs	Seminar day – Malaria (10.00 am – 6.00 pm) - Introduction and Epidemiology - Parasitology - Pathogenesis - Diagnostics - Drug resistance - Cell Biology - Immunology
Mon, Nov 05	FZB 	Buko Lindner Sven Müller-Loennies	All-day course – Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry (9.15 am – 5.15 pm) - How can my research project profit from mass spectrometry? - Modern Nuclear Magnetic Resonance (NMR)- Spectroscopy in the analysis of molecular structures and complexes -
Fri, Dec 07	HPI 	Gülsah Gabriel Cesar Munoz-Fontela	Seminar day (9.00 am – 1.00 pm) - Influenza Pathogenesis - Influenza Immunology

Date	Location	Lecturer	Topic
Mon, Jan 14	BNI 	Egbert Tannich Thomas Jacobs Joachim Clos Christian Keller Minka Breloer Monica Hagedorn Stephan Günther	<u>Seminar day – Infection Models for Tropical Diseases (10.00 am – 6.00 pm)</u> - Amoebiasis - Malaria - Leishmaniasis - Rickettsiosis - Helminth Infections - Intracellular pathogens - Tropical Viruses -
Tue, Jan 22	HPI 	Wolfram Brune Adam Grundhoff	<u>Seminar day (1.00 pm – 5.00 pm)</u> - Herpes Viruses – general overview - Genetic Manipulation and Genomic Analysis of Human Herpesviruses
Mon, Feb 04	FZB 	Christoph Lange Stefan Ehlers Elvira Richter Stefan Niemann Otto Holst/Buko Lindner Norbert Reiling Ulrich Schaible Christoph Lange	<u>Seminar day – Tuberculosis (9.15 am – 5.15 pm)</u> - Tuberculosis – a patient's perspective - Introduction: Tuberculosis – a global health threat (epidemiology, pathogenesis, animal models for research, current issues) - Microbiological diagnosis of mycobacterial infections, current status of drug resistance - Mycobacterium tuberculosis complex: genetics, molecular epidemiology, population structure, genomic and transcriptomic analyses - Structural biology of the mycobacterial cell wall - Mycobacterium tuberculosis: life inside the macrophage - Mechanisms of killing Mycobacterium tuberculosis: imaging in culture and in vivo - Clinical Diagnosis and Treatment of TB: Current Challenges and Networks
Thu, March 14	HPI 	Joachim Hauber	<u>Seminar day (1.00 pm – 5.00 pm)</u> - HIV/AIDS - Lifecycle, virus-host interactions, therapeutics
Mon, April 15	FZB 	Cordula Stamme Michael Wegmann	<u>Seminar day – Pulmonary Diseases (9.15 am – 12.15 pm)</u> - Principles of infectious pneumonia - Animal model of functional analysis of the lung
Mon, April 29	BNI 	Jürgen May Norbert Schwarz Ralf Krumkamp Denise Dekker	<u>All-day course – Epidemiologie of Infections (10.00 am – 3.00 pm)</u> - Introduction to Epidemiology (study designs, measures, risk, bias, confounding) - Infectious disease epidemiology - Interpretation of epidemiological data - Analysis of Infection outbreaks

Date	Location	Lecturer	Topic
Mon, June 03	FZB 	Holger Heine Uta Jappe Arndt Petersen	Seminar day – Clinical Allergology: Asthma, Atopy and Food Allergies (9.15 am – 12.15 pm) - 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
Tue, June 25	HPI 	Eva Herker	Seminar day (1.00 pm – 5.00 pm) - Hepatitis viruses – general overview - HBV and HCV
July	Summer break		
August			
Mon, Oct 14	BNI 	Andreas Krüger Stefanie Müller Jonas Schmidt-Chanasit	Seminar day – Vectors (10.00 am – 4.00 pm) - Introduction - Biology of mosquitoes, ticks and other important vectors - Immunology of insects - Mechanisms of vector competence - Medical Entomology: “Surveillance strategies for zoonotic mosquito-borne viruses”
Tue, Nov 19	HPI 	Rudolph Reimer	All-day course (10.00 am – 6.00 pm) - Imaging
Mon, Dec 09	BNI 	Jürgen May Iris Bruchhaus Rolf Horstmann Egbert Tannich Ingrid Müller Tobias Spielmann Thomas Jacobs	Seminar day – Malaria (10.00 – 6.00 pm) - Introduction and Epidemiology - Parasitology - Pathogenesis - Diagnostics - Drug resistance - Cell Biology - Immunology

Date	Location	Lecturer	Topic
Mon, Jan 13	FZB 	Buko Lindner Sven Müller-Loennies	<u>All-day course – Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry (9.15 am – 5.15 pm)</u> <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 -
Mon, Feb 10	BNI 	Egbert Tannich Thomas Jacobs Joachim Clos Christian Keller Minka Breloer Monica Hagedorn Stephan Günther	<u>Seminar day – Infection Models for Tropical Diseases (10.00 am – 6.00 pm)</u> <ul style="list-style-type: none"> - Amoebiasis - Malaria - Leishmaniasis - Rickettsiosis - Helminth Infections - Intracellular pathogens - Tropical Viruses -
Fri, March 07	HPI 	Gülsah Gabriel Cesar Munoz-Fontela	<u>Seminar day (9.00 am – 1.00 pm)</u> <ul style="list-style-type: none"> - Influenza Pathogenesis - Influenza Immunology
Mon, April 07	FZB 	Christoph Lange Stefan Ehlers Elvira Richter Stefan Niemann Otto Holst/Buko Lindner Norbert Reiling Ulrich Schaible Christoph Lange	<u>Seminar day – Tuberculosis (9.15 am – 5.15 pm)</u> <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) - Microbiological diagnosis of mycobacterial infections, current status of drug resistance - Mycobacterium tuberculosis complex: genetics, molecular epidemiology, population structure, genomic and transcriptomic analyses - Structural biology of the mycobacterial cell wall - Mycobacterium tuberculosis: life inside the macrophage - Mechanisms of killing Mycobacterium tuberculosis: imaging in culture and in vivo - Clinical Diagnosis and Treatment of TB: Current Challenges and Networks -
Mon, May 12	BNI 	Jürgen May Norbert Schwarz Ralf Krumkamp Denise Dekker	<u>All day course – Epidemiology of Infections (10.00 am – 3.00 pm)</u> <ul style="list-style-type: none"> - Introduction to Epidemiology (study designs, measures, risk, bias, confounding) - Infectious disease epidemiology - Interpretation of epidemiological data - Analysis of Infection outbreaks
Tue, May 06	HPI 	Wolfram Brune Adam Grundhoff	<u>Seminar day (1.00 pm – 5.00 pm)</u> <ul style="list-style-type: none"> - Herpes Viruses – general overview - Genetic Manipulation and Genomic Analysis of Human Herpesviruses

2014

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Mon, June 02	FZB 	Cordula Stamme Michael Wegmann	Seminar day – Pulmonary Diseases (9.15 am – 12.15 pm) - Principles of infectious pneumonia - Animal model of functional analysis of the lung
Thu, June 26	HPI 	Joachim Hauber	Seminar day (1.00 pm – 5.00 pm) - HIV/AIDS - Lifecycle, virus-host interactions, therapeutics
July	Summer break		
August			
Wed, Sept 17	HPI 	Rudolph Reimer	All-day course (10.00 am – 6.00 pm) - Imaging
Mon, Oct 06	FZB 	Holger Heine Uta Jappe Arndt Petersen	Seminar day – Clinical Allergology: Asthma, Atopy and Food Allergies (9.15 am – 12.15 pm) - 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
Mon, Nov 10	BNI 	Andreas Krüger Stefanie Müller Jonas Schmidt-Chanasit	Seminar day – Vectors (10.00 am – 4.00 pm) - Introduction - Biology of mosquitoes, ticks and other important vectors - Immunology of insects - Mechanisms of vector competence - Medical Entomology: “Surveillance strategies for zoonotic mosquito-borne viruses”
Tue, Dec 09.	HPI 	Eva Herker	Seminar day (1.00 pm – 5.00 pm) - Hepatitis viruses – general overview - HBV and HCV

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Mon, Jan 19	BNI 	Jürgen May Iris Bruchhaus Rolf Horstmann Egbert Tannich Ingrid Müller Tobias Spielmann Thomas Jacobs	<u>Seminar day – Malaria (10.00 am – 6.00 pm)</u> - Introduction and Epidemiology - Parasitology - Pathogenesis - Diagnostics - Drug resistance - Cell Biology - Immunology
Fri, Feb 06	HPI 	Gülsah Gabriel Cesar Munoz-Fontela	<u>Seminar day (9.00 am – 1.00 pm)</u> - Influenza Pathogenesis - Influenza Immunology
Mon, Mar 02	FZB 	Buko Lindner Sven Müller-Loennies	<u>All-day course – Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry (9.15 am – 5.15 pm)</u> - How can my research project profit from mass spectrometry? - Modern Nuclear Magnetic Resonance (NMR)- Spectroscopy in the analysis of molecular structures and complexes
Mon, April 13	BNI 	Egbert Tannich Thomas Jacobs Joachim Clos Christian Keller Minka Breloer Monica Hagedorn Stephan Günther	<u>Seminar day – Infection Models for Tropical Diseases (10.00 am – 6.00 pm)</u> - Amoebiasis - Malaria - Leishmaniasis - Rickettsiosis - Helminth Infections - Intracellular pathogens - Tropical Viruses
Mon, May 11	BNI 	Jürgen May Norbert Schwarz Ralf Krumkamp Denise Dekker	<u>All-day course – Epidemiology of Infections (10.00 am – 3.00 pm)</u> - Introduction to Epidemiology (study designs, measures, risk, bias, confounding) - Infectious disease epidemiology - Interpretation of epidemiological data - Analysis of Infection outbreaks
Mon, June 01	FZB 	Christoph Lange Stefan Ehlers Elvira Richter Stefan Niemann Otto Holst/Buko Lindner Norbert Reiling Ulrich Schaible Christoph Lange	<u>Seminar day – Tuberculosis (9.15 am – 5.15 pm)</u> - Tuberculosis – a patient's perspective - Introduction: Tuberculosis – a global health threat (epidemiology, pathogenesis, animal models for research, current issues) - Microbiological diagnosis of mycobacterial infections, current status of drug resistance - Mycobacterium tuberculosis complex: genetics, molecular epidemiology, population structure, genomic and transcriptomic analyses - Structural biology of the mycobacterial cell wall - Mycobacterium tuberculosis: life inside the macrophage - Mechanisms of killing Mycobacterium tuberculosis: imaging in culture and in vivo - Clinical Diagnosis and Treatment of TB: Current Challenges and Networks

2015

Date	Location	Lecturer	Topic
Tue, June 23	HPI 	Wolfram Brune Adam Grundhoff	Seminar day (1.00 pm – 5.00 pm) - Herpes Viruses – general overview - Genetic Manipulation and Genomic Analysis of Human Herpesviruses
July	Summer break		
August			
Fri, Sept 25	HPI 	Joachim Hauber	Seminar day (1.00 pm – 5.00 pm) - HIV/AIDS - Lifecycle, virus-host interactions, therapeutics
Mon, Oct 05	FZB 	Cordula Stamme Heinz Fehrenbach	Seminar day – Pulmonary Diseases (9.15 am – 12.15 pm) - Principles of infectious pneumonia - Animal model of functional analysis of the lung
Mon, Nov 09	BNI 	Andreas Krüger Stefanie Müller Jonas Schmidt-Chanasit	Seminar day – Vectors (10.00 am – 4.00 pm) - Introduction - Biology of mosquitoes, ticks and other important vectors - Immunology of insects - Mechanisms of vector competence - Medical Entomology: “Surveillance strategies for zoonotic mosquito-borne viruses”
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