

Introduction to Microbiology and Immunology in Zürich

A one-week course for participants of the PhD program Microbiology and Immunology offered by the Departments of Microbiology and Immunology at the University of Zürich (UZH) and the ETH Zürich (ETH-Z) which are members of the MIM-PhD-program of Life Sciences Zürich

February 26 to March 2, 2007

Large Lecture Hall, Botanical Garden of the University, 107 Zollikerstreet, 8008 Zürich
Tram 11 or bus 31 to Hegibachplatz, or bus 33 to Botanical Garden, or trams 2 or 4 to Höschgasse

Lectures last 30 minutes followed by a 15 minute discussion period

Lecture slides and the spoken lecture texts will be made available on the Switch server via OLAT (password protected)

Abstracts and Reference Papers are available as pdf (last two columns)

Downloads: [all abstracts](#) (2MB), [all reference papers](#) (33MB), [program](#) (140KB)

Program Monday, February 26

08.00	Recent Discoveries in Microbiology. PhD students present their research work P1: Katrin Gröbel P2: Doris Bühler P3: Kathrin Felder	All students of the MIM PhD program, convened by Kurt Hanselmann		
08.50	Welcome and Introduction	Leo Eberl University of Zürich		
09.00	Session 1: Human and Veterinary Medical Microbiology	CONVENERS: Isabel Hartmann; Michael Zeder; Xin Wang; Thierry Schaffner		
09.00	L 1: The biology of <i>Salmonella enterocolitis</i>	Wolf-Dietrich Hardt Institute of Microbiology, ETH-Z	Ab	Ref 1 Ref 2
09.45	L 2: Virus in sheep's skin	Mathias Ackermann Institute of Virology, VetSuisse, UZH	Ab	Ref 1 Ref 2
10.30	Intermission			
11.00	L 3: Pathogenesis of Legionella and Shigella	Hubert Hilbi Institute of Microbiology, ETH-Z	Ab	Ref 1 Ref 2 Ref 3
11.45	L 4: <i>Mycobacterium tuberculosis</i>: Virulence mechanisms and lipoprotein synthesis	Peter Sander Institute of Medical Microbiology, UZH	Ab	Ref 1 Ref 2
12.30	Lunch Break			

13.30	L 5: <i>Staphylococcus aureus</i> - Regulation of antibiotic resistance and virulence	Brigitte Berger-Bächi Institute of Medical Microbiology, UZH	Ab	Ref 1 Ref 2
14.15	L 6: The Ribosome: Mechanisms of Function, structure-function relationships and drug target	Sven N. Hobbie Institute of Medical Microbiology, UZH	Ab	Ref 1 Ref 2
15.00	Intermission			
15.30	L 7: Protein trafficking in an ancient protozoan parasite	Adrian Hehl Institute of Parasitology, UZH	Ab	Ref 1 Ref 2
16.15	L 8: Politics, public health and emerging epidemics	Paul Torgerson Institute of Parasitology, UZH	Ab	Ref 1 Ref 2
17.00	End of Monday session			
17.15	MIM Steering Committee Meeting			

Program Tuesday, February 27

08.00	Recent Discoveries in Microbiology. PhD students present their research work P4: Isabel Hartmann P5: Paula Carranza P6: Regina Miller P7: Nadine Gehre	All students of the MIM PhD program, convened by Kurt Hanselmann		
09.30	Session 1 continued: Human and Veterinary Medical Microbiology	CONVENERS: Joanna Massacand; Kathrin Endt		
09.30	L 9: Strategies to analyse an unculturable bacterial pathogen exemplified by <i>Mycoplasma suis</i>	Ludwig E. Hoelzle Institute of Veterinary Bacteriology, UZH	Ab	Ref 1 Ref 2
10.15	Intermission			
10.45	Session 2: Virology	CONVENERS: Joanna Massacand; Kathrin Endt		
10.45	L 10: Antiviral measures of the type I interferon system and counter measures mediated by specific influenza virus proteins	Jovan Pavlovic Institute of Medical Virology, UZH	Ab	Ref 1 Ref 2
11.30	L 11: Immunity to viral and bacterial infection	Annette Oxenius Institute of Microbiology, ETH-Z	Ab	Ref 1 Ref 2
12.15	Lunch Break (Please take all your belongings with you; the room will be used by another group over lunch time)			

13.15	Session 3: Plant Microbiology	CONVENERS: Paula Carranza; Ludwig Zauner		
13.15	L 12: Oxygen-controlled regulons in a symbiotic nitrogen-fixing bacterium	Hauke Hennecke Institute of Microbiology, ETH-Z	Ab	Ref 1 Ref 2 Ref 3
14.00	L 13: Plant-pathogen interactions	Robert Dudler Institute of Plant Biology, UZH	Ab	Ref 1 Ref 2
14.45	Intermission			
15.15	L 14: Crosstalk in the rhizosphere: How plants, plant pathogenic fungi and plant beneficial pseudomonads interact	Monika Maurhofer Institute of Integrative Biology, ETH-Z	Ab	Ref 1 Ref 2 Ref 3
16.00	L 15: Physiology and ecophysiology of methylotrophic bacteria	Julia Vorholt Institute of Microbiology, ETH-Z	Ab	Ref 1 Ref 2
16.45	End of Tuesday sessions			

Program Wednesday, February 28

08.00	Recent Discoveries in Microbiology. PhD students present their research work P 8: Joanna Massacand P 9: Ludwig Zauner P 10: Gerd Innerebner P 11: Mariette Bonnet	All students of the MIM PhD program, convened by Kurt Hanselmann		
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09.15	Session 4: General and Ecological Microbiology	CONVENERS: Regina Miller; Pascal Songhet		
09.15	L 16: Aquatic microbial ecology: from communities to populations	Jakob Pernthaler Institute of Plant Biology / Limnology, UZH	Ab	Ref 1 Ref 2
10.00	L 17: Exploring and exploiting bacterial proteomes	Kathrin Riedel Institute of Plant Biology / Microbiology, UZH	Ab	Ref 1 Ref 2
10.45	Intermission			
11.15	L 18: Cell-to-cell communication in bacteria: gossip and facts	Leo Eberl Institute of Plant Biology / Microbiology, UZH	Ab	Ref 1 Ref 2
12.00	L 19: From basic research to vaccine development	Martin Bachmann Cytos Biotechnology AG Zürich-Schlieren	Ab	Ref 1 Ref 2
12.45	Lunch Break			

13.45	Session 5: Food and Applied Microbiology	CONVENERS: Kathrin Felder; Katrin Gröbel		
13.45	L 20: Biology, detection and control of foodborne pathogens	Martin J. Loessner Institute of Food Sciences and Nutrition, ETH-Z	Ab	Ref 1 Ref 2
14.30	L 21: <i>Enterobacter sakazakii</i>, an example of an opportunistic foodborne pathogen	Angelika Lehner Institute for Food Safety and Hygiene, UZH	Ab	Ref 1 Ref 2
15.15	Intermission			
15.45	L 22: N-linked protein glycosylation	Markus Aebi Institute of Microbiology, ETH-Z	Ab	Ref 1 Ref 2
16.30	End of Wednesday sessions			

Program Thursday, March 1

08.00	Recent Discoveries in Microbiology. PhD students present their research work P 12: Kathrin Endt P 13: Pascal Songhet P 14: Michael Zeder	All students of the MIM PhD program convened by Kurt Hanselmann		
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09.00	Session 6: Immunology	CONVENERS: Doris Bühler; Gerd Innerebner		
09.00	L 23: Neuroimmunology: The brain under attack	Thorsten Buch University Hospital Zürich	Ab	Ref 1 Ref 2
09.45	L 24: Human leukocyte interactions with porcine endothelium: implications for xenotransplantation.	Marten Schneider University Hospital Zürich	Ab	Ref 1 Ref 2
10.30	Intermission			
11.00	L 25: The regulation of immune responses in the central nervous system	Tobias Suter University Hospital Zürich	Ab	Ref 1 Ref 2
11.45	L 26: The role of distinct T helper subsets in infection and autoimmunity	Manfred Kopf Institute of Integrative Biology, ETH-Z	Ab	Ref 1 Ref 2 Ref 3
12.30	Lunch			

13.15	Session 7: Technical Microbiology and Bio-Engineering	Organized by Kurt Hanselmann		
13.15 14.15	Departure by bus from Botanical Garden for excursion Skills and art of building fermenters Introduction to aspects of technical microbiology	Special event for students at Bioengineering, AG, Wald, ZH		
18.00	End of Thursday activities			

Program Friday, March 2

08.00	Recent Discoveries in Microbiology. PhD students present their research work P 15: Thierry Schaffner P 16: Xin Wang P 17: Sabrina Dilling P 18: Danusia Banu	All students of the MIM PhD program convened by Kurt Hanselmann		
08.45	Preparing for course evaluation via OLAT	All students of the MIM PhD program convened by Kurt Hanselmann		
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09.00	Session 8: Hospital Epidemiology	CONVENERS: Nadine Gehre; Danusia Banu Mariette Bonnet; Sabrina Dilling		
09.00	L 27: Influence of persistent viral infections on immune senescence	Urs Karrer University Hospital Zürich	Ab	Ref 1 Ref 2
09.45	L 28: Direct and indirect effects of infections after transplantation: Clinical experience in human allotransplantation, preclinical models of xenotransplantation	Nicolas Müller University Hospital Zürich	Ab	Ref 1 Ref 2
10.30	Intermission			
11.00	L 29: The HIV entry process: Target for inhibitors and vaccines	Alexandra Trkola University Hospital Zürich	Ab	Ref 1 Ref 2 Ref 3
11.45	L 30: Lytic Epstein-Barr virus	Michele Bernasconi University Children's Hospital Zürich	Ab	Ref 1 Ref 2
12.30	Lunch Break			
13.30	L 31: Epstein-Barr virus entry mechanisms	Rahel Byland University Hospital Zürich	Ab	Ref 1 Ref 2
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14.30	Session 9: Special Guest Lecture	CONVENER: Kurt Hanselmann		
14.30	L 32: Environmental genomics: Learning about the function and distribution of naturally occurring microbes without cultivating them	Christian von Mering Institute of Molecular Biology, UZH	Ab	Ref 1 Ref 2
15.30	Summary and outlook: The future of Microbiology	Leo Eberl Institute of Plant Biology / Microbiology, UZH		
16.00	Course evaluation by students and speakers via OLAT			
16.30	End of course, Aperitif offered by the MIM PhD committee			

