



Graduate College Immunomodulation Winter Semester 2007-08 Programme 'Methods in Immunology'

Date	Topic	Lab/Presentation	
18.10.2007	Working with proteins	Hünig	Generation of monoclonal antibodies
		Herrmann	mAb purification and labeling
		Müller	Purification/characterization of recombinant proteins
		Vogel	2D electrophoresis of protein mixtures
25.10.2007	Working with nucleic acids	Berberich	Retroviral transduction and cell sorting
		Tony	Single cell PCR
		Otto	(RT) PCR, identification of micro-RNAs
08.11.2007	Visualizing lymphocyte activation and death	Kerstan	Detection of apoptosis by FACS stainings and immunohistology
		Berberich-Siebelt	Transcription factor activation measured by confocal microscopy, EMSA or CHIP
		Martini	Immune histology, confocal and electron microscopy
15.11.2007	Migration and interaction of T-cells and dendritic cells	Lutz	DC generation, maturation, transwell migration. CFSE labeling and tracking of T-cells
		Moll/Remer	CD-mediated immunization in the Leishmania system
		Beilhack	In vivo imaging
22.11.07	T-cell effector assays	Topp	Ex vivo assays for detection and quantification of antigen-specific T-cells
		Wischhusen	Assays for cell-mediated cytotoxicity
		Hünig	Cytokine secretion assays

29.11.07	During these five weeks, the Graduates should carry-out a Mini-Project (minimum of 10 hours bench-work) with the aim of learning a method not available in their own laboratory.
6.12.07	
13.12.07	
20.12.07	
10.01.08	

Mini-Project Presentations

17 January 2008		
2D electrophoresis, cytokine analysis		
Josip Zovko	2D electrophoresis	Vogel
Jianqiang Li	2D electrophoresis	Vogel
Hieu Tran-Van	Co-localisation of Neuropilin1 and Plexin A1 in lipid rafts	Martini
Martin V��th	Intracellular cytokine analysis of NFAT-transduced human T cells	Topp
Christiane Hammerschmidt	Cytokine profile of oligodendrocyte cell culture supernatant	H��nig
Katrien Pletinckx	Th1 versus Th2 analysis by cytokine bead array	H��nig
24 January 2008		
microscopy, DCs		
Anja D��hler	Detection of c-rel/RelA in DCs by confocal microscopy	Berberich-Siebelt
Tessa van Alen	Electron microscopy of biofilms	Martini
Kati Martens	Immunohistology of the CNS	H��nig
Anja Matuschek	DC studies	Lutz
Paula Tabares-Gaviria	Activation of DCs	Lutz
Stefanie Manthey	CFSE proliferation assay and DC generation	Lutz
31 January 2008		
gene expression		
Claudia St��hler	Real-time PCR of Hsp90 following siRNA-mediated knockdown	Otto
Elisa Monzon-Casanova	Real-time PCR	Otto
Anoop Chandran	Single cell PCR	Tony
Khalid Muhammad	Gene expression study by microarrays	Kneitz
Stefan Fischer	CHIP analysis of the MCP-1 locus in mutant peripheral nerves.	Berberich-Siebelt
7 February 2008		
mAb generation, detection of proliferating, cytotoxic and apoptotic cells		
Yvonne Dombrowski	Generation of mAbs against hGDF15	H��nig
Asifa Khalid	Purification of IL-5	M��ller
Johannes Schnitzer	Determination of T cell proliferation in vitro via CFSE staining	Moll
Tobias Schwarz	Detection of cytotoxic T cells against <i>Leishmania</i> after vaccination	Wischhusen
Stefan Saremba	Cytokine-mediated effects on NK-cell killing	Wischhusen
Daniela Langenhorst	Detection of apoptotic cells	Kerstan