

RTG course program 2018

Organizer	Event	Title	Focus	Schedule	Short description	Date	Time	Location	Participants	doodle	organizer contact	ECTS equiv.
Scientific core competences												
Sachin Deshmukh	Lab-course / Lectures	CRISPR-Cas9 genome editing and metabolic labeling of PAMPS for cellular signaling studies	cell biology/	2-3-days	Recognizing specific microbial substructures at different cellular compartments is necessary for defending against invading pathogen and mounting robust immune responses. During this course we will study visualization methods for innate immune signaling from cytosol, cell membrane or endosomes. Using synthetic biology approaches we will perform metabolic labelling of PAMPS and trace the signal transduction in real-time. As a hands-on technique we can implement I) Metabolic labeling methods or II) CRISPR-Cas9 genome editing methods. Moreover we will discuss microbial strategies to invade host cells and their effect on sepsis organ failure.	03.09.-05.09.18		CSCC labs in FZL house F2	max:4	https://doodle.com/poll/a256d6wzbsk4twwv	Sachin.Deshmukh@med.uni-jena.de	2-3
Tony Bruns	Lab Course	Flow Cytometry	cell biology			20.09-21.09.18		Bruns-lab FZL house F2 (FUI)	min:2 max:4	https://doodle.com/poll/ew4kbywz3u7bhzwz	TONY.BRUNS@med.uni-jena.de	tba
Alexander Mosig	Lecture/ Lab Course	Biochip embedded organoids	organoid model	2 days hands on	During the course participants will learn to practically handle Biochip embedded organoids. As a hands-on example liver organoids will be stimulated with various pathogen associated molecular pattern (PAMPs) and activity of phase I/II enzymes will be assayed. Furthermore a theoretical background for the application of additional in vitro methods and tissue engineering approaches will be provided.	week 22		CSCC labs in FZL house F2 (FUI)	min:2 max:4	https://doodle.com/poll/c72he6inzm7k34ne	Alexander.Mosig@med.uni-jena.de	2
Ilse Jacobsen	Lab course / Lecture	Alternative animal models	animal studies	1-2 days	Alternative animal models Practical part c. elegans	tba preferential 17.-30.09.		HK1	max: 2	https://doodle.com/poll/cn2dqpkyhqvnyf9a	Ilse.Jacobsen@hki-jena.de	2
CU Animal Models	Lecture/ Seminar	Animal experiments in sepsis research	animal studies	0,5 day	participants will get an introduction in - generell aspectsof animal research (legal basis, procedures) - sepsis models (PCI, CLP, LPS) - alternative models (Endokarditis, Osteomyelitis)	tba (second half of the year)		Seminar room, Res.Cent.Lob. (FZL)	max: 12	https://doodle.com/poll/bx2f7tndn4b9vc6t	IGNACIO.RUBIO@med.uni-jena.de Karen.Dlubatz@med.uni-jena.de	0,5
CU Biophotonics	Lab course / Lectures	Biophotonic methods for fast antibiotic susceptibility testing	Biophotonics	2 days hands on	The course will cover a theory overview of emerging spectroscopic and microscopic methods for the fast detection of antibiotic resistance in bacteria. In the hands-on-sessions one of two possible methods (Raman spectroscopy-based or image-based) will be carried out in groups by the participants.	Week 34 or 35 (most likely Tuesday/Wednes day)		CSCC labs in FZL house F2 (FUI)	min: 4 max: 12	https://doodle.com/poll/ybx54fntq7i3vkb	Ute.Neugebauer@med.uni-jena.de	2
Rainer König	Lecture / methode course	R-Programming	data analysis	1 week	We offer an introductory course into the statistical programming language R. We will introduce you to basic programming, and you learn analyzing gene expression data e.g. from microarrays, enrichment tests, finding differently expressed genes, clustering and classification. Additionally, we will show you some basic concepts of systems biology by introducing you to constraint based modeling. The course will take one week. If you got excited and would like to continue, we can arrange a 3 weeks practical afterwards.	12.02 - 16.02.18	8.30-17.00	Seminar Room Paul Ehrlich, Hans-Knöll-Institute, Administration Building, ground floor			Marcus.Oswald_Email:marcus.oswald@hki-jena.de franziska.hoerhold@hki-jena.de	1 per day
André Scherag	Lectures Seminar	Biostatistics	data analysis	1 day	This course is planned as an introductory course to biostatistics with a focus on translation/basic science projects. After some general background on statistical principles and designs, I will address specific tailored challenges that students face with their project. About 2 weeks ahead of the course, I will ask you to send me some methodological questions regarding your project and during the course you should present the project (with a focus on design and statistics) to the other students and we will discuss the projects and hopefully solutions to your statistical challenges (which will usually be of interest not just to you).	February 2019	9.00 - 16.00	Bachstr 18, IMSID	min:4, max: 12	https://doodle.com/poll/6bz4n3fcnh8wnuep	andre.scherag@med.uni-jena.de	1
Interdisciplinary competences and transferable skills												
Soft skills course will be embedded in RTG retreat with focus on carree rpossibilities after PhD time											Nadine.Reiher@hki-jena.de franziska.hoerhold@hki-jena.de	