Multiscale Bioimaging From Molecular Machines to Networks of Excitable Cells



preliminary programme MBExC retreat 06 March - 08 March 2023 in Uslar/Volpriehausen "MBExC Renewal"

Monday, 06 March 2023

08:00	Departure in Göttingen
08:40	Arrival and Check-in in Uslar/Volpriehausen
09:30	Welcome by Tobias Moser
09:40	Line of Research 1 "Gene Expression and Regulation" Peter Rehling, André Fischer, Rubén Fernández Busnadiego Overview Refer Rehling (RA 1.1.)
10:00	Peter Rehling (RA 1.1.) "tba
10:25	André Fischer (RA 1.2.)
	"Heart and Brain diseases: Transcriptomics in translational research"
10:50	Rubén Fernández Busnadiego (RA 1.3)
	"tba"
11:15	Coffee break
11:45	Lennart Schneider
	"Investigating sudden unexpected death in epilepsy using a human heart and brain interface model"
12:00	Marleen Heinrichs "tba"
12:15	Vrinda Sant "Structure determination of a lipidic aSyn oligomer"
12:45	Ida Jentoft "Mammalian oocytes store proteins in cytoplasmic lattices"
13:00	Lunch break
14:00	New member talk: Thomas Frank (Junior Group Leader "Zebrafish Neurobiology"
	"Exploring the Role of Inhibition in Higher-Order Olfactory Processing"
15:00	Current status of the MBExC / Members assembly
15:30	Team building activity / Coffee break
17:30	Poster session
18:30	Dinner
20:00	Keynote speaker: Matthias Mann, Dept. Proteomics and Signal Transduction Max Planck Institute of Biochemistry, Martinsried "Deep Visual Tissue Proteomics"
21:00	Welcome drink

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Tuesday, 07 March 2023

09:00	Line of Research 2: Multiscale Approaches to Heart and Brain Introduction, "Bridging the scales" Nadja Simeth Roman Tsukanov Rubén Fernández Busnadiego Sarah Köster Wiebke Möbius Carola Gregor Maria Patapia Zafeiriou Tobias Brügmann Tim Salditt Jan Huisken
09:55	Coffee break & Poster Session
03.33	Line of Research 2: Multiscale Approaches to Heart and Brain
	"What is the future of"
10:25	Microscopy
10:40	X-ray imaging
10:55	Modelling
11:10	Chemistry
11:25	Electron microscopy
11:40	Data analysis
11:55	Optogenetics
12:10	Lunch break
13:30	Round table discussion Part 1
14:50	Coffee break
15:20	Round table discussion Part 2
16:40	MBExC Q&A session
18:30	Dinner
20:00	Round table summary / Get together

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Wednesday, 08 March 2023

09:00	Line of Research 3: RA 3.1 Assembly and Function of Ion Channel Clusters Stephan Lehnart, Claudia Steinem, Tina Pangrsic Overview
09:15	Niko Teiwes / Niko Schwenzer / Rohan Kapoor
	"Bottom-up approaches to CaV1.3 Ca ²⁺⁻ channel in heart and brain"
09:55	Eri Sakata / Nare Karagulyan / Tina Pangrsic
	"tba"
10:35	Coffee break & Poster Session
11:00	Line of Research 3: RA 3.2 Calcium-triggered Membrane Fusion Tobias Moser, Julia Preobraschenski, Sören Brandenburg
44.45	Overview
11:15	Antoine Huet
11.05	"Shining light on auditory brainstem neural networks"
11:35	Constantin Cretu / Sören Brandenburg "tba"
12:00	Han Chen / Mehar Monga "tba"
12:25	Lunch
14:00	Seed fund talks / Clinician scientist talks
	Hebatallah Abdelrasol
	"Deciphering the effects of alpha-synuclein aggregation in the physiology of excitable cells"
14:15	Angeliki Koufali
	"Characterization and applications of otic BENO"
14:30	Lennart Roos "In vivo characterization of novel channelrhodopsin variants for optogenetic activation of the auditory pathway by blue light"
14:45	Carolina Thomas "The role of mSec7s and ARF6 in the regulation of transmitter release"
15:00	Closing remarks and outlook
15:15	End of retreat

15:45	Departure
16:30	Arrival in Göttingen