

Clinical Studies and Translation Module – March 11, 2019

Day 1

Time	Topic	Lecturer
08:30 am – 09:15 am	Major clinical challenges in neurology	Patrick Weydt
09:15 am – 10:00 am	Common diseases and inflammation	Jacob Nattermann
10:00 am – 10:30 am	Break	
10:30 am – 11:15 am	Major clinical challenges in surgery	Sven Wehner
11:15 am – 12:00 am	Major clinical challenges in cardiology	Sebastian Zimmer
12:00 am – 01:00 pm	Break	
01:00 pm – 01:45 pm	Identification of biomarkers in oncology	Michael Hölzel
01:45 pm – 02:30 pm	Principles of clinical trial regulation	Christoph Coch
02:30 pm – 03:00 pm	Break	
03:00 pm – 03:45 pm	Clinical trials and drug development – an overview	Christoph Coch
03:45 pm – 04:30 pm	Translational pharmacology: pharmacogenetics for innovative treatment strategies and drug safety	Julia Stingl

Genetics Module - March 13th, 2019

Genetics

Time	Topic	Lecturer
08:30 am – 09:15 am	Introduction into human genetics	Markus Nöthen
09:15 am – 10:00 am	Concepts of genetic epidemiology	Markus Nöthen
10:00 am – 10:30 am	Break	
10:30 am – 11:15 am	Variability in the human genome	Stefanie Heilmann
11:15 am – 12:00 am	Genome-wide association studies	Andreas Forstner
12:00 am – 01:00 pm	Break	
01:00 pm – 01:45 pm	Next-generation sequencing	André Heimbach
01:45 pm – 02:30 pm	Genetics of psychiatric disorders	Franziska Degenhardt
02:30 pm – 03:00 pm	Break	
03:00 pm – 03:45 pm	Genetics of intelligence deficits	Hartmut Engels
03:45 pm – 04:30 pm	Craniofacial genomics	Kerstin Ludwig

The introductory course in 2019 will be held in the period of **March 11 – 15, 2019** in the IMBIE

Imaging Module - March 14, 2019

Time	Topic	Lecturer
08:30 am – 09:15 am	Nuclear Medicine: Techniques – PET & SPECT	Boecker
09:15 am – 09:45 am	Nuclear Medicine: Neuropharmaceutical Engineering	Kürpig
09:45 am – 10:15 am	Nuclear Medicine: Radiation Protection & Radiobiological Aspects	Bundschuh
10:15 am – 10:45 am	Break	
10:45 am – 11:15 am	Radiology: MRI Basics	Scheef
11:15 am – 12:00 am	Radiology: Structural and Diffusion MRI	Scheef
12:00 am – 01:00 pm	Break	
01:00 pm – 01:45 pm	Radiology: MR Spectroscopy	Sprinkart
01:45 pm – 02:30 pm	Radiology: fMRI Basics 1	Boecker
02:30 pm – 03:00 pm	Break	
03:00 pm – 03:45 pm	Radiology: fMRI Basics 2	Schmitt
03:45 pm – 04:30 pm	Radiology: Ultrasound	Pieper

Statistics Module – March 15, 2019

Day 1

Time	Topic	Lecturer
08:30 am – 09:15 am	Data structures and descriptive analysis	Shekoufeh Gorgi Zadeh
09:15 am – 10:00 am	Probability theory and statistical distributions	Shekoufeh Gorgi Zadeh
10:00 am – 10:30 am	Break	
10:30 am – 11:15 am	Confidence intervals and hypothesis tests (1)	Michael Steffens
11:15 am – 12:00 am	Confidence intervals and hypothesis tests (2)	Michael Steffens
12:00 am – 01:00 pm	Break	
01:00 pm – 01:45 pm	Correlation and simple linear regression	Andreas Mayr
01:45 pm – 02:30 pm	Multiple linear regression	Andreas Mayr
02:30 pm – 03:00 pm	Break	
03:00 pm – 03:45 pm	Diagnostic tests	Sach Mukherjee
03:45 pm – 04:30 pm	Time-to-event analysis	Matthias Schmid