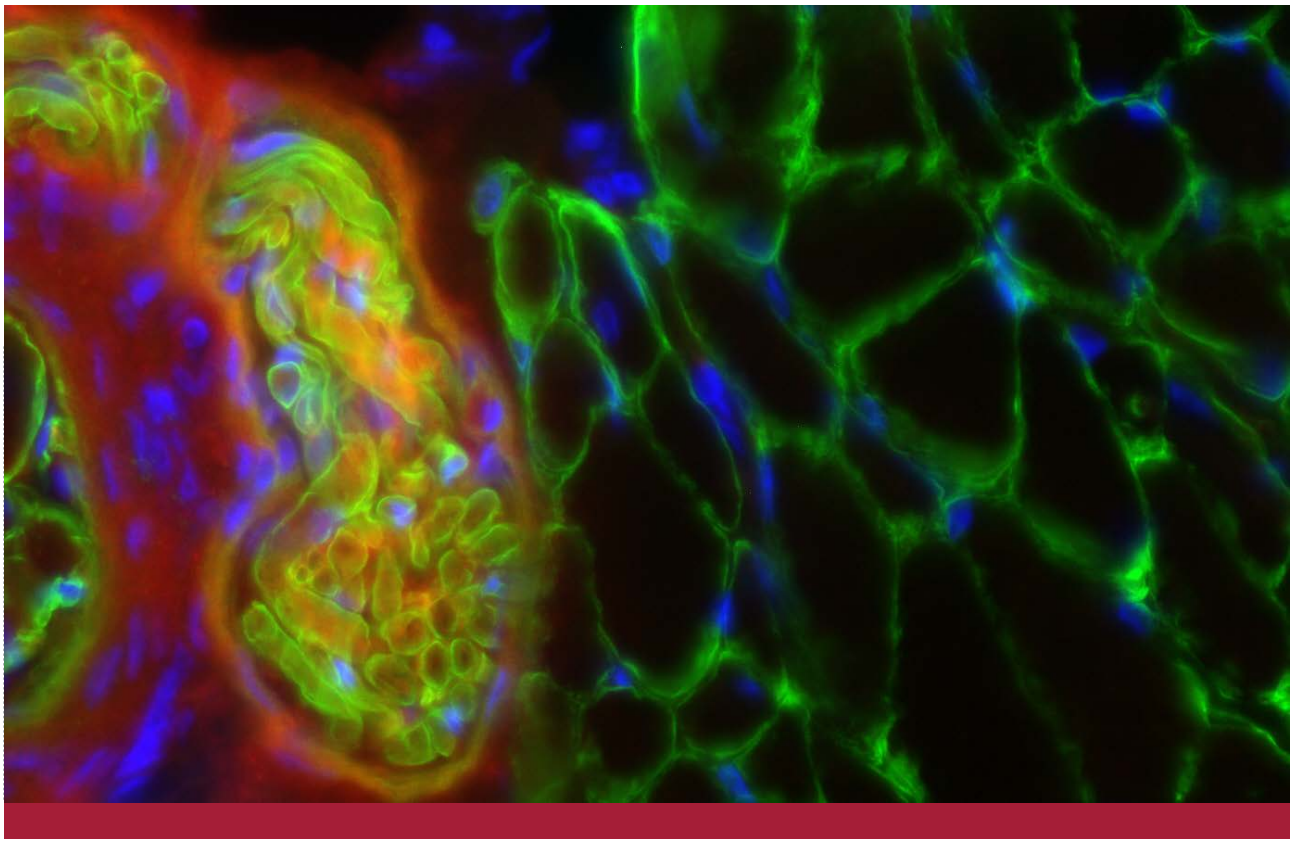
EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



Symposium

10 Years

Molecular Medicine:

Building bridges between basic science and clinical medicine

01. June 2019

FACULTY OF MEDICINE

10 Years Molecular Medicine:
Building bridges between basic science and clinical medicine

June 1st, 2019 // 8:00-14:00

Crona-Kliniken // Lecture Hall (Floor B04)

08:00	Registration & Breakfast
08:45	Welcome *Prof. Dr. Dr. Ghazaleh Tabatabai*
09:00	Monitoring tumor evolution and treatment response using liquid biopsy *Prof. Dr. Stephan Ossowski*
09:30	From molecular basis of proliferation control to targeted treatments in oncology *Prof. Dr. Nisar P. Malek*
10:00	Human infection models to improve medicine *Prof. Dr. Benjamin Mordmüller*
10:30	Break
11:00	Molecular Medicine in Neuro-Oncology *Prof. Dr. Dr. Ghazaleh Tabatabai*
11:30	Delivering the power of T cells to cancer patients – novel tumor antigens and cutting-edge immunotherapies made in Tübingen *Dr. Norbert Hilf*
12:00	Laudatio Prof. Dr. Thomas Iftner *Prof. Dr. Stephan Zipfel*
12:30-14:00	Lunch break

Speaker

June 1st, 2019 // 08:45-12:30
Crona-Kliniken // Lecture Hall (Floor B04) // Hoppe-Seyler-Straße 3 // 72076 Tübingen

Monitoring tumor evolution and treatment response using liquid biopsy
Prof. Dr. Stephan Ossowski
Institute for Medical Genetics and Applied Genomics, Eberhard Karls University of Tübingen

Notes:

From molecular basis of proliferation control to targeted treatments in oncology

Prof. Dr. Nisar P. Malek
Director and Chair, Department of Internal Medicine I, University Hospital Tübingen

Notes:

Human infection models to improve medicine

Prof. Dr. Benjamin Mordmüller
Institute for Tropical Medicine, Eberhard Karls University of Tübingen

Notes:

Molecular Medicine in Neuro-Oncology

Prof. Dr. Dr. Ghazaleh Tabatabai
Professor of Neuro-Oncology, Dean of Study Affairs Molecular Medicine,
Eberhard Karls University of Tübingen

Notes:

Delivering the power of T cells to cancer patients – novel tumor antigens and cutting-edge immunotherapies made in Tübingen

Dr. Norbert Hilf,
Vice President Translational Development, Immatics Biotechnologies GmbH, Tübingen

Notes:

Workshops

June 1st, 2019 // 14:00-17:15

Crona-Kliniken // Hoppe-Seyler-Straße 3 // 72076 Tübingen

Problem-based learning: How interactive discussions and critical analysis can make you a better learner

Dr. Tamia Lapointe

A medical scenario will be critically evaluated and analyzed as a group. This interactive discussion will highlight the importance of active and independent learning, and will encourage attendees to develop their communication skills, critical thinking abilities, and leadership.

Prior knowledge: Human physiology
Maximal participants: 15
Time frame: 14:15-17:15
Language: English
Location: Room 224

Disease modeling and correction of mutations using CRISPR/Cas9 gene editing of primary cells and iPSCs

Prof. Dr. Dr. med Julia Skokowa

Introduction in the topic and main methodological aspects of the CRISPR/Cas9 mediated gene editing and iPSC generation will be provided. After that, the implementation of the discussed methods in the (1) disease modelling or (2) correction of disease-casing mutations will be developed together with the partcipants in small groups.

Prior knowledge: Basic knowledge in cell and molecular biology, genetics
Maximal participants: 15
Time frame: 14:00-17:00
Language: English
Location: Room 221

Lehr- und Lerngebäude // Elfriede-Aulhorn-Straße 10 // 72076 Tübingen

NGS - Quo vadis

Dr. Dr. med. Saskia Biskup

The session will be covering different methods of sequencing with respect to clinical implications (genome, exome, transcriptome, panel) and will provide an outlook especially focusing on liquid biopsy, tumor mutational burden and neoantigen prediction.

Prior knowledge: None
Maximal participants: 30
Time frame: 14:15-16:15
Language: English
Location: Room 1.202/203

The characterisation of the brain's immune cell: From histological description to single cell profiles of microglia

Dr. Jonas Neher

In this workshop, we will examine how molecular analyses have been crucial for deciphering the function and heterogeneity of microglial cells (brain macrophages). We will also study how molecular approaches can be used to manipulate specific cell types and such approaches can be used for evaluating new treatment options for brain diseases.

Prior knowledge: Basic neuroscience and immunology knowledge are beneficial

Maximal participants: 15
Time frame: 14:00-17:00
Language: English
Location: Room 1.206

Immunology: The History of the Major histocompatibility complex
Prof. Dr. Oliver Planz
This workshop will give an overview on the discovery of the Major histocompatibility complex (MHC). It will introduce and discuss the work that led to Nobel prizes in 1980 and 1996. The workshop will be divided into three parts: After an introduction into the topic, the participants will form four groups and deal with the scientific work on MHC. In the final presentation each group will present their findings. The participants will be introduced into the immunological work, which, among other things, provided far-reaching insights for organ transplantation.
Prior knowledge: Immunology
Maximal participants: 15 (Every second participant should bring a laptop or tablet.)
Time frame: 14:15-17:00
Language: English
Location: Room 2.201

Impact of basic research on melanoma therapy
Prof. Dr. Birgit Schittek & Dr. Tobias Sinnberg
We will both give an overview about the topic and then discuss with the group what they think still has to be done in basic science and in clinical trials.
Prior knowledge: Oncology
Maximal participants: 15
Time frame: 14:30-17:00
Language: English
Location: Room 1.205

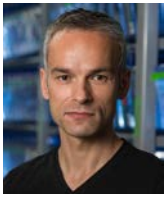
Advances in Neurogenetics: Discovery of novel disease gene
Priv.-Doz. Dr. Rebecca Schüle
How are human disease genes discovered? Students will first be introduced to the variability of the human genome, learn how to interpret genetic variation and then learn the strategies how disease genes are discovered and validated. To exemplify the principles we will work with 'real life' whole exome and whole genome sequencing data and use key genomic databases.
Prior knowledge: Basic human genetic
Maximal participants: 15
Time frame: 14:15-16:15
Language: English
Location: Room 2.202

Interfakultäres Institut für Biochemie // Hoppe-Seyler-Straße 4 // 72076 Tübingen

Tuning the way to die: implications of membrane perturbations in necroptosis
Dr. Uris Ros
The session will be divided into 3 sections:
1. Introducing the scientific background (about 30 minutes).
2. Students will be divided into groups and each group will be given some topics to dicuss (about 30 minutes).
3. Discussion about the state of art of the field, current questions and technical challenges (about 60 minutes).
Prior knowledge: Cell death
Maximal participants: 15
Time frame: 14:15-16:15
Language: English
Location: Room 209

Friedrich-Miescher-Labor, Max Planck-Gesellschaft // Max-Planck-Ring 9 // 72076 Tübingen

Zebrafish models for basic and translational research
Dr. Patrick Müller, Autumn Pomreinke, Laura Reinke
Get acquainted with a zebrafish facility and the utility of zebrafish for basic and translational research. Observe and draw wildtype and mutant embryos at various stages using stereomicroscopes and observe transgenic reporter embryos using a fluorescence microscope.
Prior knowledge: None
Maximal participants: 12
Time frame: 14:15-15:45
Language: English
Location: Lab



Anatomisches Institut (Alte Anatomie) // Österbergstraße 3 // 72074 Tübingen

Advances in Microscopy - from the digital classroom to image stacks of cleared tissues
Dr. Andreas Mack
The session will be a mix of theoretical presentations and practical hands-on demonstrations. We will discuss basics in light and electron microscopy, and advanced methods of optical sectioning and superresolution. The practical part will include working on confocal microscopes (multichannel imaging and image stacks) and optional a demonstration of an electron microscope.
Prior knowledge: None
Maximal participants: 12
Time frame: 14:15-17:15
Language: English
Location: Seminar room 3

Verfügungsgebäude Morgenstelle // Auf der Morgenstelle 15 // 72076 Tübingen

Monitoring of anti-cancer T-cell immune responses: from basic research to clinical studies
Priv.-Doz. Dr. Cécile Gouttefangeas
Workshop divided into 2 parts:
1) Lecture on T cell assays with special focus on their application for monitoring clinical studies: approx. 60 min.
2) Visit of the lab (Elispot and flow cytometer) and open discussion on the techniques: approx 60 min.
Prior knowledge: Immunology
Maximal participants: 10
Time frame: 14:15-16:15
Language: English
Location: Room 3.065

Felsenbeinlabor, HNO-Klinik // Auf der Morgenstelle 15 // 72076 Tübingen

Anatomie der höheren Wirbeltierembryonen zu Beginn der Organogenese am Mikroskop
Priv.-Doz. Dr. Andrea Wizenmann
Den Teilnehmern werden 3 Tage alte Hühnerembryonen zunächst live mittels Videomikroskop demonstriert und die Anatomie der Embryonen wird erläutert. Anschließend haben die Teilnehmer die Gelegenheit in Zweier-/Dreiergruppen am Präparationsmikroskop lebende und fixierte Hühnerembryonen (3 Tage alt), die lebenden zunächst in ovo und anschließend in vitro, selbst zu beobachten und zu präparieren.
Prior knowledge: None
Maximal participants: 10
Time frame: 14:30-17:00
Language: English
Location: Lab

Map Berg

i Einfahrt Klinikgelände

000 Die Zahlenangaben entsprechen den Gebäudenummern

400 **Crona Kliniken**
420 Anästhesiologie
Chirurgie
Neurochirurgie
Neurologie
Orthopädie
Radiologie
Radioonkologie
THG-Chirurgie
Urologie

410 **Kinderklinik**

480 **Gesundheitszentrum**
Ambulante Rehabilitation, Physiotherapie, Psychosomatische Tagesklinik, Sportmedizin, ukfit, Gästehaus

500 **Medizinische Klinik**

510 **Blutspendezentrale**

520 **Konferenzzentrum**
Casino, Cafeteria

530 **Nuklearmedizin**

600 **Hals-Nasen-Ohrenklinik**

610 **Medizinische Mikrobiologie, Medizinische Virologie**

620 **Augenklinik**

Map Tal


Frondsbergstr.
Schnarrenbergstraße
Röntgenweg
Geissweg
N
303
301
P3
332
331
330
Herrenbergerstraße
Kliniken Berg
Calwerstr.
200
202
350
360
210
365
Parkhaus
König
P
Liebermeisterstr.
Grueninstraße
Stadtfriedhof
Osianderstraße
Schleichstraße
Stadtzentrum
Rümelinstraße
Kupferbau
Einfahrt Klinikgelände
000 Die Zahlenangaben entsprechen den Gebäudenummern
200 202 Psychiatrische Klinik
210 Kinder- und Jugendpsychiatrie
301 Klinikumsverwaltung
303 Dekanat Medizinische Fakultät
330 Frauenklinik
Medizinische Genetik
Neonatologie
331 Casino, Cafeteria
332 360 Zahnklinik
350 Hautklinik
365 ViTa Gebäude
Psychosomatische Ambulanz
Tagesklinik Kinderpsychiatrie
Allgemeinmedizin