



**Symposium FOR 2127**  
**“Selection and adaptation during metastatic cancer progression”**  
**June 1<sup>st</sup> – 3<sup>rd</sup>, 2016**  
**Herzogssaal, Regensburg**

**Scientific Meeting Programme**

**Wednesday June 1**

**10:00**      **Welcome**

**10:10**      **Keynote lecture**

*Extensive subclonal mutations characterize many human cancers: origin and consequences*

Lawrence Loeb, University of Washington, Seattle

**11:00-13:00**    **Session 1: Malignant evolution**

*Chair: Christoph Klein*

*Uncovering cancer dynamics with single-cell genomics*

Ehud Shapiro, Weizman Institute, Tel Aviv

*Bioinformatics in tumor biology: from associations to mechanisms*

Rainer Spang, University of Regensburg

*Intra-tumour heterogeneity and genomic rearrangements*

Roland Schwarz, EBI Cambridge

*Intra-tumoral heterogeneity between primary and early systemic lung cancer*

Bernhard Polzer, Fraunhofer Project Group, ITEM Regensburg

*Combined Genome and Transcriptome Analysis of Single Disseminated Cancer Cells in Prostate cancer*

Miodrag Guzvic, Experimental Medicine and Therapy Research, University of Regensburg

**13.00-14.30 Lunch**

**14:30-16:30 Session 2: Genetic and epigenetic control of metastasis**

*Chair: Silke Kuphal*

*Dissecting cell differentiation and cancer by single-cell epigenome analysis*

Christoph Bock, CeMM, Vienna

*Cyld – a modulator of metastasis in melanoma*

Anja Bosserhoff, University of Erlangen

*Chicken or egg: the causality dilemma of DNA methylation in cancer*

Michael Rehli, University of Regensburg

*ZEB1 in the tumor progression of human osteosarcoma*

Manuel Ruh, Institute of Experimental Medicine I, University of Erlangen

*Epigenetic Profiling of EMT-Associated Genes in Circulating Tumour Cells*

Constantin Pixberg, Department of General, Visceral and Paediatric Surgery, University of Düsseldorf

**16:45-18:45 Poster presentation**

**19:00 Bavarian Dinner**

## Thursday June 2

### 9:00-11:00 Session 3: Early metastasis formation

*Chair: Ehud Shapiro*

*Cancer cells with 8q-gains are required for successful lymphatic metastasis*  
Nikolas Stoecklein, University of Düsseldorf

*The task of the organ-specific defense system during carcinoma colonization of the CNS*

Tobias Pukrop, University of Regensburg

*Cell density, Her2 and progesterone signaling regulate dissemination of breast cancer cells*

Hedayatollah Hosseini, Experimental Medicine and Therapy Research, University of Regensburg

*Early dissemination and metastatic progression in melanoma*

Melanie Werner-Klein, Institute of Immunology, University of Regensburg

### 11:00-11:30 Coffee Break

### 11:30-13:00 Session 4: Inflammation and metastasis

*Chair: Edward K. Geissler*

*JAK-STAT signalling in NK cells – new players in metastasis?*

Veronika Sexl, University of Vienna

*Dissecting immune complexity of metastatic breast cancer*

Karin de Visser, NKI Amsterdam

*Neutrophils inflame melanoma metastasis*

Thomas Tüting, University of Bonn

*PI3K-inhibition blocks CSF1 signaling in tumor-associated macrophages and their tumor-promoting function*

Raquel Blazquez, Department of Internal Medicine III, University Hospital Regensburg

*Digital sorting resolves heterogeneity in minute and low cellularity tumor FFPE samples*

Claudio Forcato, Silicon Biosystems spa, Bologna

**13.00-14.30 Lunch**

**14:30-16:30 Session 5: Immune defense against cancer**

*Chair: Gert Riethmüller*

*Mutant cancer-specific neoantigens that cannot be lost despite cancer progression*

Hans Schreiber, University of Chicago

*Targeting immune modulatory pathways in cancer*

Philipp Beckhove, University of Regensburg

*NK cells contribute to cancer immunosurveillance in the Grm1 mouse model*

Philipp Renner, University of Regensburg

*Visualizing cellular immunotherapy using multi-scale, multi-spectral optoacoustic tomography*

Melanie Kimm, Department of Radiology, Klinikum rechts der Isar

*Tumor development and metastatic progression of disseminated tumor cells in humanized mouse models*

Christian Werno, Fraunhofer Project Group, ITEM Regensburg

**17.00-19.00 Guided city tour for speakers**

**19.30 Speakers Dinner at Akademiesalon**

## Friday June 3

### 8:30 Keynote lecture

*Mechanisms regulating the dormancy of DTCs*  
Russell Taichman, University of Michigan

### 9:10-11:10 Session 6: Metastatic niches

*Chair: Sven Lang*

*Mechanisms of hepatic metastasis*  
Vijay Shah, Mayo Clinic, Rochester

*Where the wild things are: Perivascular regulation of disseminated tumor cell dormancy*  
Cyrus Ghajar, Fred Hutchinson Seattle

*Steatosis - a lubricant for hepatic metastasis*  
Claus Hellerbrand, University of Regensburg

*Causal modeling of stroma-tumor cell communication*  
Julia Engelmann, University of Regensburg

*Zeb1 is crucial for cellular plasticity and drives metastasis in pancreatic cancer*  
Angela Krebs, Experimental Medicine I, Nikolaus-Fiebiger-Center for Molecular Medicine, FAU University Erlangen-Nürnberg

### 11:10-11:40 Coffee Break

### 11:40-13:40 Session 7: Selection under Therapy and Resistance

*Chair: Gunter Meister*

*EMT and metabolic switches as escape route from targeted therapy*  
Gerhard Christofori, University of Basel

*Intravital imaging of cancer invasion crossing immune defence*  
Peter Friedl, University of Nijmegen

*The crosstalk of noncoding RNA during metastatic cancer progression and cancer therapy*  
Christina Hackl, University of Regensburg

*Characterization of a subgroup of human brain tumour initiating cells leading invasion in an in situ migration model*

Verena Leidgens, Wilhelm Sander-NeuroOncology Unit and Department of Neurology, University of Regensburg

*Bypassing Ras-associated drug resistance: Identification of evolutionarily conserved genetic networks controlling Ras-driven epithelial tumor progression*

Tamara Zoranovic, Max-Planck Institute for Infection's Biology, Berlin

**13:40-13:50 Poster awards**

**14:00-15:30 Speakers Lunch**