

Joint Meeting of the German Society for Cell Biology (DGZ) and the German Melanoma Research Network
33rd DGZ Annual Meeting
March 10 – 13, 2010, Regensburg

Wednesday, March 10, 2010

08:00 – 20:00 **Registration**

09:00 – 12:30 **Educational Session**

Session 1: Where can I get support?

Funding opportunities of the EU
Dr. S. Steiner-Lange (NKS-Lebenswissenschaften)

Funding opportunities of the German Cancer Aid
Dr. M. Serwe (Deutsche Krebshilfe)

General discussion

Coffee break

Session 2: Scientific careers

Prof. Dr. Gunter Meister, Institute of Biochemistry I, University of Regensburg
Prof. Dr. M. Schliwa, Institute of Cell Biology, LMU Munich
Prof. Charlotte Förster, Institute of Neurobiology and Genetics, University of Wuerzburg
Dr. C. Dony, Scil Technologies GmbH, Munich

General discussion

Time for individual questions

13:00 – 13:30 **Opening**

Reinhard Fässler (President of the DGZ)
Anja Bosserhoff (Congress chair)
Prof. Jannsen (Chairman of the senate of the University of Regensburg)
Armin Kurtz (Research Dean of the NWF III)
Bernhard Weber (Dean of the Medical Faculty)

13:30 – 15:40

Symposium 1 (S1): Frontiers in Cell Biology
Chairs: Reinhard Fässler (Munich), Jürgen Wehland (Braunschweig)

David Teis (Innsbruck): The ordered assembly of the ESCRT machinery down regulates membrane proteins

Eckhard Lammert (Düsseldorf): Constructing the pipelines of life: how do endothelial cells form blood vessels?

Ohad Medalia (Beer-Sheva): From the nuclear periphery to cell adhesion by cry electron tomography

15:40 – 16:15 Coffee break

16:15 – 17:30 **DGZ Award Presentations**

Walther Flemming Medaille
Florian Bassermann (München): The role of SCF and APC/C ubiquitin ligases in cell

cycle control and DNA damage response

Binder Innovationspreis

Anne Spang (Basel): Intracellular transport in yeast

Werner Risau Preis

Boris Strlic (Düsseldorf): Molecular mechanism of vascular lumen formation

17:30 – 18:30

Carl Zeiss Lecture

Rudolf Grosschedl (Freiburg): Transcriptional networks regulating stem cell and lymphocyte differentiation

18:30

Poster Session / Get Together

Thursday, March 11, 2010

08:30 - 09:15

Meet the Expert “Vesicle transport”

Vivek Malhotra (Barcelona)

09:15 – 12:30

Symposia 2 and 3

09:15

Symposium 2 (S2): Cell Signalling

Chair: Doris Wedlich (Karlsruhe)

Doris Wedlich (Karlsruhe): Wnt signalling and polarized cell behaviour

Walter Birchmeier (Berlin): Wnt/beta-catenin signaling in stem cells and cancer stem cells

John Collard (Amsterdam): Rho GTPase and cell polarity signaling in cancer

Lukas Huber (Innsbruck): Regulation of cell migration and focal adhesions by endosomal MAPK scaffold complexes

09:15

Symposium 3 (S3): From embryology to tumor development – what can we learn?

Chair: Marianne Bronner-Fraser (Pasadena)

Marianne Bronner-Fraser (Pasadena): Gene regulatory networks underlying neural crest formation and migration

Stefano Piccolo (Padua): Mutant-p53, TGF-beta and metastasis

Daniel Peeper (Amsterdam): Senescence suppressing melanoma progression

Roberto Mayor (London): Directional cell migration of neural crest during embryo development

10:35 – 11:00

Coffee break

11:00 – 12:30

Symposia 2 and 3 cont.

12:30 – 13:30

Lunch

12:30 – 13:30

Industry Tutorials (with Lunch)

Leica Mikrosysteme Vertrieb GmbH

12:30

DGZ Member Meeting

- 13:30 – 14:30 **Poster Walks (topics: S2, MS2, MS3, Misc)**
- 14:30 – 16:30 **Minisymposia 1 – 3**
- 14:30 **Minisymposium 1 (MS1): Cell-cell-contacts and cell polarity**
Chair: Jürgen Behrens (Erlangen)
- Ian Macara (Charlotteville): Cell Polarity in Mammary Morphogenesis and Metastasis
- Thomas Brabletz (Freiburg): Tumor invasion and metastasis: EMT and cancer stem cells
- Olivier Gires (München): EpCAM: in between cell adhesion and mitogenic signalling and speakers selected from the abstracts
- Sandra Iden (S2-11): Function of the polarity protein Par3 in Ras-induced skin tumorigenesis
- Steve Misselwitz (M1-7): Atypical PKC regulates tight junction formation and epithelial lumen development through phosphorylation of JAM-A
- 14:30 **Minisymposium 2 (MS2): Angiogenesis**
Chair: Holger Gerhardt (London)
- Holger Gerhardt (London): Cell competition in sprouting angiogenesis
- Stefan Schulte-Merker (Utrecht): Venous Sprouting and Lymphangiogenesis - a Zebrafish Study
- Hellmuth Augustin (Heidelberg): Cell biology of vascular receptor tyrosine kinases and speakers selected from the abstracts
- Sven Liebler (MS2-5): The integrin cytoplasmic domain-associated protein-1 (ICAP1) attenuates sprouting angiogenesis by activation of DELTA-NOTCH signalling
- Moritz Felcht (MS2-8): Unraveling the molecular mechanism of Ang-2-mediated endothelial destabilization
- 14:30 **Minisymposium 3 (MS3): Vesicle Transport**
Chair: Volker Gerke (Münster)
- Volker Gerke (Münster): Mechanisms governing regulated secretion in endothelial cells
- Vivek Malhotra (Barcelona): Mechanism of intracellular protein sorting
- Miguel Seabra (London): Rab GTPases in membrane traffic and disease and speakers selected from the abstracts
- Christian Schubert (MS3-5): Self-organization ability of mammalian Golgi membranes after ER export block
- Anne Spang (MS3-9): Identification of the switch in early-to-late endosome transition
- 16:30 – 17:00 Coffee break
- 17:00 – 19:00 **Minisymposia 4 – 6**

17:00

Minisymposium 4 (MS4): Best Posters
Chair: Anja Bosserhoff (Regensburg)

Speakers selected from the abstracts

Sarah Wickström (MS3-19): Integrin-linked kinase controls microtubule dynamics required for plasma membrane targeting of caveolae

Julia von Blume (MS3-23): Actin remodeling by ADF/Cofilin is required for cargo sorting at the Trans Golgi

Oliver Gruss (MS14-10): Differential Proteomics of *Xenopus* Meiosis identifies SSX2IP as a novel centrosomal protein required for proper cell division

Sarah Schmidt (MS10-11): Kindlin-3 controls osteoclast-mediated bone resorption by activating multiple classes of integrins

Evelyne Frijns (MS10-5): Regulating hemidesmosome dynamics by phosphorylation of residues on the integrin $\beta 4$ subunit

Margarete Goppelt-Struebe (S2-15): Networking of hypoxia inducible factor leads to cell type specific regulation of gene expression of Connective Tissue Growth Factor (CTGF)

17:00

Minisymposium 5 (MS5): Cellular Metabolism
Chair: Peter Oefner (Regensburg)

Jacques Pouyssegur (Nice): Tumor adaptation to hypoxic and acidic stress

Alexander Pfeifer (Bonn): Role of NO/cGMP in cellular metabolism

Tobias Walther (Martinsried): The phase of fat: cell biology of Lipid Droplets

and speakers selected from the abstracts

Markus Marniak (MS5-7): Functional analysis of the lipid droplet proteome of *Dictyostelium discoideum*

Christina Warnecke (MS5-11): Hypoxia-inducible protein 2 is a novel lipid droplet protein and a specific transcriptional target of hypoxia-inducible factor-1

17:00

Minisymposium 6 (MS6): Protein Modification
Chair: Helle Ulrich (London)

Helle Ulrich (London): Assembly and function of polyubiquitin chains in DNA damage bypass

Ramin Massoumi (Malmö): CYLD, a deubiquitinating enzyme with growth-suppressing activity

Jürgen Dohmen (Köln): Ubiquitin-SUMO interplay in the regulation of cellular processes

and speakers selected from the abstracts

Thorsten Pflanzner (MS6-1): Inactivation of the proximal NPXY motif impairs early steps in LRP1 biosynthesis

20:00

Speakers Dinner

Friday, March 12, 2010

- 08:30 – 09:15 **Meet the Expert “Stem Cells and Cancer Stem Cells”**
Andreas Trumpp (Heidelberg)
- 09:15 – 12:30 **Symposia 4 and 5**
- 09:15 **Symposium 4 (S4): miRNA /TUFs (transcripts of unknown function)**
Chair: Gunter Meister (Regensburg)
- Gunter Meister (Regensburg): Argonaute proteins - mediators of small RNA-guided gene silencing
- Carlo Croce (Boston): Causes and consequences of microRNA dysregulation in cancer
- Anders Lund (Copenhagen): miR-10a in development and cancer
- Sven Diederichs (Heidelberg): Argonaute Proteins in microRNA Biogenesis & RNA interference
- 09:15 **Symposium 5 (S5): Stem cells and Cancer stem cells**
Chair: Christoph Klein (Regensburg)
- Lenhardt Rudolph (Ulm): Molecular mechanisms in stem cell aging
- Andreas Trumpp (Heidelberg): Dormancy in stem cells
- Markus Frank (Boston): Immunomodulatory Functions of Melanoma Stem Cells
- Christoph Klein (Regensburg): The search for the metastasis founder cell: Insights from the molecular analysis of single disseminated tumour cells
- 10:35 – 11:00 Coffee break
- 11:00 – 12:30 **Symposia 4 and 5 cont.**
- 12:30 – 13:30 **Lunch**
- 12:30 – 13:30 **Industry Tutorials (with Lunch)**
- Carl Zeiss MicroImaging GmbH
- Luminex
- 13:30 – 14:30 **Poster Walks (topics: S3+5; S4+MS6+MS12; MS5; MS7+MS9)**
- 14:30 – 16:30 **Minisymposia 7 – 9**
- 14:30 **Minisymposium 7 (MS7): Cytoskeleton**
Chair: Eugen Kerkhoff (Regensburg)
- Robert Grosse (Heidelberg): Invasive motility and transcriptional regulation through formins
- David Kovar (Chicago): Regulation of actin filament assembly for fundamental cellular processes in fission yeast
- Eugen Kerkhoff (Regensburg): Actin organization at intracellular membranes: the Spir/formin complex
- and speakers selected from the abstracts

Jennifer Block (MS7-6): FMNL2/FRL3 is a novel regulator of cell protrusion induced by Cdc42

Kathrin Schloen (S2-4): Differential requirements for the formation of PDGF-induced peripheral *versus* circular dorsal membrane ruffles

14:30

Minisymposium 8 (MS8): Molecular basis of tumor therapy
Chairs: Jürgen Becker (Würzburg), Manfred Kunz (Lübeck)

Freddy Radtke (Epalinges): Notch and skin malignancies

Ze'ev Ronai (La Jolla): Transcription factor (ATF2) and ubiquitin ligase (Siah2) in melanoma development

Ashani Weeraratna (Baltimore): Melanoma as a Microsystem: Response of melanoma cells to a changing microenvironment

and speakers selected from the abstracts

Grit Ebert (MISC-11): Comparative analysis of transcriptional changes and chromatin modifications induced by retinoic acid treatment

Robert Besch (S3-4): The neuronal transcription factor Brn3a is essential for human melanoma cell proliferation and survival

14:30

Minisymposium 9 (MS9): Nuclear Transport
Chair: Katja Strässer (München)

Katja Strässer (München): Coupling of nuclear and cytoplasmic steps in gene expression

Dirk Görlich (Göttingen): Transport through nuclear pore complexes

Yuh Min Chook (Dallas): Recognition of NLS and NES

and speakers selected from the abstracts

Ralph Kehlenbach (MS9-1): The cytoplasmic nucleoporin Nup358 promotes nuclear accumulation of a subset of cellular proteins

16:30 – 17:00

Coffee break

17:00 – 19:00

Minisymposia 10 – 12

17:00

Minisymposium 10 (MS10): Cell-Matrix-Adhesion
Chair: Arnoud Sonnenberg (Amsterdam)

Jim Norman (Glasgow): Integrin trafficking and the migration of cancer cells

Marc Ginsberg (La Jolla): Adhesive signaling in cell migration

Arnoud Sonnenberg (Amsterdam): The hemidesmosome-intermediate filament-nucleus connection

and speakers selected from the abstracts

Claudia Mierke (S7-4): Integrin $\alpha 5\beta 1$ facilitates cancer cell invasion through enhanced generation of contractile forces

Philipp Peterburs (S7-9): Protein kinase D (PKD) regulates cell migration by direct phosphorylation of the cofilin phosphatase Slingshot 1 like (SSH1L)

17:00 **Minisymposium 11 (MS11): New players in melanoma development and progression**
Chairs: Cornelia Mauch (Köln), Birgit Schitteck (Tübingen)

Keith Hoek (Zürich): Transcriptional regulation of melanoma cell phenotype switching

Maria Soengas (Madrid): Autophagy in Melanoma Progression and Drug Response

Richard Marais (London): RAS and RAF signalling in cancer: Biology and Therapeutics

and speakers selected from the abstracts

Daniel Müller (S4-2): miRNA miR-196a controls several melanoma-relevant genes by regulating HOX-C8 expression

Ngum Abety (MS11-4): Stromal-derived ADAM-9 modulates growth of malignant melanoma in vivo and in vitro

17:00 **Minisymposium 12 (MS12): New Methods in Cell Biology**
Chair: Frank Buchholz (Dresden)

Frank Buchholz (Dresden): From RNAi Screens to Molecular Function: A Systematic Pipeline for Gene Function in Mammalian Cells

Petra Schwille (Dresden): In situ proteomics by Fluorescence Correlation Spectroscopy

Morgan Maeder (Boston): Engineering Zinc Finger Nucleases for highly efficient modification of endogenous genes

and speakers selected from the abstracts

Dagmar Salber (MS12-1): LMD-ICP-MS: A novel high resolution analytical technique for quantitative imaging of metal isotopes in tissue sections and single cells

Regina Kleinhans (MS12-5): Real-time screening of the chemosensitivity of human tumor slices to chemotherapeutical drug treatment

19:00 **Get Together**

Saturday, March 13, 2010

08:30 – 09:15 **Meet the Expert “miRNA”**
Carlo Croce (Boston)

09:15 – 12:30 **Symposia 6 and 7**

09:15 **Symposium 6 (S6): Epigenetics**
Chair: Michael Rehli (Regensburg)

Juerg Müller (Heidelberg): Transcriptional regulation by the Polycomb/trithorax system

Christoph Plass (Heidelberg): Epigenetic changes in cancer

Gernot Längst (Regensburg): Genomics of the human Nucleolus

Peter Becker (München): Global tuning of transcription. Lessons learned from flies

09:15	<p>Symposium 7 (S7): Cytoskeletal dynamics Chair: Jochen Wittbrodt (Heidelberg)</p> <p>Christiana Ruhrberg (London): Neuropilins in cell migration</p> <p>Jochen Wittbrodt (Heidelberg): Molecular and cellular mechanisms of vertebrate eye morphogenesis</p> <p>Darren Gilmour (Heidelberg): Crowd Control: Mobilising and Organising Migrating Epithelia</p> <p>Erez Raz (Münster): Controlling fate, motility and directed migration of germ cells in zebrafish</p>
10:35 – 11:00	Coffee break
11:00 – 12:30	Symposia 6 and 7 cont.
12:30 – 13:00	Lunch
13:00 – 14:00	Poster Walks (topics: S7+MS1; MS8+MS11; MS10; MS13+MS14) with Coffee
14:00 – 16:00	Minisymposia 13 – 15
14:00	<p>Minisymposium 13 (MS13): Apoptosis Chair: Jürgen Eberle (Berlin)</p> <p>Andreas Villunger (Innsbruck): Cell Death Regulation by BH3-only proteins</p> <p>Peter Krammer (Heidelberg): Life and Death Decisions</p> <p>Gerry Melino (Rome): The p53 family members p63 and p73</p> <p>and speakers selected from the abstracts</p> <p>Sven Horke (MS13-1): New role for an anti-atherosclerotic enzyme: PON2 confers apoptosis resistance and is overexpressed in tumors</p> <p>Anja Berger (MS13-3): Sensitization of melanoma cells for TRAIL-induced apoptosis by MAPK inhibitors and indirubins correlates with decreased mitochondrial membrane potential</p>
14:00	<p>Minisymposium 14 (MS14): Cell division and cell cycle regulation Chair: Rolf Jessberger (Dresden)</p> <p>Rolf Jessberger (Dresden): Functions of cohesin SMC1b in mammalian meiosis</p> <p>Olaf Stemmann (Bayreuth): One to rule all rings – cohesion-related roles and regulations of separase</p> <p>Ingrid Hoffmann (Heidelberg): The centrosome cycle in human cells</p> <p>and speakers selected from the abstracts</p> <p>Zuzana Storchova (MS14-3): The function of Bub1 and Sgo1 in chromosome biorientation</p> <p>Lea Arnold (MS14-2): Cell cycle control of yeast polo kinase stability</p>
14:00	<p>Minisymposium 15 (MS15): Bioinformatics and systems biology Chair: Rainer Spang (Regensburg)</p>

Nikolaus Rajewsky (Berlin): Small RNAs, RNA binding proteins and post-transcriptional gene regulation

Martin Vingron (Berlin): Regulatory Genomics

Kay Hofmann (Bergisch-Gladbach): Towards the bioinformatical prediction of disease gene function

and speakers selected from the abstracts

Theresa Niederberger (München): Reconstruction of a Mediator-Transcription Factor regulatory network

16:00

Poster Awards

End of DGZ Meeting and Frontiers in Melanoma Research

Fare Well