Supplemental Information

Meeting Report: Mouse Models of Human Cancer

Barbara C. Böck, Ulrike Stein, Clemens A. Schmitt, Hellmut G. Augustin
Affiliation of Organizers

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Berlin, Germany

Dr. Ulrike Stein
Max-Delbrück-Center for Molecular Medicine (MDC) and Charité University Medicine
Berlin, Germany

Plenary Speakers and their Affiliation

Dr. Mariano Barbacid
Centro Nacional de Investigaciones Oncológicas (CNIO)
Madrid, Spain

Dr. Axel Behrens
London Research Institute
London, UK

Dr. Yinon Ben-Neriah
Department of Immunology and Cancer Research, The Hebrew University of Jerusalem
Jerusalem, Israel

Dr. Anton Berns
Netherlands Cancer Institute, Molecular Genetics (H4)
Amsterdam, The Netherlands

Dr. Allan Bradley
Wellcome Trust Sanger Institute, Genome Research Limited
Cambridge, UK

Dr. Suzanne Cory
Australian Academy of Science, Faculty of Medicine
Melbourne, Australia

Dr. Jos Jonkers
Netherlands Cancer Institute, Molecular Pathology
Amsterdam, The Netherlands

Dr. Raghu Kalluri
The University of Texas, MD Anderson Cancer Center
Houston, USA
Dr. Hai-Kun Liu  
German Cancer Research Center, Normal and Neoplastic CNS stem cells (A240)  
Heidelberg, Germany

Dr. Andrea Lunardi  
Beth Israel Deaconess Cancer Center, Departments of Medicine & Pathology, Harvard Medical School  
Boston, USA

Dr. Tak Mak  
University of Toronto, Department of Medical Biophysics  
Toronto, Canada

Dr. Luis Parada  
The University of Texas Southwestern Medical Center, Developmental Biology  
Dallas, USA

Dr. Klaus Rajewsky  
Max-Delbrück-Center, Immune Regulation and Cancer, MDC  
Berlin, Germany

Dr. Gavin Thurston  
Regeneron Pharmaceuticals Inc., Oncology and Angiogenesis  
Tarrytown, USA

Dr. Rune Toftgard  
Karolinska Institutet, Department of Bioscience and Nutrition  
Huddinge, Sweden

Dr. Andreas Trumpp  
German Cancer Research Center, Division of Stem Cells and Cancer (A010)  
Heidelberg, Germany

Dr. David Tuveson  
Cold Spring Harbor Laboratory  
Cold Spring Harbor, USA

Dr. William Weiss  
MDC, University of California  
San Francisco, USA

Dr. Lars Zender  
University Hospital Tuebingen, Division of Molecular Oncology of Solid Tumors  
Tübingen, Germany
# PROGRAM

**Saturday, March 08, 2014**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1</th>
<th>NOVEL MOUSE MODELS</th>
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<tbody>
<tr>
<td>15:00</td>
<td>Welcome and Introduction</td>
<td>Hellmut Augustin</td>
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<tr>
<td>15:15</td>
<td>Session 1</td>
<td>NOVEL MOUSE MODELS</td>
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<tr>
<td>15:15</td>
<td>15:15 - 16:25</td>
<td>Discussion leader: Manolis Pasparakis</td>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>15:15</td>
<td>Unraveling therapy resistance in mouse models of human breast cancer</td>
<td>Jos Jonkers, Amsterdam, The Netherlands</td>
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<tr>
<td>15:45</td>
<td>Blitz</td>
<td>A dual recombination system for time and host specific genetic manipulation of pancreatic cancer</td>
</tr>
<tr>
<td>16:05</td>
<td>Modeling human B cell lymphomas and lymphoma immune surveillance in mice</td>
<td>Klaus Rajewsky, Berlin, Germany</td>
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<tr>
<td>16:35</td>
<td>Coffee Break</td>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Session 2</th>
<th>NOVEL TECHNOLOGIES IN CANCER RESEARCH</th>
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<tbody>
<tr>
<td>17:00</td>
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<td>NOVEL TECHNOLOGIES IN CANCER RESEARCH</td>
</tr>
<tr>
<td>17:00</td>
<td>17:00 - 18:30</td>
<td>Discussion leader: Jan Gronych</td>
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<tr>
<th>Time</th>
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<th>NOVEL TECHNOLOGIES IN CANCER RESEARCH</th>
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<tbody>
<tr>
<td>17:00</td>
<td>The “Co-Clinical” Trial Project</td>
<td>Andrea Lunardi, Boston, USA</td>
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<tr>
<td>17:30</td>
<td>Blitz</td>
<td>Forward genetic screening approaches in the mouse to uncover molecular networks of tumorigenesis</td>
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<tr>
<td>17:50</td>
<td>Blitz</td>
<td>Using the CRISPR/Cas-system in somatic gene transfer for rapid murine tumor model generation</td>
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<tr>
<td>18:10</td>
<td>Blitz</td>
<td>Therapeutic targeting of a synthetic lethal interaction between PRKDC and ATM in B-NHL</td>
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<tr>
<td>19:00</td>
<td>Dinner</td>
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<tr>
<td>20:30</td>
<td>Informal get-together in the Klosterstüberl</td>
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### Session 3  NOVEL MODELS IN BRAIN TUMOR RESEARCH

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Mouse models of Malignant GBM: Cancer stem cells and beyond</td>
<td>Luis Parada</td>
<td>Dallas, USA</td>
</tr>
<tr>
<td>9:30</td>
<td>Generation of spontaneously developed mouse model of human group 3</td>
<td>Daisuke Kawauchi</td>
<td>Heidelberg</td>
</tr>
<tr>
<td>9:50</td>
<td>Systems biology approaches to gene discovery in a GEM model for neuroblastoma</td>
<td>William Weiss</td>
<td>San Francisco, USA</td>
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<tr>
<td>10:30</td>
<td>Group photo</td>
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<tr>
<td>10:45</td>
<td>Coffee Break</td>
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### Session 4  INVASION AND METASTASIS

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker</th>
<th>Location</th>
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<tbody>
<tr>
<td>11:15</td>
<td>The functional role of tumor stroma in cancer progression and metastasis</td>
<td>Raghu Kalluri</td>
<td>Housten, USA</td>
</tr>
<tr>
<td>11:45</td>
<td>Role of estrogen/PI3K/NRF2 axis in BRCA1 tumor suppression</td>
<td>Chiara Gorrini</td>
<td>Toronto, Canada</td>
</tr>
<tr>
<td>12:05</td>
<td>Progress in pancreatic cancer</td>
<td>David Tuveson</td>
<td>Cold Spring Harbor, USA</td>
</tr>
<tr>
<td>12:35</td>
<td>A mouse model on human disseminated cancer cells from non-metastatic melanoma patients</td>
<td>Melanie Werner-Klein</td>
<td>Regensburg, Germany</td>
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<tr>
<td>13:00</td>
<td>Lunch</td>
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<tr>
<td>14:00</td>
<td>POSTER SESSION I</td>
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### Session 5  SIGNALING DURING TUMOR PROGRESSION

<table>
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<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00</td>
<td>Animal models of metabolic adaptation in cancer cells</td>
<td>Tak Mak</td>
<td>Toronto, Canada</td>
</tr>
<tr>
<td>16:30</td>
<td>T-cells trigger NASH and NASH-induced HCC development through hepatocyte-specific LTßR</td>
<td>Mathias Heikenwälder</td>
<td>Munich, Germany</td>
</tr>
</tbody>
</table>
16:50 Targeting K-Ras Signaling in Cancer
Mariano Barbacid, Madrid, Spain

17:20 Blitz Neural Crest-specific expression of Lin28b induces neuroblastoma in mice
Johannes Schulte, Essen, Germany

18:00 - 22:00 PCCC GOES SEEON

Monday, March 10, 2014

Session 6 GI TUMORS
09:15 Direct in vivo RNAi screening for accelerated cancer gene discovery in hepatobiliary tumors
Lars Zender, Tübingen Germany

09:45 Blitz A novel conditional adult hepatocellular carcinoma mouse model for pre-clinical evaluation of anti-angiogenic therapy
Anja Runge, Heidelberg, Germany

10:05 Blitz Hedgehog signaling in murine colorectal cancer
Marco Gerling, Stockholm, Sweden

10:30 Coffee Break

Session 7 TUMOR MICROENVIRONMENT
11:00 Parainflammation in cancer
Yinon Ben-Neriah, Jerusalem, Israel

11:30 Harnessing death for life
Suzanne Cory, Melbourne, Australia

12:15 Lunch

Session 8 STEM CELLS AND CANCER
16:00 Mesenchymal and MDS stem cells shape an interactive disease unit in the bone marrow
Andreas Trumpp, Heidelberg, Germany

16:30 Blitz Progenitor deprivation provokes T cell acute lymphoblastic leukemia
Vera Martins, Heidelberg, Germany
16:50 Function of the E3 ubiquitin ligase Fbw7 in stem cells and tumor suppression  
**Axel Behrens**, London, UK

17:20 Modeling skin cancer in the mouse: Stem cell origin and role of Hedgehog signaling  
**Rune Toftgard**, Stockholm, Sweden

18:30 *Dinner*

20:30 *Informal get-together in the Klosterstüberl*

**Tuesday, March 11, 2014**

<table>
<thead>
<tr>
<th>Session 9</th>
<th>TUMOR HETEROGENEITY</th>
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<tbody>
<tr>
<td>9:00 - 10:00</td>
<td>Discussion leader: Peter Lichter</td>
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</tbody>
</table>
| 9:00 | Tumor heterogeneity and cell-of-origin of mouse small cell and non-small-cell lung cancer  
**Anton Berns**, Amsterdam, The Netherlands |
| 9:30 | Evidence and significance of cellular heterogeneity in mouse high-grade gliomas  
**Hai-Kun Liu**, Heidelberg, Germany |
| 10:00 | *Coffee Break* |

<table>
<thead>
<tr>
<th>Session 10</th>
<th>NOVEL APPROACHES IN CANCER THERAPY</th>
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<tbody>
<tr>
<td>10:30 - 11:45</td>
<td>Discussion leader: Hellmut Augustin</td>
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</table>
| 10:30 | Full humanization of the mouse immunoglobulin loci for therapeutic antibody discovery  
**Allan Bradley**, Cambridge, UK |
| 11:00 | *Blitz*  
Chemotherapy promotes cancer stemness via senescence-related reprogramming  
**Clemens Schmitt**, Berlin, Germany |
| 11:20 | Mouse models to test human cancer immuno-therapeutics  
**Gavin Thurston**, Tarrytown, USA |
| 11:50 | Concluding Remarks |

**End of meeting**

12:00 *Lunch*

13:00 *Departure of shuttle buses*