



## Day 1: December 11, 2018

Day of arrival	
10:00 – 18:00	Arrival on site and registration
19:00 – 21:00	Dinner

## Day 2: December 12, 2018

Morning Session 9:00 – 11:55	
<i>Chairs:</i> Jinsong Liu, Claudia Matteucci	
9:00 – 9:15	<i>Opening of Conference</i>
9:15 – 9:50	Keynote lecture: Jinsong Liu <b><i>The Origin of Cancer and Therapeutic Resistance: Insight from Polyploid Blastomere-like Cancer Stem Cells</i></b> (M.D.Anderson, Houston, USA)
9:50 – 10:15	Caterina AM La Porta <b><i>Crosstalk between cancer cells and cancer stem cells in view of new therapeutic strategies</i></b> (University of Milan, Milan, Italy)
10:15 – 10:40	Olga Gordeeva <b><i>Cancer-testis antigens: unique cancer cell biomarkers and targets for cancer therapy</i></b> (Institute of Developmental Biology, Russian Academy of Sciences, Moscow, Russian Federation)
10:40 – 11:00	Coffee Break
11:00 – 11:35	Claudia Matteucci <b><i>Human endogenous retroviruses as switch control of cancer cells stemness</i></b> (University of Rome "Tor Vergata", Rome, Italy)
11:25 – 11:55	Anton Buzdin <b><i>Molecular pathway activation – new type of biomarkers for tumor morphology and personalized selection of target drugs</i></b> (I.M. Sechenov First Moscow State Medical University, Moscow, Russian Federation; Omicsway Corp., Walnut, CA, USA; Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Moscow, Russian Federation)

## Lunch 12:00 – 13:00

**13:00 – 16:00 – free time (snowboarding, skiing, cross-country skiing, ice skating, ice curling, sledding, walking)**

**OR**

**Round Table “Tumor Dormancy and Metastasis”  
Chaired by Dalit Barkan (Haifa University, Mt. Carmel, Israel)**

### **Presentations:**

**13:00 – 13:30** Dalit Barkan *EMT and Stemness in Tumor Dormancy and Outgrowth: Are They Intertwined Processes?*

**13:30 – 14:00** Isaac Witz *The cross-talk between brain-metastasizing melanoma cells with brain cells* (Tel Aviv University, Tel Aviv, Israel)

**14:00 – 14:30** Ilze Strumfa *Stem Cell Differentiation by CD44 Expression in Colorectal Carcinoma: Predictor of Lymph Node Metastases* (Department of Pathology, Riga Stradins University, Riga, Latvia)

**14:30 – 15:00 – Discussion; Conclusion**

## Evening Session 16:00 – 19:00

**Chairs:** Purificacion Muñoz, Jürgen Borlak

<b>16:00 – 16:35</b>	Keynote lecture: Purificacion Muñoz <i>Impact of cancer stem cell plasticity on skin carcinoma progression</i> (IDIBELL, Barcelona, Spain)
<b>16:35 – 17:00</b>	Peter W.K. Nagle <i>An organoid model for prediction of esophageal cancer treatment response</i> (University Medical Centre Groningen, Groningen, the Netherlands)
<b>17:00 – 17:20</b>	Coffee Break
<b>17:20 – 17:45</b>	Jürgen Borlak <i>Fatty liver disease, cancer stem cells and hepatocellular carcinoma</i> (Hannover Medical School, Centre for Pharmacology and Toxicology, Hannover, Germany)
<b>17:45 – 18:10</b>	George Tze Sian Chan <i>An ASPM-targeted nanotherapy inhibits hepatoma stemness and aggressiveness by blocking Wnt-Dvl-1-beta-catenin signaling</i> (Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taiwan, China)
<b>18:10 – 18:35</b>	Qiong Zhu Dong <i>HGF/MET signaling activation is responsible for the acquired resistance to sorafenib of hepatocellular</i>

	<b>carcinoma</b> (Fudan University, Shanghai, China)
<b>18:35 – 19:00</b>	Pritha Ray <b><i>Role of IGF1R-PI3KCA-AKT signaling in maintenance and functionality of cancer stem cells during acquirement of platinum resistance in ovarian cancer cells</i></b> (ACTREC, Tata Memorial Centre, Imaging Cell Signaling & Therapeutics Lab, India)

**Dinner 19:00 – 21:00**

## Day 3: December 13, 2018

### Morning Session 9:00 – 11:50

**Chairs:** Stefano Piccolo, Tamara Lah-Turnšek

<b>9:00 – 9:35</b>	Keynote lecture: Stefano Piccolo <b><i>YAP/TAZ and cancer stem cells</i></b> (University of Padua, Padova, Italy)
<b>9:35 – 10:00</b>	Tamara Lah-Turnšek <b><i>Dual Nature of stem cells in brain tumor: Doctor Jekyll and Mister Hyde</i></b> (National Institute of Biology, Ljubljana, Slovenia)
<b>10:00 – 10:25</b>	Jun Zhu <b><i>Glioma stem cell profiles in glioblastoma (GBM) molecular subtypes</i></b> (Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai, New York, USA)
<b>10:25 – 10:45</b>	Coffee Break
<b>10:45 – 11:00</b>	Baole Zhang <b><i>An Epigenetic Study on Mechanism of High Level Transcription of GDNF Gene in Glioma Cells</i></b> (Xuzhou Medical University, Xuzhou, Jiangsu, China)
<b>11:00 – 11:15</b>	Abiola Abdurahman Ayanlaja <b><i>A novel discovery of DCX nucleoplasmic transport facilitated by GDNF in gliomas via the classical Ran GTPase pathway</i></b> (Xuzhou Medical University, Xuzhou, Jiangsu, China)
<b>11:15 – 11:50</b>	Pier Paolo Claudio <b><i>Prospective clinical analysis of cancer stem cell drug response assay for glioblastoma patients</i></b> (University of Mississippi, USA)

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**OR**  
**free communications of the participants; discussion of collaboration**

## Evening Session 16:00 – 19:30

**Chairs:** Anahid Jewett, Brigitte Pützer

<b>16:00 – 16:35</b>	Keynote lecture: Anahid Jewett <b><i>Super-charged NK cells for treatment of stem-like/poorly differentiated pancreatic and oral cancers; Journey from basic biology in humanized mice to human clinical trials</i></b> (UCLA, Los Angeles, USA)
<b>16:35 – 17:00</b>	Cristina Maccalli <b><i>The role of cancer stem cells in the immunomodulation of anti-cancer immune responses</i></b> (Clinical Research Center, Research Department, Sidra Medicine, Doha, Qatar)
<b>17:00 – 17:25</b>	Lorenzo Castagnoli <b><i>Triple-negative breast cancer stem cells up-regulate PD-L1 expression as a potential shield against immune-mediated tumor rejection</i></b> (Fondazione IRCCS Istituto Nazionali dei Tumori, Milano, Italy)
<b>17:25 – 17:45</b>	Coffee Break
<b>17:45 – 18:10</b>	Ettore Mosca <b><i>Functional gene networks underlying somatic mutations in breast cancer initiating cells</i></b> (Institute of Biomedical Technologies, CNR, Segrate, Italy)
<b>18:10 – 19:30</b>	<i>Poster Presentations; Selection of the best Poster Presentation</i>

**Conference Dinner and Presentation of the Poster Winner 20:00 – 24:00**

## Day 4: December 14, 2018

### Morning Session 9:00 – 12:00

**Chairs:** Bruno Sainz, Janko Kos

<b>9:00 – 9:35</b>	Keynote Lecture: Bruno Sainz <b><i>The ever-evolving concept of the cancer stem cell in pancreatic cancer</i></b> (Autonoma University of Madrid, Madrid, Spain)
<b>9:35 – 10:00</b>	Yue Zhao <b><i>Aldo-keto reductase family 1 member B10 – AKR1B10, a metabolic target for gemcitabine induced</i></b>

	<b><i>therapy resistance and metastasis of pancreatic cancer – implications from cancer stem cells and their niche</i></b> (University Hospital of Cologne, Cologne, Germany)
<b>10:00 – 10:20</b>	Coffee Break
<b>10:20 – 10:45</b>	Maryam Mehrpour <b><i>Autophagy and iron homeostasis in breast cancer stem cells</i></b> (Institut Necker-Enfants Malades, Universite Paris Descartes-Sorbonne Paris Cite, Paris, France)
<b>10:45 – 11:10</b>	Daniel Gebhard <b><i>Past, Present and Future: Measure what your cell is, does and will do with Agilent Seahorse XF Technology</i></b> (Agilent, Munich, Germany)
<b>11:10 – 11:35</b>	Janko Kos <b><i>Cysteine cathepsins: their biological and molecular significance in cancer stem cells</i></b> (University of Ljubljana, Ljubljana, Slovenia)
<b>11:35 – 12:00</b>	Adit Ben-Baruch <b><i>Inflammation-driven networks in the regulation of breast cancer progression: Cancer stem cells and beyond</i></b> (Life Sciences Tel Aviv University, Tel Aviv, Israel)

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**OR**  
**free communications of the participants; discussion of collaboration**

### **Evening Session 16:00 – 18:50**

***Chairs:*** Ilio Vitale, Jürgen Dittmer

<b>16:00 – 16:25</b>	Ilio Vitale <b><i>Replication stress response in colorectal cancer stem cells as a target for chemotherapy</i></b> (University of Rome Tor Vergata, Rome, Italy)
<b>16:25 – 16:50</b>	Kristiaan Lenos <b><i>Stem cell functionality is fully microenvironmentally defined during tumour expansion and therapy response in colon cancer</i></b> (Laboratorium for Experimental Oncology and Radiobiology (LEXOR), Amsterdam UMC, Amsterdam, the Netherlands)
<b>16:50 – 17:10</b>	Coffee Break
<b>17:10 – 17:35</b>	Mariangela De Robertis <b><i>microRNA regulation of colon cancer stem cells: biological relevance and clinical implications</i></b> (CNR - Institute of Translational Pharmacology)

	Laboratory of Molecular Pathology and Experimental Oncology, Rome, Italy)
<b>17:35 – 18:00</b>	Alexey Lupatov <b>Post-genomic study of CD133 positive tumor cells associated with colorectal cancer stem cell phenotype</b> (Institute of Biomedical Chemistry, Moscow, Russian Federation)
<b>18:00 – 18:25</b>	Brigitte Pützer <b>Emerging functional markers for cancer stem cell-based therapies: Why targeting matters to conquer metastasis</b> (Rostock University Medical Center Institute of Experimental Gene Therapy and Cancer Research, Rostock University Medical Center, Rostock, Germany)
<b>18:25 – 18:50</b>	Jürgen Dittmer <b>Long-term exposure to carcinoma-associated fibroblasts makes breast cancer cells addictive to integrin <math>\beta 1</math></b> (Martin-Luther-Universität Halle-Wittenberg, Halle (Saale), Germany)

### **Dinner 19:15 – 21:00**

## **Day 5: December 15, 2018**

### **Morning Session 9:00 – 12:00**

**Chairs:** Isaac Witz, Maja Cemazar

<b>9:00 – 9:35</b>	Keynote lecture <b>The Creation of the Tumor Microenvironment Research Field</b> Isaac Witz (Tel Aviv University, Tel Aviv, Israel)
<b>9:35 – 10:00</b>	Jozsef Dudas <b>Growth factor and cancer stem cell related therapy survival mechanisms in head and neck squamous cell carcinoma</b> (Medical University of Innsbruck, Innsbruck, Austria)
<b>10:00 – 10:25</b>	Maja Cemazar <b>Cisplatin radiochemotherapy of HPV positive squamous cell carcinoma tumors in vitro and in vivo</b> (Institute of Oncology Ljubljana, Ljubljana, Slovenia)
<b>10:25 – 10:45</b>	Coffee Break
<b>10:45 – 11:10</b>	Ana Mitrović <b>Cancer stem cells express increased levels of cysteine cathepsins B and X</b> (Jožef Stefan Institute, Ljubljana, Slovenia; University of Ljubljana, Ljubljana, Slovenia)
<b>11:10 – 11:35</b>	Conference Closing

### **Adjourn and Departure**



# Poster Presentations

December 13, 2018

18:10 – 19:30

1. Sonia Alcalá Sánchez ***Inhibition of the ISG15-mediated Ubiquitin-like Modification Process Known as ISGylation Renders Pancreatic Cancer Stem Cells Functionally Inactive via a Mitophagy-Dependent Mechanism of Action***
2. Ayanlaja Abiola ***A novel discovery of DCX nucleocytoplasmic transport facilitated by GDNF in gliomas via the classical RanGTPase pathway***
3. Bertram Aschenbrenner
4. Maša Bošnjak ***Different Control Plasmids Elicit Different Antitumor Effectiveness after Gene Electrotransfer in Murine Melanoma Tumors***
5. Barbara Breznik ***Glioblastoma stem cells are localized in peri-arteriolar niche regions and are retained there by SDF-1 $\alpha$ /CXCR4 signaling***
6. Micaela Faria Freitas ***Withanolides inhibit cell proliferation in a multiple myeloma 3D co-culture model enriched with cancer stem cells***
7. Alessandro Giovinazzo ***Cancer cells with stemness features and expressing human endogenous retroviruses are affected by antiretroviral treatments***
8. Alisa Gisina ***Proliferative and clonogenic capacity of colorectal cancer cells with different CD133 expression level***
9. Chung-Chi Hsu ***ASPM promotes prostate cancer stemness and progression by augmenting Wnt-Dvl-3- $\beta$  catenin signaling***
10. Vaishali Kakkar ***Elucidating the role of Heat Shock Proteins (HSPs) in Colorectal Cancer***
11. Simona Krajnc ***Parental and their corresponding invasive breast cancer xenograft model characterization***
12. Ana Mitrovic ***Cancer stem cells express increased levels of cysteine cathepsins B and X***
13. Giulia Negro
14. Sanjeeb Kumar Sahoo ***Reprogramming cancer stem cells using Forskolin enhances the efficacy of paclitaxel in targeting triple negative breast cancer***
15. Dragana Savic
16. Luiza Scalabrini ***Targeting Aurora A kinase activity in lung cancer initiating cells driven by oncogenic KRAS***
17. Elena Selivanova ***Individual features of HPV infection and proportion of cancer stem cells in primary squamous cell carcinoma of uterine cervix***
18. Teresa Steinbichler ***Epithelial-mesenchymal Crosstalk induces radioresistance in HNSCC cells***
19. Ahmed Nabil ***Evaluation of New Hydrazones derivatives cytotoxicity against hepatocellular carcinoma and liver mesenchymal stem cells***