

## Conference Program

**Note: All Scientific Sessions will be held in the Omni Hotel at 675 L Street.**

**Poster Sessions will be held at the Hard Rock Hotel at the corner of 5th Avenue & L Street.**

### Sunday, January 20

**7:00 p.m.-7:10 p.m. Welcoming Remarks**

**7:10 p.m.-8:00 p.m. Keynote Address**  
Omni Hotel San Diego, Grand Ballroom

**Metastasis and diversity in breast cancer**  
Kornelia Polyak, Dana-Farber Cancer Institute, Boston, MA

**8:00 p.m.-9:30 p.m. Opening Reception**

### Monday, January 21

**7:00 a.m.-8:00 a.m. Continental Breakfast**  
Omni Hotel San Diego, Art Gallery

**8:00 a.m.-10:00 a.m. Session 1: The Soil**  
*Session Chairperson: Zena Werb, Helen Diller Family  
Comprehensive Cancer Center, University of California, San  
Francisco, CA*  
Omni Hotel San Diego, Grand Ballroom

**Microenvironmental control of bone metastasis**  
Sylvain Provot, INSERM, Paris, France

**The role of the microenvironment protein cathelicidin LL-37 in pancreatic ductal adenocarcinoma\***  
Christopher Heeschen, Spanish National Cancer Research Centre (CNIO), Madrid, Spain

**Normalizing tumor cell metabolism in breast cancer metastasis: A novel therapeutic approach**  
Brunhilde Felding-Habermann, Scripps Research Institute, La Jolla, CA

**Identification of luminal breast cancers that establish a tumor supportive macroenvironment defined by proangiogenic platelets and bone marrow derived cells\***  
Timothy Marsh, Brigham and Women's Hospital, Boston, MA

**The extracellular matrix is fertile soil**  
Richard Hynes, Massachusetts Institute of Technology, Cambridge, MA

\*Short talks from proffered papers

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**10:00 a.m.-10:30 a.m. Break**

**10:30 a.m.-12:30 p.m. Session 2: Determinants of Tumor Metastasis**  
*Session Chairperson: Yibin Kang, Princeton University, Princeton, NJ*  
Omni Hotel San Diego, Grand Ballroom

**Development of a therapeutic peptide for the treatment of metastatic cancer**  
Christine A. Iacobuzio-Donahue, Johns Hopkins University, Baltimore, MD

**The cholesterol metabolite, 27-hydroxycholesterol, increases breast cancer tumor growth and metastasis\***

Erik Nelson, Duke University School of Medicine, Durham, NC

**Epithelial-mesenchymal plasticity in breast cancer metastasis**  
Yibin Kang

**Targeted functional genomics screen for novel metastasis modulators in breast cancer\***  
Angela Riedel, Molecular Oncology, University of Southern Denmark, Odense, Denmark

**Macrophages as a therapeutic target in invasive gliomas**  
Joanna A. Joyce, Memorial Sloan-Kettering Cancer Center, New York, NY

**12:45 p.m.-2:45 p.m. Poster Session A and Lunch**  
Hard Rock Hotel San Diego, Legends Ballroom

**3:00 p.m.-5:00 p.m. Session 3: Imaging Metastasis**  
*Session Chairperson: Matthew Krummel, University of California, San Francisco, CA*  
Omni Hotel San Diego, Grand Ballroom

**Real-time microscopy of brain metastasis formation: From blood vessels to cancer stem cells**  
Frank Winkler, German Cancer Research Center, Heidelberg, Germany

**Intravital multiphoton imaging reveals multicellular streaming as a crucial component of in vivo cell migration in human breast tumors\***  
Antonia Patsialou, Albert Einstein College of Medicine, Bronx, NY

**Imaging metastasis in the lung**  
Matthew Krummel

**Intravital imaging of metastatic liver colonization\***  
Laila Ritsma, Hubrecht Institute, Utrecht, The Netherlands

**Issues in the development of molecular imaging agents for cancer imaging: An observation from the MICAD editors**  
Liang Shan, National Institutes of Health, Bethesda, MD

\*Short talks from proffered papers

**5:15 p.m.-7:15p.m.**      **Poster Session B and Reception**  
Hard Rock Hotel San Diego, Legends Ballroom

## Tuesday, January 22

**7:00 a.m.-8:00 a.m.**      **Continental Breakfast**  
Omni Hotel San Diego, Art Gallery

**8:00 a.m.-10:00 a.m.**      **Session 4: Metastasis Signaling Pathways**  
*Session Chairperson: Joan Massagué, Memorial Sloan-Kettering  
Cancer Center, New York, NY*  
Omni Hotel San Diego, Grand Ballroom

### **Niches and pathways of latent and overt metastasis**

Joan Massagué

### **A distinct translational regulon driven by mTOR signaling steers cancer metastasis\***

Andrew Hsieh, University of California, San Francisco, CA

### **Inhibition of Ron kinase blocks conversion of micrometastases to overt metastases by boosting antitumor immunity**

Alana L. Welm, University of Utah, Salt Lake City, UT

### **miR-15b and its novel target, metastasis suppressor 1 (MTSS1), are part of a global network of coding and noncoding EGF-stimulated genes\***

Merav Kedmi, Weizmann Institute of Science, Rehovot, Israel

### **HIFs, hypoxia, and tumor progression**

M. Celeste Simon, Abramson Family Cancer Research Institute, University of Pennsylvania, Philadelphia, PA

**10:00 a.m.-10:30 a.m.**      **Break**

\*Short talks from proffered papers

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**10:30 a.m.-12:30 p.m.      Session 5: Angiogenesis and Inflammation in Metastasis**  
*Session Chairperson: Melody Swartz, Swiss Institute for  
Experimental Cancer Research, Lausanne, Switzerland*  
Omni Hotel San Diego, Grand Ballroom

**Lymphatic vessels in the tumor microenvironment contribute to protumor immune modulation**

Melody A. Swartz

**Targeting the HIF-1 $\alpha$ /p300 complex with epidithiodiketopiperazines for antiangiogenic therapy\***

Kelie Reece, National Cancer Institute, Bethesda, MD

**Regulation of metastasis via tumor-stromal interactions**

Randolph S. Watnick, Harvard Medical School, Boston, MA

**High angiogenic capacity of inflammatory neutrophils and polarized M2 macrophages is determined by production of MMP-9 unencumbered by its natural inhibitor TIMP-1\***

Ewa Zajac, The Scripps Research Institute, La Jolla, CA

**Circulating tumor cells: Biology and relevance for cancer therapy**

Klaus Pantel, University Medical Center Hamburg, Hamburg, Germany

**12:45 p.m.-2:45 p.m.      Poster Session C and Lunch**

Hard Rock Hotel San Diego, Legends Ballroom

**3:00 p.m.-4:30 p.m.      Forum: Cancer Stem Cells and Metastasis**

*Moderator: Tannishtha Reya, University of California,  
San Diego, CA*

Omni Hotel San Diego, Grand Ballroom

**Understanding the dynamics of cancer: From molecular pathways to in vivo imaging**

Tannishtha Reya, University of California, San Diego, CA

**Deregulation of stem cell self-renewal pathways in cancer**

Michael F. Clarke, Stanford University School of Medicine, Stanford, CA

**Modeling the breast cancer bone metastatic niche**

Gabriela Dontu, King's College, London, United Kingdom

\*Short talks from proffered papers

**4:30 p.m.-6:30 p.m.**

**Session 6: Metastatic Signatures**

*Session Chairperson: Samir M. Hanash, The University of Texas MD Anderson Cancer Center, Houston TX*  
Omni Hotel San Diego, Grand Ballroom

**GEM models in translational research**

Lynda Chin, The University of Texas MD Anderson Cancer Center, Houston TX

**Collective invasion in breast cancer is led by cancer cells distinguished molecularly by basal epithelial markers\***

Kevin Cheung, Johns Hopkins School of Medicine, Baltimore, MD

**Cancer stem cells and the mechanisms of metastatic dissemination**

Robert A. Weinberg, Massachusetts Institute of Technology, Boston, MA

**Identifying different functional mechanisms of invasion from mesenchymal and proneural subtypes of glioblastoma\***

Swngwon Jung, Translational Genomics Research Institute, Phoenix, AZ

**The microenvironment as a source of markers for the early detection of cancer**

Samir M. Hanash

**Wednesday, January 23**

**7:00 a.m.-8:00 a.m.**

**Continental Breakfast**

Omni Hotel San Diego, Art Gallery

**8:00 a.m.-10:00 a.m.**

**Session 7: Metastatic Dormancy**

*Session Chairperson: Doug T. Fearon, University of Cambridge, Cambridge, United Kingdom*  
Omni Hotel San Diego, Grand Ballroom

**Immune cells promote metastasis and control dormancy**

Jean Pierre Abastado, Singapore Immunology Network, BMSI, A-STAR, Singapore

**microRNAs: Master regulators of human tumor dormancy\***

Nava Almog, Tufts University School of Medicine, Boston, MA

**Pathways in tumor dormancy and recurrence**

Lewis A. Chodosh, University of Pennsylvania, Philadelphia, PA

**ErbB2-induced epithelium to mesenchyme transition (EMT) is blocked by p38 $\alpha$ / $\beta$ ; signaling to restrict early dissemination in breast cancer\***

Kathryn Harper, Mount Sinai School of Medicine, New York, NY

**The FAP+ stromal cell and escape from immunosurveillance**

Doug T. Fearon

\*Short talks from proffered papers

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**10:00 a.m.-10:15 a.m.      Break**

**10:15 a.m.-12:00 p.m.      Session 8: Treatment of Metastatic Cancer**  
*Session Chairperson: Bruce R. Zetter, Boston Children's Hospital,  
Boston, MA*  
Omni Hotel San Diego, Grand Ballroom

**Targeting stress-induced molecular chaperones CLU and Hsp27 to inhibit EMT and metastases**

Martin Gleave, University of British Columbia, Vancouver, BC, Canada

**Antitumor effect of metformin in breast cancer is associated with AMPK and FOXO3a activation\***

Eveline Fonseca, University of São Paulo, São Paulo, Brazil

**Models of postsurgical early and late stage metastasis for improving preclinical adjuvant and metastatic therapy investigations**

Robert S. Kerbel, Sunnyside Medical Centre, Toronto, ON, Canada

**Omic and imaging approaches to understanding breast cancer progression**

Joe W. Gray, Oregon Health and Science University, Portland, OR

**12:00 p.m.                      Closing Comments and Departure**

\*Short talks from proffered papers