



**2<sup>nd</sup> NCI Tumor Microenvironment Network  
Junior Investigator Meeting  
May 11-13, 2011**

Koch Institute for Integrative Cancer Research at MIT  
Room 76-156, 500 Main Street  
Cambridge, MA 02139

and

Le Meridien Cambridge-MIT Hotel  
20 Sidney Street  
Cambridge, MA 02139

<http://www.starwoodhotels.com/lemeridien/property/overview/index.html?propertyID=3253>

**AGENDA**

<b><u>Date &amp; Time</u></b>	<b><u>Location</u></b>
<b>Wed., May 11</b>	<b>Koch Institute for Integrative Cancer Research at MIT</b>
1:00	Meet in hotel lobby; walk to MIT campus as group
1:30-2:00	Registration: Koch Institute for Integrative Cancer Research at MIT
2:00-2:45	Introductions: Aubie Shaw (Vanderbilt) and Alexandra Naba (MIT), Meeting Co-Chairs
	Welcome: Bob Weinberg, Ph.D. (Whitehead Institute, Cambridge, MA, USA)
	Opening remarks: Dinah Singer, Ph.D. (Director, Division of Cancer Biology, NCI) Suresh Mohla, Ph.D. (Associate Director, Division of Cancer Biology, NCI)
2:45-4:45	<b>“Speed Science”</b> (2 min talks, 1 slide) Moderator: Aubie Shaw Speakers: Junior Investigator attendees (in alphabetical order by last name)
4:45-5:00	Break

5:00-6:00

**Session I: Effects of cancer therapies on the tumor microenvironment**

Moderator: Aubie Shaw

Keynote speaker: Rakesh Jain, Ph.D. (Massachusetts General Hospital, Boston, MA, USA)

(45 min talk, 15 min Q&A)

Title: "Normalizing Tumor Microenvironment to Treat Cancer: From Mathematical Model to Mouse to Man"

6:00-7:30

**Hot Topics** (15 min talk + 5 min Q&A per speaker)

Ken Pitter (MSKCC): "Modeling Glioma Recurrence Following Radiation and Chemotherapy"

Nina Seitzer (Dana Farber): "Exploring the Immune System as a Target for Melanoma Therapy"

Todd Waldron (U. Penn.): "Myeloid Derived Suppressor Cells Promote Activation of Stromal Fibroblasts"

Steve Ressler (Baylor): "Reactive Stroma Progenitor Cells in the Human Prostate Gland"

7:30

Group dinner – all attendees will dine together at local restaurant

**Date & Time**  
Thurs., May 12

**Location**  
Le Meridien Cambridge-MIT Hotel

8:00-9:00

Registration

9:00-10:00

**Session II: Role of gradients of soluble factors and ECM in the tumor microenvironment on metastasis**

Moderator: Alexandra Naba

Keynote speaker: Steve Weiss, M.D. (University of Michigan, Ann Arbor, MI, USA)  
(45 min talk, 15 min Q&A)

Title: "Pericellular Proteolysis and the Regulation of the 3-Dimensional Cancer Invasion Program"

10:00-10:15

Break

10:15-11:45

**Hot Topics** (15 min talk + 5 min Q&A per speaker)

Alexandra Naba (MIT): "How Does the Extracellular Matrix Influence Tumor Progression and Metastasis Formation?"

Mandana Veisheh (UC-Berkeley): "Use of Hyaluronan-Based Microenvironmental Probes for Profiling and Sorting Breast Cancer Cellular Heterogeneity"

Tom Long (U. Washington): "Controlling the Tumor Microenvironment: A Biomaterials-Based Approach to Study Prostate Tumorigenesis"

Valerie Lebleu (BIDMC): "Vascular Targeting in Tumors Leads to Hypoxia Induced Epithelial to Mesenchymal Transition and Metastasis Mediated by c-Met Signaling Pathway"

12:00-3:00

Group activity (boxed lunch)

Group photograph

Picnic lunch followed by campus tours of MIT or Harvard

3:00-4:00

**Session III: Tumor dormancy and the role of the microenvironment**

Moderator: Aubie Shaw

Keynote speaker: Ann Chambers, Ph.D. (London Regional Cancer Program, London, Ontario, Canada)

(45 min talk, 15 min Q&A)

Title: "Tumor Metastasis and Dormancy: Experimental Imaging Studies and Clinical Implications"

4:00-5:15

**Hot Topics** (15 min talk + 5 min Q&A per speaker)

Neethan Lobo (Stanford): "Single cell PCR analysis of normal and malignant mammary epithelium"

Hernan Roca (U. Michigan): "Macrophage-cancer cell interactions induce epithelial to mesenchymal transition as a mechanism of prostate cancer metastasis"

Ying Su (Dana Farber): "Myoepithelial cell differentiation defect in human breast cancer"

5:15-5:30

Break

5:30-6:30

**Career Session I: NCI Grants**

Moderator: Alexandra Naba

Ming Lei, Ph.D. (NCI) (15 min talk)

Title: "NCI Grants for Junior Investigators"

Panel Discussion (45 minute Q&A)

Panelists:

Ming Lei, Ph.D. (NCI)

Suresh Mohla, Ph.D. (NCI)

Sandy McAllister, Ph.D. (Brigham and Women's Hospital, Harvard)

Tim Padera, Ph.D. (MGH, Harvard)

Zhe Li, Ph.D. (Brigham and Women's Hospital, Harvard)

6:30-7:30

**Career Session II: Interdisciplinary Collaborations**

Moderator: Aubie Shaw

Douglas Lauffenburger, Ph.D. (MIT): (15 minute talk)

Title: "Scientific Collaborations in an Interdisciplinary Environment"

Panel Discussion (45 minute Q&A)

Panelists:

Douglas Lauffenburger, Ph.D. (MIT)

Mikael Pittet, Ph.D. (MGH)

Anne Carpenter, Ph.D. (MIT)

7:30

Group Dinner

**Date & Time**  
**Fri., May 13**

**Location**  
**Le Meridien Cambridge-MIT Hotel**

9:00-10:00

**Session IV: Role of bone marrow-derived cell lineages in growth of the primary tumor and metastatic dissemination**

Moderator: Alexandra Naba

Keynote speaker: Lisa Coussens, Ph.D. (UCSF, San Francisco, CA, USA)

(45 min talk, 15 min Q&A)

Title: "Inflammation & Cancer: Reprogramming Immune Response in Solid Tumors"

10:00-10:30

Break and check-out

10:30-12:00

**Hot Topics** (15 min talk + 5 min Q&A per speaker)

Aubie Shaw (Vanderbilt): "Myeloid-derived Suppressor Cells Direct Fibroblast Migration and Mammary Carcinoma Cell Invasion"

Virna Cortez-Retamozo (MGH-Harvard): "Origins of Tumor-associated macrophages"

Tania Patsialou (Einstein): "CSF1-receptor in tumor cells and macrophages: autocrine and paracrine mechanisms of invasion and dissemination in breast cancer"

Michael Quante (Columbia): "Role of bone marrow derived myofibroblasts and mesenchymal stem cells in tumorigenesis"

12:00-1:00

Closing remarks and adjourn

Aubie Shaw and Alexandra Naba, Meeting Co-Chairs

~TMEN JI web page, LinkedIn

~TMEN shared resources

~TMEN Alumni group

1:00-3:00

Post-meeting discussion