2nd Annual
Intraoperative Imaging Technologies for Cancer Detection & Treatment

FRIDAY, DECEMBER 8, 2017
Memorial Sloan Kettering Cancer Center
Zuckerman Research Center
417 E 68th Street
New York, NY

New Educational Workshops Included!
The overall goal of the course is to update the learner on the progress made in the area of image-guided intraoperative treatment of cancer.

This course is directed towards surgical oncologists, radiologists, pathologists, engineers, research scientists, technologists.

EDUCATIONAL OBJECTIVES

• Develop familiarity with present and future intraoperative imaging technology advances.

• Enhance understanding of the role of molecular imaging and imaging analysis tools to highlight features of cancerous tissue for guiding biopsy, therapy, or decision-making.

• Facilitate integration of new intraoperative tools into standard surgical practice.

Image-guided Intraoperative Imaging Technologies enable surgeons to deliver therapies, confirm procedure status, and modify treatment management during the course of an operation, often enhancing outcomes. At Memorial Sloan Kettering Cancer Center, we use multiple imaging techniques for various types of cancer.
Course Directors

Nadeem R. Abu-Rustum, MD, FACOG, FACS
Chief, Gynecology Service
Vice Chair for Technology Development
Department of Surgery
Avon Chair in Gynecologic Oncology

Michelle S. Bradbury, MD, PhD
Director, Intraoperative Imaging
Co-Chair, Innovation & Technology Team
Co-Director, MSK-Cornell Center for Translation of Cancer Nanomedicines
Member, Molecular Pharmacology Program
Professor of Radiology, Gertner Sloan Kettering Graduate School & Weil Medical College of Cornell University

MSK FACULTY

Jeffrey Drebin, MD, PhD
Chair, Department of Surgery

Hedvig Hricak, MD, PhD, Dr (hc)
Chair, Department of Radiology
Carroll and Milton Petrie Chair

Stephen Solomon, MD
Chief, Interventional Radiology Service

Krishna Juluru, MD
Associate Attending Radiologist
Director of Imaging Informatics, Department of Radiology

Jan Grimm, MD, PhD
Associate Member in the Molecular Pharmacology and Chemistry Program
Associate Attending in Radiology and Nuclear Medicine

Moritz Kircher, MD, PhD
Associate Attending, Department of Radiology

Thomas Reiner, PhD
Assistant Attending, Department of Radiology

Amber Simpson, PhD
Assistant Attending, Department of Surgery

VISITING FACULTY

Piotr Grodzinski, PhD
Director, NCI Office of Cancer Nanotechnology Research

Christina Liu, PhD, PE
Program Director, NCI Office of Cancer Nanotechnology Research

Keyvan Farahani, PhD
Program Director, Imaging Guided Intervention Branch, Cancer Imaging Program, National Cancer Institute

Matthew Bogyo, PhD
Professor, Department of Pathology, Stanford University School of Medicine

James Basilion, PhD
Professor of Radiology, Biomedical Engineering, and Pathology
Case Western Reserve University
Case Center for Imaging Research
Department of Radiology

Eben Rosenthal, MD
Co-Founder, International Society of Image Guided Surgery; Professor of Otolaryngology and Radiology, Ann & John Doerr Medical Director, Stanford Cancer Center

Ulrich Wiesner, PhD
Co-Director, MSKCC-Cornell Center for Translation of Cancer Nanomedicines
Spencer T. Olin Professor of Engineering, Materials Science and Engineering
Cornell University
# Scientific Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker &amp; Affiliations</th>
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<tr>
<td>8:00 AM</td>
<td>BREAKFAST &amp; REGISTRATION</td>
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<tr>
<td>9:00 AM</td>
<td>Opening Remarks</td>
<td>Hedvig Hricak, MD, PhD, Dr (hc) Jeffrey Drebin, MD, PhD</td>
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<td>9:15 AM</td>
<td>Cancer Nanotechnology Program</td>
<td>Piotr Grodzinski, PhD Christina Liu, PhD, PE</td>
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<td>9:30 AM</td>
<td>Keynote Address</td>
<td>James P. Basilion, PhD</td>
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<td>9:50 AM</td>
<td>Leveraging Light in the Operating Room: Advances in Surgical Imaging</td>
<td>Eben Rosenthal, MD</td>
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<td>10:10 AM</td>
<td>Ultrasmall Fluorescent Silica Nanoparticles for Intraoperative Imaging Applications in Oncology</td>
<td>Ulrich Wiesner, PhD</td>
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<tr>
<td>10:30 AM</td>
<td>Image Guided Surgical Treatment of Nodal Disease and Nerve Mapping Using Clinically Translated Silica Nanoparticles</td>
<td>Michelle Bradbury, MD, PhD</td>
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<tr>
<td>10:50 AM</td>
<td>Fluorescent Probes for Imaging Tumor Margins: Recent Progress and Future Direction</td>
<td>Matthew S. Bogyo, PhD</td>
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<tr>
<td>11:10 AM</td>
<td>BREAK</td>
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<tr>
<td>11:30 AM</td>
<td>Intraoperative Image-Guided Drug Delivery in the Era of Precision Medicine</td>
<td>Keyvan Farahani, PhD</td>
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<tr>
<td>11:50 AM</td>
<td>Gynecologic Surgery: Beyond White Light and the Naked Eye</td>
<td>Nadeem Abu-Rustum, MD, FACOG, FACS</td>
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<td>12:10 PM</td>
<td>Molecular Imaging Guided Interventions</td>
<td>Stephen Solomon, MD</td>
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12:30 pm  Educational Workshop Lunch
  Multi-Spectral Optoacoustic Tomography
  Flex Robotic System
  Fluorescent Image Guided Surgery

2:00 pm  Applications of Intraoperative Advanced Visualization and 3D Printing
  Krishna Juluru, MD

2:20 pm  Imaging with Ultrafast Particles
  Jan Grimm, MD, PhD

2:40 pm  Intraoperative Imaging of PARP1 in Oral Cancer
  Thomas Reiner, PhD

3:00 pm  Raman Nanoparticles for High Precision Cancer Imaging and Theranostic
  Moritz Kircher, MD, PhD

3:20 pm  Radiomics of Gastrointestinal Cancers
  Amber Simpson, PhD

3:40 pm  Panel Discussion
  Christina Liu, PhD, PE
  Program Director,
  NCI Office of Cancer Nanotechnology Research

4:30 pm  ADJOURN
Registration

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<tr>
<th>Category</th>
<th>Early*</th>
<th>General</th>
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<tbody>
<tr>
<td>Physicians (MDs, PhDs and DOs)</td>
<td>$300</td>
<td>$350</td>
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<tr>
<td>Residents, Fellows, Nurses and Other Healthcare Providers</td>
<td>$100</td>
<td>$150</td>
</tr>
<tr>
<td>Industry Professionals*</td>
<td>$800</td>
<td>$800</td>
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*Early Registration Deadline: 10/8/17

REGISTER ONLINE:

www.mskcc.org/IntraoperativeCourse

REGISTRATION DETAILS
Registration includes continental breakfast, lunch, and refreshment breaks. Please contact us at least one week prior to the course if you have any special dietary needs.

- **30% Discounted Rate for MSK Alumni and MSK Alliance Members**
  MSK offers a 30% discounted rate to all MSK Alumni and MSK Alliance members to attend a CME course. Please contact cme@mskcc.org for a promo code or more information.

- **MSK Staff Registration**
  Registration is complimentary for MSK staff who wish to attend this course. However, you must register online by visiting the course website, www.mskcc.org/IntraoperativeCourse.

*Industry Professionals
Registration is for educational purposes only. Marketing, sales, and promotion of products and services are prohibited at CME activities.

ACCREDITATION STATEMENT
MSK is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

AMA CREDIT DESIGNATION STATEMENT
MSK designates this live activity for a maximum of 7.25 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

FACULTY DISCLOSURE
It is the policy of MSK to make every effort to assure balance, independence, objectivity, and scientific rigor in all continuing medical education activities which it provides as an ACCME accredited provider. In accordance with ACCME guidelines and standards, all faculty participating in an activity provided by MSK are expected to disclose any significant financial interest or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services which are discussed by the faculty members in an educational presentation. As required by the ACCME, when an unlabeled use of a commercial product or an investigational use not yet approved for any purpose is discussed during an educational activity, MSK requires the speaker to disclose that the product is not labeled for the use under discussion or that the product is still investigational.

ACCOMMODATIONS
For information on hotels in the area of MSK with discounted rates, please visit: www.mskcc.org/cme.

CONTINUING MEDICAL EDUCATION
MEMORIAL SLOAN KETTERING CANCER CENTER
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