OVERVIEW
The overall goal of the course is to update the learner on current and next generation image-guided intraoperative technologies for improving cancer detection, treatment, and patient outcomes. It will include didactic lectures and hands-on workshops featuring the latest technological innovations.

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

EDUCATIONAL OBJECTIVES

• Enhance understanding of the role of optical image-guided structural and functional visualization systems for individualizing treatment.
• Highlight new surgical imaging analysis tools for understanding complex 3D anatomy.
• Review advances in three-dimensional printing for surgical planning and patient-specific implant designs.
• Develop familiarity with next-generation imaging probes and paradigms for guiding therapeutic interventions, biopsies, and surgical decision-making.
• Facilitate integration of next-generation intraoperative tools into clinical trial designs and routine practice.

In partnership with:
MSK-Cornell Center for Translation of Cancer Nanomedicines

Novel diagnostic and therapeutic nanotechnologies that can enable earlier and more specific detection of cancer, as well as enhance treatment response, are critically needed to improve patient outcomes.

The goal of the MSK-Cornell Center for Translation of Cancer Nanomedicine (MC2TCN) is to advance, translate, and disseminate a suite of ultrasmall (<10 nm), multimodality (PET/optical), core-shell silica nanoparticles.

mskcc.org/IntraoperativeCourse
### COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 AM</td>
<td>Registration &amp; Breakfast</td>
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| 9:00 AM | **Opening Remarks**  
Nadeem R. Abu-Rustum, MD, FACOG, FACS  
Michelle S. Bradbury, MD, PhD |
| 9:15 AM | **Nanotechnology in Cancer: Current Challenges and Future Opportunities**  
Piotr Grodzinski, PhD |
| 9:30 AM | **Keynote Address**  
Tale of the Pineberry: What is Fluorescent Guided Surgery Going to Look Like?  
Eben Rosenthal, MD |
| 9:50 AM | **Intraoperative 3D Rendering, 3D Printing, and Beyond**  
Krishna Juluru, MD |
| 10:10 AM | **Holography for Interventions in Oncology**  
Elchanan Bruckheimer, MBBS |
| 10:30 AM | **Molecular Imaging Guidance for Percutaneous Procedures**  
Stephen Solomon, MD |
| 10:50 AM | Break                                                                |
| 11:10 AM | **Real-time Molecular Phenotyping and Image-Guided Surgical Treatment of Cancer**  
Michelle S. Bradbury, MD, PhD |
| 11:30 AM | **Sentinel Lymph Node Mapping Using a Multimodal Nanoparticle**  
Snehal Patel, MD, FRCS |
| 11:50 AM | **Fluorescence Imaging for Prevention, Diagnosis, and Treatment of Lymphedema**  
Joseph Dayan, MD |
| 12:10 PM | **Indocyanine Green Based Imaging to Improve Lymphatic Mapping During Melanoma Surgery**  
Brian Gastman, MD |
| 12:30 PM | Educational Workshop Lunch (additional details to be announced)          |
| 2:10 PM | **Advances in Image-Guided Surgery: From Precision to Safety and Data Science**  
Jeffrey Siewerdsen, PhD, FAAPM, FAIMBE |
| 2:30 PM | **Next Generation Imaging for Hepatopancreatobiliary Cancers**  
Amber Simpson, PhD |
| 2:50 PM | **Approaches to Intraoperative Imaging Using Cerenkov Light**  
Jan Grimm, MD, PhD |
| 3:10 PM | **Assignment of Surgical Margins with PARP Imaging Agents in the Oral Cavity**  
Thomas Reiner, PhD |
| 3:30 PM | **Panel Discussion**  
Future Directions for Imaging Guided Intraoperative Technologies and Interventions  
**MODERATORS**  
Nadeem R. Abu-Rustum, MD, FACOG, FACS  
Michelle S. Bradbury, MD, PhD  
Keyvan Farahani, PhD  
**PANELISTS**  
Jeffrey Siewerdsen, PhD, FAAPM, FAIMBE  
Krishna Juluru, MD  
Eben Rosenthal, MD  
Stephen Solomon, MD  
Pat Zanzonico, PhD, DABR |
| 4:30 PM | Adjourn                                                               |

### REGISTRATION

<table>
<thead>
<tr>
<th>Registration Fees</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>
</tr>
<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 rate expires November 6, 2018.  
**Industry professionals may attend CME activities for their own education. Marketing, sales, and promotion of products and services is strictly prohibited at MSK CME activities.

**REGISTER ONLINE:**  
mskcc.org/IntraoperativeCourse

Course registration includes continental breakfast, lunch, and refreshment breaks. Please contact cme@mskcc.org at least one week prior to the course if you have any special dietary requests or require any specific accommodations.

- **MSK CME offers a 30% discounted rate for MSK Alumni, MSK Cancer Alliance and Cancer Care Partners.** If you are a member of one of these groups, please contact cme@mskcc.org for more information.
- **MSK employee registration is complimentary.** However, you must complete course registration in order to attend this course: mskcc.org/IntraoperativeCourse.

Please note: after your payment has been processed, no further promotional discount adjustments will be made to your registration.

### ACCREDITATION

**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 Credits™. 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 ensure balance, independence, objectivity, and scientific rigor in all continuing medical education activities it offers 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 of any commercial product and/or provider of commercial services which are discussed by them 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.
TRAVEL & ACCOMMODATIONS

COURSE LOCATION
Memorial Sloan Kettering Cancer Center
Mortimer B. Zuckerman Research Center
417 East 68th Street
New York, NY 10065

HOTELS
MSK has negotiated special rates and amenities at select hotels in Manhattan. For information on hotels in the vicinity of MSK with discounted rates, please visit: mskcc.org/cme.

CONTACT
Memorial Sloan Kettering Cancer Center
Office of Continuing Medical Education
mskcc.org/cme
cme@mskcc.org