## Welcome

Lewis C. Cantley, PhD  
Weill Cornell Medical College, New York, NY, USA

## Introduction

Silvia C. Formenti, MD  
Weill Cornell Medical College, New York, NY, USA

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**CME-CERTIFIED PRIMER ON IMMUNOTHERAPY AND RADIATION**

Sessions I and II are jointly provided by Postgraduate Institute for Medicine and the Society for Immunotherapy of Cancer (SITC).

### Session I – Tumor Immunology (Chair: Sandra Demaria)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:40 am - 10:30 am</td>
<td><strong>Innate immunity</strong></td>
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|                 | Niroshana Anandasabapathy, MD, PhD  
|                 | Weill Cornell Medical College, New York, NY, USA                       |
| 9:10 am - 10:30 am | **Adaptive immunity**                                                   |
|                 | Gary A. Koretzky, MD, PhD  
|                 | Weill Cornell Medical College, New York, NY, USA                       |
| 9:40 am - 10:30 am | **Keynote Lecture – Checkpoint blockade immunotherapy: Understanding activity, toxicity management and investigating mechanisms** |
|                 | Jedd D. Wolchok, MD, PhD  
|                 | Memorial Sloan Kettering Cancer Center, New York, NY, USA              |

### Session II – Basic Principles of Radiation Therapy for the Immunologist (Chair: Karsten Pilones)

<table>
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<th>Time</th>
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<tr>
<td>10:45 am - 12:30 pm</td>
<td><strong>Radiation biology for immunologists</strong></td>
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|                 | William McBride, PhD  
|                 | UCLA, Los Angeles, CA, USA                                             |
| 11:15 am - 12:15 pm | **Mechanisms of response and resistance to radiation and immunotherapy** |
|                 | David Kirsch, MD, PhD  
|                 | Duke University, Durham, NC, USA                                       |
| 11:45 am - 12:30 pm | **Radiation effects on tumor microenvironment**                       |
|                 | Mary-Helen Barcellos-Hoff, PhD  
|                 | UCSF, San Francisco, CA, USA                                           |

### Questions to the Panel (Chair: Sandra Demaria, Karsten Pilones)

<table>
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<tr>
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<tr>
<td>12:30 pm - 1:30 pm</td>
<td><strong>Lunch break</strong></td>
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DAY 1  THURSDAY • SEPTEMBER 12, 2019

MAIN PROGRAM

1:30 pm – 3:45 pm  
*Session III – Progress in radiotherapy, immunotherapy and their combination* (Chair: Lorenzo Galluzzi, Claire Lhuillier)  
Sponsored by EMD Serono

1:30 pm – 2:00 pm  
The fundamental equation of oncoimmunology: Immunogenicity = antigenicity + adjuvanticity  
Guido Kroemer, MD, PhD  
Centre de Recherche des Cordeliers, Paris, France

2:00 pm – 2:30 pm  
Regulatory T Cells and radiation therapy  
Charles G. Drake, MD, PhD  
Columbia University, New York, NY, USA

2:30 pm – 2:45 pm  
Coffee break

2:45 pm – 3:15 pm  
CAR T cells and low-dose radiation  
Michel Sadelain, MD, PhD  
Memorial Sloan Kettering Cancer Center, New York, NY, USA

3:15 pm – 3:45 pm  
Overcoming the resistance in the tumor microenvironment to improve tumor control with radiotherapy  
Timothy Illidge, PhD  
University of Manchester, Manchester, UK

3:45 pm - 5:45 pm  
*Session IV – Imaging of the tumor and its microenvironment* (Chair: Fatima Mechta-Grigoriou, Josephine Kang)  
Sponsored by Nanobiotics

3:45 pm - 4:15 pm  
Radiomics  
Eric Deutsch, MD, PhD  
Gustave Roussy Comprehensive Cancer Campus, Villejuif, France

4:15 pm - 4:45 pm  
Immune profiling of primary and metastatic tumors  
Jérôme Galon, MD, PhD  
Centre de Recherche des Cordeliers, Paris, France

4:45 pm - 5:15 pm  
Is tumor hypoxia a cause of immunoresistance?  
Philippe Lambin, MD, PhD  
Maastricht University, Maastricht, The Netherlands

5:15 pm - 5:45 pm  
Theranostic Tools and Targeted Treatments  
John W. Babich, PhD  
Weill Cornell Medical College, New York, NY, USA

5:45 pm  
End of Day 1 Content

6:00 pm – 9:00 pm  
Poster Session

4th International Conference on Immunotherapy Radiotherapy Combinations
8:30 am - 10:30 am  
Session V – Radiation immunotherapy combinations in the clinic  
(Chair: Eric Deutsch, Encouse Golden)  
Sponsored by AstraZeneca

8:30 am - 9:00 am  
Radiotherapy to enhance breast cancer response to immunotherapy  
Silvia C. Formenti, MD  
Weill Cornell Medical College, New York, NY, USA

9:00 am - 9:30 am  
Hot tumors are not enough: using in situ vaccination to make cold tumors hot, and cross-priming  
Joshua Brody, MD  
Icahn School of Medicine at Mount Sinai, New York, NY, USA

9:30 am - 10:00 am  
Combinations of Immunotherapy and Targeted Drugs with Radiation: Excitement but with Caution  
David Raben, MD  
University of Colorado, Aurora, CO, USA

10:00 am - 10:30 am  
Clinical and molecular correlates of SBRT and immune-checkpoint blockade in patients with advanced solid tumors  
Jason Luke, MD  
University of Pittsburgh Medical Center and Hillman Cancer Center, Pittsburgh, PA

10:30 am –10:45 am  
Coffee break

10:45 am - 12:45 am  
Session VI – Tumor and host factors impacting tumor immunity  
(Chair: Silvia Formenti, Nils Rudqvist)  
Sponsored by EMD Serono

10:45 am - 11:15 am  
Microbiota in the efficacy of cancer immunotherapy  
Laurence Zitvogel, MD, PhD  
Gustave Roussy Comprehensive Cancer Campus, Villejuif, France

11:15 am - 11:45 am  
Microbiota and radiotherapy in cervical cancer  
Ann H. Klopp, MD, PhD  
MD Anderson Cancer Center, Houston, TX, USA

11:45 am - 12:15 pm  
Detrimental effects of high sucrose diets  
Lewis C. Cantley, PhD  
Weill Cornell Medical College, New York, NY, USA

12:15 pm - 12:45 pm  
Myeloid-derived suppressor cells  
Dmitry Gabrilovich, MD, PhD  
The Wistar Institute, Philadelphia, PA, USA

12:45 pm - 1:45 pm  
Lunch break
1:45 pm - 3:45 pm  
**Session VII – Nucleic acid sensing in immunity and autoimmunity**  
(Chair: Tim Illidge, Claire Vanpouille-Box)  

Sponsored by Roche

1:45 pm - 2:15 pm  
**Is the radiation immunology interaction predominantly local?**  

Ralph Weichselbaum, MD  
University of Chicago, Chicago, IL, USA

2:15 pm - 2:45 pm  
**Mitochondrial DNA and interferon**  

Virginia Pascual, MD  
Weill Cornell Medical College, New York, NY, USA

2:45 pm - 3:15 pm  
**ATR inhibitors and tumor immunogenicity**  

Kevin Harrington, MD, PhD  
Institute of Cancer Research, London, UK

3:15 pm - 3:45 pm  
**Improving radiotherapy efficacy with AsiDNA DNA repair inhibitors and safety with FLASH**  

Marie Dutreix, PhD  
Curie Institute, Paris, France

3:45 am - 4:00 pm  
**Coffee break**

4:00 pm - 6:00 pm  
**Session VIII – Local and systemic tumor microenvironment**  
(Chair: Mary-Helen Barcellos-Hoff, Erik Wennerberg)  

Sponsored by Nanobiotics

4:00 pm – 4:30 pm  
**Role of stromal heterogeneity in immunosuppression and resistance to immunotherapy**  

Fatima Mechta-Grigoriou, PhD  
Curie Institute, Paris, France

4:30 pm - 5:00 pm  
**Tryptophan catabolism in tumoral immune suppression: IDO2 and DNA damaging modalities**  

George Prendergast, PhD  
Lankenau Institute for Medical Research (LIMR), Philadelphia PA, USA

5:00 pm - 5:30 pm  
**Activation of NK cells for cancer immunotherapy**  

Kai Wucherpfennig, MD, PhD  
Harvard Medical School, Boston, MA, USA

5:30 pm - 6:00 pm  
**Opposing Roles of Interferon Signaling Regulate Innate and Adaptive Response to Cancer Immunotherapy**  

Andy Minn, MD, PhD  
University of Pennsylvania, Philadelphia, PA, USA

6:00 pm  
**End of Day 2 Content**

6:30 pm – 10:30 pm  
Dinner Cruise

4th International Conference on Immunotherapy Radiotherapy Combinations
8:30 am - 10:30 am  Session IX – Alternative ways to convert tumor into a vaccine
(Chair: Kevin Harrington, Aitziber Buqué)

Sponsored by EMD Serono

8:30 am - 9:00 am  Targeted immunotherapy and radiotherapy combinations

Sandra Demaria, MD
Weill Cornell Medical College, New York, NY, USA

9:00 am - 9:30 am  GRID radiation

Mansoor Ahmed, MD, PhD
NCI, Bethesda, MD, USA

9:30 am - 10:00 am  FLASH radiation

Marie-Catherine Vozenin, PhD
University of Lausanne, Lausanne, Switzerland

10:00 am - 10:30 am  Energy-based immune priming for in situ tumor vaccines

Chandan Guha, MBBS, PhD
Albert Einstein College of Medicine, Bronx, NY, USA

10:30 am - 10:45 am  Coffee break

10:45 am - 11:45 am  Session X – Omics in the future of radiation immunotherapy combinations
(Chair: Silvia Formenti)

Sponsored by Roche

10:45 am - 11:30 am  Keynote Lecture – Computational cancer dynamics

Professor Simon Tavaré PhD, FRS
Columbia University, New York, NY, USA

11:30 am - 11:45 am  Concluding remarks

Silvia C. Formenti, MD
Weill Cornell Medical College, New York, NY, USA

11:45 am  End of Day 3