

Rutgers University 4-R Symposium: **Radiation** Oncology - **Radiation** Biology - **Radiation** Physics – **Research**: Radiotherapy and Immunotherapy: At the Crossroads

Thursday, October 10, 2019
8:00 am - 5:00 pm

This activity is provided by the Department of Radiation Oncology at Rutgers Cancer Institute of New Jersey, Rutgers Robert Wood Johnson Medical School and Rutgers New Jersey Medical School

Overview

Immunotherapy has made significant progress in recent years, not only in lab research but also, more importantly, in clinical treatment and management of cancer patients. It has been proven to be very effective in curing several types of cancer and in improving treatment efficacy on others.

This symposium will provide participants with an overview of new advances in the use of radiotherapy in combination with immunotherapy. New research developments in this area will be presented to advance the integration of these findings into individualized radiation therapy clinical applications with the goal of improved patient outcomes. It is critical that participants are aware of these advances and implement them into clinical practice. Participants should be able to acquire high-quality genomic information with consistency in all diagnostic efforts. Therefore, continually understanding the emerging technologies of acquiring genetic information is essential.

Learning Objectives

Upon completion of this activity, participants should be better able to:

- Examine the current and future directions of physics research in radiation oncology and the clinical implementations of new technologies in combination with immunotherapy
- Describe recent discoveries of cancer biology research involving the mechanisms of biological response of cancer and normal cells to radiation combined with immunotherapy
- Review recent advances in radiation oncology clinical/translational research and their applications in combination with immunotherapy to improved patient care

Target Audience

This activity is designed for radiation oncology clinicians, radiobiologists, medical physicists, researchers, residents, fellows, medical students and other allied health professionals involved in radiotherapy treatment and research.

Accreditation



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, Rutgers Biomedical and Health Sciences is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Physicians: Rutgers Biomedical and Health Sciences designates this live activity for a maximum of 5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Medical Physicists: Rutgers Cancer Institute of New Jersey has applied to CAMPEP for approval of 5 MPCEC hours for this activity.

Advanced Practice Nurses, Nurses and Physician Assistants may participate in this educational activity and earn a letter of attendance as AAPA, AANP, and ANCC accept *AMA PRA Category 1 Credits™* through their reciprocity agreements.

Method of Participation

In order to meet the learning objectives and receive continuing education credits, participants are expected to check in at the registration desk, attend the program and complete an online evaluation form at the conclusion of the activity. A letter certifying attendance and credit verification will be emailed to participants upon completion of the online evaluation survey.

Keynote Speaker

Ralph R. Weichelbaum, MD, The Daniel K. Ludwig Distinguished Service Professor and Chair, Department of Radiation and Cellular Oncology, Co-Director, Ludwig Center for Metastasis Research, UChicago Medicine, Chicago, IL

Faculty

David R. Gius, MD, PhD, Zell Family Scholar Professor, Director, Women's Cancer Research Program, Robert H. Lurie Comprehensive Cancer Center; Professor and Vice Chairman of Research, Departments of Radiation Oncology and Pharmacology, Northwestern University Feinberg School of Medicine, Chicago, IL

David Kirsch, MD, PhD, Barbara Levine University Professor, Professor of Radiation Oncology and Pharmacology & Cancer Biology, Vice Chair for Basic and Translational Research, Department of Radiation Oncology, Duke University School of Medicine, Durham, NC

Charles Kunos, MD, PhD, Medical Officer and Coordinator, Investigational Therapeutics & Radiation, Investigational Drug Branch, Cancer Therapy Evaluation Program, Division of Cancer Treatment and Diagnosis, National Cancer Institute, National Institutes of Health, Rockville, MD

Bo Lu, MD, PhD, Professor and Director, Division of Molecular Radiation Biology, Department of Radiation Oncology, Sidney Kimmel Medical College of Thomas Jefferson University, Philadelphia, PA

Andy J. Minn, MD, PhD, Associate Professor, Department of Radiation Oncology; Director, The Mark Foundation Center for Immunotherapy, Immune Signaling, and Radiation, University of Pennsylvania Perlmutter School of Medicine, Philadelphia, PA

Arta M. Monjazeb, MD, PhD, Associate Professor of Radiation Oncology, UC Davis School of Medicine; CCSG Staff Investigator for Cancer Immunotherapy, Laboratory of Cancer Immunology, UC Davis Comprehensive Cancer Center, Sacramento, CA

Harald Paganetti, PhD, Associate Professor of Radiation Oncology, Harvard Medical School; Director of Physics Research, Department of Radiation Oncology, Massachusetts General Hospital, Boston, MA

Julie K. Schwarz, MD, PhD, Associate Professor, Vice Chair of Research, Cancer Biology Division Chief, Department of Radiation Oncology, Washington University School of Medicine, St. Louis, MO

Terrance M. Williams, MD, PhD, Associate Professor, Vice Chair of Translational Research, Section Chief of Thoracic and HPB Radiation Oncology, Department of Radiation Oncology, The Ohio State University Wexner Medical Center, Columbus, OH

Ying Xiao, PhD, Professor of Radiation Oncology, University of Pennsylvania Perlmutter School of Medicine; Director of Clinical Physics Research and Informatics, Department of Radiation Oncology, Hospital of the University of Pennsylvania, Philadelphia, PA

Fang-Fang Yin, PhD, Professor of Radiation Oncology, Chief of Radiation Physics Division, Duke University School of Medicine, Durham, NC

Activity Directors

Bruce G. Haffty, MD, Associate Vice Chancellor Cancer Programs, Rutgers Biomedical and Health Sciences; Chief of Staff, Rutgers Cancer Institute of New Jersey; Professor and Chair, Department of Radiation Oncology, Rutgers Robert Wood Johnson, Rutgers New Jersey Medical School, and Rutgers Cancer Institute of New Jersey

Salma K. Jabbour, MD, Professor and Vice Chair of Clinical Research and Faculty Development, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Zhiyuan Shen, MD, PhD, Professor and Chief, Division of Radiation Cancer Biology, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Ning Jeff Yue, PhD, Professor, Executive Vice Chair and Chief, Division of Medical Physics, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Program Committee

Edouard L. Azzam, PhD, MSc, Professor of Radiology, Rutgers New Jersey Medical School

Zhaohui Feng, MD, PhD, Associate Professor of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Michael L. Gatz, PhD, Assistant Professor of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Wenwei Hu, PhD, Professor of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Ke Nie, PhD, Associate Professor, Program Director, Medical Physics Residency Program, and Director of GammaKnife Physics, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Rahul R. Parikh, MD, Associate Professor of Radiation Oncology; Medical Director, Laurie Proton Beam Center, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Bing Xia, PhD, Professor of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Dallas Sanchez, Administrative Analyst II, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Sharda Kohli, MBA, Senior Director of Administration, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School

Agenda	Thursday, October 10, 2019	
8:00 am	Registration/Continental Breakfast	
8:25 am	Welcome and Overview - Bruce G. Haffty, MD	
	Track 1: Medical Physics	Track 2: Radiation Cancer Biology
8:30 am	<i>Applied Intelligence for Precision Radiation Therapy</i> Fang-Fang Yin, PhD	<i>Sirtuins, Metabolism, Carcinogenesis, and Immunity</i> David R. Gius, MD, PhD
9:00 am	<i>Bio-physical and Bio-mathematical Modeling to Inform Radiation plus Immunotherapy Clinical Trials</i> Harald Paganetti, PhD	<i>Targeting Myeloid Cells to Improve Radiation Response</i> Julie K. Schwarz, MD, PhD
9:30 am	Break	
	Track 1: Medical Physics	Track 2: Radiation Cancer Biology
10:00 am	<i>Quality Science for Quantitative Imaging and Radiotherapy of NCI Clinical Trial Network</i> Ying Xiao, PhD	<i>Opposing Role of Interferon and Pattern Recognition Receptor Signaling in Cancer Immunotherapy</i> Andy Minn, MD, PhD
10:30 am	<i>Image Guidance - Within and Beyond Radiation Therapy</i> Ke Nie, PhD	<i>Using Genetically Engineered Mouse Models of Cancer to Dissect Mechanisms of Response and Resistance to Radiation and Immunotherapy</i> David Kirsch, MD, PhD
11:00 am	Break	
11:30 am	Keynote Address: <i>The Spectrum of Metastasis from Oligo to Many: Is There a Role for Radiotherapy and Immunotherapy</i> Ralph R. Weischelbaum, MD	
12:30 pm	Lunch	
12:50 pm	Lunch Presentation – Flash Therapy *	
1:20 pm	Break	
	Clinical/Translational Track	
1:30 pm	<i>Surveying the Landscape of Immunotherapy Biomarkers in Lung Cancer</i> Terrance M. Williams, MD, PhD	
2:00 pm	<i>Update on the NCI Cancer Therapy Evaluation Program's Radiopharmaceutical Portfolio</i> Charles Kunos, MD, PhD	
2:30 pm	Break	
3:00 pm	<i>Abscopal Effects: A Vision or a Reality</i> Bo Lu, MD, PhD	
3:30 pm	<i>Paradoxical Effects of Inflammation on Radiotherapy and Immunotherapy</i> Arta M. Monjazeb, MD, PhD	
4:00 pm	Symposium Adjourns	
4:00 pm	Tours: Office Hours with Clinical, Physics, and Cancer Biology	

POSTER DISPLAYS

VENDOR EXHIBITS

* This presentation is not certified for CME/CE Credit.

General Information

Registration Fee Complimentary

Registration is required and can only be accepted through our secure on-line website until October 7, 2019. Continental breakfast, refreshment breaks, lunch, continuing education credit, and course material will be provided free of charge.

Pre-registration is strongly recommended. On-site registration will be accommodated on a space available basis.

To Register: <https://rutgers.cloud-cme.com/4RSymposium2019>

Course Material

In an effort to provide the most complete materials to attendees and conserve resources, PDF versions of the lecture slides will be made available online to registered attendees. In addition, internet access will be available during the day of the activity so we encourage attendees to bring a laptop or tablet. Additional information will be provided in future confirmation communication.

Confirmation

Once registered, you will receive a confirmation message and additional information to assist you with your plans to participate in this activity.

Cancellation

We anticipate the meeting room to be near or at seating capacity. If you are unable to attend, we would greatly appreciate it if you could cancel your registration so that we may be able to accommodate others who have an interest in attending. To cancel, email your cancellation request to ccoe@rbhs.rutgers.edu.

Questions

Registration: Contact CCOE by email at ccoe@rbhs.rutgers.edu

Course Information: Contact Sharda Kohli, MBA by email at kohlish@cinj.rutgers.edu or by phone at 732-235-6144

Rutgers reserves the right to modify program content, faculty and program activities. It also reserves the right to cancel the activity if necessary. Rutgers is not responsible for any costs purchased for attendance at this activity if the activity is cancelled.

Location

Rutgers Cancer Institute of New Jersey
First Floor Auditorium
195 Little Albany Street
New Brunswick, NJ 08903

For directions to the Rutgers Cancer Institute of New Jersey, please visit <http://www.cinj.org/about-cinj/directions>

Parking

Parking is available in the Robert Wood Johnson University Hospital Parking Deck located directly across from the Rutgers Cancer Institute of New Jersey. The prevailing daily rates apply. Participants will receive additional information in their confirmation materials.