JOINT WORKSHOP

Technology for Innovation in Radiation Oncology

June 13-14, 2013
Natcher Conference Center
National Institutes of Health
Bethesda, Md.

www.astro.org/jointworkshop

ASTRO, the National Cancer Institute (NCI) and the American Association of Physicists in Medicine (AAPM) are co-sponsoring a two-day workshop for radiation oncology professionals involved or interested in technological advances in radiation oncology research. Keynote addresses will be presented by thought leaders in the field, including highlights of research opportunities in advanced technology from both a physician and physicist perspective. Abstracts will be presented at poster sessions, and awards for "Hot Topics" in research will be given for the most innovative work.

ASTRO
TARGETING CANCER CARE

NATIONAL CANCER INSTITUTE

AAPM

WELCOME

Dear Colleagues,
On behalf of the Program Committee, we invite you to attend a research workshop, "Technology for Innovation in Radiation Oncology," to take place June 13-14, 2013, at the Natcher Conference Center, NIH, in Bethesda, Md. The workshop is co-sponsored by ASTRO, NCI and AAPM and highlights research opportunities in advanced technology from both a physician and physicist viewpoint.

Innovative technology has played a vital role in improving the quality of care and outcomes for patients receiving radiation therapy. Advances have been rapid in the past several decades, but what further technical innovations are on the horizon for radiation oncology? At the workshop, experts in the field will present overview talks on research topics such as imaging biomarkers for planning and response, novel high-performance treatment systems, patient outcomes and technology, and clinical trial designs that test the impact of technology. Discussion will follow each session topic, and highlights of research opportunities, distilled from each session, will be presented on the final day with the ultimate goal of a published report of the meeting.

Your innovative research in advanced technology could be presented at this meeting. Meeting speakers and moderators will review the abstract posters and present "Hot Topic" awards for the most innovative work. Research topics include, but are not limited to: imaging, planning, delivery, machine design, open standards platforms, clinical trial design, IT innovations, nanotechnology, technology assessment and other "disruptive" technology ideas. Your work may even appear in the meeting highlights!

Sincerely,

Stephen Hahn, MD, University of Pennsylvania
David Jaffray, PhD, Princess Margaret Hospital
Workshop Co-chairmen

PROGRAM OVERVIEW

Innovative technology plays a vital role in improving the quality of care and outcomes for patients receiving radiation therapy. Advances in technology have been periodically reviewed in recent workshops, assessing the current state of the field and discussing potential directions for future research. In 2006, the workshop "Advanced Technologies in Radiation Oncology" took place at NCI. This workshop focused on the challenges posed by new technologies, addressed the state of the science for several disease sites and discussed clinical trials for advanced technology. Over the subsequent years, the development and translation of innovative technologies has continued to evolve. ASTRO, NCI and AAPM are co-sponsoring the Joint Workshop to specifically address future research opportunities in advanced technology from both a physician and physicist perspective, addressing questions such as:

- How could innovative technology further lead to improved outcomes for radiation therapy (RT) patients?
- What is the state of high-tech targeted RT treatment delivery? How does it fit in with the personalized cancer medicine effort?
- How could clinical trials be designed to test the efficacy of innovative technology?
- What are the cutting-edge informatics methods to acquire and manage large amounts of high-quality data to analyze patient outcomes for feedback to improve treatment?
- For a technology-laden field such as radiation therapy, what methods (from outside our field) could be used to assess the benefits of RT technology?

Thought leaders in the field will present future research opportunities in innovative technology, followed by discussion sessions. Highlights of research opportunities will be presented on the final day with the ultimate goal of a published report of the meeting.

TARGET AUDIENCE

The meeting is designed to meet the interests of practicing radiation oncologists, radiation oncology residents, medical physicists and all other health professionals involved in research of innovative technology in radiation oncology.

DISCLOSURE OF VESTED INTEREST

Any conflicts of interest must be resolved prior to participation. In addition to written disclosure, presenters will disclose any vested interest or their intention to discuss off-label use of pharmaceuticals or devices, if applicable, to the audience at the beginning of their presentation and in accordance with ASTRO standards, NIH requirements and the Food and Drug Administration requirements.

QUESTIONS:

Contact Crystal Carter at 1-800-962-7876 or crystalc@astro.org.

PROGRAM CHAIRMEN

Stephen Hahn, MD, University of Pennsylvania
David Jaffray, PhD, Princess Margaret Hospital

PROGRAM COMMITTEE

Stephen Hahn, MD, University of Pennsylvania
David Jaffray, PhD, Princess Margaret Hospital
Indrin Julian Chetty, PhD, Henry Ford Health System
Stanley Benedict, PhD, University of California Davis Cancer Center
Mary K. Martel, PhD, MD Anderson Cancer Center
Laura Dawson, MD, Princess Margaret Hospital
Larry Marks, MD, FASTRO, University of North Carolina
Brian Kavanagh, MD, MPH, University of Colorado Denver
Daniel Low, PhD, University of California Los Angeles
Jim Deye, PhD, National Cancer Institute

CONFIRMED FACULTY

Stephen Hahn, MD, University of Pennsylvania
David Jaffray, PhD, Princess Margaret Hospital
Yue Cao, PhD, University of Michigan
Nancy Lee, MD, Memorial Sloan Kettering Cancer Center
David Mankoff, MD, University of Washington
Brian Ross, PhD, University of Michigan
Indrin Julian Chetty, PhD, Henry Ford Health System
Nina Mayr, MD, Ohio State University
Daniel Low, PhD, University of California Los Angeles
Harald Paganetti, PhD, Massachusetts General Hospital
Alfred Siochi, PhD, University of Iowa
Brian Kavanagh, MD, MPH, University of Colorado Denver
Stanley Benedict, PhD, University of California Davis Cancer Center
Robert Timmerman, MD, University of Texas Southwestern Medical Center
Robert Jeraj, PhD, University of Wisconsin
Daniel Ollendorf, MPH, ARM, Institute for Clinical and Economic Review
John Wong, PhD, Johns Hopkins University
Mary K. Martel, PhD, MD Anderson Cancer Center
Larry Marks, MD, FASTRO, University of North Carolina

SCHEDULE OF EVENTS

Thursday, June 13, 2013

7:30 a.m. - 8:30 a.m.
REGISTRATION AND BREAKFAST

8:30 a.m. - 9:30 a.m.
IMPACT OF TECHNOLOGY ON RT FIELD: CURRENT STATUS
Stephen Hahn, MD, University of Pennsylvania

9:30 a.m. - 10:30 a.m.
IMPACT OF TECHNOLOGY ON RT FIELD: VISION FOR THE FUTURE
David Jaffray, PhD, Princess Margaret Hospital

10:30 a.m. - 10:45 a.m.
BREAK

10:45 a.m. - 12:30 p.m.
SESSION 1:
IMAGE-BASED METRICS [BIOMARKERS] FOR PLANNING AND RESPONSE
Moderators: Yue Cao, PhD, University of Michigan and Nancy Lee, MD, Memorial Sloan-Kettering Cancer Center

- **Molecular/Functional Imaging [PET]**
David Mankoff, MD, University of Washington

- **Functional MRI Imaging**
Brian Ross, PhD, University of Michigan

12:30 p.m. - 2:00 p.m.
LUNCH AND POSTER VIEWING

2:00 p.m. - 5:00 p.m.
SESSION 2:
NOVEL HIGH-PERFORMANCE RT SYSTEMS
Moderators: Indrin Julian Chetty, PhD, Henry Ford Health System and Nina Mayr, MD, Ohio State University

- **MR Simulators, MR-treatment Machines**
Daniel Low, PhD, University of California Los Angeles

- **High-performance Particle Therapy**
Harald Paganetti, PhD, Massachusetts General Hospital

- **Will Tomorrow's RT Devices [photon] Be Open Standards Platforms for Innovation?**
Alfred Siochi, PhD, University of Iowa

Friday, June 14, 2013

7:00 a.m. - 8:00 a.m.
REGISTRATION AND BREAKFAST

8:00 a.m. - 10:00 a.m.
SESSION 3:
CLINICAL TRIALS: INCORPORATING AND TESTING TECHNOLOGY
Moderators: Brian Kavanagh, MD, MPH, University of Colorado Denver and Stanley Benedict, PhD, University of California Davis Cancer Center

- **Clinical Trials That Incorporate Technology**
Robert Timmerman, MD, University of Texas Southwestern Medical Center

- **Image-guided Radiobiology Clinical Trials**
Robert Jeraj, PhD, University of Wisconsin

10:00 a.m. - 10:15 a.m.
BREAK

10:15 a.m. - 12:00 p.m.
SESSION 4:
PATIENT OUTCOMES AND TECHNOLOGY
Moderators: Stephen Hahn, MD, University of Pennsylvania and David Jaffray, PhD, Princess Margaret Hospital

- **Technology Assessment**
Daniel Ollendorf, MPH, ARM, Chief Review Officer, Institute for Clinical and Economic Review

- **IT Innovation Opportunities, Including Decision Support, Computer-aided Theragnostics, Bioinformatics**
John Wong, PhD, Johns Hopkins University

12:00 p.m. - 1:00 p.m.
LUNCH

1:00 p.m. - 2:30 p.m.
SESSION 5:
WRAP-UP
Moderator: Mary K. Martel, PhD, MD Anderson Cancer Center

- **Highlights from Posters**
- **Highlights, Recommendations**
Larry Marks, MD, FASTRO, University of North Carolina

REGISTRATION INFORMATION

*Register online at **www.astro.org/jointworkshop**.*

REGISTRATION FEES, DEADLINES AND CATEGORIES

This registration fee is being charged by ASTRO, a non-governmental co-sponsor, and will be applied to ASTRO's costs of funding the event.

CATEGORY	EARLY-BIRD Feb. 13 - April 10	ADVANCE April 11- June 7	ON-SITE After June 7
General Attendee	$200	$275	$300
Resident/Member-in-Training	$100	$175	$200

Meeting registration includes meeting materials, continental breakfast, lunch and breaks.

REGISTRATION CONFIRMATION

Individuals who register online will receive an instant email confirmation. If you fax or mail your form, your registration confirmation will be sent via email within three to five business days. This will serve as your registration receipt. All on-site registrants will receive a receipt at the time of registration.

REGISTRATION DEADLINE

The last day to receive the early-bird rate for the 2013 Joint Workshop is April 10, 2013. The last day to register in advance is June 7, 2013. After June 7, you will need to register on-site at the meeting.

MAIL/FAX FORM PROCESSING FEE

Please note that all mailed and faxed registration forms will be assessed a $10 processing fee. To avoid being charged this processing fee, you may register online at www.astro.org/jointworkshop.

You may register by fax at 703-574-8332, or scan your form and email to jointworkshopregistration@jspargo.com.

CANCELLATION POLICY

- Refunds will be given only if written notification is received on or before May 17, 2013.
- All refunds are subject to a $100 processing fee.
- Telephone cancellations will not be accepted.
- No refunds will be given for requests received after May 17, 2013.
- Registration fees are not transferable.
- Registration refunds will be processed 30 days after the conclusion of the meeting.

VISA INFORMATION

In most cases, citizens of foreign countries will need a visa to enter the United States. It may take up to three months to obtain a visa. For additional information, please visit http://travel.state.gov/visa/. You must be registered and paid in full before you will be sent a visa letter of invitation.

SPECIAL ASSISTANCE

ASTRO is committed to making the meeting accessible to all individuals. If you have a disability as identified by the Americans with Disabilities Act, please contact ASTRO's Meeting Department at 1-800-962-7876.

REGISTRATION QUESTIONS?

Phone: 1-800-541-6058 or 703-449-6418
Fax: 703-574-8332
Email: jointworkshopregistration@jspargo.com

REGISTRATION INFORMATION

2013 JOINT WORKSHOP HOTEL AND TRAVEL INFORMATION

A block of rooms has been set aside for the Joint Workshop at a discounted rate until May 17, 2013. Reservations made after this date will be accepted on a space available basis and may not be at the negotiated rate. Please note that the ASTRO room block sells out quickly, so we encourage you to make your hotel reservations early.

HOTEL INFORMATION

Hilton Washington, DC/Rockville, Executive Meeting Center
1750 Rockville Pike
Rockville, MD 20852

HOTEL ROOM RATE

Single/Double: $149 (excluding taxes)
Hotel Deadline: May 17, 2013

Call the hotel directly at 1-800-HILTONS or 1-800-445-8667, and be sure to reference American Society for Radiation Oncology (ASTRO) when making your reservation.

Online Reservation: **www.hilton.com/en/hi/groups/personalized/I/IADMRHF-JAS-20130610/index.jhtml?WT.mc_id=POG**

HOTEL PARKING

Overnight parking is available at a rate of $15 per vehicle per day. Day parking is available at the rate of $8 per vehicle per day. ASTRO does not validate parking.

GROUND TRANSPORTATION

Hotel shuttle service:

The Hilton Washington, DC/Rockville Hotel will provide limited shuttle service to NCI for meeting attendees staying at the hotel. The shuttle will depart from the lobby entrance of the hotel and transport guests directly to NCI. A shuttle schedule will be provided at the meeting with transportation times.

Metro:

The Red Line provides access to both Medical Center Station and Twinbrook Station. Visit the Metro website for detailed map: **www.wmata.com/rail/maps/map.cfm**

National Airport Metro to Hotel:

Start at the National Airport Metro Station and take the Yellow Line train toward MT Vernon. Transfer at the Gallery Place Chinatown Station to a Red Line train toward Shady Grove. Depart at the Twinbrook Metro Station. Hotel is located 0.3 miles from the Metro station.

BWI Airport Metro to Hotel:

Go to the Airport Terminal Bus Stop for the MARC Train Station and take the Blue Line Bus #17 toward Parkway Center to the BWI Rail Station stop (5 stops). Take the MARC train toward Washington Local (Train 523) and depart at Union Station. Walk to the Union Station Metro and take the Red Line train toward Shady Grove. Depart at the Twinbrook Metro Station. Hotel is located 0.3 miles from the metro station.

Taxi:

A taxi cab from Reagan National Airport will range from $30 – $40 one way.

NCI SECURITY

The Natcher Conference Center, 45 Center Drive, is located on the main campus of the National Institutes of Health (NIH) in Bethesda, Md. The NIH, like all federal government facilities, has security measures to ensure the safety of all employees, patients and visitors.

All visitors entering the NIH campus must register at the Visitor's Center, show a photo ID, be prepared to have their personal belongings inspected and go through a metal detection inspection (wand, magnetometer, etc).

Due to extremely limited visitor parking at the NIH campus, you are strongly encouraged to take the shuttle from the hotel, taxi or public transportation. The Natcher Conference Center is a two minute walk from the Medical Center Metro Station, after going through security at the Visitor's Center.