

 **ASTRO**

January 22-24, 2009

Sheraton Wild Horse Pass Resort and Spa, Chandler, Ariz.

Advances in Technology: Practical Aspects on IMRT and PROTON THERAPY Symposium

PROGRAM CHAIRS – IMRT

QUYNH-THU LE, M.D.

Stanford University, Stanford, Calif.

PING XIA, PH.D.

University of California, San Francisco

PROGRAM CHAIR – PROTON THERAPY

PAUL M. BUSSE, M.D., PH.D.

Massachusetts General Hospital, Boston



EARLY BIRD REGISTRATION DEADLINE: JANUARY 7, 2009

NEEDS STATEMENT

Intensity modulated radiation therapy (IMRT) represents high-precision radiation therapy and requires a knowledge of multimodality imaging, set-up uncertainties and internal organ motion, tumor control probabilities, normal tissue complication probabilities, three-dimensional dose calculation and optimization and dynamic beam delivery of non-uniform beam intensities. This process of planning and treatment delivery shows significant potential for further improving the therapeutic ratio and reducing toxicity.

There is a great push to make this technology available for all cancer patients, but it does not come without a price and a risk. The price lies in the fact that IMRT utilizes expensive hardware, complex and voluminous multimodality imaging and planning data, and significant personnel resources. The risk lies in the fact that complex radiation therapy techniques can be misunderstood and misapplied, possibly resulting in excess tumor recurrences or excess complications that will negate the potential benefits of these technologies. Therefore, the task of safely and precisely implementing IMRT in radiation therapy clinics will require innovative and efficient methodologies of quality assurance and image guidance.

The IMRT team includes radiation oncologists, physicists, radiation therapists, medical dosimetrists and nurses to effectively and safely administer IMRT treatment. Most IMRT planning and delivery systems are essentially first generation systems and are changing rapidly. These rapid changes require continued learning for members of the IMRT treatment delivery team.

A professional faculty of radiation oncologists and physicists will aid both experienced radiation oncologists and newcomers to the field in understanding the nuances of IMRT and its safe implementation in the clinic setting.

SPECIAL SESSION – PROTON THERAPY

On the cutting edge of technology is proton therapy. The latest advancement in radiation therapy, it uses proton particles instead of the traditional photon beams to ablate tumors. Although proton therapy enjoys the advantage of less exit dose and sharp dose fall off when compared to photon beams, less is known about its delivery, biology and clinical outcomes. In addition, more precise patient set-up and quality assurance are required to ensure adequate tumor coverage. This session will focus on the day-to-day practical aspects of implementing proton therapy and appropriate clinical situations where proton treatments are indicated.

PROGRAM OBJECTIVES

- Apply the most recent IMRT techniques of radiation therapy to improve outcomes for cancer patients.
- Identify appropriate target volumes and learn strategies for target volume and organ-at-risk expansion to account for geometric variations, organ motion and other uncertainties.
- Explain the clinical implication and potential pitfalls of IMRT.
- Acquire the practical information on execution of these optimal plans, their verification and quality assurance.
- Discuss different proton delivery systems.
- Summarize the intricacies of proton treatment planning and uncertainties.
- Discuss proton application to specific clinical sites including pediatric, skull base, thoracic and prostate cancers.

TARGET AUDIENCE

The program is aimed at radiation oncologists, radiation physicists, dosimetrists, radiation therapists and radiation therapy nurses who work as part of the IMRT treatment delivery team.

The proton therapy session is aimed at radiation oncologists, radiation physicists, dosimetrists, radiation therapists and radiation therapy nurses.

BREAKOUT SESSIONS

These sessions are designed for practicing radiation oncologists and other treatment team members to discuss IMRT issues such as imaging and target delineation, quality assurance and its frequency, and achievable accuracy in each major disease site with the IMRT experts.

Disease sites to be discussed are:

- Gastrointestinal
- Head and Neck
- Lung
- Prostate

Breakout sessions will be divided as follows:

Target Delineation Discussions

Contouring – This session is designed for practicing radiation oncologists and other treatment members of the IMRT team to learn from expert IMRT faculty how they contour the case, show anatomy and different margins, ctv, etc. This session will take place in a lecture-style setting.

Treatment Planning

This session is designed for radiation oncologists, physicists and other members of the IMRT team to discuss issues such as treatment planning optimization, plan evaluation, quality assurance and its frequency, and achievable accuracy in each major disease site with the IMRT experts. Participants will have the opportunity to sit down with an experienced treatment planner, including access to physicists and technical support personnel.

PROGRAM FORMAT

TWO-DAY PROGRAMS

- January 22-23, 2009, and
 - January 23-24, 2009.
- Registration is limited.

CHOOSE ONE SESSION:

- Thursday and Friday, January 22-23
- or
- Friday and Saturday, January 23-24

TRAVEL GRANTS AVAILABLE

To encourage participation in this symposium, ASTRO has established a fund to subsidize meeting attendance. ASTRO will award \$1,000 for domestic travel and \$1,500 for international travel. The application deadline is November 21, 2008. To apply please visit: <http://www.astro.org/AboutUs/Awards/ResearchGrants/TravelGrants/index.asp>.

CONTINUING MEDICAL EDUCATION

PHYSICIANS

The American Society for Therapeutic Radiology and Oncology is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The American Society for Therapeutic Radiology and Oncology designates this educational activity for a maximum of 14.5 *AMA PRA Category 1 Credits*™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

PHYSICISTS

An application has been submitted to the Commission on Accreditation of Medical Physics Education Program for CAMPEP Credit.

TECHNOLOGISTS

An application has been submitted to the American Society for Radiologic Technologists for designation of Category A continuing education credit.

DOSIMETRISTS

An application has been submitted to the Medical Dosimetrist Certification Board for designation of MDCB credit.

DISCLOSURE OF VESTED INTEREST

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 in accordance with the Accreditation Council for Continuing Medical Education standards and the Food and Drug Administration requirements.

ment at 1-800-962-7876 or education@astro.org.

Thursday/Friday Schedule

Thursday, January 22

7:00 a.m. – 7:55 a.m.	REGISTRATION AND BREAKFAST	
7:55 a.m. – 8:00 a.m.	WELCOME/OPENING REMARKS	Quynh-Thu Le, M.D.
8:00 a.m. – 8:30 a.m.	OVERVIEW OF INTENSITY MODULATED RADIATION THERAPY (IMRT) AND IMAGE GUIDANCE	Ping Xia, Ph.D.
8:30 a.m. – 9:45 a.m.	ORGAN MOTION MANAGEMENT PANEL <i>Moderator:</i> THORACIC TUMORS GI CANCERS PROSTATE CANCERS	Michael B. Sharpe, Ph.D. Billy W. Loo Jr., M.D., Ph.D. Laura A. Dawson, M.D. Patrick A. Kupelian, M.D. Alan Pollack, M.D., Ph.D.
9:45 a.m. – 10:15 a.m.	IMRT FOR PROSTATE CANCER	
10:15 a.m. – 10:30 a.m.	BREAK	
10:30 a.m. – 11:00 a.m.	IMRT FOR LUNG CANCER	Craig W. Stevens, M.D., Ph.D.
11:00 a.m. – 11:30 a.m.	IMRT FOR LOWER GI CANCERS	Edgar Ben-Josef, M.D.
11:30 a.m. – 12:00 p.m.	EXTRA-CRANIAL FRACTIONATED STEREOTACTIC RADIOSURGERY TREATMENTS	Robert D. Timmerman, M.D.
12:00 p.m. – 1:00 p.m.	LUNCH	
1:00 p.m. – 1:30 p.m.	IMRT FOR HEAD AND NECK CANCERS	Avraham Eisbruch, M.D.
1:30 p.m. – 3:00 p.m.	HEAD AND NECK CONTOURING PANEL <i>Moderator:</i>	Quynh-Thu Le, M.D. Paul M. Busse, M.D., Ph.D. Avraham Eisbruch, M.D. Robert J. Amdur, M.D.
1:30 p.m. – 3:00 p.m.	PHYSICS QA ISSUES AND CHALLENGES IN COMPLEX TREATMENT PLANNING	Physics Faculty
3:00 P.M. – 3:15 p.m.	BREAK	
3:15 P.M. - 4:45 p.m.	BREAKOUT SESSION - PROSTATE Treatment Planning and Contouring/Set-up Workshops	
5:30 p.m. – 6:30 p.m.	RECEPTION	

Friday, January 23

7:00 a.m. – 8:00 a.m.	REGISTRATION AND BREAKFAST	
8:00 a.m. – 9:30 a.m.	BREAKOUT SESSION – HEAD AND NECK Treatment Planning and Contouring/Set-up Workshops	
9:30 a.m. – 9:45 a.m.	BREAK	
9:45 a.m. – 10:45 a.m.	BREAKOUT SESSION – LUNG CANCERS Treatment Planning and Contouring/Set-up Workshops	
10:45 a.m. – 11:45 a.m.	BREAKOUT SESSION – LOWER GI CANCERS Treatment Planning and Contouring/Set-up Workshops	
11:45 a.m. – 1:00 p.m.	LUNCH	
PROTON THERAPY SESSION		
1:00 p.m. – 1:30 p.m.	INTRODUCTION	Paul M. Busse, M.D., Ph.D.
1:30 p.m. – 2:00 p.m.	PROTON DELIVERY SYSTEMS	Jatinder R. Palta, Ph.D.
2:00 p.m. – 2:30 p.m.	PEDIATRICS	Shannon MacDonald, M.D.
2:30 p.m. – 3:00 p.m.	LUNG	James D. Cox, M.D., FASTRO
3:00 p.m. – 3:30 p.m.	BREAK	
3:30 p.m. – 4:00 p.m.	NASOPHARYNX AND SKULL BASE	Annie W. Chan, M.D.
4:00 p.m. – 4:30 p.m.	PROSTATE	Peter A.S. Johnstone, M.D.
4:30 p.m. – 5:00 p.m.	PROTON TREATMENT PLANNING	Judith A. Adams, C.M.D.
5:00 p.m. – 5:30 p.m.	DOSIMETRIC UNCERTAINTIES	Jatinder R. Palta, Ph.D.

Friday/Saturday Schedule

Friday, January 23

7:00 a.m. – 7:55 a.m.	REGISTRATION AND BREAKFAST	
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9:00 a.m. – 9:30 a.m.	IMRT FOR LUNG CANCER	Craig W. Stevens, M.D., Ph.D.
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5:00 p.m. – 5:30 p.m.	DOSIMETRIC UNCERTAINTIES	Jatinder R. Palta, Ph.D.
5:30 p.m. – 6:30 p.m.	RECEPTION	

Saturday, January 24

7:00 a.m. – 8:00 a.m.	REGISTRATION AND BREAKFAST	
8:00 a.m. – 9:15 a.m.	ORGAN MOTION MANAGEMENT PANEL	
	<i>Moderator:</i>	Michael B. Sharpe, Ph.D.
	THORACIC TUMORS	Billy W. Loo Jr., M.D., Ph.D.
	GI CANCERS	Laura A. Dawson, M.D.
	PROSTATE CANCERS	Patrick A. Kupelian, M.D.
9:15 a.m. – 9:45 a.m.	EXTRA-CRANIAL FRACTIONATED STEREOTACTIC RADIOSURGERY TREATMENTS	Robert D. Timmerman, M.D.
9:45 a.m. – 10:00 a.m.	BREAK	
10:00 a.m. – 11:00 a.m.	BREAKOUT SESSION – LUNG CANCERS	
	Treatment Planning and Contouring/Set-up Workshops	
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	Treatment Planning and Contouring/Set-up Workshops	
2:30 p.m. – 2:45 p.m.	BREAK	
2:45 p.m. – 4:15 p.m.	BREAKOUT SESSION - PROSTATE	
	Treatment Planning and Contouring/Set-up Workshops	

Invited Faculty

PROGRAM COMMITTEE

Paul M. Busse, M.D., Ph.D., Massachusetts General Hospital, Boston
Quynh-Thu Le, M.D., Stanford University, Stanford, Calif.
Jatinder R. Palta, Ph.D., University of Florida/Davis Cancer Center, Gainesville, Fla.
Alan Pollack, M.D., Ph.D., University of Miami, Fla.
Ping Xia, Ph.D., University of California, San Francisco

INVITED FACULTY

Judith A. Adams, C.M.D., Massachusetts General Hospital, Boston
Robert J. Amdur, M.D., University of Florida, Gainesville, Fla.
John Bayouth, Ph.D., University of Iowa Hospitals and Clinics, Iowa City, Iowa
Edgar Ben-Josef, M.D., University of Michigan, Ann Arbor, Mich.
Paul M. Busse, M.D., Ph.D., Massachusetts General Hospital, Boston
Annie W. Chan, M.D., Massachusetts General Hospital, Boston
Daniel T. Chang, M.D., Stanford University, Stanford, Calif.
James D. Cox, M.D., FASTRO, M.D. Anderson Cancer Center, Houston
Laura A. Dawson, M.D., Princess Margaret Hospital, Toronto, Ontario, Canada

Avraham Eisbruch, M.D., University of Michigan, Ann Arbor, Mich.
Gary A. Ezzell, Ph.D., Mayo Clinic, Scottsdale, Ariz.
Kenneth Shung Hu, M.D., Beth Israel Medical Center, New York
Peter A.S. Johnstone, M.D., Indiana University School of Medicine, Indianapolis
Patrick A. Kupelian, M.D., M.D. Anderson Cancer Center-Orlando, Orlando, Fla.
Quynh-Thu Le, M.D., Stanford University, Stanford, Calif.
Billy W. Loo Jr., M.D., Ph.D., Stanford University, Stanford, Calif.
Shannon MacDonald, M.D., Massachusetts General Hospital, Boston
Jatinder R. Palta, Ph.D., University of Florida/Davis Cancer Center, Gainesville, Fla.
Todd Pawlicki, Ph.D., University of California San Diego, La Jolla, Calif.
Alan Pollack, M.D., Ph.D., University of Miami, Fla.
Robert A. Price Jr., Ph.D., Fox Chase Cancer Center, Philadelphia
Howard M. Sandler, M.D., University of Michigan, Ann Arbor, Mich.
Michael B. Sharpe, Ph.D., Princess Margaret Hospital, Toronto, Ontario, Canada
Craig W. Stevens, M.D., Ph.D., H. Lee Moffitt Cancer Center and Research Institute, Tampa, Fla.
Robert D. Timmerman, M.D., University of Texas Southwestern, Dallas
Ping Xia, Ph.D., University of California, San Francisco
Sue S. Yom, M.D., Ph.D., University of California, San Francisco

ADDITIONAL INFORMATION:

Contact the ASTRO Education Department at 1-800-962-7876 or education@astro.org.

Registration and Hotel/Travel Information

Register online at www.astro.org

SYMPOSIUM ONLY AND SYMPOSIUM WITH PROTON THERAPY REGISTRATION FEES AND CATEGORIES.

REGISTRATION TYPE	EARLY BIRD (on or before January 7, 2009) SYMPOSIUM ONLY	ADVANCE/ON SITE (after January 7, 2009) SYMPOSIUM ONLY	EARLY BIRD (on or before January 7, 2009) SYMPOSIUM/PROTON Session*	ADVANCE/ON SITE (after January 7, 2009) SYMPOSIUM/PROTON Session*
Physician	\$650	\$700	\$700	\$750
Physicist	\$650	\$700	\$700	\$750
Radiation Therapist/ Technologist	\$350	\$400	\$400	\$450
Medical Dosimetrist	\$350	\$400	\$400	\$450
Nurses	\$300	\$325	\$350	\$375
Radiation Oncology Resident	\$300	\$325	\$350	\$375

*PROTON THERAPY SESSION ONLY REGISTRATION FEE

New this year! Registrants may choose to attend the Proton Therapy Session ONLY for a registration fee of \$150. The Proton Therapy Session will be offered on Friday, January 23, 2009, from 1:00 p.m. - 5:00 p.m. If you wish to attend the Symposium and the Proton Therapy Session, the registration fee is listed above.

REGISTRATION DEADLINE

The last day to receive the early bird discount is **January 7, 2009**. Registration received after this date will be charged the onsite rate. The last day to advance register before the meeting is **January 14, 2009**. After January 14, 2009, you will need to register on site at the meeting.

REGISTRATION CONFIRMATION

Individuals who register online will receive an instant e-mail confirmation. If you fax or mail in your registration form, your registration confirmation will be sent via e-mail within three to five business days.

CANCELLATION POLICY

- Refunds will be given ONLY if written notification is received on or before **January 19, 2009**.
- All refunds are subject to a \$200 processing fee. Telephone cancellations will NOT be accepted.
- NO REFUNDS will be given for requests received after **January 19, 2009**.
- Registration fees are not transferable.
- Registration refunds will be processed 30 days after the conclusion of the meeting.

VISA INFORMATION

Citizens of foreign countries in most cases 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 www.unitedstatesvisas.gov. You must be registered and paid in full before you will be sent a visa letter of invitation.

HOTEL INFORMATION

Sheraton Wild Horse Pass Resort and Spa
5594 West Wild Horse Pass Blvd.
Chandler, AZ 85226
Phone: 602-225-0100, Fax: 602-225-0300

HOTEL RESERVATIONS

A block of rooms has been set aside for the Advances in Technology: Practical Aspects on IMRT and Proton Therapy Symposium attendees at a discounted rate until **December 22, 2008**. 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.

HOW TO MAKE A HOTEL RESERVATION

Make your reservation online or by calling the hotel directly.

Internet: <http://www.starwoodmeeting.com/Book/astro2009>

Phone: 1-888-218-8989

Be sure to state you are with ASTRO when making your hotel reservation by phone.

HOTEL ROOM RATE

Single/Double: \$289 per night

TRAVEL INFORMATION

Ground Transportation

Sheraton Wild Horse Pass Resort and Spa is located 11 miles from the Phoenix Sky Harbor International Airport and 15 miles from downtown Phoenix.

Rental Car Reservations

Avis Rent-A-Car is offering ASTRO attendees special rates on car rentals during the symposium. To reserve your Avis rental car, call 1-800-331-1600. Be sure to mention the Avis Worldwide Discount number **J657704** when making a reservation.

Hertz is offering ASTRO attendees special rates on car rentals during the symposium. To reserve your Hertz rental car, call 1-800-654-2240 or 405-749-4434 to reserve by phone or go to www.Hertz.com. Be sure to mention our discount number **CV# 04840002** when making your reservation.

Directions from Airport

- 153 South to 143 and Interstate 10 East.
- Continue on I-10 East 11 miles to Maricopa Road (Exit 162-A).
- Exit right on Maricopa Road and take first right and follow signs to Sheraton Wild Horse Pass.

ADDITIONAL INFORMATION:

Contact the ASTRO Meetings Department at 1-800-962-7876 or meetings@astro.org.

ASTRO

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