From Hyper to Hypo Fractionation in Radiation Oncology

September 8-11, 2013 Wisconsin Institutes of Discovery • Madison, Wisconsin, USA

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN–MADISON

OFFICE OF CONTINUING PROFESSIONAL DEVELOPMENT
IN MEDICINE AND PUBLIC HEALTH
2701 INTERNATIONAL LANE, #208
MADISON, WI 53704-3126

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9th International Conference on
Dose, Time and Fractionation in Radiation Oncology

From Hyper to Hypo Fractionation in Radiation Oncology

Organizers

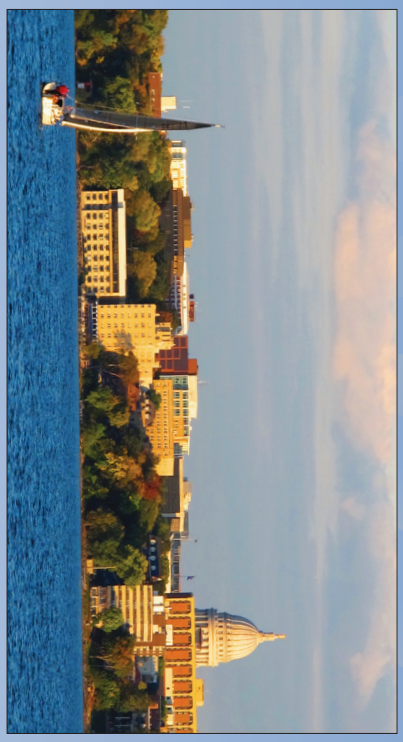

Albert van der Kogel


Robert Jeraj


Paul Harari


Søren Bentzen


Bhudatt Paliwal



SEPTEMBER 8-11, 2013 • MADISON, WISCONSIN, USA

Sponsored by:
University of Wisconsin School of Medicine and Public Health
University of Wisconsin Paul P. Carbone Comprehensive Cancer Center
Department of Human Oncology
The Office of Continuing Professional Development in Medicine and Public Health

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON

Endorsed by:
American Association of Physicists in Medicine

Carbone Cancer Center
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

PROGRAM DESCRIPTION

The University of Wisconsin School of Medicine and Public Health is organizing a 4-day conference, September 8 -11, 2013, on "From Hyper to Hypo Fractionation in Radiation Oncology."

Optimization of dose-time-fractionation remains a central research theme in radiation oncology. Intriguingly, the focus has shifted over a relatively short period of time from the use of hyperfractionation (i.e., fraction sizes lower than the standard 2 Gy per fraction) to hypofractionation that is the use of fraction sizes larger than 2 Gy, as a strategy for improving patient outcome. This shift has occurred as a result of advances in both radiation biology and in physics and technology. Advances in radiation biology include an improved understanding of the fractionation biology of tumors and normal tissues, largely based on quantitative analyses of the outcome of randomized controlled trials. There is now increasing evidence that the use of hypofractionation may be beneficial in several of the most common radiation therapy indications. Advances in physics and technology include advances in target visualization and in in-room image guidance as well as progress in the planning and delivery of intensity modulated radiation therapy. Novel radiation modalities, proton and carbon ion beams, add further capabilities for spatial modulation of dose-time-fractionation within a patient. Novel research avenues include the possible use of biomarkers for optimizing dose-fractionation in individual patients as well as the preclinical and clinical study of dose-fractionation and dose distribution interactions when combining radiation with cytotoxic or molecular targeted drugs. All of these developments create not only challenging and exciting research opportunities but also a real hope that more cancer patients will be cured while maintaining the best possible health-related quality of life.

The invited national and international faculty and the host faculty will present an update of the current status of dose-time-fractionation biology as it applies to multi-modality, targeted cancer therapy. New research opportunities will be identified and the relevance of each of the above topics to clinical practice in Radiation Oncology will be emphasized.

Proffered Papers

Proffered papers may be submitted to DiAnne Genrich (dgenrich@humonc.wisc.edu). Registration is required for submission of an abstract for presentation. The deadline for submission of a one-page abstract for proffered papers (no special format requirements) is July 15, 2013. Primary author of the abstract accepted by the Program Committee will be notified by July 31, 2013.

Intended Audience

This conference is intended for radiation oncologists, radiobiologists, medical physicists, therapists, biological modelers, medical students and residents.

Elements of Competence

This CME activity has been designed to change learner knowledge and competence and focuses on the American Board of Medical Specialties areas of medical knowledge, patient care and procedural skills, and practice-based learning and improvement.

OBJECTIVES

At the conclusion of this activity, participants will be able to:

- Report on the current status of radiation dose-time-fractionation in multi-modality therapy and the role of new imaging and radiation therapy technologies in optimizing dose delivery in space and time.
- Analyze the interplay between dose distribution, fractionation and chemical/biological agents.
- Identify the role of functional and molecular imaging in target volume definition, in intra-individual dose prescription and in monitoring the response to radiation therapy.
- Present and discuss the state-of-the-art of bio-effect models linking patient-specific outcome data 4D dose-time-volume data.
- Discuss the potential of chemical/molecular prognostic and predictive markers for individual treatment optimization.
- Identify mechanisms, programs and resources to further support and implement the investigational strategies described in the bullet points above.

CREDIT

Accreditation Statement

The University of Wisconsin School of Medicine and Public Health is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Designation Statement

The University of Wisconsin School of Medicine and Public Health designates this live activity for a maximum of 21 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Continuing Education Units

The University of Wisconsin-Madison, as a member of the University Continuing Education Association (UCEA), authorizes this program for 2.1 continuing education units (CEUs) or 21 hours.

CAMPEP and Medical Dosimetrist Certification Board (MDCB)

Application has been made to CAMPEP and MDCB for approval of this educational activity. All approved CAMPEP and MDCB CE activities will now be awarded ARRT Category A credit.

Policy on Faculty and Sponsor Disclosure

It is the policy of the University of Wisconsin School of Medicine and Public Health that the faculty, authors, planners, and other persons who may influence the content of this CME activity disclose all relevant financial relationships with commercial interests in order to allow CME staff to identify and resolve any potential conflicts of interest. Faculty must also disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation(s). Detailed disclosure will be made in the course handout materials.

ORGANIZING AND PROGRAM COMMITTEE

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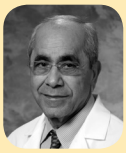
Robert Jeraj, PhD, Professor of Medical Physics, University of Wisconsin, Madison, WI

Bhudatt Paliwal, PhD, Professor of Medical Physics and Human Oncology, University of Wisconsin, Madison, WI



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Albert van der Kogel, PhD, Professor of Human Oncology, University of Wisconsin, Madison, WI

Ivan Vogelius, PhD, Medical Physicist of Radiation Oncology, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark

GENERAL INFORMATION

Dates: September 8-11, 2013

Place: Wisconsin Institutes of Discovery
330 N Orchard St, Madison, WI 53715

Telephone: 608-316-4300

Email: info@discovery.wisc.edu

Conference Fees

The conference fee includes the cost of tuition, materials, refreshment breaks, lunches, a reception, and a nonrefundable registration fee of $50. Should you cancel your registration fee by August 31, 2013, you will be refunded the entire conference fee except the $50 nonrefundable portion. **Only 50% of your registration fee will be refunded after September 1, 2013.**

Housing

A block of rooms has been reserved at Union South (1308 W Dayton St, Madison, WI 53715 p. 608-890-3000) for the rate of $124 plus tax and Hotel Red (501 Monroe St, Madison, WI 53711, p. 1-866-599-6674) for $159 plus tax. Please contact the hotel directly for your reservation and identify yourself as a member of the ICDTF/Human Oncology group. These rooms will be released to the general public on **August 8, 2013.**

Driving Directions

To get to info about parking: http://discovery.wisc.edu/home/discovery/plan-your-visit/parking/

For Further Information

For conference information please contact DiAnne Genrich, **dgenrich@humonc.wisc.edu**; phone: 608-263-9962; fax 608-890-3148, 600 Highland Avenue, K4/312 CSC, Madison, WI 53792-3684. The official website for the conference is: http://www.humonc.wisc.edu/dose.time/

Four Easy Ways to Register

Online: www.ocpd.wisc.edu/course_catalog

By Mail: Return your completed registration form and payment

By Phone: 608-262-1397. Please call and give your billing information or pay by MasterCard, VISA, or American Express

By Fax: 1-800-741-7416 (in Madison fax 265-3163)

Conference Attire

To ensure your comfort in the conference rooms, please bring a sweater or jacket to accommodate temperature variations.

Important Deadline

Proffered papers due on July 15, 2013.

#4012; ame-dose

REGISTRATION FORM

9th International Conference on Dose, Time and Fractionation in Radiation Oncology

September 8-11, 2013

Please print in BLOCK letters

STEP 1. Participant Information

Name
First *MI* *Last*

Professional Degree (for name tag): ☐ MD; ☐ DO; ☐ PhD; ☐ PA; ☐ RN; ☐ Other, please specify: _____

Company Name

Work Address

City, State, Zip

Phone
Where you can be reached from 9:00 am - 5:00 pm

FAX
Where you can be reached from 9:00 am - 5:00 pm

E-Mail Address
Please print clearly

_____ I request vegetarian meal options

STEP 2. Registration Fees

	Until July 31, 2013 (11:59 PM CST)	After July 31, 2013
Physicians	☐$450/person	☐$500/person
Other Health Professionals	☐$350/person	☐$400/person
Residents, Interns, Students*	☐$175/person	☐$200/person

**Please send verification of resident, intern or student status*

We are not able to accept credit card payments on the day of the activity.

Payment Method:

___ PO or check enclosed (payable to University of Wisconsin)

___ Please bill my company:

___ Credit Card: ☐ MasterCard; ☐ VISA; ☐ AMEX

Cardholder's Name

Card Number

Exp Date

STEP 3. Send Your Registration to:

CME Specialist, Department 101, The Pyle Center, 702 Langdon Street, Madison, WI 53706 or fax 1-800-741-7416 (in Madison fax 265-3163).

The University of Wisconsin provides equal opportunities in employment and programming, including Title IX requirements.

The University of Wisconsin School of Medicine and Public Health fully complies with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity is in need of accommodations, please notify DiAnne Genrich or Terese Bailey in order to receive service. Please call 608-263-9962 or 608-240-2141.

SUNDAY, SEPTEMBER 8

PM

12:15 Registration

1:00 Welcome
Paul M. Harari, MD

OVERVIEW
Moderator:
Paul Harari, MD

1:15 From Hyper- to Hypofractionation in Radiation Oncology
Søren M. Bentzen, DSc

1:45 Spinal Cord as a Model for Fractionation Studies
Albert van der Kogel, PhD

2:15 Discussion

2:30 Break

SITE SPECIFIC CONCEPTS
Moderator:
Kristin Bradley, MD

3:00 Prostate Cancer
Mark Ritter, MD, PhD

3:20 Breast Cancer
Bethany Anderson, MD

3:40 Head and Neck Cancer
Vincent Gregoire, MD, PhD

4:00 Discussion

4:20 Proffered papers
Moderator:
Tod Speer, MD

5:00 Adjourn & Reception

MONDAY, SEPTEMBER 9

AM **LUNG CANCER**
Moderator:
Lauren Shapiro, MD

8:00 After RTOG 0617
Jeff Bradley, MD

8:30 Dose per Fraction Escalation
Don Cannon, MD

9:00 Lung Cancer, Imaging Toxicity
John Bayouth, PhD

9:30 Discussion

9:45 Break

KEYNOTES
Moderator:
Paul Harari, MD

10:15 Fractionation in SBRT
Bob Timmerman, MD

10:45 Q & A Session

11:00 Clinical Promise of Protons to Exploit Hypofractionation
Stephen Hahn, MD

11:30 Q & A Session

PM

Noon Lunch

TUMOR BIOLOGY OF (HYPO-)FRACTIONATION
Moderator:
Randal Tibbetts, PhD

1:00 Selecting Dose-Fractionation Using Molecular Biomarkers
Kevin A. Camphausen, MD

1:30 HPV and Fractionated RT
Randy Kimple, MD, PhD

TECHNOLOGY AS A FACILITATOR OF HYPOFRACTIONATION
Moderator:
Paul DeLuca, PhD

2:00 Proton Therapy
T. Rockwell Mackie, PhD

2:30 The Future of Image Guidance
David Jaffray, PhD

3:00 Discussion

3:30 Break

4:00 Proffered Papers
Moderator:
Rupak Das, PhD

5:00 Adjourn

TUESDAY, SEPTEMBER 10

AM **MOLECULAR TARGETED AGENTS COMBINED WITH RADIATION**
Moderator:
Alan Rapraeger, PhD

8:00 Next Generation EGFR Agents
Paul Harari, MD

8:30 DNA Damage Response: Opportunities for Molecular Radiosensitization
Randal S. Tibbetts, PhD

9:00 New Vascular and Antiangiogenic Agents
Kevin Kozak, MD, PhD

9:30 Discussion

10:00 Break

IMAGING TECHNOLOGIES FOR THERAPY
Moderator:
Bhudatt Paliwal, PhD

10:30 Combining Imaging and Delivery Systems
Jan Lagendijk, PhD

11:00 ViewRay
Prabhakar Tripuraneni, MD

11:30 Discussion

PM

Noon Lunch

DOSE-PAINTING
Moderator:
Adam Bayliss, PhD

1:00 Where are we with Dose Painting?
Robert Jeraj, PhD

1:30 Dose Painting Based on Recurrence Risk
Ed Bender, PhD

2:00 Linking FDG PET to Recurrences in HNSCC
Ivan Vogelius, PhD

2:30 Extracting Biological Information from Routine CBCT
Carsten Brink, PhD

3:00 Discussion

3:15 Break

IMAGING FOR TARGET DEFINITION
Moderator:
Jennifer Smilowitz, PhD

3:30 How Well do we Know Where the Target is?
Assen Kirov, PhD

4:00 Advanced Methods for Target Definition
Mattias Hatt, PhD

4:30 Discussion

5:00 Adjourn

WEDNESDAY, SEPTEMBER 11

AM

IMAGING FOR TREATMENT RESPONSE ASSESSMENT
Moderator:
Steven Howard, MD

8:00 PET Response Assessment in Lung Cancer
Scott Perlman, MD

8:30 MRI Response Assessment in GBM
Yue Cao, PhD

9:00 TCP and NTCP Models: Current Status on Treatment Plan Optimization
Joseph Deasy, PhD

9:30 Discussion

10:00 Break

10:30 Panel

11:30 Conference Summary

PM

Noon Adjourn