



IC3DDose August 2010

The 6th International Conference on
3D Radiation Dosimetry*

**** Find out how to verify complex
dose distributions in 3D ****

www.IC3DDose.org

When: August 22-26th, 2010

Where: The Crowne Plaza Resort, Hilton Head Island, South Carolina, USA. *A fantastically scenic and peaceful ocean-front resort on a small island on the Eastern seaboard.*

What: State-of-the-art seminars, educational refreshers, proffered sessions (both research papers and posters), workshops, debates, and outstanding exhibition space for exhibitors and organisations.

Conference Objectives:

1. **To provide a forum** to discuss the latest research and developments in 3D and advanced radiation dosimetry.
2. **To elevate the quality** of radiation therapy treatments and quality assurance (QA) through improved clinical dosimetry.
3. **To explore** the dosimetric challenges posed by modern radiation treatment techniques
4. **To energize and diversify** dosimetry research and clinical practice by encouraging interaction and synergy between advanced, 3D, and semi-3D dosimetry techniques

Who: Historically the IC3DDose meeting has been attended by medical physicists (both clinical and research), physicists, chemists, and engineers.

Special: Academic sponsors: [AAPM](http://www.aapm.org), [SEAAPM](http://www.seaapm.org), [DukeMPGP](http://www.dukeup.edu). **26 CAMPEP MPCEC credits** have been approved. **Accepted papers will be published** online in the Journal of Physics (www.iop.org/EJ/journal/conf)

* Formerly DOSGEL (www.dosgel.org)

Crowne Plaza Resort, Hilton Head Island, South Carolina, USA



Key Dates:

- Regular conference paper May 18th, 2010
- Works-in-Progress July 1st, 2010
Guidelines at www.ic3ddose.org
- Early bird registration, prior to June 25th, 2010

Registration/Accommodation (meals and materials):

- Early-bird registration (late registration) \$400 (\$550)
- SEAAPM member discount \$75
- Student registration (late registration) \$200 (\$380)
- Exhibitor registration available (contact chair below)
- Special conference room rate \$159-189
Booking details at www.ic3ddose.org,
rate extends 2 days pre and post conference

Local Organising Committee:

Mark Oldham PhD (Conference Chair, mark.oldham@duke.edu),
Carolyn Crank, Joseph Newton PhD, Fang-Fang Yin PhD
[Duke University Medical Center, Durham, NC, USA](http://www.duke.edu)

Scientific Organising Committee:

Mark Oldham (USA - Chair), Sven Back (Sweden), Clive Baldock (Australia), Cheng-Shie Wu (USA), Yves De Deene (Belgium), Simon Doran (UK), Geoffrey Ibbott (USA), Andrew Jirasek (Canada), Kevin Jordan (Canada), Martin Lepage (Canada), Thomas Maris (Greece), Evangelos Pappas (Greece), John Schreiner (Canada).

International Conference on 3D Radiation Dosimetry Scientific Program

Time	Monday Aug 23	Tuesday Aug 24	Wednesday Aug 25th	Thursday Aug 26th
07:30 - 08:15	Reception Sunday Evening !	Refresher 1: History of 3D	Refresher 2: Gels and Plastics	Refresher 3: Imaging & Dose
08:15 - 08:30	Breakfast break			
08:30 - 09:10	ICR: RPC, QA & RT	ICR: IMAT/IMRT	ICR: Small-Flds	ICR: 4D and Gating
09:10 - 09:50	ICR: Challenges	ICR: IGRT 3D & QA	ICR: SRS & SBRT	ICR: Brachy/Inhom
9:50 - 10:30	Proffered: Clinical Challenges	Proffered: IMRT/IGRT & Radiochromic	Proffered: SBRT & Small Fields	Proffered: Motion/Brachy/Hetero
10:30 - 10:50	Break			
10:50 - 12:00	Proffered: New Systems	Proffered: Protons & Particles	Proffered: Modeling & Scatter	Proffered: Various Topics II
12:00 - 13:00	Lunch and Posters			
13:00 - 13:40	I3D: Polymer Gels	I3D: Radiochromic	I3D: x-ray+other 3D	I3D: A Clinical 3D Program Panel
13:40 - 14:20	I3D: MRI dosimetry	I3D: Optical	I3D: 3D Analysis	
14:20 - 15:00	Proffered: Polymer Gels	Proffered: Optical/Radiochromic	Proffered: Analysis, x-ray & US	Awards/Finale
15:00 - 15:20	Break			
15:20 - 16:20	IDR: EPIDS & 3D	IDR: Diode/Chambers	Proffered: Various Topics I	Bon Voyage !
16:20 - 17:00	Proffered: EPIDS and Optical	Proffered: Diodes & Chambers		
17:15 +	Point/CounterPoint Debate	WorkShop 1 Making 3D Measurements.	WorkShop 2: 3D Data Analysis	
Evening	<i>Sunday</i> Evening Welcome Reception		Social Night	

Program key:

ICR=Invited Clinical Review

The dosimetry challenges and significance of a technique.

I3D=Invited 3D Dosimetry Review

The state of the art 3D dosimetry systems and techniques.

IDR=Invited Dosimetry Review

New 3D or semi-3D dosimetry systems and techniques.

Invited Speakers and Panelists:

Refresher 1	Baldock and Schreiner	Whats important - past and present?: 3D Dosimetry
Refresher 2	Lepage and Jordan	3D Dosimetry Fundamentals: Gels and Plastics
Refresher 3	Doran and Pappas	Imaging and Dose Calibration
ICR: QA in RT	Geoffrey Ibbott	QA in Radiation Therapy: The RPC perspective
ICR: Challenges	FangFang Yin	Dosimetry Challenges of Emerging Technologies
ICR: IGRT and QA	David Jaffray	Verification of IGRT techniques: Role of 3D
ICR: IMAT/IMRT	T. Rock Mackie	Dosimetry and QA for Static and Rotational IMRT
ICR: Small fields	Timothy Zhu	Small Field Dosimetry
ICR: SRS & SBRT	Stanley Benedict	SRT/SBRT: QA Dosimetry and 3D
ICR: 4D & Gating	Sven Back	Dosimetry and Organ Motion
ICR: Brachy/Hetero	Geoff Ibbott	3D Dosimetry for Brachytherapy and Heterogeneities
WorkShop1	Multiple Participants	Making 3D Dose Measurements
WorkShop 2	Joe Deasy	A Computational Environment for 3D Analysis
I3D: Polymer Gels	John Schreiner	Polymer Gel Dosimetry
I3D: MRI Dosimetry	Yves DeDeene	How to scan Polymer Gels with MRI ?
I3D: Radiochromic	Kevin Jordan	Recent developments in 3D Radiochromic Dosimetry
I3D: Optical-CT	ChenShie Wu	How to perform Dosimetry with Optical-CT
I3D: Xray & Other	Andrew Jirasek	X-ray and other Dosimetry Systems
I3D: 3D Analysis	Daniel Low	Working with 3D Data: Analysis and Metrics.
I3D: Clinical Program	Oldham, Schreiner, Wu	Implementing 3D Dosimetry in the Clinic ?
IDR: EPIDS & 3D	Mijnheer and Moran	EPIDS and QA of advanced treatments
IDR: Diodes & 3D	Gutierrez and O'Daniel	QA with Diode and Chamber Arrays
Point/Counter 1	Schreiner and Jordan:	Really, - I'm fine with just 2D measurements !

Speaker affiliations given below-

Academic Sponsors:

AAPM – co-sponsor (www.aapm.org)

SEAAPM – co-sponsor (<http://chapter.aapm.org/seaapm/>)

Duke University Medical Physics MS/PhD Program
(www.medicalphysics.duke.edu)

Invited Speaker listing: -

- Geoff Ibbott, Professor and Chief of Outreach Physics,**
Radiological Physics Center, M.D.Anderson Cancer Center, USA
- Fang-Fang Yin, Professor and Director of Radiation Therapy Physics**
Duke University Medical Center, Durham, NC, USA
- Rock Mackie, Professor of Medical Physics and Human Oncology**
University of Wisconsin, Madison, USA
- David Jaffray, Professor and Head of Physics**
Princess Margaret Hospital, Toronto, Canada
- Dan Low, Professor and Director of Medical Physics,**
Washington University, St Louis, USA
- Tim Zhu, Professor of Medical Physics**
University of Pennsylvania, Philadelphia, USA
- Jean Moran, Chief of Clinical Physics,**
University of Michigan Medical Center, Ann Arbor, USA
- Stanley Benedict, Director of Radiation Physics**
University of Virginia Health Systems, Charlottesville, USA
- Joe Deasy, Professor and Director of Bio-informatics**
Washington University, St Louis, USA
- Ben Mijneer, Professor of Medical Physics**
The Netherlands Cancer Institute, Amsterdam, Netherlands
- Sven Back, Professor of Medical Physics**
Lund University, Malmö University, Sweden
- Clive Baldock, Professor and Director of Medical Physics,**
University of Sydney, Sydney, Australia
- Yves DeDeene, Professor of Medical Physics**
Ghent University Hospital, Ghent, Belgium
- Simon Doran, Senior Staff Scientist,**
Institute for Cancer Research, London, UK
- Alonso Gutierrez, Assistant Professor**
The University of Texas Health Science Center San Antonio
- Andrew Jirasek, Assistant Professor,**
University of Victoria, Canada
- Kevin Jordan PhD, Senior Medical Physicist**
London Regional Cancer Center, London, Canada
- Martin Lepage, Professeur Agrége,**
University of Sherbrooke, Canada
- Jennifer O'Daniel, Assistant Professor**
Duke University Medical Center, Durham, USA
- Mark Oldham, Associate Professor**
Duke University Medical Center, Durham, USA
- John Schreiner, Professor and Chief of Medical Physics**
Cancer Center of Southeastern Ontario, Kingston, Ontario, Canada
- Cheng-Shie Wu, Professor and Director of Medical Physics,**
Columbia University, New York, USA

Directions and Travel:

Hilton Head Island is 100 miles south of Charleston, South Carolina, and 45 miles north of historic Savannah, Georgia, 35 miles south of Beaufort, South Carolina. **Savannah/Hilton Head International Airport (SAV)** is served by most major airlines, rental car companies, and Yellow Resort Shuttle (843-686-6666) www.yellowcabhhi.com 48 miles from resort. **Hilton Head Airport (HHH)** is served by US Airways Express (via Charlotte) Delta Express (via Atlanta) and Yellow Resort Shuttle (843-686-6666) www.yellowcabhhi.com, on-island, off Route 278; 7.5 miles from resort.



Sponsors and Exhibitors:

Outstanding exhibit space is available in the beach-front club house next to posters and conference refreshment center (see www.IC3DDose.org for further information).

Gold Sponsors (as of July 2010):

MGS Research, www.mgsresearch.com
Scandidos, www.scandidos.com
SunNuclear, www.sunnuclear.com
PTW, www.ptwny.com
IBA Dosimetry America, Inc, www.lba-dosimetry.com
Tomotherapy Inc, www.Tomotherapy.inc
Varian Medical Systems, www.varian.com
Modus Medical, <http://www.modusmed.com/>
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Best Theratronics, www.theratronics.ca