

Image-Guided Radiation Therapy

Paraspinal SBRT IGRT Education Course



putting innovation to work

October 11–13, 2012, Toronto, Canada

THURSDAY, October 11, 2012

1:30 – 2:00 *Registration and Lunch* *Red Room (1B-615) ‡*

2:00 – 2:10 **Welcome and Introductions**

David Jaffray PhD

2:10 – 2:50 **Paraspinal Disease: Setting the Stage**

Arjun Sahgal MD

2:50 – 2:55 Discussion

Session One: The Basics of Paraspinal IGRT

2:55 – 3:15 **The IGRT Education Course: Concepts**

Doug Moseley PhD

3:15 – 3:50 **Cone-beam CT Primer**

David Jaffray PhD

3:50 – 4:00 Discussion

4:00 – 4:15 *Break*

4:15 – 4:40 **Technical Delivery of Paraspinal SBRT: an Overview**

Renée Korol PhD

4:40 – 4:45 Discussion

4:45 – 5:25 **Quality Assurance in an Image-Guided Era**

Jean-Pierre Bissonnette PhD

5:25 – 5:30 Discussion

5:30 **End of Day**

Dinner on your own



‡All sessions and events of the course are in the Red Room (1B-615) unless otherwise indicated.

FRIDAY, October 12, 2012

8:30 – 9:00 *Breakfast and Sign In*

Session Two: Visualizing and Immobilizing the Relevant Anatomy

9:00 – 9:10 **Overview for the Day**
Arjun Sahgal MD

9:10 – 9:35 **Diagnostic Imaging in Paraspinal Disease**
Eugene Yu MD

9:35 – 9:40 Discussion

9:40 – 10:15 **The Role of Spine Radiosurgery in the Multidisciplinary Management of Spine Metastases: the MSKCC Method**
Josh Yamada MD

10:15 – 10:20 Discussion

10:20 – 10:35 *Break*

10:35 – 11:00 **Patient Immobilization: the Princess Margaret Journey**
Winnie Li MRT(T), Anita Vloet MRT(T)

11:00 – 11:25 **Simulation**
Anna Simeonov MRT(R)(MR), Nancy La Macchia MRT(T)

11:25 – 11:35 Discussion

11:35 – 11:55 **Principles of Registration and Fusion**
Kristy Brock PhD

11:55 – 12:10 **Registration in Paraspinal SBRT**
Mark Ruschin PhD, Daniel Letourneau PhD

12:10 – 12:15 Discussion

12:15 – 1:15 *Lunch & Tour of Facilities*

7th Floor Atrium

Session Three A: Live Demonstrations & Practical Exercises

1:15 – 2:15 **Target Delineation & Contouring Exercise** *Skills Lab*
Arjun Sahgal MD, Josh Yamada MD, Nancy La Macchia MRT(T), Tatiana Conrad MD, Isabelle Thibault MD

OR **Technical Topics in Paraspinal SBRT** *1B Red Room*
Daniel Letourneau PhD, Renée Korol PhD, Mark Ruschin PhD

Session Four: The IGRT Journey – Image, Plan, Treat

2:15 – 2:35 **Principles of Margin Design**
Tim Craig PhD

2:35 – 3:00 **Margin Design in Paraspinal SBRT: to PRV or not to PRV**
Daniel Letourneau PhD, Josh Yamada MD

3:00 – 3:10 Discussion

3:10 – 3:50 **Treatment Planning in Paraspinal SBRT — From Targets to Plan Optimization**
Arjun Sahgal MD, Daniel Letourneau PhD, Nancy La Macchia MRT(T)

3:50 – 4:00 Discussion

4:00 – 4:15 *Break*

4:15 – 4:45 **Paraspinal SBRT in Action**
Anita Vloet MRT(T), Arjun Sahgal MD, Daniel Letourneau PhD, Renée Korol PhD

4:45 – 4:50 Discussion

4:50 – 5:10 **Late Effects of SBRT**
Arjun Sahgal MD, Josh Yamada MD

5:10 – 5:15 Discussion

5:15 – 7:00 *Wine and Cheese Reception*

Pencer Centre

SATURDAY, October 13, 2012

9:00 – 9:30 *Breakfast and Sign In*

Session Four: The IGRT Journey – Image, Plan, Treat *(continued)*

9:30 – 9:50 **Recap**
Arjun Sahgal MD

9:50 – 10:25 **The Role of Surgery in Paraspinal Disease**
Raja Rampersaud MD

10:25 – 10:35 *Discussion*

Session Three B: Live Demonstrations & Practical Exercises

10:35 – 10:40 **Overview and Introduction of Exercises**
Nicole Harnett MRT(T)

10:40 – 10:50 *Break*

10:50 – 12:00 **Multimodality Registration for Treatment Planning Exercise** *1B Planning*
Nancy La Macchia MRT(T), Mark Ruschin PhD, Daniel Letourneau PhD, Arjun Sahgal MD

AND **IGRT Image Registration Exercise** *Skills Lab*
Doug Moseley PhD, Anita Vloet MRT(T), Khenan Carmichael MRT(T)

12:00 – 12:30 **Unit Demonstrations** *Units 8 & 9*
Khenan Carmichael MRT(T), Anita Vloet MRT(T)

12:30 – 1:30 *Lunch* *7th Floor Atrium*

Session Five: Preparing for the Future

1:30 – 1:35 **Introduction to Keynote Address**
Arjun Sahgal MD

1:35 – 2:25 **Keynote Address: Mechanisms of Response for Spine Radiosurgery**
Josh Yamada MD

2:25 – 2:30 *Discussion*

2:30 – 3:00 **The Future of IGRT**
David Jaffray PhD

3:00 – 3:10 *Discussion*

3:10 – 3:30 **Team Work, Innovation, & Change Management**
Jean-Pierre Bissonnette PhD

3:30 – 3:45 *Break*

3:45 – 4:15 **Developing a Paraspinal SBRT Program: Prepare to Launch**
Arjun Sahgal MD, Daniel Letourneau PhD, Winnie Li MRT(T), Renée Korol PhD

4:15 – 5:10 **Group Exercise**
Nicole Harnett MRT(T), David Jaffray PhD

5:10 – 5:20 **Wrap-up / Evaluation**

6:30 *Dinner* *Jump Restaurant, 18 Wellington St. West*