

Image-Guided Radiation Therapy

Liver SBRT IGRT Education Course



putting innovation to work

April 7-9, 2016, Toronto, Canada



Radiation Oncology
UNIVERSITY OF TORONTO



Radiation Medicine Program
Princess Margaret Cancer Centre



UHN Princess
Margaret
Cancer Centre

Thursday, April 7, 2016

1:30 – 2:00 **Registration & Lunch** **1B Red Room**

2:00 – 2:05 **Welcome & Introductions**
Rebecca Wong MD

Session 1: Setting the Stage

2:05 – 2:30 **Introduction to Liver Cancer, Liver RT & The Course**
Laura Dawson MD

Session 2: Liver Imaging, Anatomy, Contouring & Function

2:30 – 3:00 **Hepatology 101: Liver Function**
David Wong MD

3:00 – 3:30 **Radiation Induced Toxicities Following SBRT**
Laura Dawson MD

3:30 – 3:40 **Discussion**

3:40 – 3:55 **Break**

3:55 – 4:25 **Imaging for Liver Cancer**
Tae Kim MD

4:25 – 4:45 **Tumour, Target, & OAR Contouring Principles**
John Kim MD

4:45 – 6:05 **Contouring Exercise** **2B Skills Lab**
Laura Dawson MD, Alana Pellizzari MRT(T), Andrea Shessel MRT(T), Tae Kim MD, Ted Hong MD, Tim Craig PhD

6:05 **End of Day**

6:05 – 6:30 **BONUS CASE**
For those who just can't get enough contouring!!!

Friday, April 8, 2016

8:30 – 9:00 **Breakfast & Sign In** **1B Red Room**

Session 3: Rationale for IGRT for Liver RT

9:00 – 9:30 **The Many Faces of Liver Cancer RT: Hepatocellular Carcinoma & Liver Metastases**

Laura Dawson MD,

9:30 – 10:00 **Keynote Address: RT for Biliary Cancer (Webinar)**

Ted Hong MD

10:00 – 10:15 **Discussion**

10:15 – 10:35 **Impact of Liver RT on Quality of Life**

Jolie Ringash MD

10:35 – 10:45 **Discussion**

10:45 – 11:00 **Break**

11:00 – 11:25 **Contemporary & Future Tools for Image Guidance**

Jean-Pierre Bissonnette PhD

11:25 – 11:55 **Liver IGRT: How to Optimize Quality**

Teodor Stanescu PhD

11:55 – 12:15 **Motion Management**

Douglas Moseley PhD

12:15 – 12:25 **Discussion**

12:25 – 1:15 **Lunch & Tour of Facilities** **7th Floor Atrium**

Session 4: Liver RT Simulation & Planning

1:15 – 1:55 **Practical Simulation – Princess Margaret Approach**

Andrea Shessel MRT(T), Laura Dawson MD

Practical Simulation, Including Fiducials & Spacers – Massachusetts General Approach

Ted Hong MD

1:55 – 2:05 **Discussion**

2:05 – 2:35 **Image Registration & Demonstration**

Michael Velec PhD

2:35 – 2:55 **PTV Margin Design**

Tim Craig PhD

2:55 – 3:00 **Discussion**

3:00 – 3:15 **Break**

3:15 – 3:45 **Individualized Dose Allocation, Liver V_{eff} & NTCP**

Tim Craig PhD, Ted Hong MD

3:45 – 4:35 **Liver Planning & Interactive Demonstration**

Alana Pellizzari MRT(T)

Discussants: Tim Craig PhD, Laura Dawson MD, Teodor Stanescu PhD

4:35 – 4:45 **Discussion**

4:45 – 5:15 **Practical Liver IGRT – CBCT**

Laura Dawson MD, Petula Seco MRT(T), Teodor Stanescu PhD

5:15 – 5:25 **Discussion**

5:25 – 5:45 **Tour of MRgRT Suite**

Teodor Stanescu PhD

1B Red Room

5:30 – 7:30 **Wine & Cheese**

18th Floor Pencer Centre

Saturday, April 9, 2016

9:00 – 9:20

Breakfast & Sign In

1B Red Room

Session 5: Liver Protons

9:20 – 9:50

Protons for Liver Cancer

Ted Hong MD

9:50 – 10:00

Discussion

Session 6: Trials & Case Examples

10:00 – 10:30

Clinical Trials in Liver RT

Laura Dawson MD Ted Hong MD

10:30 - 10:50

Liver RT Credentialing & Peer Review

Tim Craig PhD, Ted Hong MD, Laura Dawson MD

10:50 – 11:00

Discussion

11:00 – 11:10

Break

11:10 – 12:00

Liver Case-based Discussion

Anthony Brade MD, Ted Hong MD, Tim Craig PhD, Teodor Stanescu PhD

Session 7: Demonstrations & Practical Exercises

12:00 – 1:30

Patient Setup Demonstration

Skills Lab

Alana Pellizzari MRT(T), Petula Seco MRT(T), Andrea Shessel MRT(T)

AND

Matching Exercise

Douglas Moseley PhD, Winnie Li MRT(T)

1:30 – 2:05

Lunch

1B Red Room

Session 8: Future of IGRT

2:05 – 2:40

Dose Accumulation in Liver SBRT

Michael Velec PhD

2:40 – 3:05

MRgRT for Liver & Its Impact on Workflow

Teodor Stanescu PhD

3:05 – 3:15

Discussion

3:15 – 3:30

Break

3:30 – 3:50

Stories from the Trenches – How to Build a Liver RT Program

Laura Dawson MD

3:50 – 4:40

Group Exercise – Creating & Maintaining an SBRT Program

Douglas Moseley PhD, Nicole Harnett MRT(T)

4:40 – 4:45

Wrap Up & Evaluation

OPTIONAL

4:45 – 6:15

Spine SBRT: A review of indications, technical details & lessons learned

Arjun Sahgal MD, David Shultz MD