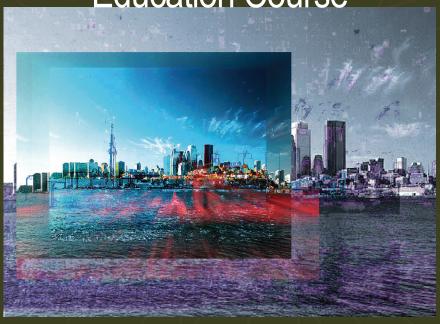
ACCELERATOR TECHNOLOGY

Education Course



putting innovation to work

February 26 – March 1, 2018, Toronto, Canada







Monday, February 26, 2018

11:30 – 12:00	Registration & Lunch	PM 1B-615
12:00 – 12:10	Welcome	
	David Jaffray PhD	
12:10 -12:50	Motivation for Advanced Imaging Systems on Linear Accelerators	
	Mike Milosevic MD	
12:50 - 1:00	Discussion	
1:00 - 1:45	COMP Webinar: SIMAC	
	Marco Carlone PhD	
1:45 - 2:00	Introduction to the Course	
	Bern Norrlinger & Nathan Becker PhD	
2:00 – 2:15	Break	

Session 1: Linear Accelerator Technology

2:15 – 3:00	Introduction to ATec & Review of Background Material Nathan Becker PhD	PM 1B-615
3:00 – 3:45	Microwave Devices	
	Carlos Varon P.Eng	
3:45 – 4:15	High Voltage Modulator	
	Bern Norrlinger	
4:15 – 4:20	Discussion	
4:20 - 4:35	Break	
4:35 – 6:05	Lab #1: Beam Output	PM 2B Skills Lab
	Bern Norrlinger, Nathan Becker PhD	
6:05	END OF DAY	
6:30	Social Event	Reds Midtown Tavern 382 Yonge St

Tuesday, February 27, 2018

8:30 – 9:00 Sign In PM 1B-610

Session 1 (cont'c	I): Linear Accelerator Technology	
9:00 – 9:10	Overview for the Day	
	Bern Norrlinger, Nathan Becker PhD	
9:10 – 9:55	Accelerator Beam Control	
	Bern Norrlinger	
9:55 - 10:15	Synchronization Pulse	
	Bern Norrlinger	
10:15 – 10:25	Discussion	
10:25 – 10:40	Break	
10:40 – 11:25	Multileaf Collimators & Dynamic Beam Delivery	
	Andrea McNiven PhD	
11:25 – 11:30	Discussion	
11:30 – 12:10	Beam Steering	
	Andrea McNiven PhD	
12:10 – 12:15	Discussion	
12:15 – 1:00	Lunch	
1:00 – 3:00	Lab #2: Finding Beam	PM 2B Skills Lab
	Bern Norrlinger, Nathan Becker PhD	
3:00 – 3:15	Break	PM 1B-610
3:15 – 3:45	Standard Imaging Equipment as Accessories to Medical Linace	s
3:45 – 4:35	2D Imaging Principles	
	Jean-Pierre Bissonnette PhD	
4:35 – 4:40	Discussion	
4:40 - 5:30	Good Practices for Service Groups	
	Bern Norrlinger	
5:30 - 5:35	Discussion	
5:35	END OF DAY	

Wednesday, February 28, 2018

8:30 – 9:00 Sign In PM 1B-615

Session 1 (cont'd): Linear Accelerator Technology

9:00 – 9:10

Recap

Bern Norrlinger, Nathan Becker PhD

9:10 – 9:30

Advanced Topic: Vacuum Systems

George Parsons

9:30 – 10:30

Demonstration: Basic Vacuum Practice,

Roughing Pumps, Leak Detection

George Parsons

10:30 - 10:45 Break

Session 2: Linac-Based Imaging (IGRT)

10:45 – 12:25 Lab #3: Beam Steering *PM 2B Skills Lab*

Bern Norrlinger, Nathan Becker PhD

12:25 – 1:25 Lunch PM 1B-615

1:25 – 2:15 Safety with Medical Devices in Canada

Ivan Yeung PhD, Bern Norrlinger

Session 3: Quality & Safety

2:15 – 3:00	Accelerator Safety
	Carlos Varon P.Eng
3:00 – 4:00	Radiation Safety
	Raina Park, Dave Niven
4:00 - 4:05	Discussion
4:05 – 4:35	Patient Safety
	Murray Rice P. Eng, Bern Norrlinger
4:35 – 5:20	Quality Management: Responsibility for Holders of a
	Service License
	Frank Tourneur
5:20 - 5:25	Discussion
5:25	END OF DAY
<i>5:30 – 6:00</i>	MRgRT Tour – Teo Stanescu PhD



Thursday, March 1, 2018

8:30 – 9:00 Sign In PM 1B-610

Session 2 (con	t'd) Linac-Based Imaging (IGRT)	
9:00 – 9:40	3D Imaging Principles	
3.10	Doug Moseley PhD	
9:40 – 9:45	Discussion	
9:45 – 10:30	Image Troubleshooting	
	Doug Moseley PhD	
10:30 – 10:35	Discussion	
10:35 – 10:50	Break	
10:50 – 11:25	kV Beam Generation	
	Carlos Varon P. Eng	
11: 25 – 11:30	Discussion	
11:30 – 12:35	Image Viewing & Evaluation Lab	PM 2B Skills Lab
	Doug Moseley PhD	
12:35 – 1:20	Lunch	PM 1B-610
1:20 – 1:55	Water Systems	
	George Parsons	
1:55 – 2:00	Discussion	
Session 4: Pan	el Discussion	
2:00 – 2:45	Linac Archaeology: Using the past to explain the preso	ent and foretell the
	future (maybe)	
	Malcolm McEwen PhD	
2:45 – 2:55	Discussion	
2:55 – 3:10	Break	
3:10 – 4:40	Panel Discussion – Moderator: Andrea McNiven PhD	
	Discussants: Bern Norrlinger, Nathan Becker PhD, Malo	colm McEwen PhD
4:40 – 4:50	Course Wrap Up & Evaluation	

END OF COURSE