

**Canadian Association of Radiation Oncology-Canadian Organization of Medical Physicists Joint Scientific Meeting
(CARO-COMP JSM)
September 20-23, 2023**

Interprofessional Collaboration: Better Together

Program Objectives: At the end of the conference, the participants will be able to:

- Understand the importance of inter-professional collaboration for the delivery of high-quality, patient-centered cancer care.
- Apply evidence-based recommendations for implementing advanced radiotherapy techniques.
- Describe current Canadian-led research initiatives within radiation oncology, medical physics, radiation therapy and allied health.
- Discuss challenges and opportunities related to equity, inclusivity, and access to radiotherapy in Canada.

CARO-COMP JSM PROGRAM – Working Copy

Last update: June 20, 2023

Wednesday September 20, 2023

7:30-4:00

Resident Refresher Course

Facilitator: Sarah Hamilton

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Review the principles of management and the role of radiotherapy in early stage breast cancer, non-CNS pediatric cancers and CNS tumours.
- Explore the evidence and indications for radiotherapy for benign diseases.
- Develop a radiotherapy treatment plan evaluation approach.

7:30-8:30

Breakfast and Registration

8:30-8:40

Welcome and Introduction

Sarah Hamilton

8:40-9:30

RT for Benign Diseases

Caroline Holloway

9:30-10:20

Extra-cranial / non-CNS peds

Anne-Marie Charpentier

10:20-10:50

Break

10:50-11:40

Primary CNS

Valerie Panet-Raymond

11:40-12:30

Early Stage Breast Cancer

Tarek Hijal

12:30-2:00

Lunch

2:00-3:15

Plan Evaluation

Jeff Winter/Jennifer Croke

3:15-3:25

Closing Remarks

Sarah Hamilton

3:25-4:25

CARO Mentorship Session

4:30-5:30 pm

CARO-COMP Trainee Reception

TBD

6:00-9:00pm

CARO Board Meeting

Hemon, Level A

6:00-7:00

COMP Keynote Speaker

Ballroom, Level 4

Facilitator:

MR-guided Radiotherapy and Adaptive Radiotherapy

Uwe Oelfke

Objectives: By the end of this session, the participants will be able to:

Xx

xx

7:30-4:00

Young Professionals Day

Facilitator: Uwe Oelfke

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

Xx

xx

7:30-8:30

Breakfast and Registration

8:30-8:40

Welcome and Introduction

8:40-10:30

Young Professionals Workshop

10:30-10:50

Break

10:50-12:30

Canadian Medical Physics Residency Fair

12:30-2:00

Lunch

2:00-3:30

Science Spoken Succinctly (S3) Competition

3:30-3:40

Closing Remarks

4:30-5:30

CARO-COMP Trainee Reception

TBD

6:00-7:00

COMP Opening Keynote Speaker

Moderator:

Ballroom, Level 4

MR-guided Radiotherapy and Adaptive Radiotherapy

Uwe Oelfke

Objectives: By the end of this session, the participants will be able to:

Xx

xx

8:00 pm

COMP Student Night Out

TBD

COMP Board Meeting

9:00 am-4:00 pm

Larmartine, Level A

Thursday September 21, 2023

7:00-7:50

Registration and Breakfast

Exhibit Hall

Foyer, East Ballroom, Level 4

7:50-8:15

Welcome and Introductions

Ballroom, Level 4

Jolie Ringash, CARO President

Boyd McCurdy, COMP President

Jennifer Croke, Patricia Lindsay, JSM Co-Chairs

Targeting Cancer Canada Campaign Kick Off

Jeff Cao, Michael Brundage

8:15-9:45

Joint Theme Symposium – AI: The Future is Now?

Moderators:

Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Demonstrate an understanding of the principles of artificial intelligence (AI), including its goals, applications, and tools.
- Understand current applications of AI in Radiation Therapy, Medical Physics and Radiation Oncology.
- Recognize how AI will impact the future of Radiation Therapy, Medical Physics and Radiation Oncology including opportunities and challenges.
- Describe current pan-Canadian initiatives and ongoing collaborations within the field of AI.

8:15-8:30

Under the Hood of AI

James Tsui

8:30-8:45

Applications of Machine Learning/AI in Medical Physics and Medical Imaging

John Kildea

8:45-9:00

How Big Data and AI Work Together to Improve Clinical Care

Amanda Caissie

9:00-9:15

Collaborative Opportunities for AI in Radiation Therapy

Caitlin Gillan

9:15-9:45

Discussion Period

9:45-10:30

Refreshment Break

Exhibit Hall

Foyer, East Ballroom, Level 4

10:30-11:15
CARO Lecture
Ballroom, Level 4

Equity in Access to Radiation Therapy – Opportunities for Collaboration
Mei Ling Yap
Moderators: Jolie Ringash, xx

Objectives: By the end of this session, the participants will be able to:

- Understand the current global inequities in access to radiation therapy, both within high income and low-and-middle income settings.
- Learn about examples of education and training partnerships to address access issues within low-and-middle income countries and the importance of involving multiple craft groups (including radiation oncology, medical physics and radiation therapy).
- Understand the importance of turning data on radiation therapy access into action and impact, through health systems research.

11:15-11:30
Question & Answer Period

11:30-12:30
Resident and Young Investigator Competition – Abstract #1-6
Moderators: Mei Ling Yap, Uwe Oelfke
Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover the top ranked resident and young investigator research projects in radiation medicine and medical physics across Canada.
- Describe the latest radiation oncology and medical physics research taking place in Canada by radiation oncology residents and medical physics graduate students.

1

ANALYSIS OF HODGKIN'S LYMPHOMA PATIENTS WITH INCOMPLETE METABOLIC RESPONSE AFTER FIRST-LINE SYSTEMIC THERAPY

Donna (MengWen) Liao¹, Mahmood Aminilari³, May Tsao², Sameera Ahmed³, Xiang Y. Ye³, Anca Prica³, Ur Metser³, Amit Singnurkar², David Hodgson³

¹University of Toronto, Toronto, ON

²Sunnybrook Health Sciences Centre, Toronto, ON

³Princess Margaret Cancer Centre, Toronto, ON

2

IMPROVING VISUALIZATION AND GUIDANCE FOR BREAST BRACHYTHERAPY: DEVELOPING, COMMISSIONING, AND IMPLEMENTING A HIGH-RESOLUTION ROBOTIC 3D ULTRASOUND SYSTEM

Claire Zhang^{1,2}, Shuwei Xing³, Lori Gardi³, Aaron Fenster³, Juanita Crook¹, Deidre Batchelar^{1,2}, Michelle Hilts^{1,2}

¹British Columbia Cancer, Kelowna, BC

²The University of British Columbia Okanagan, BC

³Western University, London, ON

3

PLASMA EBV DNA IN NASOPHARYNGEAL CANCER (NPC) TREATED WITH DEFINITIVE RADIOTHERAPY (RT)

Eric Stutheit-Zhao¹, Andrew Hope¹, John N. Waldron¹, Brian O'Sullivan¹, Jolie Ringash¹, Andrea McNiven¹, Tony Tadic¹, John Kim¹, Ali Hosni Abdalaty¹, Ian King¹, Shao Hui Huang¹, Scott V. Bratman¹, John Cho¹, Ezra Hahn¹, Katrina Rey-McIntyre¹, Lawson Eng², Andrew McPartlin¹, Lillian Siu², Anna Spreafico², C. Jillian Tsai¹

¹University of Toronto, ON

²Princess Margaret Cancer Centre, Toronto, ON

4

ASSOCIATION OF ARTIFICIAL INTELLIGENCE-SCREENED INTERSTITIAL LUNG DISEASE WITH RADIATION PNEUMONITIS AND MORTALITY IN LOCALLY ADVANCED NON-SMALL CELL LUNG CANCER

Hannah Bacon¹, Nicholas McNeil¹, Tirth Patel², Mattea Welch³, Xiang Y. Ye³, Andrea Bezjak¹, Benjamin H. Lok¹, Srinivas Raman¹, Meredith Giuliani¹, John Cho¹, Alexander Sun¹, Patricia Lindsay¹, Geoffrey Liu³, Sonja Kandel², Chris McIntosh², Tony Tadic¹, Andrew Hope¹

¹University of Toronto, Toronto, ON

²University Health Network, Toronto, ON

³Princess Margaret Cancer Centre, Toronto, ON

5

NON-COPLANAR, ADAPTIVE, LUNG PATIENT TREATMENT PLANNING ON A LOW-COST, KILOVOLTAGE, ISOCENTRIC RADIOTHERAPY (KVIRT) SYSTEM

Jericho O'Connell¹, Magdalena Bazalova-Carter¹, Michael Weil²

¹University of Victoria, Victoria, BC

²N/A, Half Moon Bay, CA

6

TRAJECTORY VMAT OPTIMIZATION USING A 4PI INTENSITY MAP

Jakob Marshall¹, Marie-Pierre Milette², Benjamin Mou², Andrew Jirasek³, Tony Teke²

¹University of British Columbia, Okanagan, BC

²British Columbia Cancer, Kelowna, BC

³University of British Columbia, Kelowna, BC

12:30-2:00

Lunch / Exhibit Hall

Foyer, Level 4

12:45-1:45 Industry Symposium

Jarry/Joyce, Level A

12:45-1:45

Women in Radiation Medicine

Kafka/Lamartine, Level A

Title:

Speaker:

Objectives: By the end of this session, the participants will be able to:

Xx

xx

2:00-3:00

Resident and Young Investigator Competition – Abstract #7-12

Moderators: Mei Ling Yap, Uwe Oelfke

Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover the top ranked resident and young investigator research projects in radiation medicine and medical physics across Canada.
- Describe the latest radiation oncology and medical physics research taking place in Canada by radiation oncology residents and medical physics graduate students.

7

PREDICTING THE NEED FOR A REPLAN IN OROPHARYNGEAL CANCER: A RADIOMIC, CLINICAL, AND DOSIMETRIC MODEL

Tricia Chinnery, Pencilla Lang, Anthony Nichols, Sarah Mattonen
Western University, London, ON

8

STEREOTACTIC BODY RADIOTHERAPY FOR BREAST CANCER SPINAL METASTASES IS ASSOCIATED WITH LOW RATES OF LONG-TERM LOCAL FAILURE AND VERTEBRAL COMPRESSION FRACTURE INDEPENDENT OF MOLECULAR STATUS

Bryce Thomsen, Danny Vesprini, Liang Zeng, Sten Myrehaug, Chai-lin Tseng, Jay Detsky, Hanbo Chen, Beibei Zhang, Katarzyna Jerzak, Eshetu Atenafu, Pejman Maralani, Hany Soliman, Arjun Sahgal
University of Toronto, Toronto, ON

9

MACHINE LEARNING PLAN ADAPTATION IMPROVES QUALITY OF ULTRA-HYPOFRACTIONATED ADAPTIVE RADIATION THERAPY FOR PROSTATE CANCER ON A 1.5T MR-LINEAR ACCELERATOR

Aly Khalifa¹, Jeff Winter², Tony Tadic², Chris McIntosh¹, Thomas G Purdie²

¹University of Toronto, Toronto, ON

²Princess Margaret Cancer Centre, Toronto, ON

10

LONG-TERM OUTCOMES FOLLOWING FAIRLY BRIEF ANDROGEN SUPPRESSION AND STEREOTACTIC RADIOTHERAPY IN HIGH-RISK PROSTATE CANCER: UPDATE FROM THE FASTR/FASTR-2 TRIALS

Terence Tang¹, George Rodrigues^{1,2}, Glenn Bauman^{1,2}

¹Western University, London, ON

²London Health Sciences Centre, London, ON

11

CLINICAL UTILITY OF 3D TRANSVAGINAL ULTRASOUND IN GYNECOLOGIC PERINEAL TEMPLATE INTERSTITIAL HIGH-DOSE-RATE BRACHYTHERAPY

Devin Van Elburg¹, Tyler Meyer^{1,2}, Kevin Martell², Robyn Banerjee², Tien Phan², Sarah Quirk^{3,4}, Aaron Fenster⁵, Michael Roumeliotis⁶

¹University of Calgary, Calgary, AB

²Tom Baker Cancer Centre, Calgary AB

³Brigham & Women's Hospital, Boston, MA

⁴Harvard Medical School, Boston, MA

⁵Western University, London, ON

⁶Johns Hopkins University, Baltimore, MD

12

SAFETY AND EFFICACY OF STEREOTACTIC BODY RADIOTHERAPY FOR ULTRA-CENTRAL THORACIC TUMOURS

George Li, Hendrick Tan, Humza Nusrat, Hanbo Chen Joe Chang, Jeevin Shahi, Ian Poo, May Tsao, Yee Yung, Patrick Cheung, Alexander V. Louie

Sunnybrook-Odette Cancer Centre, Toronto, ON

3:00-3:30 – Wall Closing

3:30-4:30

CARO Oral Session 1 – Education and Professional Development – Abstract #13-18

Moderators: Andrew Arifin, Paris Ann Ingledew

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Understand the importance of conducting education and professional development research within radiation oncology
- Discover ongoing educational scholars research taking place within radiation oncology.
- Discover ongoing professional development research taking place within radiation oncology.

13

IMPACT OF NATIONAL CONFERENCE-ASSOCIATED MEDICAL STUDENT RESEARCH AND MENTORSHIP AWARD IN RADIATION ONCOLOGY ON MEDICAL STUDENTS, RESIDENT MENTORS, AND RESEARCH PROJECT SUPERVISORS
Ruijia (Rachel) Jin¹, Che Hsuan (David) Wu², Meredith Giuliani³, Corinne M. Doll⁴, Jolie Ringash³, Danny Lavigne⁵,
Paris-Ann Ingledew¹

¹University of British Columbia, Vancouver, BC

²McMaster University, Hamilton, ON

³University of Toronto, Toronto, ON

⁴University of Calgary, Calgary, AB

⁵Université de Montréal, Montréal, QC

14

CANADIAN NATIONAL SURVEY OF CONTINUING PROFESSIONAL DEVELOPMENT FOR RADIATION ONCOLOGISTS:
WHERE ARE THE GAPS AND BARRIERS?

Sympascho Young¹, Gurjit Parmar², Nicolas Siriani-Ayoub², Timothy Nguyen¹

¹Western University, London, ON

²University of British Columbia, Vancouver, BC

15

PATIENT EDUCATION PRACTICES AND PREFERENCES OF INTERPROFESSIONAL RADIATION ONCOLOGY PROVIDERS
Jie Jane Chen¹, Anna M. Brown², Allison E. Garda³, Ellen Kim³, Sarah A. McAvoy³, Subha Perni Subha Perni³, Michael
K. Rooney Michael K. Rooney², Kevin Shiu, MD Kevin Shiu, MD³, Kristi L. Tonning³, Laura Warren³, Daniel W.
Golden³, Jennifer Croke⁴, Radiation Oncology Education Collaborative Study Group (ROECSG) Patient Education
Working Group N/A²

¹University of California, San Francisco, CA

²N/A, Wausau, WI

³N/A, Rochester, MN

⁴Princess Margaret Cancer Centre, Toronto, ON

16

EXPLORING TRENDS IN WORK SATISFACTION, STRESS AND BURNOUT AMONG ONCOLOGISTS AND ONCOLOGY
TRAINEES

Selena Laprade^{1,2}, Ege Babadagli^{1,2}, Gordon Locke^{1,2}, Joanne Meng^{1,2}, Angela McNeil¹, Julie Renaud¹, Elisabeth Cisa-
Paré³, Jessica Chan⁴, Jiheon Song⁵, Rajiv Samant^{1,2}

¹The Ottawa Hospital Cancer Centre, Ottawa, ON

²University of Ottawa, Ottawa, ON

³Northern Ontario School of Medicine, Sudbury, ON

⁴University of British Columbia, Vancouver, BC

⁵University of Toronto, Toronto, ON

17

CHALLENGES IN DEFINING OLIGOMETASTATIC DISEASE IN CLINICAL PRACTICE.

Inmaculada Navarro-Domenech, Aisling Barry, Jane Tsai, Grace Ma, Philip Wong

University of Toronto, Toronto, ON

18

SUCCESSFUL IMPLEMENTATION OF A RADIATION THERAPIST-LED INTERDISCIPLINARY COURSE FOR LEARNING
MALIGNANT SPINAL CORD COMPRESSION MANAGEMENT

Yiming Michael Zhu, Brian Chwyl, Susan Fawcett, Fan Yang, Heather Warkentin, Sunita Ghosh, Brock Debenham,
Adele Duimering, Mustafa Al Balushi

University of Alberta, Edmonton, AB

3:30-4:30

CARO-COMP Oral Session 1 – Thoracic and CNS Malignancies – Abstract #19-24

Moderators:

Salon ABC, Level B

Objectives: By the end of this session, the participants will be able to:

- Understand ongoing research within CNS malignancies.
- Understand ongoing research within thoracic CNS malignancies.

19

PREDICTING ESOPHAGITIS: A SECONDARY ANALYSIS OF THE PALLIATIVE RADIATION FOR ADVANCED CENTRAL LUNG TUMOURS WITH INTENTIONAL AVOIDANCE OF THE ESOPHAGUS (PROACTIVE) PHASE III RANDOMIZED TRIAL
Muhammad I. Karamat¹, Douglas A. Hoover¹, Patrick V. Granton², Alysa Fairchild³, Andrea Bezjak^{4,5}, Darin Gopaul⁶, Liam Mulroy⁷, Anthony Brade^{4,8}, Andrew Warner^{9,1}, Brock Debenham³, David Bowes⁷, Joda Kuk⁶, Alexander Sun³, George B. Rodrigues^{9,1}, David Palma^{9,1}, Alexander V. Louie^{10,11}

¹London Health Sciences Centre, London, ON

²Erasmus Medical Center, Rotterdam, NL

³University of Alberta, Edmonton, AB

⁴University of Toronto, Toronto, ON

⁵Princess Margaret Cancer Centre, Toronto, ON

⁶Grand River Regional Cancer Centre, Kitchener, ON

⁷Dalhousie University, Halifax, NS

⁸Credit Valley Cancer Centre, Toronto, ON

⁹Western University, London, ON

¹⁰Carleton University, Ottawa, ON

¹¹Sunnybrook Health Sciences Centre, Toronto, ON

20

PNEUMONITIS RISK FOLLOWING COMBINED OSIMERTINIB AND THORACIC RADIOTHERAPY IN EGFR-MUTATED NON-SMALL CELL LUNG CANCER

David Y. Mak¹, Humza Nusrat², Michael Yan², Ambika Parmar², Ian Poon², Yee Ung², May Tsao², Andrew Warner³, Patrick Cheung², Alexander V. Louie²

¹University of Toronto, Toronto, ON

²Sunnybrook-Odette Cancer Centre, Toronto, ON

³London Health Sciences Centre, London, ON

21

NUTRITIONAL INTERVENTIONS TO SUPPORT LUNG CANCER PATIENTS UNDERGOING THORACIC RADIATION: A SYSTEMATIC REVIEW

Lise Wolyniuk², Andrew N Youssef², Alexander V Louie¹, Adam Mutsaers¹

¹University of Toronto, Toronto, ON

²Western University, London, ON

22

DOSE ESCALATED RADIOTHERAPY IS ASSOCIATED WITH IMPROVED OUTCOMES FOR HIGH GRADE MENINGIOMA

Arjun Sahgal¹, Sten Myrehaug¹, Hany Soliman¹, Chia-Lin Tseng¹, Jay Detsky¹, Hanbo Chen¹, Mary-Jane Lim-Fat¹, Mark Ruschin¹, Eshetu Atenafu², Julia Keith¹, Nir Lipsman¹, Chris Heyn¹, Pejman Maralani¹, Sunit Das¹, Farhad Pirouzmand¹, K. Liang Zeng¹

¹University of Toronto, Toronto, ON

²University Health Network, Toronto, ON

23

A RETROSPECTIVE STUDY COMPARING OUTCOMES IN MATCHED PATIENTS WITH POOR PROGNOSIS TREATED WITH TARGETED CONVENTIONAL VOLUMETRIC MODULATED ARC RADIOTHERAPY VERSUS WHOLE BRAIN RADIOTHERAPY FOR BRAIN METASTASES

Gurjit Parmar, Timothy Kong, Jeremy Hamm, Mitchell Liu, Shilo Lefresne, Hannah Carolan, Eric Berthelet, Jessica Chan, Alan Nichol
University of British Columbia, Vancouver, BC

24

STEREOTACTIC BODY RADIOTHERAPY FOR POSTERIOR ELEMENT ONLY SPINAL METASTASES: OUTCOMES AND VALIDATION OF RECOMMENDED CLINICAL TARGET VOLUME DELINEATION PRACTICE

Laura Burgess^{1,2}, K. Liang Zeng^{1,2}, Sten Myrehaug^{1,2}, Hany Soliman^{1,2}, Chia-Lin Tseng^{1,2}, Jay Detsky^{1,2}, Hanbo Chen^{1,2}, Daniel Moore-Palhares^{1,2}, Christopher D. Witiw^{1,3}, Beibei Zhang^{1,2}, Pejman Maralani^{1,4}, Arjun Sahgal^{1,2}

¹University of Toronto, Toronto, ON

²Sunnybrook-Odette Cancer Centre, Toronto, ON

³St. Michael's Hospital, Toronto, ON

⁴Sunnybrook Health Sciences Centre, Toronto, ON

3:30-4:30

COMP Oral Session 1 – Special Topics in Medical Physics – Abstract #25-30

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Understand the breadth of research in medical physics.
- Discover new areas of medical physics research and innovation.

25

DUAL ENHANCEMENT IN THE RADIOSENSITIVITY OF PROSTATE CANCER THROUGH NANOTECHNOLOGY AND CHEMOTHERAPEUTICS

Nolan Jackson¹, Abdulaziz Alhussan¹, Iona Hill², Kyle Bromma¹, Belal Abousaïda², Jessica Morgan¹, Yuri Mackeyev², Wayne Beckham³, Sunil Krishnan², Devika Chithrani¹

¹University of Victoria, Victoria, BC

²University of Texas Health Science Center, Houston, TX

³British Columbia Cancer, Victoria, BC

26

CLINICAL IMPLEMENTATION OF VMAT BASED TOTAL BODY IRRADIATION

Dan Morton, Laura Drever, Cody Crewson, Chantal Perry, Philip Wright
Saskatchewan Cancer Agency, Saskatoon, SK

27

A NOVEL APPROACH TO LONGITUDINAL BEAM STABILITY IN A COMPACT DIELECTRIC WALL ACCELERATOR FOR PROTON THERAPY

Christopher Lund^{1,2}, Paul Jung^{3,4}, Morgan Maher^{1,2}, Julien Bancheri^{1,2}, Thomas Planche^{4,3}, Rick Baartman^{3,4}, Jan Seuntjens^{5,6,7}

¹McGill University Health Centre, Montréal, QC

²McGill University, Montréal, QC

³TRIUMF, University of Victoria, BC

⁴University of Victoria, Victoria, BC

⁵Princess Margaret Cancer Centre, Toronto, ON

⁶University Health Network, Toronto, ON

⁷University of Toronto, Toronto, ON

28

MEASUREMENT OF NEUTRON DOSE FOR VMAT AND SRS TREATMENT AT ENERGIES BETWEEN 6 AND 10 MV

Marco Carlone, Ray Yang, Derek Hyde, Nathan Becker, John Cocarell
British Columbia Cancer, Kelowna, BC

29

POTENTIAL OF GOLD NANOPARTICLES IN CURRENT RADIOTHERAPY USING A CO-CULTURE MODEL OF CANCER CELLS AND CANCER ASSOCIATED FIBROBLASTS

Abdulaziz Alhussan¹, Nicholas Palmerely¹, Julian Smazynski², Joanna Karasinska³, Daniel J. Renouf³, David Scaheffer⁴, Wayne Beckham², Abraham Alexander², Devika Chithrani¹

¹University of Victoria, Victoria, BC

²British Columbia Cancer, Victoria, BC

³British Columbia Cancer, Vancouver, BC

⁴University of British Columbia, Vancouver, BC

30

CHARACTERIZING A NOVEL 4 MV FFF BEAM FOR CLINICAL APPLICATION

Isabelle St-Martin¹, Ermias Gete², Carrie-Lynne Swift², Cheryl Duzenli^{1,2}

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Vancouver, BC

4:30-5:45

Refreshment Break/ePoster Viewing Reception

5:00-6:00

Medical Physics for World Benefit

Centre Ballroom, Level 4

5:30-6:30pm

Fun Run/Walk

Meet in the Lobby at 5:20pm

7:30

Welcome Reception

The Windsor Ballrooms

1170, rue Peel, Bureau 110

Tel: (514) 393-3588

www.lewindsormontreal.com

Friday September 22, 2023

6:30-8:00

CCPM and COMP Ex Comm Breakfast Meeting

Salon 7, Level 3

7:15-8:00

Breakfast Symposium

Jarry/Joyce, Level A

Exhibit Hall

Foyer, Level 4

7:00-8:00

CARO AGM

Ballroom, Level 4

8:00-8:15

Welcome and Introduction Day 2

Ballroom, Level 4

8:15-8:20

Introduction

xx

8:20-9:00

CARO Gold Medal and Gordon Richards Lecture

Title

David Hodgson

Objectives: By the end of this session, the participants will be able to:

Xx

xx

9:00-9:15

Question & Answer Period

9:15-10:00

COMP Gold Medal

Ballroom, Level 4

xx

10:00-10:30

Refreshment Break/Exhibits

Foyer, Level 4

10:30-11:30

CARO Oral Session 2 – Fellow Competition – Abstract #31-36

Moderators: Andrew Arifin

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing research taking place by radiation oncology fellows.
- Discuss the top ranked Canadian Radiation Oncology Fellow research abstracts.

31

PROSPECTIVE LONGITUDINAL ASSESSMENT OF QUALITY OF LIFE AFTER STEREOTACTIC ABLATIVE RADIOTHERAPY FOR OLIGOMETASTASES: ANALYSIS OF THE POPULATION-BASED SABR-5 PHASE II TRIAL

Ella Mae Cruz-Lim^{1,2}, Benjamin Mou, ^{1,2}, Sarah Baker^{1,3}, Gregory Arbour¹, Kelsey Stefanyk¹, Will Jiang^{1,3}, Mitchell Liu^{1,4}, Alanah Bergman^{1,4}, Devin Schellenberg^{1,3}, Abraham Alexander^{1,6}, Tanya Berrang^{1,6}, Andrew Bang^{1,4}, Nick Chng⁵, Quinn Matthews⁵, Hannah Carolan^{1,4}, Fred Hsu^{1,7}, Stacy Miller^{1,5}, Siavash Atrchian^{1,2}, Elisa Chan^{1,4}, Clement Ho^{1,3}, Islam Mohamed^{1,2}, Angela Lin^{1,2}, Vicky Huang³, Ante Mestrovic⁶, Derek Hyde^{1,2}, Chad Lund^{1,3}, Howard Pai^{1,6}, Boris Valev^{1,6}, Shilo Lefresne^{1,4}, Scott Tyldesley^{1,4}, Robert Olson^{1,5}

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Kelowna, BC

³British Columbia Cancer, Surrey, BC

²British Columbia Cancer, Vancouver, BC

²British Columbia Cancer, Prince George, BC

²British Columbia Cancer, Victoria, BC

²British Columbia Cancer, Abbotsford, BC

32

RATE OF PACHYMENINGEAL FAILURE FOLLOWING ADJUVANT WBRT VERSUS SRS IN PATIENTS WITH BRAIN METASTASES

Enrique Gutierrez Valencia¹, Aristotelis Kalyvas², Kaiyun Yang², Ruth Lau², Benazir Khan¹, Barbara-Ann Millar¹, Normand Laperriere¹, Tatiana Conrad¹, Alejandro Berlin¹, Jessica Weiss¹, Xuan Li¹, Gelareh Zadeh², Mark Bernstein², Paul Kongkham², David B. Shultz¹

¹Princess Margaret Cancer Centre, Toronto, ON

²University of Toronto, Toronto, ON

33

EFFICACY OF ULTRA HYPOFRACTIONED RADIOTHERAPY COMBINED WITH HDR BRACHYTHERAPY

Ingrid Sidibé, Marie-Michèle Beaudry, Damien Carignan, Marie-Anne Froment, William Foster, Eric Vigneault, Cindy Magnan, Sylviane Aubin, Janelle Morrier, Eric Poulin, Frédéric Lacroix, Marie-Claude Lavallée, Luc Beaulieu, André-Guy Martin

CHU de Québec-Université Laval, Quebec City, QC

34

TESTOSTERONE RECOVERY FOLLOWING ANDROGEN SUPPRESSION AND PROSTATE RADIOTHERAPY (TRANSPORT) - UPDATED ANALYSES FROM THE MARCAP CONSORTIUM

Wee Loon Ong^{1,2}, Holly Wilhalme³, Jeremy Millar^{4,5}, Allison Steigler⁶, James Denham⁶, David Joseph⁷, Soumyajit Roy⁸, Shawn Malone⁹, Nicholas Nickols³, Matthew Rettig³, Luca Valle³, Michael Steinberg³, Yilun Sun^{10,11}, Nicholas Zaorsky^{10,11}, Daniel Spratt^{10,11}, Luis Souhami¹², Nathalie Carrier¹³, Abdenour Nabid¹³, Amar U. Kishan³

¹University of Toronto, Toronto, ON

²Sunnybrook-Odette Cancer Centre, Toronto, ON

³University of California Los Angeles, CA

⁴Alfred Health, Melbourne, AU

⁵Monash University, Melbourne, AU

⁶University of Newcastle, Newcastle, AU

⁷University of Western Australia, Perth, AU

⁸Rush University Medical Center, Chicago, IL

⁹The Ottawa Hospital, Ottawa, ON

¹⁰University Hospitals Seidman Cancer Center, Cleveland, OH

¹¹Case Western Reserve University, Cleveland, OH

¹²McGill University Health Centre, Montréal, QC

¹³Centre hospitalier Universitaire de Sherbrooke, Sherbrooke, QC

35

OUTCOMES FOLLOWING ALTERED FRACTIONATED RADIOTHERAPY ALONE IN PATIENTS WITH TNM-7 STAGE III/IV HEAD AND NECK SQUAMOUS CELL CARCINOMA (HNSCC)

Marc Vincent Barcelona^{1,2}, Shao Hui Huang^{1,2}, Jie Su², Li Tong^{1,2}, Scott Bratman^{1,2}, John Cho^{1,2}, Ezra Hahn^{1,2}, Andrew Hope^{1,2}, Ali Hosni Abdalaty^{1,2}, John Kim^{1,2}, Andrew McPartlin^{1,2}, Brian O'Sullivan^{1,2}, Jolie Ringash^{1,2}, Lillian Siu^{1,2}, Anna Spreafico^{1,2}, Lawson Eng^{1,2}, Christopher MKL Yao^{1,2}, Wei Xu^{1,2}, John Waldron^{1,2}, Chiaojung Jillian Tsai^{1,2}

¹University of Toronto, Toronto, ON

²Princess Margaret Cancer Centre, Toronto, ON

36

DAWN OF STAGING FOR HEAD AND NECK SOFT TISSUE SARCOMA: VALIDATION OF THE NOVEL 8TH EDITION AJCC T CLASSIFICATION AND PROPOSED STAGE GROUPINGS

Rohan Salunkhe¹, Shao Hui Huang¹, Brian O'Sullivan¹, Susie Su¹, Wei Xu¹, Ali Hosni¹, John Waldron¹, Jonathan Irish¹, John deAlmeida¹, Ian Witterick¹, Eric Monteiro¹, Ralph Gilbert¹, Albiruni Razak¹, Lingxin Zhang², Dale Brown¹, David Goldstein¹, Patrick Gullane¹, Li Tong¹, Ezra Hahn¹

¹Princess Margaret Cancer Centre, Toronto, ON

²Mount Sinai Hospital, Toronto, ON

10:30-11:30

COMP Oral Session 2 – Radiation Dosimetry – Abstract #37-42

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Understand current topics of research in Radiation Dosimetry.
- Discover novel applications of Radiation Dosimetry research in medical physics.

37

DIRECT VALIDATION OF ACUROS XB FOR DOSE-TO-MEDIUM CALCULATIONS IN BONE-SURROGATE USING CALORIMETRY MEASUREMENTS

Stanislaw Szpala¹, James Renaud², Bryan Muir², Alexandra Bourguoin², Kirpal Kohli¹, Malcolm McEwen²

¹British Columbia Cancer, Surrey, BC

²National Research Council of Canada, Ottawa, ON

38

PLASTIC SCINTILLATOR DOSIMETRY OF ULTRAHIGH DOSE-RATE 200 MEV ELECTRONS AT CLEAR

Alexander Hart¹, Cloé Giguère², Nolan Esplen¹, Joseph Bateman³, Pierre Korysko³, Wilfrid Farabolini⁴, Roberto Corsini⁴, Manjit Dosanjh³, Luc Beaulieu², Magdalena Bazalova-Carter¹

¹University of Victoria, Victoria, BC

²Université Laval, Quebec City, QC

³University of Oxford, Geneva, CH

⁴CERN, Geneva, CH

39

EVALUATION OF ORGAN ABSORBED DOSES IN INTRAOPERATIVE RADIOTHERAPY OF GLIOBLASTOMA

David Santiago Ayala Alvarez¹, Peter G F Watson², Marija Popovic², Veng Jean Heng¹, Michael D C Evans², Valerie Panet-Raymond², Jan Seuntjens³

¹McGill University, Montréal, QC

²McGill University Health Centre, Montréal, QC

³University Health Network, Toronto, ON

40

PROTON THERAPY MEDIATES DOSE REDUCTIONS TO CRITICAL BRAIN ORGANS AT RISK WHICH ARE ASSOCIATED WITH BETTER COGNITION IN CHILDREN WITH MEDULLOBLASTOMA

Julianna Sienna¹, Lisa Kahalley², Donald Mabbott³, David Grosshans⁴, Anna Theresa Santiago⁵, Arnold Paulino⁴, Gohar Shahwar Manzar⁴, Hitesh Dama⁵, Murali Chintagumpala⁶, Mehmet Fatih Okcu⁶, William Whitehead⁶, Vijay Ramaswamy⁷, Normand Laperriere⁵, Thomas Merchant⁸, Tim Craig⁵, Derek Tsang⁵

¹McMaster University, Hamilton, ON

²Baylor College of Medicine, Houston, TX

³University of Toronto, Toronto, ON

⁴The University of Texas MD Anderson Cancer Center, Houston, TX

⁵Princess Margaret Cancer Centre, Toronto, ON

⁶Texas Children's Cancer Center, Houston, TX

⁷Hospital for Sick Children, Toronto, ON

⁸St. Jude Children's Research Hospital, Memphis, TN

41

CALORIMETRIC VERIFICATION OF ELECTRON ULTRA-HIGH DOSE RATE (E-FLASH) DOSIMETRY ON A TRUEBEAM LINAC

Cheryl Duzenli¹, Tania Karan², James Renaud³, Bryan Muir³, M. Peter Petric², Don TA¹, Claudia Mendez⁴, Malcolm McEwen³

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Vancouver, BC

³National Research Council of Canada, Ottawa, ON

⁴British Columbia Cancer, Abbotsford, BC

42

RADIATION SURVEY OF A TRUEBEAM LINAC OPERATING IN ELECTRON FLASH-RT MODE

Andrew K. H. Robertson, Amy Frederick, Sheila MacMahon, M. Peter Petric
British Columbia Cancer, Vancouver, BC

11:30-12:30

CARO Oral Session 3– Canadian Brachytherapy Group – Abstract #43-47, 161

Moderators:

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing brachytherapy research taking place within radiation oncology.
- Discuss the top ranked brachytherapy research abstracts.

43

BRACHYTHERAPY-ON-CHIP: A MICROFLUIDIC SETUP FOR IN VITRO INTERROGATION OF HYPOXIC SPHEROIDS

Rodin Chermat^{1,2}, Elena Refet-Mollof^{1,2}, Jean-François Carrier^{1,3}, Philip Wong^{1,4}, Thomas Gervais^{1,2}, Yuji Kamio³

¹Centre de Recherche du Centre Hospitalier de l'Université de Montréal (crCHUM), Montréal, QC

²Polytechnique Montréal, Montréal, QC

³Centre Hospitalier de l'Université de Montréal, Montréal, QC

⁴Princess Margaret Cancer Centre, Toronto, ON

44

DOSIMETRIC PARAMETERS PREDICTIVE OF TREATMENT-RELATED TOXICITY IN HIGH DOSE-RATE BRACHYTHERAPY AS MONOTHERAPY FOR PROSTATE CANCER

Jiheon Song, Mark Corkum, Andrew Loblaw, Hans Chung, Chia-Lin Tseng, Patrick Cheung, Ewa Szumacher, Stanley Liu, William Chu, Melanie Davidson, Matt Wronski, Liying Zhang, Alexandre Mamedov, Gerard Morton
University of Toronto, Toronto, ON

45

HEALTH-RELATED QUALITY OF LIFE AFTER COMBINED EXTERNAL BEAM AND EITHER HIGH DOSE RATE (HDR) OR LOW DOSE RATE (LDR) BRACHYTHERAPY: DID THE RECTAL DOSE FROM THE LDR BRACHYTHERAPY MAKE A DIFFERENCE?

Felipe Castro-Canovas^{1,2}, Cynthia Araujo^{1,2}, Juanita Crook^{1,2}, Gregory Arbour², Deidre Batchelar^{1,2}, Nikitha Moideen^{1,2}, Michelle Hilts^{1,2}, Ross Halperin¹, David Kim¹, David Petrik¹, Jim Rose¹, Francois Bachand^{1,2}

¹British Columbia Cancer, Kelowna, BC

²University of British Columbia, Vancouver, BC

46

PATTERNS OF RELAPSE AND BIOCHEMICAL CONTROL IN INTERMEDIATE RISK PROSTATE CANCER TREATED WITH HIGH DOSE RATE BRACHYTHERAPY (HDRB) MONOTHERAPY

Jayson Paragas¹, Luis Souhami¹, Simon Gauvin¹, Leticia Alvaredo¹, Richard Sioufi², Gabriela Stroian¹, Doris Marti¹, Marie Duclos¹

¹McGill University, Montréal, QC

²Centre Hospitalier Anna Laberge, Chateauguay, QC

47

LONG-TERM DISEASE-FREE SURVIVAL AND HEALTH-RELATED QUALITY OF LIFE RESULTS OF HIGH-DOSE-RATE BRACHYTHERAPY AS MONOTHERAPY FOR LOW AND INTERMEDIATE-RISK PROSTATE CANCER TREATED IN A COMMUNITY CANCER CENTRE

Raphael Rezkallah¹, Pierre-Yves McLaughlin¹, Alain Haddad², Mathieu Pharand-Charbonneau³, Debbie Wright³, Marc Gaudet²

¹McGill University, Montréal, QC

²University of Ottawa, Ottawa, ON

³Hôpital de Gatineau, Gatineau, QC

161

REAL-TIME RADIOBIOLOGICAL MODELLING: THE DEVELOPMENT OF A TOOL FOR ON-THE-FLY BED ASSESSMENT FOR HDR BRACHYTHERAPY

Matthew Mouawad¹, Niranjan Venugopal^{1,2}

¹CancerCare Manitoba, Winnipeg, MB

²University of Manitoba, Winnipeg, MB

11:30-12:30

COMP Oral Session 3 – Treatment Planning – Abstract #49-54

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Understand applications of treatment planning to advance radiotherapy treatment.
- Recognize novel research in the area of Radiotherapy treatment planning.

49

NOPAUSE: DEVELOPMENT AND VALIDATION OF CLINICAL PROTOCOLS FOR A NOVEL VMAT PLAN AUTOMATION SYSTEM

Nick Chng¹, Stacy Miller², Robert Olson²

¹British Columbia Cancer, Prince George, BC

²University of British Columbia, Vancouver, BC

50

IN-HOUSE SCRIPTING AND 3D PRINTING PROCESS FOR CUSTOM FLEXIBLE SILICONE BOLUS CREATION

Quinn Matthews, Nathan Smela, Kim Lawyer, Nick Chng

British Columbia Cancer, Prince George, BC

51

DOSIMETRIC AND QUALITATIVE EVALUATION OF MAGNETIC RESONANCE FOR CALCULATING ATTENUATION (MRCAT) FOR HEAD AND NECK RADIOTHERAPY

Allan Hupman, Lee Chin, Melanie Davidson

¹University of Toronto, Toronto, ON

52

AUTOMATED TANGENTS-ONLY TREATMENT PLANNING FOR BREAST CANCER RADIOTHERAPY USING THE ECLIPSE SCRIPTING APPLICATION PROGRAMMING INTERFACE (ESAPI)

Muhammad I. Karamat¹, Owen T. Karnas², Jamiel Nasser³, Jason Vickress^{2,1}, Scott Karnas^{2,1}, Jonatan Snir^{2,1}, Jeff Kempe¹, Jennifer Neeb¹, Wendy Wells¹, Diana SlegersKrekewich¹, Stewart Gaede^{2,1}

¹London Health Sciences Centre, London, ON

²Western University, London, ON

³University of Waterloo, Waterloo, ON

53

AUTOPLANNING SOFTWARE FOR 3D PRINTABLE INTERSTITIAL GYNECOLOGICAL BRACHYTHERAPY TEMPLATES

Michael Kudla¹, Francois Bachand², Deidre Batchelar², Tony Teke²

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Kelowna, BC

54

FEASIBILITY STUDY AND DOSIMETRIC EVALUATION OF A VMAT TECHNIQUE FOR PARTIAL BREAST IRRADIATION

Hedi Mohseni, Michelle Chan, Alana Pellizzari, Teodor Stanescu

Princess Margaret Cancer Centre, Toronto, ON

12:30-2:00

Lunch / Exhibits

Foyer, Level 4

12:45-1:45 Industry Symposium

Jarry/Joyce, Level A

12:45-1:15

Yoga

Salon 4, Level 2

2:00-3:00

CARO Oral Session 4 – Stereotactic Radiotherapy – Abstract #55-60

Moderators:

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discuss current and ongoing stereotactic radiotherapy related research taking place within radiation oncology.
- Discuss current and ongoing oligometastases related research taking place within radiation oncology.

55

PREDICTING DOSIMETRY OF STEREOTACTIC ABLATIVE RADIOTHERAPY FOR THE TREATMENT OF MULTIPLE LUNG LESIONS

Edward Wang¹, Hassan Abdallah¹, Jonatan Snir², Jaron Chong¹, David Palma¹, Sarah Mattonen¹, Pencilla Lang¹

¹Western University, London, ON

²London Health Sciences Centre, London, ON

56

STEREOTACTIC ABLATIVE RADIOTHERAPY FOR OLIGO-PROGRESSIVE CANCERS: RESULTS OF THE RANDOMIZED PHASE II STOP TRIAL

Devin Schellenberg¹, Zsolt Gabos², Adele Duimering², Brock Debenham², Alysa Fairchild², Fleur Huang², Lindsay Rowe², Diane Severin², Meredith Giuliani³, Andrea Bezjak³, Benjamin Lok³, Srinivas Raman³, Peter Chung³, Yizhou Zhao¹, Clement Ho¹, Michael Lock⁴, Alexander Louie³, Shilo Lefresne⁵, Hannah Carolan⁵, Mitchell Liu⁵, Vivian Yau⁶, Allison Ye⁶, Rob Olson⁶, Benjamin Mou⁷, Islam Mohamed⁷, David Petrik⁷, Maryam Dosani⁸, Howard Pai⁸, Boris Valev⁸, Stewart Gaede⁹, Andrew Warner⁴, David Palma⁴

¹British Columbia Cancer, Surrey, BC

²University of Alberta, Edmonton, AB

³University of Toronto, Toronto, ON

⁴London Health Sciences Centre, London, ON

⁵British Columbia Cancer, Vancouver, BC

⁶British Columbia Cancer, Prince George, BC

⁷British Columbia Cancer, Kelowna, BC

⁸British Columbia Cancer, Victoria, BC

⁹Western University, London, ON

57

ABLATIVE RADIATION THERAPY TO RESTRAIN EVERYTHING SAFELY TREATABLE (ARREST) - A PHASE 1 STUDY OF SABR FOR POLY-METASTATIC DISEASE

Timothy Nguyen¹, Sherif Ramadan¹, Abhirami Hallock², David Palma¹, Mark Corkum³, Melissa O'Neil¹, Anders Celinski¹, Hatim Fakir¹, Michael Lock¹, Pencilla Lang¹, Vikram Velker¹, Glenn Bauman¹

¹Western University, London, ON

²N/A, Niagara, ON

³University of Ottawa, Ottawa, ON

58

SHOULD ORGANS AT RISK (OARS) BE PRIORITIZED OVER TARGET VOLUME COVERAGE IN STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR) FOR OLIGOMETASTASES? A SECONDARY ANALYSIS OF THE POPULATION-BASED PHASE II SABR-5 TRIAL

Reno Eufemon Cereno^{1,2}, Benjamin Mou^{1,2}, Sarah Baker^{1,3}, Nick Chng⁴, Gregory Arbour¹, Alanah Bergman^{1,5}, Mitchell Liu^{1,5}, Devin Schellenberg^{1,3}, Quinn Matthews⁴, Vicky Huang³, Ante Mestrovic⁶, Derek Hyde², Abraham Alexander^{1,6}, Hannah Carolan^{1,5}, Fred Hsu^{1,7}, Stacy Miller^{1,4}, Siavash Atrchian^{1,2}, Elisa Chan^{1,5}, Clement Ho^{1,3}, Islam Mohamed^{1,2}, Angela Lin^{1,2}, Tanya Berrang^{1,6}, Andrew Bang^{1,5}, Will Jiang^{1,4}, Chad Lund^{1,3}, Howard Pai^{1,6}, Boris Valev^{1,6}, Shilo Lefresne^{1,5}, Scott Tyldesley^{1,5}, Robert Olson^{1,4}

¹University of British Columbia,

²British Columbia Cancer, Kelowna, BC

³British Columbia Cancer, Surrey, BC

⁴British Columbia Cancer, Prince George, BC

⁵British Columbia Cancer, Vancouver, BC

⁶British Columbia Cancer, Victoria, BC

⁷British Columbia Cancer, Abbotsford, BC

59

POLYMETASTATIC RECURRENCE-FREE SURVIVAL IN PATIENTS WITH REPEAT OLIGOMETASTASES ON THE SABR-5 TRIAL

Wei Liu¹, Subhadip Das², Robert Anton Olson³, Sarah Baker⁴, Emma Dunne¹, Jee Suk Chang¹, Devin Schellenberg⁴, Tanya Berrang², Fred Hsu⁵, Will Jiang⁴, Benjamin Mou⁶, Shilo Lefresne¹, Scott Tyldesley¹, Mitchell Liu¹

¹British Columbia Cancer, Vancouver, BC

²British Columbia Cancer, Victoria, BC

³British Columbia Cancer, Prince George, BC

⁴British Columbia Cancer, Surrey, BC

⁵British Columbia Cancer, Abbotsford, BC

⁶British Columbia Cancer, Kelowna, BC

60

STEREOTACTIC BODY RADIOTHERAPY (SBRT) FOR SACRAL METASTASES: DEVIATION FROM RECOMMENDED TARGET VOLUME DELINEATION PREDICTS HIGHER RISK OF LOCAL FAILURE

Daniel Palhares, Kang Liang Zeng, Sten Myrehaug, Hanbo Chen, Hany Soliman, Chia-Lin (Eric) Tseng, Jeremie Larouche, Pejman Maralani, Jeff Wilson, Mark Ruschin, Beibei Zhang, Eshetu Atenafu, Arjun Sahgal, Jay Detsky
University of Toronto, Toronto, ON

2:00-3:00

CARO-COMP Oral Session 2 – AI and Big Data – Abstract #61-66

Moderators: Brian Liszewski, xx

Salon ABC, Level B

Objectives: By the end of this session, the participants will be able to:

- Learn about AI and its applications in Radiation Oncology and Medical Physics.
- Discuss ongoing and future uses of Big Data.

61

DEVELOPMENT OF BIG DATA HEALTH CARE FRAMEWORK IN ONCOLOGY WITH DYNAMIC INTEGRATION OF MULTIMODAL HEALTH INFORMATION

Jee Suk Chang¹, Eun Sil Baek², Jin Sung Kim², Robert Olson³, Sang Joon Shin²

¹British Columbia Cancer, Vancouver, BC

²Yonsei University College of Medicine, Seoul, KR

³British Columbia Cancer, Prince George, BC

62

OPERATIONAL ONTOLOGY FOR RADIATION ONCOLOGY (OORO) - A PROFESSIONAL SOCIETY-BASED, MULTI-STAKEHOLDER CONSENSUS DRIVEN INFORMATICS STANDARD SUPPORTING CLINICAL AND RESEARCH USE OF REAL-WORLD DATA

Charles Mayo¹, Clifton David Fuller², Mary Feng³, Kristy Brock², Randi Kudner⁴, Peter Balter², Jeffrey Buchsbaum⁵, Amanda Caissie⁶, Elizabeth Covington¹, Emily Daugherty⁷, David Sup Hong Jr⁸, Andra Krauze⁹, Jon Kruse¹⁰, Todd McNutt¹¹, Richard Popple¹², Susan Richardson¹³, Jatinder Palta¹⁴, Thomas Purdie¹⁵, Lawrence Tarbox¹⁶, Ying Xiao¹⁷

¹University of Michigan, Ann Arbor, MI

²The University of Texas MD Anderson Cancer Center, Houston, TX

³University of California San Francisco, CA

⁴ASTRO, Arlington, VA

⁵National Cancer Institute, Bethesda, MD

⁶Dalhousie University, Halifax, NS

⁷University of Cincinnati, Cincinnati, OH

⁸University of Southern California, Los Angeles, CA

⁹National Institute of Health, Washington, DC

¹⁰Mayo Clinic, Rochester, MN

¹¹Johns Hopkins University, Baltimore, MD

¹²University of Alabama, Birmingham, AL

¹³Washington University, Springfield, MO

¹⁴Virginia Commonwealth University, Richmond, VA

¹⁵Princess Margaret Cancer Centre, Toronto, ON

¹⁶University of Arkansas for Medical Sciences, Little Rock, AR

¹⁷University of Pennsylvania, Philadelphia, PA

63

CLINICAL ACCEPTABILITY OF ARTIFICIAL INTELLIGENCE-SCREENED INTERSTITIAL LUNG DISEASE (AI-ILD) IN LUNG CANCER PATIENTS TREATED WITH RADIOTHERAPY

Nicholas McNeil¹, Hannah Bacon¹, Sonja Kandel^{1,2}, Tirth Patel², Mattea Welch³, Xiang Y. Ye³, Chris McIntosh¹, Andrea Bezjak³, Benjamin H. Lok³, Srinivas Raman³, Meredith Giuliani³, John Cho³, Alexander Sun³, Patricia Lindsay¹, Geoffrey Liu³, Tony Tadic¹, Andrew Hope³

¹University of Toronto, Toronto, ON

²University Health Network, Toronto, ON

³Princess Margaret Cancer Centre, Toronto, ON

64

A PROSPECTIVE STUDY OF MACHINE LEARNING-ASSISTED RADIOTHERAPY PLANNING FOR PATIENTS RECEIVING 54 Gy TO THE BRAIN

Derek Tsang¹, Grace Tsui², Anna Santiago³, Harald Keller², Thomas Purdie², Chris McIntosh², Nancy La Macchia², Amy Parent², Hitesh Dama², Sameera Ahmed², Tim Craig², Normand Laperriere¹, Barbara-Ann Millar¹, David Hodgson¹

¹University of Toronto, Toronto, ON

²Princess Margaret Cancer Centre, Toronto, ON

³University Health Network, Toronto, ON

65

PRELIMINARY VALIDATION OF SYNTHETIC CT FROM CBCT IMAGES FOR DOSE RECONSTRUCTION IN LUNG CANCER RADIOTHERAPY

Dipal Patel¹, Teodor Stanescu^{1,2}, Jean-Pierre Bissonnette^{1,2}

¹University of Toronto, Toronto, ON

²Princess Margaret Cancer Centre, Toronto, ON

66

DUAL-CENTRE VALIDATION OF USING MRI RADIOMICS AND MACHINE LEARNING TO PREDICT STEREOTACTIC RADIOSURGERY OUTCOMES

David DeVries¹, Terence Tang², Ghada Alqaidey³, Ali Albweady⁴, Andrew Leung¹, Joanna Laba¹, Frank Lagerwaard⁵, Jaap Zindler⁶, George Hajdok¹, Aaron Ward¹

¹Western University, London, ON

²London Health Sciences Centre, London, ON

³King Fahad Armed Forces Hospital, Jeddah, SA

⁴Unaizah College of Medicine and Medical Sciences, Unaizah, SA

⁵Amsterdam UMC - Vrije University Medical Center, Amsterdam, NL

⁶Haaglanden Medical Centre, Den Haag, NL

2:00-3:00

COMP Oral Session 4 – Motion and Adaptation – Abstract #67-72

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Learn about motion management and treatment adaptation in radiotherapy.
- Understand novel research to address motion management and treatment adaptation in radiotherapy.

67

DOSE VERIFICATION OF MRI-GUIDED ONLINE ADAPTIVE TREATMENT DELIVERY FOR UGI SITES

Oleksii Semeniuk, Andrea Shessel, Michael Velec, Cathy Carpino-Rocca, Jelena Lukovic, Ali Hosni, Laura Dawson, Teodor Stanescu

University of Toronto, Toronto, ON

68

SEMI-AUTOMATED METHODS FOR ROUTINE QUALITY ASSURANCE FOR OPTICAL SURFACE IMAGING SYSTEMS

Eric Wright, Kaleigh Young

University of British Columbia, Kelowna, BC

69

EXPERIMENTAL VALIDATION OF A NOVEL METHOD OF DOSE ACCUMULATION FOR THE RECTUM

Haley Patrick, Emily Poon, Kayla O'Sullivan-Steben, John Kildea

McGill University, Montréal, QC

70

ACTIVE SURFACE MONITORING FOR REAL-TIME CLINICAL GUIDANCE DURING PELVIC ADAPTIVE RADIOTHERAPY

Timothy Keiper¹, Grace Gwe-Ya Kim¹

University of California San Diego, La Jolla, CA

71

MODELLING THE 6-DOF RESPIRATORY MOTION OF THE HEART IN CARDIAC RADIOSURGERY USING MULTI-LEAD TRACKING

Jakob Marshall¹, Alanah Bergman², Tania Karan², Marc Deyell³, Devin Schellenberg², Richard Thompson⁴, Justin Poon¹, Steven Thomas²

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Vancouver, BC

³University of British Columbia, Vancouver, BC

⁴University of Alberta, Edmonton, AB

72

A DEEP LEARNING APPROACH TO TUMOUR MOTION FORECASTING FOR SURFACE GUIDED RADIATION THERAPY BASED ON VOLUMETRIC 4D-CT

Timothy Yau, Ting-Yim Lee, Stewart Gaede

Western University, London, ON

3:00-4:00

CARO Oral Session 5 – Mixed Clinical – Abstract #73-78

Moderators:

Quest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Learn about current and ongoing research taking place within radiation oncology in a variety of cancer sites.
- Learn about ongoing and current research taking place within radiation oncology for benign conditions.

73

HYPOFRACTIONATED RADIOTHERAPY FOR HEMATOLOGICAL MALIGNANCIES DURING COVID-19 PANDEMIC AND BEYOND

Febin Antony^{1,2}, Arbind Dubey^{2,1}, Pascal Lambert¹, Pamela Skrabek^{1,2}, Naseer Ahmed^{1,2}

¹CancerCare Manitoba, Winnipeg, MB

²University of Manitoba, Winnipeg, MB

74

HYPOFRACTIONATED PREOPERATIVE RADIOTHERAPY 30GY IN 5 FRACTIONS FOR SOFT TISSUE SARCOMA OF THE EXTREMITY

Rie Asso¹, Fabio Cury¹, Constanza Martinez¹, Neelabh Rastogi², Paul Ramia¹, Carolyn Freeman¹

¹McGill University Health Centre, Montréal, QC

²McGill University, Montréal, QC

75

HEATMAPS TO ASSESS TUMOUR MOTION PROBABILITY WITH MRCINE IN HEAD AND NECK CANCER

Adam Mutsaers, Yonatan Weiss, Lee Chin, Ian Poon, Andrew Bayley, Geordi Pang, Angus Lau, Irene Karam
University of Toronto, Toronto, ON

76

A NOVEL STRATEGY TO ENHANCE RADIOTHERAPY EFFICACY: RESULTS FROM THE PROSPECTIVE PHASE I CLINICAL TRIAL OF MR-GUIDED FOCUSED ULTRASOUND-STIMULATED MICROBUBBLES (MRgFUS+MB) TREATMENT FOR BREAST CANCER

Daniel Palhares, Archya Dasgupta, Murtuza Saifuddin, Ling Ho, Lin Lu, Maria Lourdes Anzola Pena, Shopnil Prasla, Ewa Szumacher, Edward Chow, Danny Vesprini, Irene Karam, Hany Soliman, Arjun Sahgal, Gregory Czarnota
University of Toronto, Toronto, ON

77

SINGLE PRE-OPERATIVE RADIATION THERAPY (SPORT-CK) TRIAL FOR LOW-RISK BREAST CANCER: EARLY RESULTS OF A PHASE 2 STUDY

Dima Mahmoud¹, Leticia Alvarado¹, Christine Lambert¹, Sarkis Meterissian¹, Michael Yassa², Francine Tremblay¹, Naim Otaky¹, John Keyeserlingk¹, Valerie Panet-Raymond¹, Neil Kopek¹, Marc David¹, Marie Duclos¹, David Fleischer¹, Ari Meguerditchian², Antoine Loutfi¹, Tarek Hijal¹

¹McGill University, Montréal, QC

²University of Montréal, Montréal, QC

78

CARDIAC SBRT FOR THE TREATMENT OF VENTRICULAR TACHYCARDIA

Matthew Volpini, Katie Lekx-Toniolo, Calum Redpath, Andrew Crean, David Tiberi, Graham Cook
The Ottawa Hospital, Ottawa, ON

3:00-4:00

CARO-COMP Oral Session 3 – Education and Professional Development – Abstract #79-84

Moderators: Joanne Alfieri, Vanessa Di Lalla

Salon ABC, Level B

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing education research taking place within radiation oncology and medical physics.
- Discover ongoing professional development research taking place within radiation oncology and medical physics.

79

VIRTUAL MENTORING FOR MEDICAL PHYSICISTS: GUIDANCE PROVIDED BY A GLOBAL ONLINE PERCEPTIONS SURVEY

Jacob Van Dyk¹, Matt Jalink², John Schreiner², Robert Jeraj³

¹Western University, London, ON

²Queen's University, Kingston, ON

³University of Wisconsin, Madison, WI

80

VIRTUAL REALITY SIMULATOR FOR LINAC SAFETY TRAINING

Varlukhin Anton¹, Geordi Pang^{2,3}, Syed Bilal Ahmad⁴, Humza Nusrat²

¹Toronto Metropolitan University, Toronto, ON

²Sunnybrook Health Sciences Centre, Toronto, ON

³University of Toronto, Toronto, ON

⁴Thunder Bay Regional Health Sciences Centre, Toronto, ON

81

THE DEVELOPMENT AND IMPLEMENTATION OF SIMULATION-BASED INTER-PROFESSIONAL EDUCATION FOR RADIATION ONCOLOGY AND MEDICAL PHYSICS RESIDENTS IN RADIATION THERAPY SAFETY EVENTS

Michelle Nielsen¹, Andrew Bayley¹, Jay Detsky¹, Nicole Harnett², Andrea McNiven²

¹Odette Cancer Centre, Toronto, ON

²Princess Margaret Cancer Centre, Toronto, ON

82

FUTURE-PROOFING THE RADIATION THERAPY WORKFORCE: THE PROMISE OF AN MR-INTEGRATED RADIATION THERAPY TRAINING PROGRAM

Darby Erler^{1,2}, Nicole Harnett^{2,3}, Ruby Bola¹, Mikki Campbell², Laura D'Alimonte^{2,4}

¹Sunnybrook Health Sciences Centre, Toronto, ON

²University of Toronto, Toronto, ON

³Princess Margaret Cancer Centre, Toronto, ON

⁴Windsor Regional Hospital, Windsor, ON

83

IMPACT OF THE COVID-19 PANDEMIC ON ACADEMIC PRODUCTIVITY IN ONCOLOGY: A JOURNAL-, CONFERENCE- AND AUTHOR-LEVEL ANALYSIS

Vivian Tan, Andrew Warner, Anthony Nichols, Eric Winquist, David Palma

Western University, London, ON

84

REMOTE DELIVERY OF A MINDFULNESS-BASED INTERVENTION TO DECREASE STRESS LEVELS AND PROMOTE COPING AMONG HEALTH-CARE WORKERS DURING THE COVID-19 PANDEMIC

Joelle Helou¹, Aisling Barry², Philip Ye³, Fei-fei Liu³, Colleen Dickie³, Anet Julius³, Daniel Letourneau³, Philip Wong³, Laura Dawson³, Mary Elliott³

¹Western University, London, ON

²University of Cork College, Cork, IE

³University of Toronto, Toronto, ON

3:00-4:00

COMP Oral Session 5 – Imaging – Abstract #85-90

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Understand applications of Medical Imaging in Radiation Oncology and Medical Physics.
- Ascertain current research in Medical Imaging.

85

MR DISTORTION ARTIFACT CORRECTION FOR SPINE SABR PATIENTS WITH PEDICLE SCREWS

Andrew K. H. Robertson¹, Keith Wachowicz², Teo Stanesco³, Emma Dunne¹, Mitchell Liu¹, Monty Martin¹, Hannah Carolan¹, Steven Thomas¹

¹British Columbia Cancer, Vancouver, BC

²University of Alberta, Edmonton, AB

³Princess Margaret Cancer Centre, Toronto, ON

86

HIGH-RESOLUTION DEDICATED 3D AUTOMATED BREAST ULTRASOUND WITH COMPLEMENTARY IMAGING FOR POINT-OF-CARE BREAST CANCER SCREENING

Claire Park^{1,2}, Tiana Trumpour^{1,2}, Jeffrey Bax², Igor Gyacskov², David Tessier², Lori Gardi², Aaron Fenster^{1,2}

¹Western University, London, ON

²Robarts Research Institute, London, ON

87

ACCURATE VISUALIZATION OF STENTS THROUGH ARTIFACT REDUCTION WITH PHOTON-COUNTING DETECTOR CT

Devon Richtsmeier¹, Pierre-Antoine Rodesch¹, Kris Iniewski², William Siu³, Magdalena Bazalova-Carter¹

¹University of Victoria, Victoria, BC

²Redlen Technologies, Saanichton, BC

³Fraser Health Authority, New Westminster, BC

88

SODIUM CONCENTRATION MEASUREMENTS IN PROSTATE CANCER AND NORMAL TISSUE USING AN EXTERNAL SODIUM MRI BUTTERFLY COIL

Josephine Tan^{1,2,3}, Vibhuti Kalia¹, Jonathan Thiessen^{1,2}, Timothy Scholl^{1,3,4}, Alireza Akbari^{1,3}

¹Western University, London, ON

²Lawson Health Research Institute, London, ON

³Robarts Research Institute, London, ON

⁴Ontario Institute for Cancer Research, Toronto, ON

89

INTEGRATION OF IMAGING PHYSICISTS IN RADIATION ONCOLOGY

David Hintenlang, Kathleen Hintenlang, Michael Weldon, Nilendu Gupta, Xiangyu Yang, Xia Jiang, Jun Zhang, Nathan Quails

The Ohio State University, Columbus, OH

90

ROLE OF MRI-BASED RADIOMIC SIGNATURES IN PREDICTING LOCAL CONTROL AFTER STEREOTACTIC BODY RADIOTHERAPY FOR MALIGNANT LIVER TUMOURS

Arun Elangovan¹, Keith Wachowicz¹, Terence Riauka¹, Sunita Ghosh¹, Jihyun Yun¹, Aswin Abraham¹, Asmara Waheed¹, Helene Daly², Heather Warkentin¹, Diane Severin¹, Kurian Joseph¹

¹University of Alberta, Edmonton, AB

²Alberta Health Services, Edmonton, AB

4:00-5:00

Workshop 1 - Better Together: Embracing Sexual Orientation and Gender Diversity in Radiation Oncology, Radiation Therapy, Medical Physics, and Allied Health

Amanda Bolderston, Morgan Maher, Sarah Aubert, Jennifer Croke, Meghan Koo, Radim Barta

Salon ABC, Level B

By the end of this session, the participants will be able to:

- Explain common challenges faced by the 2SLGBTQ+ community in cancer care.
- Discuss respectful and inclusive communication approaches.
- Identify individual and programmatic methods to create a welcoming environment.

4:00-5:00

Workshop 2 - Workplace Engagement, Wellbeing and Mental Health: Navigating Burnout Culture

Mira Keyes, Christopher Thomas, Miller MacPherson, Ghada Aldosary

Salon 1, Level 2

By the end of this session, participants will be able to:

- Differentiate between burnout and chronic mental health conditions.
- Identify the drivers of each, and learn how vectors of neurodiversity can be leveraged at work.
- Understand the role of institutions in addressing mental health and burnout and empower leaders to develop effective well-being strategies for their teams.
- Learn how to create personalized mental health toolkits and how to utilize them as well as engage with leadership to promote resilience in the workplace.

4:00-5:00

Workshop 3 - Need-to-know AI for Non-experts: How to Differentiate Between Good and Bad AI

Hossein Naseri, Kayla O'Sullivan-Steben

Salon 6/7, Level 3

By the end of this session, participants will be able to:

- Understand the difference between good and bad AI tools/research in radiation oncology and medical physics.
- Have hands-on experience testing how the performance of an AI model can be influenced by changes in model parameters and database characteristics.
- Evaluate and critique AI tools and research for their clinical acceptability.

4:00-5:00

Workshop 4 - 70+ Years of Megavoltage Radiation Therapy: A Multidisciplinary Perspective

John Schreiner, Bernard Cummings, Julie Renaud

Jarry/Joyce, Level A

By the end of this session, participants will be able to:

- Review the development and progress of megavoltage radiation technologies.
- Describe the clinical impact as a result of the evolution of megavoltage technologies.
- Describe how the role of radiation therapists has been impacted by the evolution of megavoltage treatment technologies.

5:45 Buses start departing at the hotel

7:00

Dinner and Awards Ceremony

Cirque Eloize

Located in the former Dalhousie Station, a historic building in Old Montreal.

417 Berri Street, Montreal

(514) 596-3838

Saturday September 23, 2023

6:30-8:00

AAPM and COMP Ex Comm Breakfast Meeting
Salon 7, Level 3

7:00-8:00

Breakfast
Foyer, Level 4

8:00-8:45

Jean Roy Lecture
Centre Ballroom, Level 4
Moderators:

Bridging the Gap: Brachytherapy Training in Low Resource Settings
Maroie Barkati

Objectives: By the end of this session, the participants will be able to:

- Highlight the importance of brachytherapy as a cost-effective and viable treatment option for low resource settings in the context of global oncology.
- Share experiences and challenges encountered in teaching brachytherapy in low resource settings, with a focus on Africa.
- Explore future directions and potential advancements in brachytherapy for low resource settings.

8:45-9:00

Discussion

9:00-9:30

Refreshment Break
Foyer, Level 4

9:30-10:30

CARO Oral Session 6 – Survivorship and Population Science – Abstract #91-96

Moderators:
Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing population science research taking place within radiation oncology.
- Discover ongoing survivorship research taking place within radiation oncology.

91

PATIENT SELF-REPORTED OVERALL WELL-BEING CORRELATES WITH CONCURRENT CANCER-RELATED SYMPTOMS?

Catherine McKenna^{1,3}, Brook-Lynn Fleury^{1,2}, Ernest Osei^{1,3}, Johnson Darko^{1,3}

¹Grand River Regional Cancer Centre, Kitchener, ON

²Wilfred Laurier University, Waterloo, ON

³University of Waterloo, Waterloo, ON

92

HYPOFRACTIONATED DOSE-INTENSIFIED PALLIATIVE RADIOTHERAPY: 25 GY IN 5 FRACTIONS FOR ENHANCED SYMPTOM CONTROL

Jayson Paragas, Vanessa Di Lalla, Leticia Alvarado, Tanner Connell, Sonia Skamene, Marc David
McGill University, Montréal, QC

93

RISK FACTORS FOR UNSCHEDULED ACUTE CARE VISITS FOR GYNECOLOGIC ONCOLOGY PATIENTS RECEIVING RADIOTHERAPY

Aaron Dou¹, Mary Doherty², Xuan Li², Kathy Han¹, Stephanie L'heureux², Jelena Lukovic¹, Mike Milosevic¹, Genevieve Bouchard-Fortier², Jennifer Croke¹

¹University of Toronto

²N/A, Toronto, ON

94

EVALUATING GEOGRAPHIC ACCESS TO RADIOTHERAPY SERVICES IN CANADA

Oluwaseun Davies, Yang Xu, Shaun Loewen

¹University of Calgary, Calgary, AB

95

USE OF RADIATION THERAPY AMONG PATIENTS WITH EXTENSIVE-STAGE SMALL-CELL LUNG CANCER RECEIVING IMMUNOTHERAPY: CANADIAN CONSENSUS RECOMMENDATIONS

Alexander Sun¹, Barbara Melosky², Devin Schellenberg³, Bassam Abdulkarim⁴, Normand Blais⁵, Jonathan Greenland⁶, Alexander Louie¹, Stephanie Snow⁷, Geoffrey Liu¹

¹University of Toronto, Toronto, ON

²University of British Columbia, Vancouver, BC

³British Columbia Cancer, Surrey, BC

⁴McGill University, Montréal, QC

⁵University of Montréal, Montréal, QC

⁶St. John's, ⁷Dalhousie University, Halifax, NS

96

BREAST CANCER OUTCOMES OF PATIENTS WITH T4b DISEASE: A POPULATION-BASED RETROSPECTIVE ANALYSIS

Nicolas Siriani-Ayoub, Theodora Koulis, Lovedeep Gondara, Caroline Speers, Rekha Diocee, Caroline Lohrisch, Alan Nichol, Pauline Truong

University of British Columbia, Vancouver, BC

9:30-10:30

CARO-COMP Oral Session 4 – Basic and Translational Science – Abstract #97-102

Moderators:

Salon ABC, Level B

Objectives: By the end of this session, the participants will be able to:

- Learn about basic and translational science applications in Radiation Oncology and Medical Physics.
- Discuss novel research in basic and translational science.

97

PROBING MICROSTRUCTURAL CHANGES IN A MOUSE MODEL OF MILD TRAUMATIC BRAIN INJURY USING DIFFUSION MRI TECHNIQUES

Naila Rahman, Kathy Xu, Arthur Brown, Corey Baron

Western University, London, ON

98

RADIOSENSITIZATION OF GLIOBLASTOMA USING TARGETED INHIBITION OF N-MYRISTOYLATION

Deepak Dinakaran, Evan Wilson, Nicholas Rydzewski, Kevin Camphausen

National Institute of Health, Bethesda, MD

99

CHARACTERIZATION OF THE RADIATION RESPONSE AND PREVENTION OF RADIATION-INDUCED MALIGNANCIES IN LI-FRAUMENI SYNDROME

Pamela Psarianos, Katherine Sauberli-Stewart, Nicholas Fischer, David Malkin

University of Toronto, Toronto, ON

100

PROGNOSTIC ASSOCIATIONS OF THE NEUTROPHIL-TO-LYMPHOCYTE AND PLATELET-TO-LYMPHOCYTE RATIO IN PATIENTS TREATED WITH SURGERY FOR PLEURAL MESOTHELIOMA AFTER RADIOTHERAPY

Enrique Gutierrez Valencia, Nicholas McNeil, Rohan Salunkhe, Avipsa Das, Jessica Weiss, Natasha Leighl, Shaf Keshavjee, Marc de Perrot, Andrea Bezjak, Alexander Sun, John Cho
Princess Margaret Cancer Centre, Toronto, ON

101

RADIOTHERAPY UTILIZATION BASED ON MOLECULAR MARKER STATUS IN TREATMENT OF EARLY-STAGE ENDOMETRIAL CANCER

Jiheon Song, Amandeep Taggar, Elizabeth (Toni) Barnes, Hanbo Chen, Eric Leung
University of Toronto, Toronto, ON

102

A FULL BODY BLOOD FLOW MODEL FOR APPLICATIONS IN TBI DOSIMETRY

Cassidy Northway¹, Ingrid Spadinger²

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Vancouver, BC

9:30-10:30

COMP Oral Session 6 – AI and Big Data – Abstract #103-108

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Expand their understanding of AI and its applications in Radiation Oncology and Medical Physics.
- Discuss ongoing and future uses of Big Data in Radiation Oncology and Medical Physics.

103

PREDICTING LUNG DOSE FOR RIGHT-SIDED BREAST CANCER PATIENTS WITH TRADITIONAL MACHINE LEARNING AND NEURAL NETWORKS

Fletcher Barrett¹, Sarah Quirk^{2,3}, Owen Paetkau¹, Sangjune Lee¹, Philip McGeachy¹

¹University of Calgary, Calgary, AB

²Harvard Medical School, Boston, MA

³Brigham & Women's Hospital, Boston, MA

104

Automatic Treatment Plan Generation for Prostate Radiotherapy Using Deep Learning

Cody Church¹, Michelle Yap¹, Dal Granville²

¹N/A, Ottawa, ON

²Ottawa Hospital Research Institute, Ottawa, ON

105

IMPROVED DOSE PREDICTION FOR BREAST RADIOTHERAPY USING NOVEL ANATOMICAL MASK INPUTS FOR 3D DEEP LEARNING MODELS

Lance Moore, Fatemeh Nematollahi, Sandra Meyers, Kevin Moore, Kelly Kisling

University of California San Diego, CA

106

AN EFFICIENT PATIENT SELECTION METHOD FOR RAPIDPLAN MODEL DEVELOPMENT

Matthew Mouawad, David Sasaki

CancerCare Manitoba, Winnipeg, MB

107

CRANIAL METASTASIS DETECTION USING LONGITUDINAL VOXEL-WISE RADIOMICS AND DIFFUSION WEIGHTED IMAGING-BASED MACHINE LEARNING

Joseph Madamesila¹, Nicolas Ploquin¹, Salman Faruqi¹, Subhadip Das², Ekaterina Tchistiakova¹

¹University of Calgary, Calgary, AB

²University of British Columbia, Victoria, BC

108

CLINICAL APPLICATION OF AI-GENERATED CONTOURS IN PROSTATE ULTRASOUND BRACHYTHERAPY

Mathieu Goulet¹, Laurie Pilote¹, Émilie Brouillard¹, Dany Thériault^{1,2}, James Tsui³

¹Centre régional intégré de cancérologie, Lévis, QC

²Université Laval, Quebec City, QC

³McGill University Health Centre, Montréal, QC

10:30-11:30

CARO-COMP Poster Discussion Session 1 – Abstract #133-142

Moderators:

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing radiation medicine research taking place across a variety of areas.

133

PREDICTORS OF STAFF SATISFACTION, STRESS, AND BURNOUT AT A CANADIAN CANCER CENTRE

Ege Babadagli¹, Selena Laprade¹, Gordon Locke¹, Angela McNeil¹, Joanne Meng¹, Julie Renaud¹, Elisabeth Cisa-Pare², Jessica Chan³, Jiheon Song⁴, Rajiv Samant¹

¹University of Ottawa, Ottawa, ON

²Northern Ontario School of Medicine, Thunder Bay, ON

³University of British Columbia, Vancouver, BC

⁴University of Toronto, Toronto, ON

134

A QUALITATIVE ANALYSIS OF MEDICAL STUDENT REFLECTIONS FOLLOWING PARTICIPATION IN A CANADIAN RADIATION ONCOLOGY STUDENTSHIP

Brandon Chai¹, Meredith Giuliani², Joanne Alfieri³, Jeffery Cao^{4,9}, Andrea Bezjak², Michael Kim⁵, Che Hsuan David Wu⁶, Nauman Malik⁷, David Mak², Paris-Ann Ingledew^{1,8}

¹University of British Columbia, Vancouver, BC

²Princess Margaret Cancer Centre, Toronto, ON

³McGill University, Montréal, QC

⁴University of Calgary, Calgary, AB

⁵Dalhousie University, Halifax, NS

⁶British Columbia Cancer, Victoria, BC

⁷University of California, San Francisco, CA

⁸British Columbia Cancer, Vancouver, BC

⁹Tom Baker Cancer Centre, Calgary, AB

135

EXPLORING FAMILY PHYSICIAN TRAINING NEEDS TO IMPROVE CANCER PATIENT CARE

Marissa Sherwood¹, Janet Papadakos¹, Kulamahan Kulasegaram¹, Maria A. Martimianakis¹, Edward Kucharski², Meredith Giuliani¹

¹University of Toronto, Toronto, ON

²Casey House Hospital, Toronto, ON

136

INVESTIGATING A RESIDUAL NEURAL NETWORK TO GENERATE CUSTOMIZABLE RADIOFREQUENCY PULSES FOR MAGNETIC RESONANCE IMAGING

Seeger Nelson, Rebecca Feldman

University of British Columbia, Kelowna, BC

137

STEREOTACTIC BOOST AND SHORT-COURSE RADIOTHERAPY FOR P16-ASSOCIATED OROPHARYNX CANCER (SHORT-OPC): FIRST PLANNED INTERIM SAFETY ANALYSIS FROM A RANDOMIZED PHASE II TRIAL

Sweet Ping Ng¹, David C. Fuller², Adam S. Garden², David I. Rosenthal², Jack Phan², Phuc Felix Nguyen-Tan³, Ying Yuan², Edith Filion³, Denis Soulieres³, Apostolos Christopoulos³, Katherine Hutcheson², Anna Lee², Houda Bahig¹

¹Austin Health, Austin, TX

²The University of Texas MD Anderson Cancer Center, Houston, TX

³Centre Hospitalier de l'Université de Montréal, Montréal, QC

138

FIVE-YEAR FEASIBILITY STUDY OF A THREE-DAY RAPID ACCESS PALLIATIVE VMAT PROGRAM IN A TWO LINAC CENTRE

Quinn Matthews¹, Kim Lawyer¹, Evan Maynard¹, Robert Olson¹, Allison Ye¹, Vivian Yau¹, Stacy Miller¹, Boris Valev², Nick Chng¹

¹British Columbia Cancer, Prince George, BC

²British Columbia Cancer, Victoria, BC

139

EFFECT OF COBALT-60 CALIBRATION DOSE-RATE ON ARTERIOVENOUS MALFORMATION OBLITERATION AFTER STEREOTACTIC RADIOSURGERY

Victoria Anthes¹, Michael Schwartz², Michael Cusimano³, Ivan Radovanovic⁴, Abhaya Kulkarni⁵, Normand Laperriere⁶, David Payne⁶, Robert Heaton⁶, Monique van Prooijen⁶, Sunit Das³, Derek Tsang⁶

¹University of Toronto, Toronto, ON

²Sunnybrook Health Sciences Centre, Toronto, ON

³St. Michael's Hospital, Toronto, ON

⁴University Health Network, Toronto, ON

⁵Hospital for Sick Children, Toronto, ON

⁶Princess Margaret Cancer Centre, Toronto, ON

140

ADAPTIVE STAGED STEREOTACTIC RADIOSURGERY TO SALVAGE PREVIOUSLY IRRADIATED BRAIN METASTASES

Dana Shor, Kang Liang Zeng, Lori Holden, Hanbo Chen, Pejman Maralani, Chris Heyn, Beibei Zhang, Sten Myrehaug, Chia-Lin (Eric) Tseng, Jay Detsky, Hany Soliman, Arjun Sahgal

University of Toronto, Toronto, ON

141

TOXICITY AND ONE YEAR OUTCOMES IN A SERIES OF SIX PATIENTS RECEIVING STEREOTACTIC ARRHYTHMIA RADIOABLATION FOR VENTRICULAR TACHYCARDIA

Ian J. Gerard, Alfieri Joanne, Gabriela Stroian, Valeria Anglesio, Martin Bernier, Tarek Hijal, Sarah Konermann, Neil Kopek, Piotr Pater, Bruno Toscani Gomes da Silveira

McGill University, Montréal, QC

142

PATIENT-REPORTED DISTRESS AND ACUTE CARE UTILIZATION FOR CERVICAL CANCER PATIENTS UNDERGOING CONCURRENT CHEMO-RADIATION AND BRACHYTHERAPY

Areeb Hassan¹, Alyssa Macedo¹, Genevieve Bouchard-Fortier¹, Stephanie L'heureux², Manjula Mangati¹, Kathy Han², Candice Yu¹, Madeline Li², Jennifer Croke²

¹Princess Margaret Cancer Centre, Toronto, ON

²University of Toronto, Toronto, ON

10:30-11:30

CARO-COMP Poster Discussion Session 2 – Abstract #143-152

Moderators:

Salon ABC, Level B

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing radiation medicine research taking place across a variety of areas.

143

NOPAUSE: INITIAL EXPERIENCE DEPLOYING A NOVEL MULTI-CENTRE VMAT PLAN AUTOMATION SYSTEM

Nick Chng¹, Fred Cao¹, Michael Lamey², Sergei Zavgorodni³, Quinn Matthews¹, Parmveer Atwal⁴, Robert Olson¹

¹British Columbia Cancer Centre, Prince George, BC

²British Columbia Cancer Centre, Kelowna, BC

³British Columbia Cancer Centre, Victoria BC

⁴British Columbia Cancer Centre, Abbotsford, BC

144

VALIDATION OF GPU-ACCELERATED MONTE CARLO SIMULATIONS FOR PATIENT-SPECIFIC CT DOSE CALCULATIONS

Ronan Lefol¹, Yannick Lemaréchal¹, Jonathan Boivin², Philippe Després¹

¹Université Laval, Quebec City, QC

²CHU de Québec-Université Laval, Quebec City, QC

145

QUANTIFICATION OF RADIOMIC FEATURE VARIABILITY ACROSS PROVINCIAL COMPUTED TOMOGRAPHY SCANNERS

Lorna Tu^{1,2}, Herve Choi², Haley Clark^{1,3}, Bradford Gill², Scott Young², Samantha Lloyd^{1,2}

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Vancouver BC

³British Columbia Cancer, Surrey, BC

146

FIVE-YEAR RENAL FUNCTION OUTCOMES AFTER SABR FOR PRIMARY RENAL CELL CARCINOMA: A REPORT FROM THE INTERNATIONAL RADIOSURGERY ONCOLOGY CONSORTIUM OF THE KIDNEY (IROCK)

Vivian Tan¹, Alexander Louie², Andrew Warner¹, Muhammad Ali³, Alexander Muacevic⁴, Lee Ponsky⁵, Rodney Ellis⁶, Simon Lo⁷, Hiroshi Onishi⁸, Anand Swaminath⁹, Young Suk Kwon¹⁰, Scott Morgan¹¹, Fabio Cury¹², Bin Teh¹³, Anand Mahadevan¹⁴, Irving Kaplan¹⁵, William Chu², Raquibul Hannan¹⁰, Michael Staehler⁴, William Grubb¹⁶, Shankar Siva³, Rohann Correa¹

¹Western University, London, ON

²University of Toronto, Toronto, ON

³Peter MacCallum Cancer Centre, Melbourne, AU

⁴University of Munich Hospitals, Munich, DE

⁵Case Western Reserve University, Cleveland, OH

⁶GenesisCare, Cape Coral, FL

⁷University of Washington School of Medicine, Seattle, WA

⁸University of Yamanashi, Yamanashi, JP

⁹McMaster University, Hamilton, ON

¹⁰University of Texas Southwestern Medical Center, Dallas, TX

¹¹University of Ottawa, Ottawa, ON

¹²McGill University, Montréal, QC

¹³Houston Methodist Hospital Cancer Center and Research Institute, Houston, TX

¹⁴NYU Langone Health, New York, NY

¹⁵Beth Israel Deaconess Medical Center, Boston, MA

¹⁶Augusta University, Augusta, GA

147

EVALUATION OF VOLUMETRIC RESPONSE ASSESSMENT FROM STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR) FOR RENAL CELL CARCINOMA (RCC)

Daniel Schep^{1,2}, Ian Dayes^{1,2}, Himanshu Lukka^{1,2}, Kimmen Quan^{1,2}, Anil Kapoor^{2,3}, Jasmin Vansantvoort¹, Tom Chow¹, Anand Swaminath^{1,2}

¹Juravinski Cancer Centre, Hamilton, ON

²McMaster University, Hamilton, ON

³St. Joseph's Health Care, Hamilton, ON

148

IMPACT OF STATIN USE ON BIOCHEMICAL RECURRENCE IN PROSTATE CANCER PATIENTS TREATED WITH RADIATION THERAPY

Danny Lavigne¹, Kevin Kaulanjan², Benedikt Hoeh³, Fred Saad¹, Pierre I. Karakiewicz¹, Rocco Simone Flammia⁴, Luis Alex Kluth³, Philipp Mandel³, Felix K.H. Chun³, Daniel Tausky¹

¹Université de Montréal, Montréal, QC

²Université des Antilles, Pointe-à-Pitres, FR

³Goethe University Frankfurt am Main, Frankfurt am Main, FFM

⁴Sapienza Rome University, Rome, IT

149

ACCUMULATED KIDNEY DOSE IN RENAL STEREOTACTIC BODY RADIOTHERAPY: ANALYSIS FROM A PROSPECTIVE PHASE II TRIAL

Joelle Helou¹, Jeff Winter², Jerusha Padayache², Inmaculada Navarro², Tony Tadic², Srinivas Raman², Peter Chung², Padraig Warde², Antonio Finelli², Rob Hamilton², Tony Lam², Charles Catton², Alejandro Berlin², Jennifer Dang², Andrew McPartlin², Philip Ye², Laura Dawson², Rachel Glicksman²

¹Western University, London, ON

²University of Toronto, Toronto, ON

150

SUCCESS IS BEST WHEN IT IS SHARED: ONE DEPARTMENT'S INTERPROFESSIONAL TEAM EFFORT TO REDUCE WAIT TIME FOR HEAD AND NECK RADIATION THERAPY PATIENTS

Marc LeBlanc, Jenna Clayfield, Murali Rajaraman, Nathan Lamond, Monique Ashe, Peilong Zhang, Leah Hensel, Steven Burrell, Carol-Anne Davis
Dalhousie University, Halifax, NS

151

SURGEON, PATHOLOGIST AND PATHOLOGY TECHNICIAN EFFECTS ON NODAL YIELD AFTER A NECK DISSECTION

Veeral Desai¹, Adam Mutsaers², Rui Fu², Mark Khoury², Carlos Khalil², Peter Leventis², Antoine Eskander², Zain Husain²

¹Queen's University, Kingston, ON

²University of Toronto, Toronto, ON

152

AN UPDATE OF STEREOTACTIC BODY RADIOTHERAPY (SBRT) FOR THE PALLIATION OF UNIRRADIATED MUCOSAL HEAD AND NECK SQUAMOUS CELL CARCINOMA (SCC)

Mohammed Aldohan, Elwyn Zhang, Irene Karam, Andrew Bayley, Madette Galapin, Antoine Eskander, Kevin Higgins, Liying Zhang, Lee Chin¹, Ian Poon

¹University of Toronto, Toronto, ON

10:30-11:30

CARO-COMP Poster Discussion Session 3 – Abstracts #153-160, 162, 163

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing radiation medicine research taking place across a variety of areas.

153

BIOMARKER STATUS PREDICTS FOR LOCAL CONTROL FOLLOWING SPINE STEREOTACTIC BODY RADIOTHERAPY IN NON-SMALL CELL LUNG CANCER PATIENTS WITH SPINAL METASTASES

Dana Shor, Kang Liang Zeng, Hanbo Chen, Ines Menjak, Eshetu Atenafu, Chia-Lin (Eric) Tseng, Jay Detsky, Jeremie Larouche, Beibei Zhang, Hany Soliman, Pejman Maralani, Sten Myrehaug, Alexander V. Louie, Arjun Sahgal

¹University of Toronto, Toronto, ON

154

PROSTATE STEREOTACTIC RADIOTHERAPY WITH AND WITHOUT A RECTAL SPACER: EFFECTS ON DOSIMETRY AND EARLY ACUTE TOXICITY

Subhadip Das, Dominique Fortin, Isabelle Gagne, Winkle Kwan, Abraham Alexander

University of British Columbia, Victoria, BC

155

OUTCOMES OF HEAD AND NECK CUTANEOUS ANGIOSARCOMA TREATED IN THE IMRT ERA

Saheli Saha, Shao Hui Huang, Brian O'Sullivan, Jie Su, Wei Xu, Ali Hosni Abdalaty, John Waldron, Jonathan Irish, John de Almeida, Ian Witterick, Eric Monteiro, Ralph Gilbert, Charles Catton, Peter Chung¹, Dale Brown, David Goldstein, Albiruni Abdul Razak, Patrick Gullane, Ezra Hahn

University of Toronto, Toronto, ON

156

IMPACT OF IMMUNE, INFLAMMATORY, AND NUTRITIONAL INDICES ON OUTCOME IN PATIENTS WITH CERVICAL CANCER TREATED WITH DEFINITIVE (CHEMO) RADIOTHERAPY

Ruth Fullerton¹, Kevin Martell¹, Rutvij A. Khanolkar¹, Tien Phan¹, Robyn Banerjee¹, Tyler Meyer¹, Laurel Traptow², Martin Köbel¹, Prafull Ghatage¹, Corinne M. Doll¹

¹University of Calgary, Calgary, AB

²Tom Baker Cancer Centre, Calgary, AB

157

RECURRENCE RATES AND PATTERNS IN LOCALLY ADVANCED CERVICAL CANCER IN THE IMRT ERA: A SINGLE INSTITUTION EXPERIENCE

Bayan Malakouti-Nejad, Ege Babadagli, Krystine Lupe, Tien Le, Rajiv Samant

University of Ottawa, Ottawa, ON

158

PATTERNS OF TREATMENT AND OUTCOMES OF PATIENTS WITH BRAIN-ONLY METASTATIC BREAST CANCER

Badr Id Said, Ellen Warner, Hany Soliman, Veronika Moravan, Sten Myrehaug, Chia-Lin Tseng, Jay Detsky, Arjun Sahgal, Katarzyna Jerzak

University of Toronto, Toronto, ON

159

SBRT FOR EXTRACRANIAL OLIGOMETASTATIC HEAD AND NECK CANCER: A META-ANALYSIS

Adam Mutsaers¹, Aquila Akingbade², Liying Zhang¹, Ian Poon¹, Alexander V Louie¹, Antoine Eskander¹, Irene Karam¹

¹University of Toronto, Toronto, ON

²Western University, London, ON

160

OVOID APPLICATOR COMMISSIONING USING 2D OPTICAL SCINTILLATING IMAGING

Robert Weersink, Hedi Mohseni, Jette Borg, Maryam Golshan, Akbar Beiki-Ardakani, Alexandra Rink
University of Toronto, Toronto, ON

162

THE DEVELOPMENT AND ASSESSMENT OF A CORE-NEEDLE BIOPSY LOCALIZATION METHODOLOGY IMPLEMENTED DURING PROSTATE HIGH DOSE-RATE BRACHYTHERAPY TREATMENTS

Matthew Muscat¹, Jeff Andrews¹, Felipe Castro Canovas², Juanita Crook¹, Andrew Jirasek¹, Nathan Becker¹

¹University of British Columbia, Kelowna, BC

²British Columbia Cancer, Kelowna, BC

163

EVALUATING THE INTER-OBSERVER VARIABILITY IN THE DELINEATION OF RECTAL LESIONS IN ENDOSCOPY IMAGES

Alana Thibodeau-Antonacci¹, Corey Miller², Luca Weishaupt³, Aurélie Garant⁴, Te Vuong², Philippe Nicolai⁵, Shirin Enger^{1,3}

¹McGill University, Montréal, QC

²Jewish General Hospital, Montréal, QC

³Lady Davis Institute for Medical Research, Jewish General Hospital, Montréal, QC

⁴University of Texas Southwestern Medical Center, Dallas, TX

⁵Université de Bordeaux, Bordeaux, FR

11:30-11:45

Stretch Break

11:45-12:45

CARO Oral Session 7 – Gynecologic and Genito-urinary Malignancies – Abstract #109-114

Moderators: Joanne Alfieri

Ouest Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover and discuss current and ongoing gynecological oncology research taking place within radiation oncology.
- Discover and discuss ongoing genito-urinary oncology research taking place within radiation oncology.

109

CLINICAL VALIDATION OF HPV CTDNA FOR EARLY DETECTION OF RESIDUAL DISEASE FOLLOWING CHEMORADIATION IN CERVICAL CANCER

Kathy Han¹, Jinfeng Zou², Zhen Zhao², Zeynep Baskurt², Yangqiao Zheng², Elizabeth Barnes¹, Jennifer Croke¹, Anthony Fyles¹, Adam Gladwish¹, Magali Lecavalier-Barsoum³, Jelena Lukovic¹, Eve-Lyne Marchand⁴, Michael Milosevic¹, Amandeep Taggar¹, Scott Bratman¹, Eric Leung¹

¹University of Toronto, Toronto, ON

²University Health Network, Toronto, ON

³Jewish General Hospital, Montréal, QC

⁴University of Montréal, Montréal, QC

110

HYPOMAGNESEMIA AND SURVIVAL IN PATIENTS WITH CERVICAL CANCER TREATED WITH DEFINITIVE CHEMORADIOTHERAPY

Ruth Fullerton¹, Kevin Martell¹, Rutvij A. Khanolkar¹, Tien Phan¹, Robyn Banerjee¹, Tyler Meyer¹, Laurel Traptow², Martin Köbel¹, Prafull Ghatage¹, Corinne M. Doll¹

¹University of Calgary, Calgary, AB

²Tom Baker Cancer Centre, Calgary, AB

111

RADIATION THERAPY IN RECURRENT ENDOMETRIAL CANCER POST ROBOTIC HYSTERECTOMY; AN INSTITUTIONAL REVIEW

Zainab Al Habsi, Ericka Wiebe, Ananya Beruar, Sean Zhu, Sunita Ghosh, Jasmine Gill, Sophia Pin
University of Alberta, Edmonton, AB

112

IS HYPOFRACTIONATED WHOLE-PELVIS RADIOTHERAPY (WPRT) AS WELL TOLERATED AS CONVENTIONALLY FRACTIONATED WPRT IN PROSTATE CANCER PATIENTS? AN EARLY ANALYSIS OF THE HOPE-TRIAL

Lucas C. Mendez^{1,2}, Glenn Bauman^{1,2}, Ross Halperin³, Kevin Martell⁴, Vikram Velker^{1,2}, Belal Ahmad^{1,2}, Michael Lock^{1,2}, Aneesh Dhar^{1,2}, Bryan Schaly², Douglas Hoover², Andrew Warner², Juanita Crook³, David D'Souza^{1,2}

¹Western University, London, ON

²London Health Sciences Centre, London, ON

³British Columbia Cancer, Kelowna, BC

⁴University of Calgary, Calgary, AB

113

FINAL RESULTS FROM A PROSPECTIVE RANDOMIZED PILOT TRIAL OF STEREOTACTIC BODY RADIATION THERAPY VERSUS RADIOFREQUENCY ABLATION FOR THE MANAGEMENT OF SMALL RENAL MASSES (RADSTER)

Anand Swaminath¹, Raees Cassim¹, Braden Millan¹, Oleg Mironov¹, Priya Ahir², Camilla Tajzler³, Jen Hoogenes¹, Kimmen Quan¹, Edward Matsumoto¹, Anil Kapoor¹

¹McMaster University, Hamilton, ON

²St. Joseph's Health Care, Hamilton, ON

³N/A, Toronto, ON

114

STEREOTACTIC BODY RADIATION THERAPY (SBRT) AND HYPO-FRACTIONATED RADIATION THERAPY (HFRT) OUTCOMES FOR LOW AND INTERMEDIATE-RISK PROSTATE CANCER (PRCA): EXPERIENCE AT TWO ONTARIO CENTRES

Hsin-pei (Spencer) Hu^{1,2}, Gregory Anagnostopoulos^{2,1}, Mohammad Gouran-Savadkoobi^{1,2}, Ian Dayes^{1,2}, Adrian Ishkanian³, Abhirami Hallock³, Himanshu Lukka^{1,2}, Kimmen Quan^{1,2}, Kara Schnarr^{1,2}, David Cuthbert³, Mira Goldberg^{1,2}, Theodoros Tsakiridis^{1,3,2}

¹Hamilton Health Sciences, Hamilton, ON

²McMaster University, Hamilton, ON

³Niagara Health, St. Catharines, ON

11:45-12:45

CARO-COMP Oral Session 5 – Mixed Clinical Services – Abstract #115-120

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Understand current and ongoing research taking place within radiation oncology and medical physics in a variety of categories.

115

PREDICTORS OF TUMOUR DYNAMICS DURING A 6-WEEK COURSE OF CHEMORADIOTHERAPY FOR GLIOBLASTOMA

Wee Loon Ong^{1,2}, James Stewart¹, Arjun Sahgal^{1,2}, Hany Soliman^{1,2}, Chia-Lin Tseng^{1,2}, Jay Detsky^{1,2}, Ling Ho^{1,2}, Sunit Das¹, Pejman Maralani³, Nir Lipsman¹, Greg Stanisz⁴, James Perry^{1,2}, Hanbo Chen^{1,2}, Eshetu Atenafu^{5,1}, Angus Lau⁴, Mark Ruschin^{4,1}, Sten Myrehaug^{1,2}

¹University of Toronto, Toronto, ON

²Sunnybrook-Odetta Cancer Centre, Toronto, ON

³Sunnybrook Health Sciences Centre, Toronto, ON

⁴Sunnybrook Research Institute, Toronto, ON

⁵University Health Network, Toronto, ON

116

A CHARGED DEBATE: PHOTON VERSUS PROTON SBRT FOR HEAD AND NECK MUCOSAL PRIMARIES ACROSS TWO INSTITUTIONS

Adam Mutsaers¹, Lee Chin¹, He Catherine Wang², Mohammed Aldohan¹, Christopher Goodman³, Xiaodong Zhang², Madette Galapin¹, Anna Lee², G. Brandon Gunn², Andrew Bayley¹, Ian Poon¹, Jack Phan², Irene Karam¹

¹University of Toronto, Toronto, ON

²The University of Texas MD Anderson Cancer Center, Houston, TX

³Western University, London, ON

117

EVALUATION OF PLANNING TARGET VOLUME (PTV) IN THE OUTCOMES OF PROSTATE CANCER PATIENTS TREATED WITH MODERATE HYPOFRACTIONATED RADIOTHERAPY

Rania Soliman¹, Luis Souhami², Marie Duclos², Fabio Cury², Horacio Patrocinio², Sergio Faria²

¹McGill University, Montréal, QC

²McGill University Health Centre, Montréal, QC

118

CODE GREY IS STILL IN EFFECT: LESSONS LEARNED FROM A CYBERATTACK

Teri Stuckless^{1,2}, Donia MacDonald¹, Suzanne Drodge^{1,2}, Maria Corsten¹, Susan Costello¹, Astrid Billfalk-Kelly^{1,2}

¹Cancer Care Program, Eastern Health, NL

²Memorial University of Newfoundland and Labrador, NL

119

AN MRI-BASED CONVOLUTIONAL NEURAL NETWORK TO PREDICT BIOCHEMICAL RECURRENCE FOLLOWING RADIOTHERAPY FOR INTERMEDIATE AND HIGH RISK LOCALIZED PROSTATE CANCER

Negin Piran Nanekaran¹, Tony Felefly², Eranga Ukwatta¹, Nicola Schieda², Scott Morgan²

¹University of Guelph, Guelph, ON

²The Ottawa Hospital, University of Ottawa, Ottawa, ON

120

DESIGN OF PATIENT SPECIFIC MULTI-CATHETER GYNECOLOGICAL BRACHYTHERAPY APPLICATORS WITH CUSTOMIZABLE CATHETER POSITIONS

Jasmine Penney^{1,2}, Dr. Krista Chytk-Praznik^{2,1}, Dr. Amanda Cherpak^{2,1}

¹Dalhousie University, Halifax, NS

²Nova Scotia Health Authority, Halifax, NS

11:45-12:45

COMP Oral 7 Session – Brachytherapy – Abstract # 121-126

Moderators:

Salon ABC, Level B

Objectives: By the end of this session, the participants will be able to:

- Discover ongoing brachytherapy research taking place within Medical Physics.
- Learn about dosimetry and treatment planning applications and developments in brachytherapy.

121

NEURAL NETWORK DOSE PREDICTION FOR CERVICAL BRACHYTHERAPY: OVERCOMING DATA SCARCITY FOR APPLICATOR-SPECIFIC MODELS

Lance Moore, Karoline Kallis, Nuno Vasconcelos, Kelly Kisling, Dominique Rash, Catheryn Yashar, Jyoti Mayadev, Kevin Moore, Sandra Meyers

University of California San Diego, CA

122

IS SELENIUM-75 A FEASIBLE HDR BRACHYTHERAPY SOURCE?

Jake Reid¹, Shirin A. Enger¹, Jonathan Kalinowski¹, Andrea Armstrong², John Munro III³

¹Lady Davis Institute for Medical Research, Jewish General Hospital, Montréal, QC

²McMaster University, Hamilton, ON

³N/A, MA

123

COMMISSIONING OF AN OPEN-SOURCE MONTE CARLO CODE FOR LOW DOSE RATE BRACHYTHERAPY DOSE EVALUATION

Narjes Moghadam¹, Claire Zhang^{2,3}, Samuel Ouellet⁴, Dakota Mckeown^{2,5}, Joanna Cygler⁶, Michelle Hilts^{2,5}, Luc Beaulieu⁴, Rowan Thomson¹

¹Carleton University, Ottawa, ON

²British Columbia Cancer, Kelowna, BC

³University of British Columbia, Kelowna, BC

⁴Université Laval, Quebec City, QC

⁵University of British Columbia, Kelowna, BC

⁶The Ottawa Hospital, Ottawa, ON

124

DEVELOPMENT OF A NOVEL DOSIMETRY SOFTWARE FOR PATIENT-SPECIFIC INTRAVASCULAR BRACHYTHERAPY TREATMENT PLANNING ON OPTICAL COHERENCE TOMOGRAPHY IMAGES

Maryam Rahbaran¹, Jonathan Kalinowski¹, James Man Git Tsui^{2,3,4}, Joseph DeCunha⁵, Kevin Croce^{3,4}, Brian Bergmark^{3,4}, Philip Devlin^{3,4}, Shirin A. Enger¹

¹McGill University,

²McGill University Health Centre,

³Brigham & Women's Hospital,

⁴Harvard Medical School,

⁵The University of Texas MD Anderson Cancer Center, Houston, TX

125

TOWARD THE TRANSLATION OF RECTAL INTENSITY MODULATED BRACHYTHERAPY FOR FEASIBILITY AND SAFETY STUDIES

Jonathan Kalinowski¹, Shirin Enger²

¹McGill University, Montréal, QC

²Jewish General Hospital, Montréal, QC

126

INVESTIGATION OF A MONTE CARLO MODEL BASED DOSE CALCULATION FOR ¹⁰³Pd LOW DOSE RATE BREAST BRACHYTHERAPY

Dakota McKeown¹, Samuel Ouellet², Claire Zhang¹, Narjes Moghadam³, Eric Wright⁴, Felipe Castro Cánovas¹, Juanita Crook¹, Deidre Batchelar⁴, Joanna Cygler⁵, Luc Beaulieu², Rowan Thomson³, Michelle Hilts⁴

¹University of British Columbia, Kelowna, BC

²Université Laval, Quebec City, QC

³Carleton University, Ottawa, ON

⁴British Columbia Cancer Agency, Kelowna, BC

⁵The Ottawa Hospital Cancer Centre, Ottawa, ON

12:45-1:15

Refreshment Break

1:15-2:45

Plenary Abstract Orals – Abstract #127-132

Moderators:

Centre Ballroom, Level 4

Objectives: By the end of this session, the participants will be able to:

- Discover the top-ranked research abstracts in radiation oncology and medical physics, and how they impact our cancer population.
- Describe the results of innovative and practice changing research done by Canadian peers.

127

IMPACT OF BRACHYTHERAPY APPLICATOR ON CLINICAL OUTCOMES IN CERVIX CANCER: AN EMBRACE-I STUDY ANALYSIS

Monica Serban^{1,2}, Sofia Spampinato², Astrid de Leeuw³, Israel Fortin⁴, Nicole Nesvacil⁵, Christian Kirisits⁵, Maximilian Schmid⁵, Umesh Mahantshetty⁶, Peter Hoskin⁷, Barbara Segedin⁸, Kjersti Bruheim⁹, Fleur Huang¹⁰, Bradley Pieters¹¹, Remi Nout¹², Richard Pötter⁵, Kathrin Kirchheiner⁵, Ina Jürgenliemk-Schulz³, Kari Tanderup²

¹Princess Margaret Cancer Centre, Toronto, ON

²Aarhus University Hospital, Aarhus, DK

³University Medical Centre Utrecht, Utrecht, NL

⁴University of Montreal, Maisonneuve-Rosemont Hospital, Montreal, QC

⁵Comprehensive Cancer Center, Medical University of Vienna, Vienna, AT

⁶Tata Memorial Hospital, Mumbai, IN

⁷Cancer Centre, Mount Vernon Hospital, London, UK

⁸Institute of Oncology Ljubljana, University of Ljubljana, Ljubljana, SI

⁹The Norwegian Radium Hospital, Oslo University Hospital, Oslo, NO

¹⁰Cross Cancer Institute, University of Alberta, Edmonton, AB

¹¹University of Amsterdam, Amsterdam, NL

¹²Erasmus MC Cancer Institute, University Medical Center Rotterdam, Rotterdam, NL

128

LONG-TERM TOXICITY IN PATIENTS RECEIVING RADIOTHERAPY FOR ULTRACENTRAL STAGE I NON-SMALL CELL LUNG CANCER - A SECONDARY ANALYSIS OF THE LUSTRE RANDOMIZED TRIAL

Che Hsuan David Wu¹, Marcin Wierzbicki², Sameer Parpia³, Vijayananda Kundapur⁴, Alexis Bujold⁵, Edith Filion⁵, Harold Lau⁶, Sergio Faria⁷, Naseer Ahmed⁸, Nelson Leong⁴, Gordon Okawara³, Khalid Hirmiz⁹, Timothy Owen¹⁰, Alexander Louie¹¹, James Wright³, Timothy Whelan³, Anand Swaminath³

¹British Columbia Cancer, Victoria, Victoria, BC

²Juravinski Cancer Centre, Hamilton, ON

³McMaster University, Hamilton, ON

⁴University of Saskatchewan, Saskatoon, SK

⁵Université de Montréal, Montréal, QC

⁶University of Calgary, Calgary, AB

⁷McGill University, Montréal, QC

⁸University of Manitoba, Winnipeg, MB

⁹Western University, London, ON

¹⁰Queen's University, Kingston, ON

¹¹University of Toronto, Toronto, ON

129

ASSESSMENT OF PRECISION IRRADIATION IN EARLY NON-SMALL CELL LUNG CANCER AND INTERSTITIAL LUNG DISEASE (ASPIRE-ILD): PRIMARY ANALYSIS OF A PHASE II TRIAL

David Palma¹, Houda Bahig², Andrew Hope³, Stephen Harrow⁴, Brock Debenham⁵, Alexander Louie⁶, Toni Vu², Edith Filion², Andrea Bezjak⁶, Marie-Pierre Campeau², Adele Duimering⁵, Meredith Giuiliani⁶, Joanna Laba¹, Benjamin Lok⁶, Pencilla Lang¹, X. Melody Qu¹, Srinivas Raman⁶, George Rodrigues¹, Christopher Goodman¹, Stewart Gaede⁷, Julie Morisset², Andrew Warner¹, Inderdeep Dhaliwal¹, Christopher Ryerson⁸

¹London Health Sciences Centre, London, ON

²Centre Hospitalier de l'Université de Montréal, Montréal, QC

³University of Toronto, Toronto, ON

⁴Beatson West of Scotland Cancer Centre, Edinburgh, SC

⁵University of Alberta, Edmonton, AB

⁶University of Toronto, Toronto, ON

⁷Western University, London, ON

⁸University of British Columbia, Vancouver, BC

130

DEVELOPMENT OF A PRIMARY STANDARD OF ABSORBED DOSE TO WATER FOR PROTON BEAMS

Claudiu Cojocaru¹, James Renaud¹, Cornelia Hoeher², Camille Belanger-Champagne², Michael Trinczek², Malcolm McEwen¹

¹National Research Council, Ottawa, ON

²TRIUMF, Vancouver, BC

131

A PROSPECTIVE STUDY OF MR-ASSISTED SALVAGE HDR PROSTATE BRACHYTHERAPY WITH INTRA-PROSTATIC BOOST

Hans Chung^{1,2}, Andrew Loblaw^{1,2}, Chia-Lin Tseng^{1,2}, Jure Murgic³, Ananth Ravi², Melanie Davidson^{1,2}, Matt Wronski^{1,2}, Moti Paudel^{1,2}, Masoom Haider², Andrea Deabreu¹, Gerard Morton^{1,2}

¹Sunnybrook-Odette Cancer Centre, Toronto, ON

²University of Toronto, Toronto, ON

³University Hospital Center Sestre Milosrdnice, Zagreb, HR

132

HYPOXIA ON A CHIP

Elena Refet-Mollof^{1,2}, Rodin Chermat^{1,2}, Thomas Gervais^{1,2}, Philip Wong^{2,3,4,5}

¹Polytechnique Montréal,

²Centre de Recherche du Centre Hospitalier de l'Université de Montréal (crCHUM),

³University Health Network, Toronto, ON

⁴University of Toronto, Toronto, ON

⁵Princess Margaret Cancer Centre, Toronto, ON

2:45-3:00

Closing Remarks

48

FOCAL BRACHYTHERAPY FOR LOCALIZED PROSTATE CANCER: SYSTEMATIC REVIEW AND META-ANALYSIS

Enrique Gutierrez Valencia¹, Inmaculada Navarro¹, Ronald Chow¹, Kailee Zhou¹, Rouhi Fazelzad¹, Matthew Ramotar¹, Irving Sanchez², Victor Ruiz², Robert Weersink¹, Rachel Glicksman¹, Alejandro Berlin¹, Peter Chung¹, Srinivas Raman¹

¹Princess Margaret Cancer Centre, Toronto, ON

²University of Guadalajara, Guadalajara, MX

100

PROGNOSTIC ASSOCIATIONS OF THE NEUTROPHIL-TO-LYMPHOCYTE AND PLATELET-TO-LYMPHOCYTE RATIO IN PATIENTS TREATED WITH SURGERY FOR PLEURAL MESOTHELIOMA AFTER RADIOTHERAPY

Enrique Gutierrez Valencia, Nicholas McNeil, Rohan Salunkhe, Avipsa Das, Jessica Weiss, Natasha Leighl, Shaf Keshavjee, Marc de Perrot, Andrea Bezjak, Alexander Sun, John Cho

Princess Margaret Cancer Centre, Toronto, ON

133

PREDICTORS OF STAFF SATISFACTION, STRESS, AND BURNOUT AT A CANADIAN CANCER CENTRE

Ege Babadagli¹, Selena Laprade¹, Gordon Locke¹, Angela McNeil¹, Joanne Meng¹, Julie Renaud¹, Elisabeth Cisa-Pare², Jessica Chan³, Jiheon Song⁴, Rajiv Samant¹

¹University of Ottawa, Ottawa, ON

²Northern Ontario School of Medicine, Thunder Bay, ON

³University of British Columbia, Vancouver, BC

⁴University of Toronto, Toronto, ON

134

A QUALITATIVE ANALYSIS OF MEDICAL STUDENT REFLECTIONS FOLLOWING PARTICIPATION IN A CANADIAN RADIATION ONCOLOGY STUDENTSHIP

Brandon Chai¹, Meredith Giuliani², Joanne Alfieri³, Jeffery Cao^{4,9}, Andrea Bezjak², Michael Kim⁵, Che Hsuan David Wu⁶, Nauman Malik⁷, David Mak², Paris-Ann Ingledew^{1,8}

¹University of British Columbia, Vancouver, BC

²Princess Margaret Cancer Centre, Toronto, ON

³McGill University, Montréal, QC

⁴University of Calgary, Calgary, AB

⁵Dalhousie University, Halifax, NS

⁶British Columbia Cancer, Victoria, BC

⁷University of California, San Francisco, CA

⁸British Columbia Cancer, Vancouver, BC

⁹Tom Baker Cancer Centre, Calgary, AB

135

EXPLORING FAMILY PHYSICIAN TRAINING NEEDS TO IMPROVE CANCER PATIENT CARE

Marissa Sherwood¹, Janet Papadakos¹, Kulamahan Kulasegaram¹, Maria A. Martimianakis¹, Edward Kucharski², Meredith Giuliani¹

¹University of Toronto, Toronto, ON

²Casey House Hospital, Toronto, ON

136

INVESTIGATING A RESIDUAL NEURAL NETWORK TO GENERATE CUSTOMIZABLE RADIOFREQUENCY PULSES FOR MAGNETIC RESONANCE IMAGING

Seeger Nelson, Rebecca Feldman

University of British Columbia, Kelowna, BC

137

STEREOTACTIC BOOST AND SHORT-COURSE RADIOTHERAPY FOR P16-ASSOCIATED OROPHARYNX CANCER (SHORT-OPC): FIRST PLANNED INTERIM SAFETY ANALYSIS FROM A RANDOMIZED PHASE II TRIAL

Sweet Ping Ng¹, David C. Fuller², Adam S. Garden², David I. Rosenthal², Jack Phan², Phuc Felix Nguyen-Tan³, Ying Yuan², Edith Filion³, Denis Soulieres³, Apostolos Christopoulos³, Katherine Hutcheson², Anna Lee², Houda Bahig¹
¹Austin Health, Austin, TX
²The University of Texas MD Anderson Cancer Center, Houston, TX
³Centre Hospitalier de l'Université de Montréal, Montréal, QC

138

FIVE-YEAR FEASIBILITY STUDY OF A THREE-DAY RAPID ACCESS PALLIATIVE VMAT PROGRAM IN A TWO LINAC CENTRE

Quinn Matthews¹, Kim Lawyer¹, Evan Maynard¹, Robert Olson¹, Allison Ye¹, Vivian Yau¹, Stacy Miller¹, Boris Valev², Nick Chng¹
¹British Columbia Cancer, Prince George, BC
²British Columbia Cancer, Victoria, BC

139

EFFECT OF COBALT-60 CALIBRATION DOSE-RATE ON ARTERIOVENOUS MALFORMATION OBLITERATION AFTER STEREOTACTIC RADIOSURGERY

Victoria Anthes¹, Michael Schwartz², Michael Cusimano³, Ivan Radovanovic⁴, Abhaya Kulkarni⁵, Normand Laperriere⁶, David Payne⁶, Robert Heaton⁶, Monique van Prooijen⁶, Sunit Das³, Derek Tsang⁶
¹University of Toronto, Toronto, ON
²Sunnybrook Health Sciences Centre, Toronto, ON
³St. Michael's Hospital, Toronto, ON
⁴University Health Network, Toronto, ON
⁵Hospital for Sick Children, Toronto, ON
⁶Princess Margaret Cancer Centre, Toronto, ON

140

ADAPTIVE STAGED STEREOTACTIC RADIOSURGERY TO SALVAGE PREVIOUSLY IRRADIATED BRAIN METASTASES

Dana Shor, Kang Liang Zeng, Lori Holden, Hanbo Chen, Pejman Maralani, Chris Heyn, Beibei Zhang, Sten Myrehaug, Chia-Lin (Eric) Tseng, Jay Detsky, Hany Soliman, Arjun Sahgal
University of Toronto, Toronto, ON

141

TOXICITY AND ONE YEAR OUTCOMES IN A SERIES OF SIX PATIENTS RECEIVING STEREOTACTIC ARRHYTHMIA RADIOABLATION FOR VENTRICULAR TACHYCARDIA

Ian J. Gerard, Alfieri Joanne, Gabriela Stroian, Valeria Anglesio, Martin Bernier, Tarek Hijal, Sarah Konermann, Neil Kopeck, Piotr Pater, Bruno Toscani Gomes da Silveira
McGill University, Montréal, QC

142

PATIENT-REPORTED DISTRESS AND ACUTE CARE UTILIZATION FOR CERVICAL CANCER PATIENTS UNDERGOING CONCURRENT CHEMO-RADIATION AND BRACHYTHERAPY

Areeb Hassan¹, Alyssa Macedo¹, Genevieve Bouchard-Fortier¹, Stephanie L'heureux², Manjula Mangati¹, Kathy Han², Candice Yu¹, Madeline Li², Jennifer Croke²
¹Princess Margaret Cancer Centre, Toronto, ON
²University of Toronto, Toronto, ON

143

NOPAUSE: INITIAL EXPERIENCE DEPLOYING A NOVEL MULTI-CENTRE VMAT PLAN AUTOMATION SYSTEM

Nick Chng¹, Fred Cao¹, Michael Lamey², Sergei Zavgorodni³, Quinn Matthews¹, Parmveer Atwal⁴, Robert Olson¹
¹British Columbia Cancer Centre, Prince George, BC
²British Columbia Cancer Centre, Kelowna, BC
³British Columbia Cancer Centre, Victoria BC
⁴British Columbia Cancer Centre, Abbotsford, BC

144

VALIDATION OF GPU-ACCELERATED MONTE CARLO SIMULATIONS FOR PATIENT-SPECIFIC CT DOSE CALCULATIONS

Ronan Lefol¹, Yannick Lemaréchal¹, Jonathan Boivin², Philippe Després¹

¹Université Laval, Quebec City, QC

²CHU de Québec-Université Laval, Quebec City, QC

145

QUANTIFICATION OF RADIOMIC FEATURE VARIABILITY ACROSS PROVINCIAL COMPUTED TOMOGRAPHY SCANNERS

Lorna Tu^{1,2}, Herve Choi², Haley Clark^{1,3}, Bradford Gill², Scott Young², Samantha Lloyd^{1,2}

¹University of British Columbia, Vancouver, BC

²British Columbia Cancer, Vancouver BC

³British Columbia Cancer, Surrey, BC

146

FIVE-YEAR RENAL FUNCTION OUTCOMES AFTER SABR FOR PRIMARY RENAL CELL CARCINOMA: A REPORT FROM THE INTERNATIONAL RADIOSURGERY ONCOLOGY CONSORTIUM OF THE KIDNEY (IROCK)

Vivian Tan¹, Alexander Louie², Andrew Warner¹, Muhammad Ali³, Alexander Muacevic⁴, Lee Ponsky⁵, Rodney Ellis⁶, Simon Lo⁷, Hiroshi Onishi⁸, Anand Swaminath⁹, Young Suk Kwon¹⁰, Scott Morgan¹¹, Fabio Cury¹², Bin Teh¹³, Anand Mahadevan¹⁴, Irving Kaplan¹⁵, William Chu², Raquibul Hannan¹⁰, Michael Staehler⁴, William Grubb¹⁶, Shankar Siva³, Rohann Correa¹

¹Western University, London, ON

²University of Toronto, Toronto, ON

³Peter MacCallum Cancer Centre, Melbourne, AU

⁴University of Munich Hospitals, Munich, DE

⁵Case Western Reserve University, Cleveland, OH

⁶GenesisCare, Cape Coral, FL

⁷University of Washington School of Medicine, Seattle, WA

⁸University of Yamanashi, Yamanashi, JP

⁹McMaster University, Hamilton, ON

¹⁰University of Texas Southwestern Medical Center, Dallas, TX

¹¹University of Ottawa, Ottawa, ON

¹²McGill University, Montréal, QC

¹³Houston Methodist Hospital Cancer Center and Research Institute, Houston, TX

¹⁴NYU Langone Health, New York, NY

¹⁵Beth Israel Deaconess Medical Center, Boston, MA

¹⁶Augusta University, Augusta, GA

147

EVALUATION OF VOLUMETRIC RESPONSE ASSESSMENT FROM STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR) FOR RENAL CELL CARCINOMA (RCC)

Daniel Schep^{1,2}, Ian Dayes^{1,2}, Himanshu Lukka^{1,2}, Kimmen Quan^{1,2}, Anil Kapoor^{2,3}, Jasmin Vansantvoort¹, Tom Chow¹, Anand Swaminath^{1,2}

¹Juravinski Cancer Centre, Hamilton, ON

²McMaster University, Hamilton, ON

³St. Joseph's Health Care, Hamilton, ON

148

IMPACT OF STATIN USE ON BIOCHEMICAL RECURRENCE IN PROSTATE CANCER PATIENTS TREATED WITH RADIATION THERAPY

Danny Lavigne¹, Kevin Kaulanjan², Benedikt Hoeh³, Fred Saad¹, Pierre I. Karakiewicz¹, Rocco Simone Flammia⁴, Luis Alex Kluth³, Philipp Mandel³, Felix K.H. Chun³, Daniel Taussky¹

¹Université de Montréal, Montréal, QC

²Université des Antilles, Pointe-à-Pitres, FR

³Goethe University Frankfurt am Main, Frankfurt am Main, FFM

⁴Sapienza Rome University, Rome, IT

149

ACCUMULATED KIDNEY DOSE IN RENAL STEREOTACTIC BODY RADIOTHERAPY: ANALYSIS FROM A PROSPECTIVE PHASE II TRIAL

Joelle Helou¹, Jeff Winter², Jerusha Padayache², Inmaculada Navarro², Tony Tadic², Srinivas Raman², Peter Chung², Pdraig Warde², Antonio Finelli², Rob Hamilton², Tony Lam², Charles Catton², Alejandro Berlin², Jennifer Dang², Andrew McPartlin², Philip Ye², Laura Dawson² Rachel Glicksman²

¹Western University, London, ON

²University of Toronto, Toronto, ON

150

SUCCESS IS BEST WHEN IT IS SHARED: ONE DEPARTMENT'S INTERPROFESSIONAL TEAM EFFORT TO REDUCE WAIT TIME FOR HEAD AND NECK RADIATION THERAPY PATIENTS

Marc LeBlanc, Jenna Clayfield, Murali Rajaraman, Nathan Lamond, Monique Ashe, Peilong Zhang, Leah Hensel, Steven Burrell, Carol-Anne Davis

Dalhousie University, Halifax, NS

151

SURGEON, PATHOLOGIST AND PATHOLOGY TECHNICIAN EFFECTS ON NODAL YIELD AFTER A NECK DISSECTION

Veeral Desai¹, Adam Mutsaers², Rui Fu², Mark Khoury², Carlos Khalil², Peter Leventis², Antoine Eskander², Zain Husain²

¹Queen's University, Kingston, ON

²University of Toronto, Toronto, ON

152

AN UPDATE OF STEREOTACTIC BODY RADIOTHERAPY (SBRT) FOR THE PALLIATION OF UNIRRADIATED MUCOSAL HEAD AND NECK SQUAMOUS CELL CARCINOMA (SCC)

Mohammed Aldohan, Elwyn Zhang, Irene Karam, Andrew Bayley, Madette Galapin, Antoine Eskander, Kevin Higgins, Liying Zhang, Lee Chin¹, Ian Poon

¹University of Toronto, Toronto, ON

153

BIOMARKER STATUS PREDICTS FOR LOCAL CONTROL FOLLOWING SPINE STEREOTACTIC BODY RADIOTHERAPY IN NON-SMALL CELL LUNG CANCER PATIENTS WITH SPINAL METASTASES

Dana Shor, Kang Liang Zeng, Hanbo Chen, Ines Menjak, Eshetu Atenafu, Chia-Lin (Eric) Tseng, Jay Detsky, Jeremie Larouche, Beibei Zhang, Hany Soliman, Pejman Maralani, Sten Myrehaug, Alexander V. Louie, Arjun Sahgal

¹University of Toronto, Toronto, ON

154

PROSTATE STEREOTACTIC RADIOTHERAPY WITH AND WITHOUT A RECTAL SPACER: EFFECTS ON DOSIMETRY AND EARLY ACUTE TOXICITY

Subhadip Das, Dominique Fortin, Isabelle Gagne, Winkle Kwan, Abraham Alexander

University of British Columbia, Victoria, BC

155

OUTCOMES OF HEAD AND NECK CUTANEOUS ANGIOSARCOMA TREATED IN THE IMRT ERA

Saheli Saha, Shao Hui Huang, Brian O'Sullivan, Jie Su, Wei Xu, Ali Hosni Abdalaty, John Waldron, Jonathan Irish, John de Almeida, Ian Witterick, Eric Monteiro, Ralph Gilbert, Charles Catton, Peter Chung¹, Dale Brown, David Goldstein, Albiruni Abdul Razak, Patrick Gullane, Ezra Hahn

University of Toronto, Toronto, ON

156

IMPACT OF IMMUNE, INFLAMMATORY, AND NUTRITIONAL INDICES ON OUTCOME IN PATIENTS WITH CERVICAL CANCER TREATED WITH DEFINITIVE (CHEMO) RADIOTHERAPY

Ruth Fullerton¹, Kevin Martell¹, Rutvij A. Khanolkar¹, Tien Phan¹, Robyn Banerjee¹, Tyler Meyer¹, Laurel Traptow², Martin Köbel¹, Prafull Ghatage¹, Corinne M. Doll¹

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157

RECURRENCE RATES AND PATTERNS IN LOCALLY ADVANCED CERVICAL CANCER IN THE IMRT ERA: A SINGLE INSTITUTION EXPERIENCE

Bayan Malakouti-Nejad, Ege Babadagli, Krystine Lupe, Tien Le, Rajiv Samant
University of Ottawa, Ottawa, ON

158

PATTERNS OF TREATMENT AND OUTCOMES OF PATIENTS WITH BRAIN-ONLY METASTATIC BREAST CANCER

Badr Id Said, Ellen Warner, Hany Soliman, Veronika Moravan, Sten Myrehaug, Chia-Lin Tseng, Jay Detsky, Arjun Sahgal, Katarzyna Jerzak
University of Toronto, Toronto, ON

159

SBRT FOR EXTRACRANIAL OLIGOMETASTATIC HEAD AND NECK CANCER: A META-ANALYSIS

Adam Mutsaers¹, Aquila Akingbade², Liying Zhang¹, Ian Poon¹, Alexander V Louie¹, Antoine Eskander¹, Irene Karam¹
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²Western University, London, ON

160

OVOID APPLICATOR COMMISSIONING USING 2D OPTICAL SCINTILLATING IMAGING

Robert Weersink, Hedi Mohseni, Jette Borg, Maryam Golshan, Akbar Beiki-Ardakani, Alexandra Rink
University of Toronto, Toronto, ON

161

REAL-TIME RADIOBIOLOGICAL MODELLING: THE DEVELOPMENT OF A TOOL FOR ON-THE-FLY BED ASSESSMENT FOR HDR BRACHYTHERAPY

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162

THE DEVELOPMENT AND ASSESSMENT OF A CORE-NEEDLE BIOPSY LOCALIZATION METHODOLOGY IMPLEMENTED DURING PROSTATE HIGH DOSE-RATE BRACHYTHERAPY TREATMENTS

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163

EVALUATING THE INTER-OBSERVER VARIABILITY IN THE DELINEATION OF RECTAL LESIONS IN ENDOSCOPY IMAGES

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164

DYNAMIC PREDICTION OF TOXICITIES IN HEAD AND NECK CANCER RADIOTHERAPY BY 3D CONVOLUTIONAL NEURAL NETWORK USING DAILY CONE-BEAM CTs

Charmin (Chulmin) Bang¹, Willam Trung Le², Phuc Felix Nguyen-Tan¹, Édith Filion¹, Denis Soulières¹, Brian O'Sullivan¹, Apostolos Christopoulos¹, Éric Bissada¹, Tareck Ayad¹, Louis Guertin¹, Arthur Lalonde¹, Daniel Markel¹, Samuel Kadoury², Houda Bahig¹
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165

DOSIMETRIC IMPACT OF USING MACHINE LEARNING-PREDICTED HYBRID INTERSTITIAL NEEDLE ARRANGEMENTS FOR HIGH-DOSE-RATE CERVICAL BRACHYTHERAPY

Kailyn Stenhouse¹, Sarah Quirk², Michael Roumeliotis³, Kevin Martell¹, Robyn Banerjee¹, Tien Phan¹, Corinne Doll¹, Philip Ciunkiewicz¹, Svetlana Yanushkevich¹, Philip McGeachy¹

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166

DEEP LEARNING-BASED TRANSFER OF TG-43 BASED DOSE TO WATER TO DOSE TO MEDIUM IN MEDIUM IN HIGH DOSE RATE BRACHYTHERAPY

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167

MULTI-TIMEPOINT DOSIOMIC MODELING OF PATIENT-REPORTED DYSPHAGIA

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168

LEARNING-EMPOWERED REAL-TIME NEEDLE IDENTIFICATION FOR ULTRASOUND-GUIDED PERCUTANEOUS LIVER TUMOUR ABLATIONS

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169

QUALITATIVE EVALUATION OF AI CONTOURS

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170

TOWARDS AI-BASED DOSE PREDICTION OF DAILY DELIVERED DOSE DURING LUNG CANCER RADIOTHERAPY

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171

EVALUATING THE PERFORMANCE OF CHATGPT AT BREAST TUMOUR BOARD

Yang Xu, Natalie Logie, Tien Phan, Lisa Barbera, Robert Nordal, Jordan Stosky, Sangjune Lee

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172

THE IMPACT OF ANDROGEN-DEPRIVATION THERAPY ON CERAMIDES, A POTENTIAL BIOMARKER OF OUTCOMES OF PROSTATE CANCER FOR PATIENTS TREATED WITH EBRT AND HDR BRACHYTHERAPY BOOST

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173

PLASMA COLLECTED DURING RADIOTHERAPY IN TRIPLE-NEGATIVE BREAST CANCER PATIENT STIMULATES DEVELOPMENT OF LUNG METASTASES IN A MOUSE MODEL

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174

NEUTROPHIL-TO-LYMPHOCYTE RATIO POST-HYPOFRACTIONATED RADIATION THERAPY IN SOFT TISSUE SARCOMAS IS A PROGNOSTIC BIOMARKER FOR RECURRENCE AND METASTASES

Constanza Martinez, Rie Asso, Neelabh Rastogi, Carolyn Freeman, Fabio Cury

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175

ELIMINATE CANCER CELLS INFILTRATED IN THE BRAIN BY ATTRACTING THEM INTO A MACROPOROUS HYDROGEL TRAP

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176

COMBINED EFFECTS OF ARSENIC AND RADIATION

Connie Le, Shengwen Shen, Michael Weinfeld, Chris Le

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177

SINGLE CELL RNA SEQUENCING CHARACTERIZATION OF AN IN VITRO MODEL FOR STUDIES OF HEPATITIS B VIRUS

Connie Le¹, Reshma Sirajee², Rineke Steenbergen¹, Michael Joyce¹, William Addison¹, D. Lorne Tyrrell¹

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178

PRELIMINARY INVESTIGATION OF PLACENTAL [1-13C]PYRUVATE METABOLISM CORRELATED WITH PLACENTAL EFFICIENCY IN GUINEA PIGS

Lindsay E. Morris¹, Lanette J. Friesen-Waldner¹, Timothy RH. Regnault^{1,2}, Charles A. McKenzie^{1,2}

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179

VALIDATION OF THE MONTREAL SPLIT-RING APPLICATOR IN A GYNECOLOGICAL PHANTOM SIMULATING CLINICAL IMPLANTS CONDITIONS IN INTRACAVITARY/INTERSTITIAL BRACHYTHERAPY

Marie-Ève Roy^{1,2}, Maroie Barkati², Marie-Claude Beauchemin², Yuji Kamio^{2,3}, Stéphane Bedwani^{1,2,3}

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180

LARGE-SCALE RETROSPECTIVE MC DOSE RECALCULATION FOR PERMANENT IMPLANT PROSTATE BRACHYTHERAPY

Samuel Ouellet¹, Éric Vigneault¹, André-Guy Martin¹, Yannick Lemaréchal¹, Francisco Berumen¹, Marie-Claude Lavallée¹, William Foster¹, Rowan Thomson², Philippe Després¹, Luc Beaulieu¹

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181

RapidBrachyTG43: A TG-43 PARAMETER AND DOSE CALCULATION MODULE FOR RapidBrachyMCTPs

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182

ACUTE TOXICITY OUTCOMES FROM SALVAGE HIGH-DOSE-RATE BRACHYTHERAPY FOR LOCALLY RECURRENT PROSTATE CANCER AFTER PRIOR RADIOTHERAPY

Breanna Fang¹, Phillip McGeachy¹, Siraj Husain¹, Tyler Meyer¹, Kundan Thind², Kevin Martell¹

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183

MONTE CARLO INVESTIGATION OF DOSE DISTRIBUTION OF UNIFORMLY AND NON-UNIFORMLY LOADED STANDARD AND NOTCHED EYE PLAQUES

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184

AUTOMATED HDR QA TESTS USING AN ORGANIC PLASTIC SCINTILLATOR WITH OPENCV

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185

DEVELOPMENT OF TEST CASES FOR COMPARISON OF MODEL-BASED DOSE CALCULATIONS IN LOW-ENERGY BRACHYTHERAPY

Elizabeth Fletcher¹, Facundo Ballester^{2,3}, Luc Beaulieu^{4,5}, Hali Morrison^{6,7}, Audran Poher^{5,4}, Mark Rivard⁸, Ron Sloboda^{9,10}, Javier Vijande^{2,3}, Rowan Thomson¹

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186

DIFFUSION OF 220RN AND 212PB IN DIFFUSING ALPHA-EMITTER RADIATION THERAPY DOSIMETRY WITH GEANT4

Victor Daniel Díaz Martínez, Shirin Enger

McGill University, Montréal, QC

187

COST OF HIGH-DOSE RATE ENDOBRONCHIAL BRACHYTHERAPY FOR AIRWAY MALIGNANCY

Ethan Kutanzi¹, Nicole O'Callaghan², Zain Siddiqui¹, Conrad Falkson¹, Aamer Mahmud¹

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188

DEVELOPMENT AND EVALUATION OF A GUI USING AI-ASSISTED ALGORITHM FOR CATHETER RECONSTRUCTION IN MR-ONLY GYNECOLOGICAL INTERSTITIAL HDR BRACHYTHERAPY

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189

ESTABLISHING A LOW DOSE RATE (LDR) BRACHYTHERAPY TREATMENT IN PROSTATE CANCER PROGRAM IN AN EMERGING ECONOMY

Nadeem Pervez, Tauseef Ali, Zahid Almandhari, Agha Khan, Jamsari Khalid, Nirmal Babu, Muhammad Ali Gurmani, Iqbal Al Amri, Abdullah Alshaikh, Mulham Alyahmadi, Mukaram Said, Sercan Yilmaz

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190

IN VIVO DOSIMETRY FOR SUPERFICIAL HIGH DOSE RATE BRACHYTHERAPY WITH OPTICALLY STIMULATED LUMINESCENCE DOSIMETERS: A COMPARISON STUDY WITH METAL-OXIDE-SEMICONDUCTOR FIELD-EFFECT TRANSISTORS

Alana Lopes, Eric Sabondjian, Alejandra Rangel

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191

THREE DIMENSIONAL VARIATIONS & THEIR EFFECTS ON EQUIVALENT DOSE IN 2 GRAY FRACTIONS (EQD2) FOR THE ORGANS AT RISK DURING IMAGE-GUIDED BRACHYTHERAPY

Agha Muhammad Hammad Khan, Mahmoud Al Fishaway, Furhan Altaf, Ana Paula E Galerani Lopes, Tauseef Ali, Sara Tajammul, Mohsina Vallengara, Jamsari Khalid, Iqbal Abdullah AlAmri, Zahid Almandhari, Nadeem Pervez

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192

INVESTIGATION OF THE DOSE PROPERTIES AND SOURCE TO SOURCE VARIABILITIES IN XOFT SOURCE MODEL S7500

Azin Esmaelbeigi¹, Jonathan Kalinowski¹, Te Vuong², Shirin A. Enger^{1,2}

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193

APPLICATION OF A NOVEL MONTE CARLO BASED METHOD TO DETERMINE THE EMBEDDED DISTRIBUTIONS OF ALPHA-EMITTERS FROM THEIR MEASURED ALPHA SPECTRA IN DIFFUSING ALPHA-EMITTERS RADIATION THERAPY (DART)

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194

CHARACTERIZATION OF NOVEL 3D-PRINTED METAL SHIELDING FOR BRACHYTHERAPY APPLICATORS

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195

ALPHA PARTICLE DOSE MODELING IN DART BRACHYTHERAPY: SENSITIVITY OF DIFFUSION-LEAKAGE PARAMETERS, SEED GEOMETRY AND INTER-SEED EFFECTS

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196

3D PRINTED MODEL FOR SURFACE MOULD PREPARATION ON A DOWN SYNDROME BRACHYTHERAPY PATIENT

Iqbal Al Amri, Rohit Inippully, Mahmood AL Fishawy, Nirmal Babu, Hajir Al Siyabi, Mohammed Al Ghafri
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197

MONTE CARLO DOSE MODELLING OF EMBEDDED BETA/GAMMA EMISSIONS FROM DART ALPHA-EMITTERS
BRACHYTHERAPY SEEDS USING GEANT4

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198

EVALUATING ONLINE YOUTUBE RESOURCES FOR CERVICAL CANCER BRACHYTHERAPY

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199

IMPLEMENTATION AND EARLY EXPERIENCE OF BREAST INTRAOPERATIVE ELECTRON BEAM RADIATION THERAPY

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200

A CANADIAN BREAST RADIOTHERAPY PRACTICE SURVEY

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201

A RADIATION ONCOLOGIST'S EXPERIENCE TREATING MALIGNANT GLIOMA WITH TUMOUR TREATING FIELDS IN
CANADA

David Roberge

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202

SAFETY AND EFFICACY OF FRACTIONATED STEREOTACTIC RADIATION THERAPY FOR PITUITARY ADENOMAS

Aveline Marie Ylanan^{1,2}, Alan Nichol^{3,2}, Roy Ma^{3,2}, Michael McKenzie^{3,2}, Fred Hsu^{1,2}, Sheikh Nisar Ahmed^{1,2}, Arthur
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203

18F-DOPA PET SCAN MAPPED WITH RADIOTHERAPY DOSIMETRY FOR THE MANAGEMENT OF TUMOUR RECURRENCE VERSUS RADIATION NECROSIS IN HIGH GRADE GLIOMAS: AN INSTITUTIONAL EXPERIENCE

Asmara Waheed, Jay Easaw, Kelvin Young, Egiroh Omene, Albert Murtha, Aswin Abraham, John Amanie, Lindsay Rowe, Samir Patel, Ravi Bhargava, Daniel Thut, Freimut Juengling, Helene Daly, Hans-Sonke Jans, Wilson Roa
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204

DEVELOPMENT OF A DECISION AID FOR PATIENT WITH EXTENSIVE BRAIN METASTASES

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205

MODERATE HYPOFRACTIONATED RE-IRRADIATION FOR RECURRENT GLIOBLASTOMA MULTIFORME

Danny Jazmati, Edwin Boelke, Yechan Flaig, Jan Haussmann, Wilfried Budach, Stefanie Corradini, Amir Rezazadeh, Balint Tamaskovics, Christiane Matuschek
Heinrich Heine University, Dusseldorf, DE

206

SHARING MONO-INSTITUTIONAL EXPERIENCE OF TREATING PANCREATIC CANCER WITH STEREOTACTIC BODY RADIATION THERAPY (SBRT) AS AN ADJUVANT THERAPY FOR NON-OPERATIVE PATIENTS OR SALVAGING LOCAL FAILURE

Asmara Waheed, Aswin Abraham, Shannah Murland, Diane Severin, Kent Powell, Arun Elangovan, Nawaid Usmani, Keith Tinkel, Kim Paulson, Xiaofu Zhu, Clarence Wong, Eugene Yip, Sunita Ghosh, Amr Heikal, Ben Burke, Kurian Joseph
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207

TOXICITY AND CLINICAL OUTCOMES TO ABDOMINAL RADIOTHERAPY USING 5 FRACTIONS FOR NON-SURGICAL PATIENTS

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208

SINGLE-INSTITUTION OUTCOMES OF CYBERKNIFE SBRT IN RENAL CELL CARCINOMA

Osbert Zalay, Janice Doody, Julia Malone, Shawn Malone
The Ottawa Hospital, Ottawa, ON

209

CHANGE OF THE NEUTROPHIL TO LYMPHOCYTE RATIO DURING TREATMENT: A POTENTIAL PROGNOSTIC BIOMARKER IN METASTATIC PROSTATE CANCER TREATED WITH RADIUM-223 DICHLORIDE

Cédric Charrois-Durand, Kevin Kaulanjan, Johanna Dahan, Fred Saad, Guila Delouya, Edouard Auclin, Daniel Taussky

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210

CONTOUR AGREEMENT? ACCURACY? WHAT ABOUT A DOSIMETRIC PERSPECTIVE ON WHEN MILLIMETERS MATTER IN CERVIX EXTERNAL BEAM RADIOTHERAPY?

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211

CAN THE G8 OBJECTIVELY IDENTIFY HNC SBRT CANDIDATES?

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212

ASSOCIATION OF TUMOUR VOLUME WITH SURVIVAL IN T3 SUPRAGLOTTIC CANCERS MANAGED WITH RADIOTHERAPY

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213

MODERNIZATION OF NASAL PROTHESIS FABRICATION THROUGH THE USE OF THE BLENDER API, 3D SCANNING AND PRINTING

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214

FILLING THE GAP: IMPROVING COMMUNICATION BETWEEN THE DENTISTRY AND RADIOTHERAPY DEPARTMENTS

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215

SURVIVAL OUTCOMES OF EXTENSIVE STAGE SMALL CELL LUNG CANCER PATIENTS TREATED WITH CONSOLIDATIVE THORACIC RADIOTHERAPY AT A TERTIARY CANCER CENTRE

Vijithan Sugumar, Rohan Salunkhe, Xiang Y. Ye, Luna Zhan, Alexander Sun, Andrea Bezjak, John Cho, Srinivas Raman, Andrew J. Hope, Meredith E. Giuliani, Natasha B. Leighl, Adrian G. Sacher, Frances A. Shepherd, Penelope Bradbury, Geoffrey Liu, Benjamin H. Lok

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216

IMPACT OF INTRA-FRACTION MOTION CORRECTION ON TARGET AND OAR DOSIMETRY IN SINGLE FRACTION LUNG STEREOTACTIC ABLATIVE RADIATION THERAPY

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217

TOXICITY OF PATIENTS WITH ULTRA-CENTRAL THORACIC TUMOURS TREATED WITH STEREOTACTIC BODY RADIOTHERAPY WITH DOSE OF 50Gy IN 5 FRACTIONS

Rie Asso, Neil Kopek, Marie Duclos, Bassam Abdulkarim, Tanner Connel, Paul Ramia, Asma Saidi, Sergio Faria

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218

MANAGEMENT OF VERY EARLY SMALL CELL LUNG CANCER: A CANADIAN SURVEY STUDY

Bayan Malakouti-Nejad, Sara Moore, Paul Wheatley-Price, David Tiberi

The Ottawa Hospital, Ottawa, ON

219

A DIGITAL WORKFLOW TO CREATE PATIENT-SPECIFIC RADIATION ORAL SHIELDS FOR ORTHOVOLTAGE

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220

UNCOVERING THE ARMPIT OF AXILLARY SBRT

Adam Mutsaers, Jason Savio Fernandes, George Li, Saher Ali, Hanbo Chen, Gregory Czarnota, Irene Karam, Daniel Palhares, Ian Poon, Hany Soliman, Danny Vesprini, Patrick Cheung, Arjun Sahgal, Alexander V Louie

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221

SURVEY ON THE STRUCTURE OF INPATIENT CARE PROVIDED BY RADIATION ONCOLOGISTS IN CANADA

Daniel Tesolin, Ege Babadagli, Michael Sun, Bayan Malakouti-Nejad, Jason Pantarotto, Marc Gaudet, Robert MacRae

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222

NEW ASPECTS REGARDING MARKERS FOR THE CLINICAL COURSE IN THE BLOOD OF PATIENTS WITH SARS-COV-2 INFECTION. A TOOL TO PROTECT OUR ONCOLOGY PATIENTS

Danny Jazmati, Edwin Boelke, Johannes Fischer, Yechan Flaig, Wilfried Budach, Amir Rezazadeh, Jan Haussmann, Balint Tamaskovics, Christiane Matuschek

Heinrich Heine University, Dusseldorf, DE

223

EVIDENCE TO GUIDE DAY-TO-DAY PRACTICE OF CONE-BEAM COMPUTER TOMOGRAPHY RE-IMAGING

Marzena Kastyak-Ibrahim^{1,2}, Bryan Kim^{1,2}, Joanna Foster¹, Amanda Jacques¹, Jean-david Jutras^{1,2}, Fiona Lochray¹, Lisa Barbera^{1,2}

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224

NEW ASPECTS REGARDING PERCUTANEOUS FRACTIONATED RADIOTHERAPY OF THE GROIN TO ELIMINATE LYMPHATIC FISTULAS AFTER VASCULAR SURGERY

Danny Jazmati, Edwin Bölke, Wilfried Budach, Jan Haussmann, Yechan Flaig, Balint Tamaskovics, Amir Rezazadeh, Christiane Matuschek

Heinrich Heine University, Dusseldorf, DE

225

FUNCTIONAL AND TOXICITY OUTCOMES OF RADIATION THERAPY FOR DUPUYTREN'S CONTRACTURE

Justin Oh, Yi Peng Wang, Susan Hiniker

Stanford University, Stanford, CA

226

OUTCOMES OF PEDIATRIC AND ADOLESCENT PATIENTS WITH METASTATIC SARCOMA TREATED WITH SURGICAL RESECTION OR STEREOTACTIC ABLATIVE RADIATION THERAPY

Justin Oh, Paulina Gutkin, Yi Peng Wang, Sarah Donaldson, Robert Steffner, Matias Bruzoni, Raffi Avedian, Sheri Spunt, Allison Pribnow, Susan Hiniker

Stanford University, Stanford, CA

227

PLANNING FOR THE RIGHT CARE AT THE RIGHT TIME: DEVELOPMENT AND IMPLEMENTATION OF AN AUTOMATED RESUSCITATION STATUS TOOL

Natalie Rozanec^{1,2}, Cynthia Heron¹, Edwin Chan¹, Shaziya Malam¹, John San Miguel¹, Jennifer Daley-Morris¹, Charles Cho^{1,2,3}, Peter Anglin¹, James Loudon^{1,2}

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228

IMPROVING THE CANCER CENTRE WORK EXPERIENCE: ONE SIZE DOES NOT FIT ALL

Rajiv Samant¹, Ege Babadagli¹, Selena Laprade¹, Gordon Locke¹, Angela McNeil², Joanne Meng¹, Julie Renaud², Elisabeth Cisa-Paré³, Jessica Chan⁴, Jiheon Song⁵

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⁵University of Toronto, Toronto, ON

229

SURVEY ON RESIDENT PERCEPTIONS OF RADIATION ONCOLOGY INPATIENT CARE IN CANADA

Michael Sun, Bayan Malakouti-Nejad, Daniel Tesolin, Ege Babadagli, Graham Cook, Marc Gaudet, Robert MacRae
The Ottawa Hospital Cancer Centre, Ottawa, ON

230

THE IMPACT OF A STUDENT-LED RADIATION ONCOLOGY INTEREST GROUP ON MEDICAL LEARNER INTEREST AND ACCESS TO THE SPECIALTY

Benson Wan, Ian J. Gerard, Piotr Pater, Tanner Connell, Joanne Alfieri
McGill University, Montréal, QC

231

CHARACTERISTICS ASSESSMENT OF ONLINE YOUTUBE VIDEOS ON RADIOTHERAPY FOR BREAST CANCER

Brandon Chai¹, Paris-Ann Ingledew²

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²British Columbia Cancer, Vancouver, BC

232

ABDOMINAL SCHWANNOMA MIMICKING LYMPH NODE METASTASIS IN RECTAL CANCER

Enxhi Kotrri, Derek Jonker, Rebecca Auer, Gordon Locke
University of Ottawa, Ottawa, ON

233

INTERACTIVE LINEAR ACCELERATOR MODELS FOR MEDICAL EDUCATION

Parminder Basran
Cornell University, Ithaca, NY

234

PATIENTS AS PARTNERS IN UNDERGRADUATE ALLIED HEALTH CURRICULUM: HOW ARE THEY INVOLVED?

Cynthia Palmaria, Amanda Bolderston, Susan Fawcett
University of Alberta, Edmonton, AB

235

ASSESSMENT OF LUNG CANCER YOUTUBE VIDEOS FOR PATIENT EDUCATION

Brandon Chai¹, Paris-Ann Ingledew²

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236

IMPORTANCE OF LEADERSHIP SKILL DEVELOPMENT AMONG HEALTH CARE PROFESSIONALS IN LMIC

Agha Muhammad Hammad Khan¹, Tooba Ali², Agha Muhammad Hassaan Khan³, Maria Tariq², Bilal Mahar Qureshi², Nasir Ali², Sehrish Abrar², Asim Hafiz², Ahmed Nadeem Abbasi²

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237

TEACHING PROFESSIONAL ETHICS IN MEDICAL PHYSICS GRADUATE PROGRAM

Marija Popovic¹, Ives R. Levesque¹, Cassandra Stambaugh², Wang Dongxu³

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238

IMPLEMENTING DEMENTIA-FRIENDLY CARE APPROACH FOR CANCER PATIENTS LIVING WITH DEMENTIA

Shelley Canning¹, Jagbir Kaur², Michael McKenzie², Genevieve St-Martin², Lillian Hung³, Nicole Percival⁴, Jasleen Brar¹, Rachel Wan³, Lynn Jackson⁵, Sara Makortoff⁵,

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239

LEARN ONCOLOGY THROUGH SOCIAL MEDIA: IS IT POSSIBLE?

Saveen Sidhoo¹, Stella Kang², Paris-Ann Ingledew³

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³University of British Columbia, Vancouver, BC

240

USING 18F PSMA-1007 PET AND MULTIPARAMETRIC MRI WITH PROSTATE SBRT TO ESCALATE THE DOSE TO DOMINANT INTRAPROSTATIC LESIONS - ARGOS-CLIMBER: INTERIM RESULTS OF A PHASE I/II CLINICAL TRIAL
Aneesh Dhar^{1,2}, Glenn Bauman^{1,2}, Lucas Mendez^{1,2}, Hatim Fakir^{1,2}, David Laidley^{1,2}, Zahra Kassam^{1,2}, Wei Liu³, TingYim Lee^{4,1}, Aaron Ward¹, Jonathan Thiessen⁴, Anders Celinski², Melanie Davidson⁵, Jane Bayani⁶, Matt Mulligan², Linada Berryhill², John Conyngham², Wee Loon Ong⁵, Andrew Loblaw^{5,7}

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241

A FEASIBILITY STUDY: INSERTION OF INERT ALPHA DART SEEDS IN ORTHOTOPIC RECTAL MICE MODELS

Mélodie Cyr, Behnaz Behmand, Naim Chabaytah, Joud Babik, Shirin A. Enger

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242

INVESTIGATING THE APPLICATIONS OF GLIAL ACTIVATION IMAGING USING [18F]-FEPPA PET FOLLOWING CRANIAL IRRADIATION TO GUIDE RADIOTHERAPY TREATMENTS

Sawyer Badiuk¹, Lise Desjardins², Matthew Fox^{1,2}, Paula Foster^{1,3}, Jonathan Thiessen^{1,2}, Jeff Chen¹, Eugene Wong^{1,2,4}

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243

DOSE REDUCTION IN QUANTITATIVE IODINE IMAGING WITH PHOTON-COUNTING CT

Pierre-Antoine Rodesch, Devon Richtsmeier, Magdalena Bazalova-Carter

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244

RESOLVING THE 2.1 PPM ALLYLIC FATTY ACID RESONANCE WITH MAGNETIC RESONANCE SPECTROSCOPY AT 3 T

Nathaniel Bly, Atiyah Yahya

University of Alberta, Edmonton, AB

245

APPARENT DIFFUSION COEFFICIENT REPEATABILITY AND REPRODUCIBILITY WITHIN THE PROSTATE FOR MR-GUIDED ADAPTIVE RADIATION THERAPY

Nitara Fernando¹, Tony Tadic², Winnie Li², Tirth Patel², Jerusha Padayachee³, Anna T Santiago⁴, Jennifer Dang², Peter Chung², Enrique Gutierrez², Catherine Coolens², Ed Taylor², Jeff D Winter²

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246

CHARACTERIZING THE HU CONSTANCY OF THE VARIAN ETHOS HYPERSIGHT CBCT AND COMPARING IT TO CONVENTIONAL SYSTEMS

Clara Fallone^{1,2}, Lee MacDonald^{1,2}, Amanda Cherpak^{1,2}, James Robar^{1,2}

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247

THE EFFECT OF CT ACQUISITION PARAMETERS ON EXTRACTED RADIOMIC FEATURES USING COMPUTATIONAL PHANTOMS

Jaryd Christie, Mohamed Abdelrazek, Stewart Gaede, Sarah Mattonen

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248

COMPARISON OF INSPIRATION AND EXPIRATION DENSITY-BASED CT MEASUREMENTS WITH CT TEXTURE-BASED RADIOMICS IN PREDICTING COPD SYMPTOMS

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249

MICROWAVE-BASED BREAST IMAGING: EXISTING EVIDENCE, CHALLENGES, AND FUTURE PATHS

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250

DOES DIAGNOSTIC MRI BEFORE RADIOTHERAPY FOR PROSTATE CANCER CAUSE A WILL ROGERS PHENOMENON

Johanna Dahan

Université de Montréal, Montréal, QC

251

PROSTATE SPECIFIC MEMBRANE ANTIGEN POSITRON EMISSION TOMOGRAPHY FOR PATIENTS WITH RECURRENT PROSTATE CANCER (PREP) - A PROSPECTIVE, MULTICENTRE REGISTRY

Aneesh Dhar¹, Glenn Bauman^{1,2}, Lucas Mendez^{2,1}, Girish Kulkarni^{3,4}, Antonio Finelli^{3,4}, Alejandro Berlin^{3,4}, Peter Chung^{3,4}, Andrew Bayley^{3,5}, Hans Chung^{3,5}, Laurence Klotz^{5,3}, Robert Wolfson^{5,3}, Himu Lukka^{6,7}, Katherine Zukotynski^{7,6}, Anil Kapoor^{8,6}, Bobby Shayegan^{8,6}, Joseph Chin^{2,1}, Catherine Hildebrand², Irina Rachinsky^{2,1}, Eugene Leung^{9,10}, Luke Lavallee^{9,10}, Chris Morash^{10,9}, David Tiberi^{10,9}, Marlon Hagerty¹¹, Kevin Ramchandar¹¹, Jonathan Boekhoud¹¹, Walid Shahrour¹¹, Deanna Langer¹², Pamela MacCrostie¹², Victor Mak¹², Ur Metser^{3,4}

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¹¹Thunder Bay Regional Health Sciences Centre, Thunder Bay, ON

¹²Cancer Care Ontario (Ontario Health), Toronto, ON

252

SIGNAL TO NOISE VARIABILITY OF PHASED ARRAY COIL ELEMENTS USED IN A RADIATION ONCOLOGY DEDICATED MRI SIMULATOR

Alyaa Elzibak^{1,2}, Brige Chugh^{1,2}, Alex Karotki¹, Stephen Breen^{1,2}

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253

FINDING REPRODUCIBLE AND INFORMATIVE RADIOMIC FEATURES ASSOCIATED TO CLINICAL ENDPOINTS AND TO IMMUNOHISTOCHEMISTRY BIOMARKERS FROM CT IMAGING DATA IN AN IMMUNOTHERAPY-TREATED NSCLC COHORT

Leyla Ebrahimpour¹, Yannick Lemaréchal¹, Michèle Orain¹, Philippe Joubert¹, Fabien Lamaze¹, Philippe Després¹, Venkata Manem²

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254

LOW-TESLA MRI IMAGING EFFECTIVELY REDUCES HARDWARE ARTIFACTS IN PATIENTS WITH METAL IMPLANTS

Abdulaziz Alghamdi, Soon Huh, Adam Holtzman, Danny Indelicato, Jiyeon Park

University of Florida, Jacksonville, FL

255

LOGISTIC DOSE DISTANCE MODEL TO PREDICT MOIST DESQUAMATION IN BREAST RADIOTHERAPY

Aria Malhotra¹, Emilie Carpentier¹, Sheri Grahame², Alan Nichol^{1,2}, Elisa Chan^{1,2}, Cheryl Duzenli^{1,2}

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256

PATIENT-SPECIFIC PRE-TREATMENT NUCLEI SIZE DISTRIBUTION IS OF SIGNIFICANCE FOR POST RADIATION THERAPY LOCOREGIONAL RECURRENCE AND SURVIVAL OUTCOMES

Yujing Zou¹, Magali Lecavalier-Barsoum¹, Manuela Pelmus¹, Farhad Maleki², Shirin A. Enger¹

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257

THREE-DIMENSIONAL ULTRASOUND FUSION OF TRANS-ABDOMINAL AND TRANS-RECTAL IMAGES FOR
VISUALIZATION OF GYNECOLOGICAL HIGH DOSE-RATE BRACHYTHERAPY APPLICATORS

Tiana Trumpour¹, Jamiel Nasser⁴, Carla du Toit², Claire Park¹, Jessica Rodgers³, Lucas Mendez¹, Kathleen Surry¹,
Aaron Fenster¹

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258

SET UP TIME AND REPRODUCIBILITY FOR PATIENTS WITH LARGE OR PENDULOUS BREASTS IN SUPINE BREAST
RADIOTHERAPY

Michelle Medina¹, Amy Frederick², Cheryl Duzenli^{1,2}

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259

DEVELOPMENT OF A COST-EFFICIENT SCINTILLATION-FIBER DETECTOR FOR USE IN AUTOMATED SYNTHESIS OF
POSITRON EMISSION TOMOGRAPHY RADIOTRACERS

Hailey SH Ahn¹, Liam Carroll¹, Robert Hopewell², I-Huang Tsai², Shirin A Enger³

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260

INCORPORATING DNA REPAIR MECHANISMS INTO A MONTE CARLO MODEL OF DNA DAMAGE BY NEUTRONS

Nicolas Desjardins, John Kildea

¹McGill University, Montréal, QC

261

A 3D STAR SHOT TO DETERMINE AXES OF ROTATION

Robert Corns, Kaida Yang, Mason Ross, Shiva Bhandari, Makunda Aryal, Peter Ciacchio

East Carolina University, Greenville, NC

262

A FRAMEWORK FOR DESIGNING GLASS VESSELS USED IN WATER CALORIMETRY

Mark D'Souza¹, James Renaud², Arman Sarfehnia³

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³Sunnybrook Health Sciences Centre, Toronto, ON

263

THE MINIMUM ACCEPTABLE BLADDER VOLUME IN PROSTATE CANCER RADIATION THERAPY WITH VMAT DELIVERY
TECHNIQUE

Congwu Cui, Holly Campbell

Saint John Regional Hospital, Horizon Health Network, Saint John, NB

264

Monitoring of the Long-term Performance of a-Si 1200 Electronic Portal Imaging Device

Ivan Kutuzov, Boyd McCurdy, Ryan Rivest, Eric Van Uytven

University of Manitoba, Winnipeg, MC

265

MULTI-POINTS CALORIMETER USING FIBER BRAGG GRATINGS FOR SMALL FIELD DOSIMETRY IN RADIOTHERAPY

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266

WITHDRAWN

267

CHARACTERIZATION OF CHANGES IN SCINTILLATION SPECTRUM OF PLASTIC SCINTILLATOR DOSIMETERS AFTER RADIATION DAMAGE UNDER ULTRA-HIGH DOSE RATE 200 MEV ELECTRONS AT CLEAR

Cloé Giguère^{1,2}, Alexander Hart³, Nolan Esplen³, John Bateman^{4,5}, Pierre Korysko⁵, Wilfrid Farabolini⁵, Magdalena Bazalova-Carter³, Luc Beaulieu^{1,2}

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268

SHOULD WE IMPLEMENT TRS 483 RECOMMENDED CORRECTION FACTORS FOR CYBERKNIFE CONES OUTPUT IN VARIOUS DETECTOR TYPES

Iqbal AL AMRI, Mahmood AL Fishawy, Mohammed Ali Gourmani, Nirmal Babu

Sultan Qaboos Comprehensive Cancer Center, Muscat, OM

269

IMPLEMENTATION AND VALIDATION OF NON-UNIFORM MAGNETIC FIELDS INTO PENELOPE/PENEASY

Jacob Groeneveld^{1,2}, Fletcher Barrett¹, Charles Kirkby^{1,2}

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270

APPLICATION OF 3D POLYMER GEL DOSIMETRY (PGD) TO COMMISSION A VIRTUAL CONE TECHNIQUE FOR STEREOTACTIC RADIOSURGERY OF TRIGEMINAL NEURALGIA

Tenzin Kunkyab¹, Michael Lamey², Andrew Jirasek¹, Toney Teke², Benjamin Mou², Derek Hyde²

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271

GRID THERAPY WITH VERY-HIGH ENERGY ELECTRONS

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³CERN, Geneva, CH

272

CLINICAL IMPLEMENTATION AND PRELIMINARY PATIENT OUTCOMES OF FLATTENING FILTER FREE IRRADIATION AT AN EXTENDED DISTANCE FOR TOTAL BODY IRRADIATION (FIRE-TBI)

Rebecca Frederick^{1,2}, Alana Hudson^{1,2}, Alexander Balogh^{1,2}, Jeffrey Cao^{1,2}, Andrew Daly^{1,3}, Adam Blais^{1,2}, Greg Pierce^{1,4}

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273

IMPACT OF RANGE UNCERTAINTIES ON ROBUST MIXED ELECTRON-PHOTON BEAM RADIATION THERAPY

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274

AN EXPLORATION OF ANNULAR PARALLEL PLATE WAVEGUIDES FOR ELECTRIC FIELD GENERATION IN A DIELECTRIC WALL ACCELERATOR

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275

PLANNING STRATEGIES FOR DYNAMIC TUMOUR TRACKING TREATMENTS

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276

CHARACTERIZATION OF MLC LATENCY FOR NON-INVASIVE INTRAFRACTIONAL TUMOUR-TRACKED RADIOTHERAPY (NIFERT) ON ALBERTA LINAC-MR

Benjamin Schultz, Satyapal Rathee, Gino Fallone, Jihyun Yun

University of Alberta, Edmonton, AB

277

AN INVESTIGATION INTO THE BENEFIT OF USING A HIGHER THRESHOLD OF CORRECTIBLE ROTATIONS IN CYBERKNIFE TREATMENTS

Meaghen Shiha¹, Emily Heath¹, Eric Vandervoort^{2,3,1}

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278

EVALUATION OF PATIENT-SPECIFIC QUALITY CONTROL (QC) FOR MARKERLESS DYNAMIC TUMOUR TRACKING (MDTT) DELIVERIES

Marie-Laure Camborde, Tania Karan, Ronald Horwood, Ante Mestrovic, Alanah Bergman

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279

RESULT OF A NATIONAL SURVEY: TIME FOR CANADA TO JOIN THE GLOBAL RESEARCH ON BORON NEUTRON CAPTURE THERAPY?

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280

CLINICAL IMPLEMENTATION OF INTRAOPERATIVE RADIOTHERAPY: 10-YEAR EXPERIENCE AT MUHC

Marija Popovic¹, Monica Serban², Michael Evans¹, William Parker¹, Jan Seuntjens²

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281

THE USE OF IMPLANTED CARDIAC LEADS OR AN ANATOMICAL SURROGATE FOR RESPIRATORY TRACKING IN CARDIAC RADIOSURGERY

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282

SPLENDEURS ET MISERES WITH KNOWLEDGE-BASED PLANNING FOR PROSTATE STEREOTACTIC ABLATIVE BODY RADIOTHERAPY

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283

THE EFFECT OF REAL-TIME IMAGING DOSE ON OAR CONSTRAINTS IN LUNG SBRT

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284

IMPACT OF NOVEL RECONSTRUCTION AND METAL ARTIFACT REDUCTION ALGORITHMS ON METAL ELECTRON DENSITY CURVE FOR KVCT SIMULATOR

Robert Stodilka¹, Brandon Disher¹, Matt Mulligan¹, Homeira Mosalaei¹, Hatem Mehrez², Stewart Gaede¹

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285

OPTIMIZING THE DELIVERABILITY OF BINARY COLLIMATION-BASED SRS TREATMENT TECHNIQUE FOR MULTIPLE METASTASES WITH MULTIPLE PRESCRIPTIONS

Eva Lee, Lee MacDonald, Christopher Thomas, Alasdair Syme

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286

ASSESSING THE CONTROL POINT-SPECIFIC DOSIMETRIC IMPACT OF POPULATION-BASED INFRAFRACTIONAL MOTION IN CRANIAL RADIOSURGERY OF MULTIPLE METASTASES WITH A SINGLE ISOCENTRE

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287

IMPACT OF ABDOMINAL COMPRESSION ON HEART AND STOMACH RESPIRATORY MOTION FOR STEREOTACTIC ARRHYTHMIA RADIOABLATION

Daniel Cecchi, Hali Morrison, Nicolas Ploquin

University of Calgary, Calgary, AB

288

CLINICAL INTEGRATION OF MULTIJET FUSION 3D PRINTING-BASED BOLUS FOR VMAT CHEST WALL PATIENTS

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289

DEFORMABLE IMAGE REGISTRATION-BASED DOSE ACCUMULATION FOR LUNG REIRRADIATION CASES

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290

PLAN TRANSFORMATION MADE EASY

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291

CHANGES IN BODY CONTOUR DURING TREATMENT AND THEIR EFFECTS ON VMAT PELVIC PLANS

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292

STATIC COUCH NON-COPLANAR ARC SELECTION OPTIMIZATION FOR LUNG SBRT TREATMENT PLANNING

John Lincoln, Lee MacDonald, Alasdair Syme, Christopher G. Thomas

Dalhousie University, Halifax, NS

293

PROSTATE STEREOTACTIC BODY RADIOTHERAPY TREATMENT PLANNING AND IMAGE GUIDANCE: INITIAL EXPERIENCE FROM TWO INSTITUTIONS

Derek Liu, Nelson Leong, Varun Thakur, Julius Pekar, Ali El-Gayed

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294

STRATEGIES TO MANAGE RADIATION THERAPY WAIT TIME "READY-TO-TREAT TO START OF TREATMENT" PERFORMANCE IN ONTARIO

James Loudon^{1,2}, Tara MacDonald³, Laurie Stillwaugh⁴, Richard Singh⁵, Dennis Vergel de Dios⁶, Sandi Sodhi⁶, Melissa Diffey⁷, Tammy Mathurin⁸, Brandee Pidgeon⁹, Rob Blanchette³, Melisa King¹⁰, Kit Tam¹¹, Jackson Chan⁸, Steve Russell¹², Lorella Divanbeigi¹³, Yat Tsang¹³, Christine Black¹⁴, Laura D'Alimonte¹⁵, Mellissa Linke¹⁶, Margaret Hart¹⁷, Brian Liszewski^{2,17}, Eric Gutierrez¹⁷

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295

INFLUENCE OF SOCIO-ECONOMIC STATUS ON RADIOTHERAPY ADVERSE EVENTS

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296

A POPULATION-BASED ANALYSIS OF THE MANAGEMENT OF SYMPTOMS OF DEPRESSION AMONG PATIENTS WITH STAGE IV NON-SMALL CELL LUNG CANCER IN ONTARIO, CANADA

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297

POPULATION ANALYSIS OF SABR/SRS FOR THE TREATMENT OF METASTATIC CANCER IN A JURISDICTION OF 15 MILLION PEOPLE

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298

IMPACT OF HEALTHCARE ACCESS DURING COVID-19 SHUTDOWN IN ANAL CANCER DIAGNOSIS

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299

POPULATION-BASED DIFFERENCES IN CANCER INCIDENCE BETWEEN IMMIGRANTS AND NON-IMMIGRANTS IN CANADA FROM 1992-2015

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300

STEREOTACTIC RADIOTHERAPY FOR THE RE-TREATMENT OF PELVIC AND PARA-AORTIC DISEASE IN GYNECOLOGIC CANCERS

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301

RADIOTHERAPY CAPABILITIES, POPULATION, AVERAGE INCOME, AND HEALTH INSURANCE STATUS AS PREDICTORS OF CANCER MORTALITY AT THE COUNTY LEVEL IN THE UNITED STATES

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302

HEALTH CARE SYSTEM FACTORS ASSOCIATED WITH RECEIPT OF TREATMENT AND WITH TREATMENT INTENT IN STAGE III NON-SMALL CELL LUNG CANCER: A POPULATION-BASED STUDY IN ONTARIO

Stephane Thibodeau¹, Paul Nguyen¹, Andrew Robinson¹, Fabio Ynoe de Moraes¹, Jason Pantarotto², Timothy Hanna¹

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303

SCALING UP CHEMORADIATION SERVICES IN UGANDA: OPPORTUNITIES AND CHALLENGES FOR THE ROAD TO CARE PROGRAM

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304

THE CHANGING LANDSCAPE OF RADIATION THERAPY: IMPLICATIONS FOR FUTURE PLANNING

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305

ALL THAT GLITTERS IS NOT GOLD: EXAMINING COST EFFECTIVENESS ANALYSES IN RADIATION ONCOLOGY

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306

WHICH CRITERIA SHOULD WE USE TO DETERMINE AN ADEQUATE NUMBER OF LINEAR ACCELERATORS IN EMERGING ECONOMY COUNTRIES?

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307

THE EFFECTIVENESS AND SAFETY OF STEREOTACTIC BODY RADIATION THERAPY IN THE TREATMENT OF OLIGOPROGRESSIVE BREAST CANCER: A SYSTEMATIC REVIEW

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308

SAFETY INCIDENTS AND NEAR-MISS EVENTS IN PEDIATRIC RADIOTHERAPY

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309

PROSPECTIVE CLINICAL TRIALS OF NOVEL SYSTEMIC THERAPIES IN ADVANCED NON-SMALL CELL LUNG CANCER-
WHAT ABOUT RADIOTHERAPY?

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310

EXTREMITY DOSE ESTIMATES IN HDR STUCK SOURCE EMERGENCIES WITH UNKNOWN SOURCE POSITIONS

Krista Chytky-Praznik, Kathleen MacLean, Michel Ladouceur, Alasdair Syme

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311

DEVELOPMENT AND TESTING OF A SYMPTOM COMPLEXITY ALGORITHM USING ESAS-R CANCER

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312

EXAMINING THE EFFICACY AND SAFETY PROFILE OF PALLIATIVE RADIOTHERAPY USING 30 GY IN 5 FRACTIONS

Zhang Hao (Jim) Li^{1,2}, Timothy Kong^{1,2}, Emma Dunne^{1,2}, Mitchell Chung Chiu Liu^{1,2}, Jee Suk Chang^{1,2}, Tina Wanting Zhang^{1,2}, Matthew Chan^{1,2}, Ronan McDermott^{1,2}

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313

HIGH SYMPTOM BURDEN IN PATIENTS RECEIVING RADIOTHERAPY AND FACTORS ASSOCIATED WITH BEING
OFFERED AN INTERVENTION

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314

A PRACTICAL METHOD FOR QUALITY ASSURANCE OF THE TIME DELAY ASSOCIATED WITH A MOTION
MANAGEMENT SYSTEM USING A QUASAR™ PHANTOM

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315

OZONE HEALTH AND SAFETY CONSIDERATIONS FOR FLASH RADIOTHERAPY

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316

RADIATION TREATMENT CONSIDERATIONS FOR PATIENTS WITH IMPLANTED MEDICAL DEVICES

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317

EFFECTS OF PALLIATIVE ESOPHAGEAL EBRT IN PATIENTS WITH STENT FOR ESOPHAGEAL CANCER: BRITISH COLUMBIA PATTERN OF PRACTICE SURVEY AND RETROSPECTIVE COHORT STUDY

Emily Adams¹, Héloïse Lavoie-Gagnon², Farhana Islam¹, Michael Humer^{3,4}, Theodora Koulis^{3,5}, Benjamin Mou^{3,6}, David Kim^{3,6}, Siavash Atrchian^{3,6}

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318

OPTIMIZATION OF WORKUP PATHWAYS TO DECREASE RADIOTHERAPY WAIT TIMES AND IMPROVING PATIENT EXPERIENCE: A SINGLE CENTRE STUDY

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319

RAPID AUTOMATED EXTRACTION OF DOSE-VOLUME HISTOGRAM DATA FOR ARBITRARY PATIENT COHORTS

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320

MONITORING CT DOSES IN DIAGNOSTIC RADIOLOGY THROUGH A DASHBOARD

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321

COMPARISON OF PATIENT-SPECIFIC QUALITY ASSURANCE RESULTS FROM A DELIVER-LOG BASED CALCULATION SYSTEM AND DOSE RECONSTRUCTION IN PATIENT ANATOMY BASED ON PHANTOM MEASUREMENTS

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322

PATIENT EXPERIENCE IN A RADIATION THERAPY DEPARTMENT PRE- AND DURING THE COVID-19 PANDEMIC

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323

AUTOMATED LOW CONTRAST DETECTION FOR ACR MRI PHANTOM QUALITY ASSURANCE

Joseph Madamesila, Ali Golestani

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324

AN INVESTIGATIONAL STUDY OF UNACCEPTABLE MONITOR UNITS IN STEREOTACTIC ABLATION RADIOTHERAPY (SABR) VOLUMETRIC MODULATED ARC THERAPY (VMAT) TREATMENT PLANS

Gurpreet K. Sandhu, Fred Cao

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325

COMPARISON OF SET-UP ERRORS BETWEEN BREAST AND THORAX ALL-IN-ONE SOLUTION AND BREAST BOARD IN BREAST CANCER PATIENTS

Aya Hassabelrasol, Agha Muhammed Hammad, Jamsari Khalid, Zahid Al Mandhari

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326

OUTCOMES OF HYPOFRACTIONATED RADIOTHERAPY WITH INDUCTION OR SEQUENTIAL CHEMOTHERAPY FOR UNRESECTABLE STAGE III NON-SMALL CELL LUNG CANCER: SINGLE INSTITUTION EXPERIENCE

Ian J. Gerard, Neelabh Rastogi, Jayson Paragas, Tanner Connel, Bassam Abdulkarim, Marie Duclos, Sergio Faria, Neil Kopek

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327

CONVENTIONALLY FRACTIONATED VERSUS HYPOFRACTIONATED RADIOTHERAPY FOR TREATMENT OF UNRESECTABLE PANCREATIC CANCER: LOCAL CONTROL AND SURVIVAL OUTCOMES IN A RETROSPECTIVE SINGLE-INSTITUTIONAL ANALYSIS

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328

TOXICITIES ASSOCIATED WITH RADIOTHERAPY FOR PROSTATE CANCER PATIENTS TREATED WITH VMAT

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