2018-2019 Annual Report
Radiation Medicine Program

UHN Princess Margaret Cancer Centre
The Radiation Medicine Program (RMP) at the Princess Margaret Cancer Centre is committed to delivering the highest standard of patient care. Over the past year, our dynamic and collaborative multi-disciplinary team of radiation oncologists, medical physicists, radiation therapists, administrators, researchers, and educators, have advanced us toward our vision of Precision Radiation Medicine. Personalized Care. Global Impact. Our foundational values of innovation, excellence, collaboration, accountahility, and integrity have all played a pivotal role in our mission to provide exemplary radiation medicine through patient care, research, and education in partnership with our patients and community.

2018 brings us another year closer to the culmination of our Strategic Roadmap to 2020. As a program, we have made remarkable progress, and I would like to highlight a few specific accomplishments. First and foremost, we successfully completed a Canadian Nuclear Safety Commission Audit. Our robust quality and safety culture is a source of immense pride for RMP, and I would like to acknowledge the vigilant efforts of all staff and leadership in this regard. Another key achievement in 2018 was the world’s largest deployment of the RayStation Treatment Planning System. This highly coordinated collaborative effort means treatment plans can be developed faster and more efficiently, allowing care to be delivered to our patients as precisely and rapidly as possible. It is also important to acknowledge that we remain the largest single-site radiation medicine program in the world, having provided 9,113 patient consultations and 11,099 courses of radiation treatment in 2018, recording the highest number of courses delivered in our history.

Our research program has continued to expand and thrive, and is centered on six strategic priority areas including radiogenomics, radiomics, MR-guided radiation therapy, oligoprogression, regenerative radiation medicine, and patient-reported outcomes. 2018 saw the establishment of the Radiomics for Radiotherapy Research (R3) Consortium. RMP also hosted the first-ever Ontario Proton Therapy Symposium in 2018, situating RMP as a leading advocate for the implementation of this important treatment option for cancer patients in Ontario. Our continued excellence and innovation in education was also demonstrated in 2018. The international reputation of the Accelerated Education Program (AEP) continues to attract attendees from around the world to its high-impact, industry-leading courses. As one headline example, AEP’s 52nd course, “Expanding Use of SBRT in Radiation Therapy” welcomed 28 participants from several different countries, with 100% of course participants reporting that the course met its objectives. In training such a diverse group of radiation medicine professionals, we are delivering on our plan to truly have a global impact, maximizing positive outcomes for not just our own patients, but for those around the world.

In summary, I am thrilled to be able to share so many program accomplishments from 2018. We remain steadfast in our dedication to accelerate discovery to deliver precision medicine, integrate research and education with clinical practice, strengthen internal and external community linkages, and extend high reliability with systems thinking for 2019. I eagerly anticipate all that we can achieve together in the coming year.

Fei-Fei Liu, MD, FRCP
Chief, Radiation Medicine Program, Princess Margaret Cancer Centre
Head, Department of Radiation Oncology, University Health Network
Our multi-talented, interprofessional staff enables all aspects of our program to succeed. Led by the Program Chief, the RMP Steering Committee defines the principles of operation, and policies of governance for the management of clinical, quality assurance and safety, research, educational, operational and IT activities.

Team RMP

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A Year in Review

Strategic Roadmap to 2020

Since the launch of the Strategic Roadmap to 2020 in 2015, RMP has focused on implementing several key initiatives and activities to help achieve its four strategic priorities to: 1) accelerate discovery to deliver precision medicine for best patient and population outcomes; 2) integrate research and education with clinical practice; 3) strengthen internal and external community linkages; and 4) extend high reliability with systems thinking. Key highlights from 2018-2019 are shown.

Accelerate discovery to deliver precision medicine

- Hosted the first-ever Ontario Proton Therapy Symposium in collaboration with U of T, Sickkids, POGO
- Migrated all external beam planning techniques to RayStation, marking the world’s largest RayStation deployment
- Rolled out Radiation Therapist Case Expert practice model with RT Site Leads training in CT Sim and Treatment Planning
- Developed harmonized process for overseeing MR-guided adaptive RT in RMP, including new technology implementation, protocol development/approval & optimal clinical/academic utilization to ensure impact
- Improved reliability of MRgRT facility and implemented real-time MR-imaging of patients receiving EBRT

Integrate research & education with clinical practice

- Secured funding from Harrison McCain Foundation and Elekta China to develop collaborative professional training opportunities in Atlantic Canada and China
- Held 1-day Faculty Development Workshop on Competence by Design in Radiation Oncology
- Launched RMP Research Bites, a quarterly e-newsletter highlighting RMP research activities and achievements
- Successfully launched a new Image Guidance for Radiation Therapists AEP Course to build image-matching competence for therapists
- Increased utilization of social media to disseminate information regarding RMP research accomplishments

Strengthen internal & external community linkages

- Hosted a continuing education event with referring physicians from St. Michael’s, St. Joseph’s, Humber River Hospitals
- Completed SharePoint CMS upgrade pilot project in collaboration with UHN Digital
- Established cross-appointed radiation oncologists and collaborative, multidisciplinary oligo-metastases brain clinic with SickKids and Carlo Fidani Regional Cancer Centres
- Developed Safety Huddle Database for staff to submit and track opportunities for improvement
- Promoted interdisciplinary leadership and broad programmatic engagement in the international MR LINAC Consortium

Extend high reliability with systems thinking

- Deployed EVOQ in the Breast Site Group
- Developed a dashboard of key research metrics for near real-time reporting and program planning
- Established a formalized collaboration with the Princess Margaret Biostatistics Department to improve efficiency
- Recruited Scientific Program Manager to increase external peer-review funding

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A Vision for Proton Therapy in Ontario

In November 2018, RMP hosted the first-ever Ontario Proton Therapy Symposium, entitled “A Vision for Proton Therapy in Ontario”, in collaboration with the University of Toronto, Hospital for Sick Children, and the Pediatric Oncology Group of Ontario. The symposium, co-chaired by Derek Tsang and David Jaffray, aimed to increase awareness of proton therapy and facilitate access to this important treatment option for cancer patients across Ontario. Hospital leaders, government administrators, and health care providers from MOHLTC, CCO, UHN, SickKids, POGO, and nine cancer centres across Ontario attended the well-received event.

World’s Largest RayStation Installation

RMP completed its clinical transition to RayStation for external beam treatment planning in 2019, marking the largest RayStation installation in the world. Led by Tim Craig, over 7000 clinical RayStation plans were produced; standardized planning nomenclature was adopted across the program; 56 RayStation planning protocols were written, tested, measured, reviewed, and approved; 11 step-and-shoot IMRT techniques were migrated to VMAT; electron planning was completely re-designed; and palliative planning processes were dramatically improved. RMP now has a platform that can support current state-of-the-art and future planning activities, including dose reconstruction, adaptive radiation therapy, and proton therapy. RMP is an acknowledged leader at the Princess Margaret and UHN in technology adoption due to David Jaffray’s vision and ongoing efforts to ensure RMP remains ahead of the curve in bringing new technologies to improve patient care.
Mobilizing to Support Personalized Precision Radiation Medicine

The Case Expert Radiation Therapist practice model is currently being rolled out within RMP to enable radiation therapists to deliver adaptive radiation therapy and person-centered care. Led by Ellen Mooy, the innovative model envisions a primary radiation therapist, who functions within the multidisciplinary radiation team, but is engaged in all aspects of the patient's journey, serving as a continuous advocate and steward for the patient through patient education, CT simulation, planning, treatment delivery, patient care and symptom management. After successful pilot studies in 2 Super Teams, phase 2 of the initiative commenced in November 2018 with skill-up of RT Site Leads in CT simulation and treatment planning for all 4 Super Teams.

Colleen Dickie was appointed as the Director of Operations of RMP, effective April 2018, succeeding Sophie Fauco, who held this position since 2013.

Leadership Appointments

Jean-Pierre Bissonnette: Associate Head of Professional and Academic Affairs for the Department of Medical Physics (May 2018)
Carina Feuz: Interim Radiation Therapy Team 3 Supervisor (May 2018)
Kathy Han: DRG Gynecology Site Group Leader (February 2019); succeeding Michael Milosevic, who held this position for well over 20 years
Christine Hill: Manager of Radiation Therapy Strategic Operations (July 2018)
Nareesa Ishmail: Radiation Therapy Team 3 Supervisor (September 2018)
Normand Laperriere: Interim Princess Margaret CNS Site Group Leader (February 2018)
Winnie Li: Interim Process Development and Integration Practice Leader – Radiation Treatment Delivery (March 2018)
Fei-Fei Liu: Re-appointed as Chief of RMP at the Princess Margaret for another 5-year term (April 2018)

Excellence in Performance

The RMP QC uses the standards set by Cancer Care Ontario, Canadian Partnership for Quality Radiotherapy (CPQR) and Accreditation Canada to provide guidance in developing and maintaining quality in the program.

CCO Performance Measures

CCO monitors 3 key performance areas: referral-to-consult wait times, ready to treat-to-treatment start wait times, and peer review rates. RMP continued to meet or exceed the majority of the CCO Performance Measures and provincial averages for wait times and peer review in 2018.

CPQR Program Compliance

CPQR has published a series of 16 guidelines in 3 categories: technical quality control, quality assurance and patient engagement. Compliance has been assessed against all of the CPQR guidelines, three have been deemed not applicable to RMP practice. In 2018, RMP had a compliance rate of 94%.

Accreditation Canada Standards

Accreditation Canada introduced 32 new radiation therapy specific standards to the Omentum Program in 2017. In anticipation of UHN accreditation in September 2019, the RMP QC has completed a review of all of the Accreditation Canada Standards, none of which have been deemed not applicable to RMP practice. In 2018, RMP had a compliance rate of 94%.

Referral-to-Consult Wait Time

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<thead>
<tr>
<th>CCO Target</th>
<th>RMP Performance</th>
<th>*calendar year statistics</th>
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<tbody>
<tr>
<td>80%</td>
<td>82%</td>
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Ready to Treat-to-Treatment Start Wait Time

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<tr>
<th>CCO Target</th>
<th>RMP Performance</th>
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<tbody>
<tr>
<td>85%</td>
<td>89%</td>
<td></td>
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</table>

Peer Review Rate

<table>
<thead>
<tr>
<th>CCO Target</th>
<th>RMP Performance</th>
<th>*calendar year statistics</th>
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<tr>
<td>75%</td>
<td>92%</td>
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Fei-Fei Liu was appointed as the Chair of the Medical Advisory Committee at UHN in January 2018.

Jean-Pierre Bissonnette was appointed as the Physics Clinical Quality Lead with the Radiation Treatment Program at CCO in January 2018.
AQUA™, a clinical Quality Assurance software platform developed by a multi-disciplinary team led by Daniel Letourneau and David Jaffray was acquired by Elekta in September 2018. Commercialized through the spin-off company, Acumyn Inc, this acquisition will help bring AQUA’s quality management to the world and provides an effective tool to facilitate the delivery of safe radiotherapy for our cancer patients.

Acumyn Inc. Acquired by Elekta

The Radiation Therapy Workplace Violence Implementation Group, comprising Andrea Shessel, Gary Chaulk, Anne Di Tomasso, Colleen Dickie, Devin Hindle, Annette Sperduti and Hina Akmal, was selected as recipients of the 2018 UHN Local Impact Award - Non-Clinical Team, for identifying a process of dealing with patients or family members who may present safety concerns that could result in incidents of workplace violence. This Award was presented to the group during the Annual General Meeting of the UHN Board of Directors in June 2018.

RMP Wins UHN Local Impact Award

RMP successfully completed its Canadian Nuclear Safety Commission (CNSC) Type 1 audit in September 2018. With the CNSC audit taking place once every 5 years, this is a critically important milestone for RMP. The program is grateful for everyone’s immense efforts in preparation for this review, and participating in all the interviews with the auditors. In particular, RMP is deeply appreciative of the tremendous support and guidance from our UHN Radiation Safety Team. Much of the success behind this audit is due to the continuous vigil and attention by our medical physics and radiation therapy teams, brachytherapy and ocular oncologists, as well as members of our Radiation Therapy Radiation Safety Committee. Inasmuch as this CNSC audit is a single event in the life of RMP/UHN, the positive review highlighted our strong culture of safety, the collaboration within our teams, the safety huddles, and leadership attention and response to concerns raised from our front-line staff.

CNSC Audit Successfully Completed
As the largest single-site radiation medicine program in North America, RMP provides one of the most comprehensive clinical settings for the formal training of radiation oncologists, physicists and therapists. RMP’s education portfolio is closely aligned with that of the University of Toronto’s Department of Radiation Oncology as a fully affiliated teaching hospital of the University. This strategic alignment enables the optimal utilization of educational expertise and infrastructure, and facilitates the achievement of the central education mandate of RMP and UTDRO.

The formal professional training programs include undergraduate training for radiation therapy (BSc Medical Radiation Sciences) and medical education; post-graduate training programs for radiation oncology residency, fellowship and physics residency; as well as the Master of Health Science in Medical Radiation Sciences (MHScMRS) graduate program and the Strategic Training in Transdisciplinary Radiation Science for the 21st Century (STARS21) training program. RMP staff also teach residents and fellows from other training programs, as well graduate students from University of Toronto Departments, such as the Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, Nursing, Institute of Medical Science, Institute of Biomedical Materials & Biomedical Engineering, and Medical Biophysics.

RMP offers interdisciplinary continuing education catered to practicing radiation medicine professionals, who seek to gain informal or structured learning experiences at the Princess Margaret, including the RMP Observership Program; the Accelerated Education Program, which delivers in-depth structured 2-3 day courses; and the Personalized Learning Program™ (PLP™) in Radiation Medicine, which offers 3-6-months of on-site and online learning opportunities.

As global leaders in clinical practice, research and education, RMP actively disseminates its knowledge and best practices so that quality care can be available to all patients within our community and globally. In 2018-2019, RMP hosted 66 observers from 20 countries. Observers spent a median of 10 days (range: 1-67) at RMP and included health professionals from radiation oncology (23%), medical physics (4%), radiation therapy (17%), as well as trainees (34%). RMP continued discussions with our global partners in Africa, Jamaica, United Kingdom, Hong Kong and China on strategies to leverage radiation and educational expertise to enhance global capacity within radiation medicine.

**Excellence in Teaching**

Jennifer Croke received the inaugural University of Toronto MD Program Teaching Award of Excellence for the 2017-2018 academic year. The new award introduced by U of T medical students recognizes faculty in the MD Program who have attained Teaching Evaluation Scores in the top 10% in one or more of the teaching activities to which they have contributed. Jennifer was also the recipient of one of two 2019 PARO Excellence in Clinical Teaching Awards allocated to U of T. She is one of three radiation oncologists to have received this prestigious award – another being our own Andrew Bayley in 2002.

**Diverse Learners**

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<tr>
<th>Undergraduate</th>
<th>Post-Graduate</th>
<th>Continuing Education</th>
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<tr>
<td>37 BSc Medical Radiation Sciences students</td>
<td>22 Radiation oncology residents</td>
<td>66 Observers from 20 countries</td>
</tr>
<tr>
<td>61 Undergraduate Medical Education students</td>
<td>26 Radiation oncology fellows</td>
<td>31 AEP external participants</td>
</tr>
<tr>
<td>1 CARO-CROF student</td>
<td>6 Medical physics residents</td>
<td>(3 on-site AEP Courses)</td>
</tr>
<tr>
<td>25 Summer students</td>
<td>3 Strategic Training in Transdisciplinary Radiation Science for the 21st Century scholars</td>
<td>1 Personalized Learning Program participant</td>
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*Academic year statistics*
As part of RMP’s ongoing partnership with the University of Hong Kong-Shenzhen Hospital (HKU-SZH), the Sanming Project of Medicine’s 2nd International Symposium on Specialist Education and Advances in Radiation Oncology took place during November/December 2018 in Shenzhen, China. Featuring Princess Margaret’s Fei-Fei Liu, Brian O’Sullivan, Laura Dawson, Rebecca Wong, Sophie Huang and Marnie Escaf, RMP solidified its reputation as one of the leading radiation medicine programs in the world, contributing invited presentations, exercises, and workshops for a wide array of international attendees. The Contour Workshop led by the RMP team had 90 on-site participants from across China (e.g. Liaoning, Zhejiang, Fujian, Chongqing, Hubei) and >8000 “registrants” through the webcast. Talks from our RMP team garnered thousands of hits online, reaching over 65,000 views. RMP deeply values its international partnerships and hopes that this symposium and continued global outreach collaborations will translate to improved patient outcomes and the advancement of medical research in China and around the world.

The Accelerated Education Program (www.aepeducation.ca) at the Princess Margaret formalized a partnership with the Hong Kong Hospital Health Authority for the annual advanced training of four expert radiation therapists. This included the development of a new “Image Guidance for Radiation Therapists” course aimed at building image-matching competence for radiation therapists. The inaugural course, led by Course Director, Winnie Li, was held in January 2019 with huge success. Dynamic, practical presentations from RMP’s amazing faculty highlighted best practices from the front lines and immersed our learners in the wild and wonderful world of volumetric image matching. The audience comprised of eight learners from across Canada (New Brunswick, Newfoundland & Labrador, Saskatchewan, Ontario) and the four radiation therapists from Hong Kong, who were also on a 2-week Observership at RMP. Participant feedback highlighted the value of the immersive, case-based approach that was used to build competence.

Leadership Appointments

Marianne Koritzinsky: Rank of Associate Professor at UTDRQ (July 2018)

Jennifer Croke: Associate Director of the UTDRQ Fellowship Program (October 2018)
RMP is a world-leader in radiation research aimed at developing more precise, personalized solutions that will cure more patients with fewer side effects. Our research program spans the breadth of the four professional disciplines of radiation oncology, medical physics, radiation therapy and radiation nursing, and is led by nationally and internationally recognized experts. The program encompasses the full spectrum of radiation research from basic biologic studies through translation biology and physics to clinical trials, health services and education research.

RMP is disrupting the radiation treatment landscape through new Adaptive Radiation Oncology research and knowledge dissemination to ensure the right treatment at the right time for every patient. The program is accomplishing this through innovative approaches that integrate clinical care and research, learning from all of our patients while focusing on the outcomes that matter most to patients along their cancer journey.

RMP research activities are strategically focused on six key domains to accelerate the availability of adaptive radiation oncology for every patient:

1. Radiogenomics
2. Radiomics
3. MR-guided radiotherapy
4. Oligoprogression
5. Regenerative radiation medicine
6. Patient-reported outcomes

These research themes are highly integrated and closely aligned with the research objectives of the Princess Margaret, UHN and University of Toronto’s Department of Radiation Oncology. There is strong collaboration with other academic and industry-based research groups within UHN, as well as external groups locally, nationally and internationally.

Leadership Appointments

Renise Ayearst: CRP Research Manager (April 2019)
Jim Dimitroulakos: RMP Scientific Program Manager (June 2018)
Lea Dungao: CRP Quality Assurance and Monitoring Lead (April 2018)

Benjamin Haibe-Kains: Scientific Lead of the RMP Radiomics Program (January 2018)
Bernadeth Lao: CRP Team Lead (November 2018; Interim CRP Research Manager (December 2018))
Excellence in Cancer Research

Fei-Fei Liu was appointed as the inaugural Peter and Shelagh Godsoe Chair in Radiation Medicine at the Princess Margaret in March 2019. This Endowed Chair is a prestigious joint hospital and University of Toronto Chair aimed at supporting the activities of the Chief of Radiation Medicine Program.

Notable Peer-Reviewed Funding

Alejandro Berlin: Combination of Subpathology and Nanocoding-PHA: Integrating Outcome Prediction and Treatment Individualization for Intermediate-Risk Prostate Cancer. Prostate Cancer Canada Translation Acceleration Grant

Alejandro Berlin: Subpathologies and Genomic Classifier for Individualized Post-Prostatectomy Radiotherapy. ESTRO Varian Research Award

Alejandro Berlin and Thomas Purdie: Prospective Validation of a Novel-Voxel- and Machine Learning-based Automated Planning Method for Prostate Fossa Volumetric Arc Radiotherapy. CARO SANOFI Award

Scott Bratman: Genomics-based Radiosensitization for HPV-Negative Squamous Cell Carcinoma of the Aerodigestive Tract. V Scholar Program

Alejandro Berlin: Prospective Validation of a Novel-Voxel- and Machine Learning-based Automated Planning Method and Interim-Risk Prostate Cancer. Prostate Cancer Canada Translation Acceleration Grant

John Waldron was appointed as the Bailey-Smith Wharton Chair in Radiation Oncology in January 2019 for a 5-year term. John has led RPM’s Head and Neck Site Group since 2006, and assumed leadership of the PI Head and Neck Group in 2016, which is known as a world-class multi-disciplinary program delivering excellence in clinical care, education, and research.

Kathy Han and Scott Bratman: Circulating HPV DNA as a Biomarker of Response in Patients with Locally Advanced Cervical Cancer Treated with Definitive Chemoradiation. Cancer Research Society Operating Grant

Benjamin Lok: Development of Epigenetic Therapeutics for Small Cell Lung Cancer. IASLC Young Investigator Award

Jolie Ringash: Efficacy of the Rehabilitation Planning Consult for Survivors of Head & Neck Cancer: A Phase II Randomized Controlled Trial. Canadian Cancer Society Innovation to Impact Grant

Alex Vitkin: Wide-field Polarimetric Imaging for Targeted and Rapid High-Sensitivity Analysis of Breast Cancer Margins and Heterogeneity with Mass Spectrometry. CIHR Project Grant

Peter Chung: Feasibility and Toxicity of mp-MRI guided Focal SABR with or without Whole Gland SABR for Patients with Localized Prostate Cancer. CARO SANOFI Award

Notable Awards and Distinctions

Alejandro Berlin: UTDRO Rising Star Research Award

Scott Bratman: ASTRO Basic/Translational Science Award for his project entitled “Plasmid Redox Imbalance Caused by Albumin Oxidation Promotes Lung-Predominant NETosis and Metastasis in Patients Treated With Definitive Radiotherapy”

David Jeffrey and Monique van Prooijen: Michael S. Patterson Publication Impact Prize in Medical Physics for their paper entitled “Gold Nanoparticles as Radiation Sensitizers in Cancer Therapy”

Normand Laperriere: Princess Margaret Till and McCulloch Clinical Paper of the Year Award for his paper entitled “Short-Course Radiation plus Temazolamide in Elderly Patients with Glioblastoma”

Benjamin Lok: Appointed as Ontario Association of Radiation Oncologists Clinical Scientist

RMP Represents at CARO-COMP-CAMRT

RMP was well-represented at the first Joint Scientific Meeting hosted by the three sister organizations, Canadian Association of Radiation Oncology (CARO), Canadian Organization of Medical Physicists (COMP), and Canadian Association of Medical Radiation Technologists (CAMRT) in September 2018. RMP staff and trainees presented and/or moderated various sessions/workshops throughout the conference, several of whom were recipients of awards.

- Laura Dawson received the Best Abstract in Science and Applied Technology Award for “Deep Neural Network for MR to CT imaging Translation Applied to H&N Data”
- Anet Julius received an Associate Member Awards – Nursing for “Exploring the Educational Needs of Women with Gynecological Cancers Post-Brachytherapy”
Congratulations and thank you to our dedicated RMP members who have reached their ≥25 year service milestone in 2018.

25 Years
Ivan Yeung, Nancy La Macchia, Emily Mettrick, John Waldron

30 Years
Fei-Fei Liu, Kathleen Conway, Dan Sajac, Charles Catton, Richard Tsang, Angela Cashell

RMP also congratulates staff who retired in the past year. Thank you for your many years of service.

• Hamideh Alasti (33 years)
• James Carpenter (10 years)
• Salma Jafferali (28 years)
• Wilfred Levin (32 years)
• Sandra Scott (26 years)
• Deborah Tsuji (41 years)

With a team of over 400 radiation specialists, the Radiation Medicine Program is fortunate to have a diverse pool of talent to increase RMP’s capacity to deliver on its vision to achieve “Precision Radiation Medicine Personalized Care: Global Impact.” In 2018, RMP continued to exhibit excellence, innovation and leadership in patient-centered care, research and education, exemplified by the high level of productivity and achievements of our staff.

Priyani Alahakoon, Zoraida Betancourt, Jeff Bruce, Lisa Chong, Vanessa De Conciliis, Jim Dimitroulakos, Wendy Issa, Nahida Jafferali, Cheryl Marcelo, Jenny Vargas

· Clinical Research Program
Jessy Abed, Renice Ayearst, Rehab Chahin, Colleen Dunphy, Mahesh Kajil, Farah Khan, Masoud Mohammadi, Sarin Peres, Karen Tse

Honouring a Lifetime of Achievement in Oncology

· Wilfred Levin retired in April 2019, after serving as a radiation oncologist at RMP for 32 years. Since joining the department in 1988, he has assumed the role of Gynecology Site Group Leader from 1989–1992, and was an integral member of the Breast and PROP site groups. Most importantly, he co-founded Princess Margaret’s Adult Radiation Late Effects Clinic (ARLEC) – the only one of its kind in Canada, in 2000. For almost two decades, ARLEC has helped hundreds of patients nationwide cope with radiation late effects. In recognition of the exceptional care he provides to our patients, Wilf received the Gerald Kirsh Humanitarian Award in 2008. RMP thanked and celebrated Wilf’s contributions to RMP and the Princess Margaret at a farewell event in March 2019.

Danielle Rodin was elected to the 2018-2020 UICC Board of Directors, effective October 2018

Mary Gospodarowicz was elected as one of nine inaugural board members of the UICC C2Can 2025: City Cancer Challenge in September 2018, a multi-sectoral initiative supporting cities to take the lead in the design, planning and implementation of cancer treatment solutions.

David Jaffray was awarded the prestigious 2018 ASI/RD Gold Medal by the American Society for Radiation Oncology. This award recognizes David as a revered member of the global radiation oncology community, acknowledging his outstanding contributions to the advancement of radiation medicine worldwide in the domains of research, clinical care, teaching and service.

Jennifer Deering was awarded the Pfizer Award of Excellence in Nursing Clinical Practice at the 30th Annual Canadian Association of Nurses in Oncology Conference

Maitry Patel was awarded the 2018 Honour Roll from the Canadian Association of Physician Assistants for her outstanding contributions to the promotion and development of the Physician Assistants profession

New Talent
Radiation Oncology
Danielle Rodin
Medical Physics
Jeff Winter
Radiation Therapy
Angie Cardella, Jennifer Dang, Devin Hindle, Amanda Hogan, Julie Kang, Ilan Lu, Zabin Mawji, Lino Padlo, Erin Pristak, Mohsin Qureshi, Alexandra Sarra, Louise Wei, Simon Xie

Administration/Operations
Priyani Alahakoon, Zoraida Betancourt, Jeff Bruce, Lisa Chong, Vanessa De Conciliis, Jim Dimitroulakos, Wendy Issa, Nahida Jafferali, Cheryl Marcelo, Jenny Vargas

Sustained Service
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· Wilfred Levin retired in April 2019, after serving as a radiation oncologist at RMP for 32 years. Since joining the department in 1988, he has assumed the role of Gynecology Site Group Leader from 1989–1992, and was an integral member of the Breast and PROP site groups. Most importantly, he co-founded Princess Margaret’s Adult Radiation Late Effects Clinic (ARLEC) – the only one of its kind in Canada, in 2000. For almost two decades, ARLEC has helped hundreds of patients nationwide cope with radiation late effects. In recognition of the exceptional care he provides to our patients, Wilf received the Gerald Kirsh Humanitarian Award in 2008. RMP thanked and celebrated Wilf’s contributions to RMP and the Princess Margaret at a farewell event in March 2019.

Danielle Rodin was elected to the 2018-2020 UICC Board of Directors, effective October 2018

Mary Gospodarowicz was elected as one of nine inaugural board members of the UICC C2Can 2025: City Cancer Challenge in September 2018, a multi-sectoral initiative supporting cities to take the lead in the design, planning and implementation of cancer treatment solutions.

David Jaffray was awarded the prestigious 2018 ASI/RD Gold Medal by the American Society for Radiation Oncology. This award recognizes David as a revered member of the global radiation oncology community, acknowledging his outstanding contributions to the advancement of radiation medicine worldwide in the domains of research, clinical care, teaching and service.

Jennifer Deering was awarded the Pfizer Award of Excellence in Nursing Clinical Practice at the 30th Annual Canadian Association of Nurses in Oncology Conference

Maitry Patel was awarded the 2018 Honour Roll from the Canadian Association of Physician Assistants for her outstanding contributions to the promotion and development of the Physician Assistants profession

Danielle Rodin was elected to the 2018-2020 UICC Board of Directors, effective October 2018

People
Hamideh Alasti retired in June 2018, after serving as a medical physicist at the Princess Margaret for over 33 years. Throughout her successful career, she has had a profound impact on the care received by our patients. Hamideh played a central physics leadership role in the establishment of the Prostate MRI Program, development of the 4D CT Program, re-building RMP’s radiation safety approach over the past 10 years, and most recently, advancing our high-dose CT imaging initiative. These efforts will continue to have an enduring legacy even when she is enjoying her retirement with her husband, children and grandchildren. Hamideh’s many contributions to RMP and the Princess Margaret were celebrated at a retirement event in June 2018.

Honouring a Lifetime of Achievement in Physics

Notable Awards and Distinctions

Charles Catton Ontario Medical Association Life Membership Award
Sophie Huang CAMRT Welch Memorial Lecture Award
Benjamin Lok ASCO Conquer Cancer Foundation Career Development Award
Michael Velec CAMRT Early Professional Achievement Award

UHN Award Winners

Meredith Giuliani (Cancer Answers Development Team Member): Princess Margaret Innovation in Education Award
Emma Ito and Maitry Patel Princess Margaret Excellence in Education Support Award
Andrea McIven and Monique van Prooijen Princess Margaret Outstanding Contribution to Cancer Education Award
Natassia Naccarato and Alice Leung Princess Margaret Employee Engagement – Team Engaged Spirit Award

RMP Clinical Awards

- Distinction in Quality & Process Improvement: Alana Pellizzari
- Distinction in Technical Improvement: RayStation Deployment Team (Michael Holwell, Amy Parent, Alana Pellizzari, Tony Lam, Andrea McIven, Patricia Lindsay, Harold Keller, Tim Craig, Alex Sun, John Waldron, Laura Dawson, Andrew Bayley)
- Excellence in Patient Experience: Unit #3 Team (Nettie Sperduti, Emily Mettrick, Carla Cerase, Jessica Bonomo, Ellen Hoffman, Maitry Patel)

RMP Education Awards

- Chief’s Choice RMP Rounds: David Hodgson
- Best RMP Rounds: Best of RTi3 (Vickie Kong, Angela Cashell, Joanna Javor, Carina Feuz)
- Trainee Excellence in Education: Jenna Adlemann, Pablo Munoz
- Distinction in Education Support: Angela Alivio
- Distinction in Teaching: Tim Craig
- Distinction in Professional Mentorship: Normand Laperriere

Accelerated Education Program Awards

- Highest Overall Teaching Effectiveness Score: Charles Catton
- Paving Innovation to Work: Douglas Moseley

RMP Research Awards

- Research Productivity – Radiation Oncology: Alejandro Berlin, Peter Chung
- Research Productivity – Medical Physics: Thomas Purdie
- Research Productivity – Radiation Therapy: Vickie Kong
- Most Influential Research Publication: Normand Laperriere
- Exceptional Research Support: CRP Regulatory Coordinators (Sarah Lee, Janany Sivalingam, Matthew Ramotar, Brian Lofgren, Katrina Rey-McIntyre, Devin Hindle)
- Research Leadership: James Brierley
- Top Clinical Trial Accrual Investigator: Andrew Hope, Jennifer Croke
Celebrating the Career of a Leader in Physics

Over the past two decades, David Jaffray has been an invaluable member of the RMP and UHN team. He has been a visionary leader as the Head of Medical Physics at the Princess Margaret, Executive Vice President of Technology and Innovation at UHN, and Director of the Techna Institute. His contributions to the field of imaging technologies, specifically, the development and application of image-guided radiation therapy, have made an incredible impact on advancing cancer research and clinical care. Notable achievements include, but are not limited to:

- Established the state-of-the-art Magnetic Resonance-guided Radiation Therapy (MRgRT) facility at the Princess Margaret, the first of its kind in the world
- Developed the Elekta Gamma Knife Icon in partnership with Elekta and Techna researchers
- Co-Founded Aouym Inc. with Daniel Letourneau, developed the AQUA quality assurance management software, which has been commercialized by Elekta
- Co-Invented the X-RAD 225Cx with Richard Hill – a pre-clinical image-guided x-ray irradiation system
- Co-Founded Nanovista Inc., which provides multimodal visualization agents designed specifically to enhance the performance of image-guided interventions such as surgery, radiotherapy and drug delivery
- Co-Invented the Radiation Therapy Integral Quality Monitoring (IQM) system, which provides exclusive verification of intrafractional treatment; developed with Mohammad Islam and Robert Heaton, which is now licensed to iRT

Among his many accolades, he has been named as Canada’s Top 40 Under 40, an ASTRO Gold Medal winner, and the Fidani Chair in Radiation Physics. He has held over 50 peer-reviewed and industry grants as principal investigator valued at over $70M, published over 260 peer-reviewed articles, and holds over 20 patents. As EVP of Technology and Innovation, he has led UHN’s IT and digital transformation to new heights. His innovative and high impact contributions to our program will be greatly missed. RMP wishes him the best as he embarks on a new journey at M.D. Anderson Cancer Center in Houston, Texas to assume the role of Chief Technology and Digital Officer – Senior Vice President.
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American Society for Radiation Oncology (cover, p. 5, 12, 21-23, 26), American Society of Clinical Oncology (p.25), Canadian Organization of Medical Physicists (p. 28), Donna Santos Studio (p.12, 21-22, 26), Fei Fei Liu (p.18, 23), Glen Bandiera (p.16), Hunt Hargett Photography (cover, p.10), Jeff Winter (cover, p.6), Kelvin Young Photography (p.11, 27), Lisa Chong (p.15, 26, 29), Matthew Ramotar (p.26), Paul Behnke (p.13), Rebecca Wong (p.19), Sophie Huang (cover, p.18), UHN Visual Services (cover, p.12-14, 18, 21, 23-24, 26, 28-29), University of Toronto Department of Radiation Oncology (p.11, 18, 23)

PUBLICATION REFERENCES (DOI)

i) 10.1038/s41467-018-07550-x
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iii) 10.1002/jmrs.281
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vi) 10.1038/s42255-018-0008-5

Read the annual report online at www.radiationatpm.com