



The Canadian Cancer  
Research Conference

La conférence canadienne  
sur la recherche sur le cancer

# Program Programme



**November 3 - 5, 2019 — 3 au 5 novembre 2019**

**Shaw Centre, Ottawa Ontario — Centre Shaw, Ottawa (Ontario)**

# THANK YOU TO ALL OF OUR SUPPORTERS MERCI À TOUS NOS PARTENAIRES

## PLATINUM LEVEL – NIVEAU PLATINE



Canadian  
Cancer  
Society  
Société  
canadienne  
du cancer



CIHR  
IRSC  
Institute of  
Cancer Research  
Institut du  
cancer



OICR / IORC  
Ontario Institute  
for Cancer Research  
Institut ontarien de  
recherche sur le cancer

CANADIAN PARTNERSHIP  
AGAINST CANCER



PARTENARIAT CANADIEN  
CONTRE LE CANCER

## GOLD LEVEL – NIVEAU OR

COLORECTAL  
CANCER  
CANADA



CANCER  
COLORECTAL  
CANADA

Réseau thématique soutenu par le

Fonds de recherche  
Santé

Québec



National Research  
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THE TERRY FOX RESEARCH INSTITUTE  
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## SILVER LEVEL – NIVEAU ARGENT



Société de recherche  
sur le cancer  
Cancer Research Society



GenomeCanada



Cancer de la Prostate  
Canada



Prostate Cancer  
Canada



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To access the conference app, download "Crystal Event Leads" on the App Store or Google Play Store and scan your conference badge barcode.

@CCRAAlliance | #CCRAconf

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# MESSAGE FROM THE CCRA

On behalf of the Canadian Cancer Research Alliance (CCRA), welcome to the fifth Canadian Cancer Research Conference!

The CCRA is an alliance of over 30 cancer research funding agencies that was formed in 2003 to facilitate large transformative cancer research initiatives, coordinate cancer research at a pan-Canadian level, and document and promote cancer research activity in Canada. The Canadian Cancer Research Conference (CCRC) is a prime example of the work we do together. As an alliance committed to this joint endeavor, we are thrilled to have reached this milestone.

The need for the CCRC was identified during the development of the inaugural pan-Canadian Cancer Research Strategy in 2010. Scientists from across the country expressed a desire for a national cancer research meeting to showcase the breadth and excellence of Canadian cancer research and allow leading experts from across all areas of cancer research to exchange knowledge and share ideas to strengthen Canada's cancer research community. Such a meeting would also be a venue to demonstrate to the public the continuing impact of cancer research on improving the health of the population. One year later, in 2011, the inaugural CCRC was hosted as a direct response to this identified need.

Since our inaugural meeting in 2011, the CCRC has been hosted in three provinces and has grown to an annual attendance of over 1000 participants, with over 600 submitted abstracts. The scientific program continues to highlight leading researchers from across all four pillars of cancer research and we continue to strive for gender parity. This conference is our second to include the Patient Involvement in Cancer Research Program (PIP), a demonstration of our commitment to enhancing the role of patients in the cancer research enterprise. All of this over the course of five conference cycles! This is truly a reflection of the joint commitments and passions of all CCRA members and our other supporters.

At this year's conference, we are excited to share a new Vision for cancer research in Canada - a vision that has culminated from the hard work and visionary leadership of CCRA on behalf of the broader cancer research community. Working with our partners from Shift Health, we have engaged with many of you through one-on-one conversations, focus groups, and surveys. We have listened and heard what you've said about the need for us to discover together and lead the way with bold and innovative cancer research in Canada and beyond. Our shared vision for cancer research is aligned with the newly refreshed Canadian Strategy for Cancer Control, demonstrating the importance and interconnectedness of cancer research to the cancer control system. We ask you to provide your comments on the vision and to share the ways in which you can be a champion and an ambassador to ensure that this joint Vision becomes a reality.

We are grateful to this year's conference chairs, Drs. Christine Williams and John Bell, under whose leadership an exciting and engaging conference has been planned. We also extend our gratitude to Drs. Barbara Vanderhyden and Michael Brundage for overseeing the creation of a diverse scientific program representing the breadth and depth of cancer research happening in our country. Finally, we would like to acknowledge the team at the CCRA Executive Office, specifically, Louisa Salemi, Kim Badovinac, and Diana Soifer, who not only ensure that CCRA continues to make impactful contributions to the system of cancer research, but also undertake the day-to-day conference logistics to ensure your experience is a good one.

Enjoy the conference!

## MESSAGE DE L'ACRC

Au nom de l'Alliance canadienne pour la recherche sur le cancer (ACRC), nous vous souhaitons la bienvenue à la cinquième Conférence canadienne sur la recherche sur le cancer!

L'ACRC est une alliance comptant dans ses rangs plus de 30 organismes de financement de la recherche sur le cancer qui a été créée en 2003 pour faciliter de vastes initiatives de recherche transformatrices sur le cancer, coordonner la recherche sur le cancer à l'échelle pancanadienne, et documenter et promouvoir les activités de recherche sur le cancer au Canada. La Conférence canadienne sur la recherche sur le cancer (CCRC) représente un excellent exemple du travail que nous accomplissons ensemble. En tant qu'alliance engagée dans cette entreprise commune, nous sommes ravis d'avoir atteint ce jalon.

Lors de l'élaboration de la première Stratégie pancanadienne de recherche sur le cancer en 2010, nous avons déterminé qu'il était nécessaire d'organiser la CCRC. Des scientifiques provenant de partout au pays ont exprimé le souhait que se tienne une réunion nationale portant sur la recherche sur le cancer afin de mettre en lumière toute l'étendue et l'excellence de la recherche canadienne sur cette maladie et de donner la possibilité aux principaux experts de tous les domaines cette recherche d'échanger des connaissances et des idées pour renforcer la communauté de la recherche sur le cancer au Canada. Une telle réunion allait également être une occasion de montrer au public les répercussions continues de la recherche sur le cancer en ce qui concerne l'amélioration de la santé de la population. Un an plus tard, en 2011, la première CCRC avait lieu, en réponse directe à ce besoin qu'on avait cerné.

Depuis notre réunion inaugurale en 2011, la CCRC s'est tenue dans

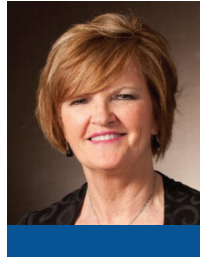


trois provinces. Elle compte aujourd'hui plus de 1 000 participants par an, avec plus de 600 résumés soumis. Le programme scientifique continue de mettre en lumière des chercheurs de premier plan s'intéressant aux quatre piliers de la recherche sur le cancer, et nous poursuivons nos efforts pour parvenir à la parité hommes-femmes. Notre conférence de cette année est la deuxième à inclure le Programme de participation des patients à la recherche sur le cancer (PPP), ce qui témoigne de notre engagement à renforcer le rôle des patients dans l'entreprise de la recherche sur le cancer. Tout cela au cours de cinq cycles de conférences! Cela reflète véritablement les passions et les engagements communs de tous les membres de l'ACRC et de nos autres partisans.

En ce qui concerne la conférence de cette année, nous sommes ravis de partager une nouvelle vision de la recherche sur le cancer au Canada. Celle-ci est le fruit du travail acharné et du leadership visionnaire de l'ACRC, au nom de la communauté élargie de la recherche sur le cancer. En collaboration avec nos partenaires de Shift Health, nous avons collaboré avec beaucoup d'entre vous par le biais de conversations individuelles, de groupes de discussion et de sondages. Nous avons écouté et entendu ce que vous aviez à dire sur la nécessité de faire des découvertes ensemble et d'ouvrir la voie avec des recherches audacieuses et novatrices sur le cancer, au Canada et ailleurs. Notre vision commune de la recherche sur le cancer s'aligne sur la Stratégie canadienne de lutte contre le cancer, mise à jour récemment, démontrant ainsi l'importance de la recherche sur le cancer pour le système de lutte contre le cancer, ainsi que leur interconnexion. Nous vous demandons de nous faire part de vos commentaires à l'égard de cette vision et de partager les façons dont vous pouvez être un champion ainsi qu'un ambassadeur de cette vision commune pour vous assurer qu'elle devienne réalité.

Nous remercions les présidents de la conférence de cette année, la D<sup>re</sup> Christine Williams et le D<sup>r</sup> John Bell, sous la direction desquels a été planifiée cette conférence passionnante et captivante. Nous exprimons également notre gratitude à la D<sup>re</sup> Barbara Vanderhyden et au D<sup>r</sup> Michael Brundage pour avoir supervisé la création d'un programme scientifique diversifié représentant l'ampleur et la profondeur de la recherche sur le cancer en cours au sein de notre pays. Enfin, nous tenons à remercier l'équipe du Bureau administratif de l'ACRC, et plus particulièrement Louisa Salemi, Kim Badovinac et Diana Soifer, qui ont non seulement veillé à ce que l'ACRC continue de contribuer de manière déterminante au système de recherche sur le cancer, mais qui s'occupent également de la logistique quotidienne de la conférence afin de vous offrir une bonne expérience.

Bonne conférence!



*Cindy L. Bell*

**Cindy L. Bell, PhD**

*Executive Vice President, Genome Canada,  
Chair, CCRA*

*Vice-présidente exécutive de Génome  
Canada et présidente de l'ACRC*



*Stephen Robbins*

**Stephen Robbins, PhD**

*Scientific Director, CIHR Institute of Cancer  
Research, Immediate past Chair, CCRA*

*Directeur scientifique de l'Institut du cancer  
des IRSC et président sortant de l'ACRC*



*Sara Urowitzw*

**Sara Urowitzw, PhD**

*Executive Director, CCRA and Director,  
Research, Canadian Partnership Against  
Cancer*

*Directrice générale de l'ACRC et directrice  
de la recherche du Partenariat canadien  
contre le cancer*

# MESSAGE FROM THE CONFERENCE CO-CHAIRS

As this year's conference co-chairs and on behalf of the Executive Planning Committee and the Local Organizing Committee, we would like to welcome you to the Canadian Cancer Research Conference (CCRC).

This year we come together in Ottawa for the fifth CCRC. This is a significant milestone in the history of the CCRC, and we are honoured to have been selected as chairs of this important meeting. This year's meeting builds on the successes of the previous conferences and is designed to showcase the broad spectrum of cancer research happening across the country. At this year's conference, we are proud to showcase the great research happening in Ottawa and the surrounding areas of Kingston and Montréal.

This year in conjunction with the CCRC, the Canadian Cancer Research Alliance (CCRA) and our partners hosted a community event, Cancer: Piecing the Puzzle Together on the afternoon of Saturday, November 2, 2019. This event was geared towards individuals affected by cancer and their family and friends, donors to cancer charities, patient advocates, volunteers and members of the community. It was a CCRA-led and family-friendly afternoon to learn about cancer and cancer research—the impact of cancer research happening in Canada, the successes of cancer research investments thus far and the future of cancer research. Breakout sessions in both French and English on topics including Cancer 101, Introduction to Clinical Trials, Patient Advocacy and Cancer Research Investments were held. And John was honoured to present the keynote address, teaching about his work in immunotherapy. As we have with previous conferences, we hope to be able to continue to engage with the community in events like this one and others in the years to come.

We are proud and appreciative of the work done by the Scientific Program Committee under the leadership of Drs. Barbara Vanderhyden and Michael Brundage. Together with their committee, they have developed a diverse program highlighting researchers from across the cancer research spectrum as well as researchers in the early stages of their careers. We are thrilled to have a gender-balanced selection of speakers and hope that our meeting will continue to encourage gender parity in the sciences. In addition to learning from your colleagues, we hope you will take advantage of the many networking and collaboration opportunities throughout the conference as well as the diversity and uniqueness of this meeting. We encourage you to attend as many sessions as you can, particularly those outside of your area of scientific expertise.

After a huge success at the 2017 CCRC, we are thrilled to have the second Patient Involvement in Cancer Research Program (PIP) as part of this year's conference. The program is intended not only to broaden participants' own understanding of cancer research

and cutting-edge science, but to help facilitate an understanding among the scientific community about the many ways that patients can help inform, support, and strengthen cancer research. Please take the opportunity to speak with patient representatives who will be participating in the meeting both as delegates and chairs. The voice of the patient and caregiver is an important one that directly benefits the research process.

We would like to extend our gratitude to our colleagues on the Executive Planning Committee for their input and continued oversight of the conference. In addition, we would like to acknowledge the CCRA Executive Office, specifically, Sara Urowitz, Louisa Salemi, Kim Badovinac, and Diana Soifer, who undertake the day-to-day conference logistics to ensure your experience is a good one.

And last, but certainly not least, we thank the many supporters for their financial and in-kind support. The success of this meeting is a reflection of the priority that these supporters place on knowledge exchange and the sharing of new science. We are appreciative of their ongoing commitment to this biennial endeavour.

Enjoy the conference!

## MESSAGE DES COPRÉSIDENTS DE LA CONFÉRENCE

À titre de coprésidents de la conférence de cette année et au nom du Comité de direction de la planification et du Comité d'organisation local, nous vous souhaitons la bienvenue à la Conférence canadienne sur la recherche sur le cancer (CCRC).

Cette année, nous nous réunissons à Ottawa pour la cinquième CCRC. Il s'agit d'un jalon majeur dans l'histoire de la CCRC, et nous sommes honorés d'avoir été choisis comme présidents de cet événement important. La réunion de cette année s'appuie sur les réussites des conférences précédentes et est conçue pour présenter le large spectre des recherches sur le cancer menées dans l'ensemble du pays. Nous sommes fiers de mettre en lumière, à la conférence de cette année, les remarquables recherches menées à Ottawa et dans les environs de Kingston et de Montréal.

Cette année, en marge de la CCRC, l'Alliance canadienne pour la recherche sur le cancer (ACRC) et ses partenaires ont organisé un événement communautaire intitulé Le cancer : assembler les

morceaux du casse-tête dans l'après-midi du samedi 2 novembre 2019. Cet événement s'adressait aux personnes touchées par le cancer, ainsi qu'à leur famille et à leurs amis, aux donateurs à des organismes de bienfaisance sur le cancer, aux défenseurs des intérêts des patients, aux bénévoles et aux membres de la collectivité. Il s'agissait d'une après-midi familiale pendant laquelle ils ont pu en apprendre davantage sur le cancer et la recherche sur cette maladie – l'incidence de la recherche sur le cancer menée au Canada, les retombées positives des investissements dans ce domaine à ce jour et l'avenir de ce secteur. Des séances en petits groupes, aussi bien en français qu'en anglais, sur des thèmes tels que « la recherche sur le cancer 101 », « introduction aux essais cliniques », « la défense des intérêts des patients » et « les investissements dans la recherche sur le cancer », ont eu lieu. Et John a été honoré de prononcer un discours d'ouverture au sujet de ses travaux en immunothérapie. Comme aux conférences précédentes, nous espérons continuer d'entrer en contact avec la collectivité grâce à des événements comme celui-ci et comme ceux que l'avenir nous réserve.

Nous éprouvons de la fierté et de la gratitude pour le travail réalisé par le Comité du programme scientifique sous la direction des D<sup>rs</sup> Barbara Vanderhyden et Michael Brundage. Ensemble, ils ont créé un programme diversifié qui met en vedette des chercheurs de tous les domaines de la recherche sur le cancer ainsi que des chercheurs en début de carrière. Nous sommes très heureux d'avoir un programme scientifique équilibré pour ce qui est du sexe des conférenciers, et nous espérons que notre réunion continuera d'encourager la parité hommes-femmes dans les sciences. En plus d'apprendre de vos collègues, nous espérons que vous profiterez des nombreuses occasions de réseautage et de collaboration tout au long de la conférence, ainsi que de la diversité et de l'unicité de cette réunion. Nous nous sommes engagés à soutenir les nouveaux chercheurs alors qu'ils s'établissent dans la communauté de la recherche sur le cancer, et nous espérons que vous prendrez le temps de parler à ces nouveaux chercheurs talentueux, qui représentent près de 50 % des délégués de la conférence. Nous vous encourageons à assister au plus grand nombre de séances possible, plus particulièrement celles portant sur des thèmes qui ne font pas partie de votre domaine d'expertise scientifique.

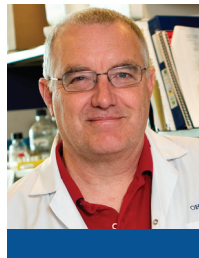
Le Programme de Participation des Patients à la recherche sur le cancer (PPP) a été un immense succès lors de la CCRC de 2017, et nous sommes ravis d'en organiser la deuxième édition dans le cadre de la conférence de cette année. Ce programme est conçu non seulement pour aider les participants à mieux comprendre la recherche sur le cancer et la science d'avant-garde, mais aussi pour sensibiliser la communauté scientifique à l'égard des nombreuses façons dont les patients peuvent éclairer, appuyer et renforcer la recherche sur le cancer. Veuillez saisir cette chance de parler à des représentants des patients, qui participeront à la

réunion à titre de délégués et de présidents. La voix des patients et des aidants est importante et profite directement au processus de recherche.

Nous tenons à témoigner notre reconnaissance à nos collègues siégeant au Comité de direction de la planification pour leur apport et leur supervision continue de la conférence. Nous souhaitons aussi remercier l'équipe du bureau administratif de l'ACRC, et plus particulièrement Sara Urowitz, Louisa Salemi, Kim Badovinac et Diana Soifer, qui s'occupent de la logistique quotidienne de la conférence afin de vous offrir une bonne expérience.

Enfin, nous remercions les nombreux partenaires pour leur soutien financier et en nature. La réussite de cette réunion est le reflet de l'importance qu'ils accordent au partage des connaissances et des percées scientifiques. Nous leur sommes reconnaissants de leur engagement continu envers ce projet biennal.

Bonne conférence!



**John C. Bell, PhD, FRSC**

*Ottawa Hospital Research Institute,  
University of Ottawa*

*Institut de recherche de l'Hôpital d'Ottawa,  
Université d'Ottawa*



**Christine Williams, PhD**

*Ontario Institute for Cancer Research*

*Institut ontarien de recherche sur le cancer*

# MESSAGE FROM THE SCIENTIFIC PROGRAM COMMITTEE CO-CHAIRS

On behalf of the Scientific Program Committee, welcome to the fifth Canadian Cancer Research Conference! We are honoured to have had the opportunity to lead the development of the scientific program for this milestone conference.

We are grateful to our Committee members who have worked hard to develop an exciting program featuring leading cancer experts addressing major themes in cancer research, from discovery research to policy research, and clinical research to end-of-life care. Over 600 abstracts were submitted and reviewed by a diverse panel of scientists, and we are excited to have 42 oral presentations selected from these submissions. Three plenary sessions will be presented over the course of the conference - Novel Cancer Immunotherapies, Cancer Genetics and Precision Oncology, and the Future of Cancer Research by leading Canadian and international experts in cancer research. In addition, the program includes a special plenary during which the Canadian Cancer Research Alliance will present its awards for Exceptional Leadership, Outstanding Achievements, Distinguished Service and Exceptional Leadership in Patient Involvement. During this plenary, delegates will hear inspirational presentations from each of the outstanding awardees. New to the CCRC 2019 we've added rapid-fire presentations allowing further opportunity for abstract submitters to present their research on a pan-Canadian stage. We are very proud and impressed with the breadth, range, and excellence of Canadian cancer research, and are sure that you will feel the same as you engage in this year's program.

The CCRC provides an opportunity to engage with researchers from across the cancer control continuum and across all four pillars of cancer research. We hope that you will find many opportunities to network with other conference participants from across the country and develop new collaborations within and between research disciplines through the program's blend of plenary sessions, concurrent sessions, poster sessions, and satellite meetings.

The second Patent Involvement in Cancer Research Program (PIP) will be held throughout the conference. The PIP provides opportunities to engage and interact with members of the public, cancer survivors, patients, and their families. This year's scientific program is enhanced with the inclusion of 22 patient co-chairs in both plenary and concurrent sessions.

We would like to thank all the members of the committee for their commitment and effort to ensure a stellar conference for all the delegates, and we want to extend our gratitude to Louisa Salemi and Sara Urowitz from the CCRA Executive Office for their tireless efforts to keep the committee on track to ensure that the program came together in an outstanding fashion.

We hope that you find this conference engaging and that it will lead to new ideas and new collaborations. We look forward to hearing your feedback so that we can continue to provide you with a unique and stimulating experience!

## MESSAGE DES COPRÉSIDENTS DU COMITÉ DU PROGRAMME SCIENTIFIQUE

Au nom du Comité du programme scientifique, nous vous souhaitons la bienvenue à la cinquième Conférence canadienne sur la recherche sur le cancer (CCRC)! Nous sommes honorés d'avoir eu l'occasion de diriger l'élaboration du programme scientifique de cette importante conférence.

Nous sommes reconnaissants envers les membres du Comité, qui ont travaillé fort pour élaborer un programme passionnant réunissant des experts reconnus du cancer qui aborderont les principaux thèmes de la recherche sur le cancer, allant de la recherche axée sur la découverte à celle sur les politiques, et de la recherche clinique à celle sur les soins de fin de vie. Nous avons reçu plus de 600 résumés, qui ont été examinés par un panel diversifié de scientifiques, et nous sommes heureux que 42 de ces soumissions aient été sélectionnées pour faire l'objet d'une présentation orale. Au cours de la conférence, trois séances plénières, intitulées « Les nouveaux traitements d'immunothérapie contre le cancer », « Génétique du cancer et oncologie de précision » et « L'avenir de la recherche sur le cancer », seront présentées par des experts reconnus de la recherche sur le cancer, provenant du Canada et de l'étranger. En outre, le programme comprend une séance plénière spéciale pendant laquelle l'Alliance canadienne pour la recherche sur le cancer (ACRC) présentera ses prix du leadership exceptionnel, des réalisations exceptionnelles, des services exceptionnels et du leadership exceptionnel dans la participation des patients à la recherche sur le cancer. Au cours de cette séance plénière, les délégués assisteront aux présentations passionnantes de chacun des remarquables lauréats. Nouveauté de la CCRC de cette année : nous avons ajouté des présentations rapides afin de donner aux autres soumissionnaires de résumés une autre chance de présenter leurs recherches sur une scène pancanadienne. Nous sommes très fiers et impressionnés par l'ampleur, la diversité et l'excellence de la recherche canadienne sur le cancer, et nous sommes certains qu'il en sera de même pour vous lorsque vous participerez au programme de cette année.



La CCRC représente une occasion de dialoguer avec des chercheurs s'intéressant à l'ensemble des domaines de la lutte contre le cancer et des quatre piliers de la recherche sur cette maladie. Nous espérons que vous aurez de nombreuses occasions de réseauter avec les autres participants de la conférence provenant de toutes les régions du pays et que vous créerez de nouvelles collaborations au sein des disciplines de recherche et entre elles, grâce au programme varié comportant des séances plénières, des séances simultanées, des présentations par affiches et des réunions parallèles.

La deuxième édition du Programme de participation des patients à la recherche sur le cancer (PPP) aura lieu tout au long de la conférence. Le PPP vous donnera la possibilité de rencontrer et d'interagir avec des membres du public, des survivants du cancer, des patients et des membres de leur famille. Le programme scientifique de cette année se voit amélioré par l'inclusion de 22 patients participant à titre de coprésidents des séances plénières et simultanées.

Nous tenons à remercier l'ensemble des membres du comité pour leur engagement et leurs efforts visant à garantir une excellente conférence pour l'ensemble des délégués, et nous aimerions témoigner notre reconnaissance à Louisa Salemi et Sara Urowitz, du bureau administratif de l'ACRC, qui ont travaillé fort pour maintenir le comité sur la bonne voie afin de s'assurer que tous les éléments du programme s'assemblent d'une manière exceptionnelle.

Nous espérons que vous trouverez cette conférence intéressante et qu'elle débouchera sur de nouvelles idées et de nouvelles collaborations. Nous avons hâte d'entendre vos commentaires, qui nous permettront de continuer de vous offrir une expérience unique et stimulante!



A handwritten signature in black ink, appearing to read 'Michael Brundage'.

**Michael Brundage, MSc,  
FRCPC, MD**

*Queen's University, Cancer Centre of  
Southeastern Ontario, and Canadian  
Association of Radiation Oncology*

*Université Queen's, Cancer Centre of  
Southeastern Ontario et Association  
canadienne de radio-oncologie*



A handwritten signature in black ink, appearing to read 'Barbara Vanderhyden'.

**Barbara Vanderhyden, PhD**

*University of Ottawa, and Ottawa Hospital  
Research Institute*

*Université d'Ottawa et Institut de recherche  
de l'Hôpital d'Ottawa*

# CONFERENCE COMMITTEES • COMITÉS DE LA CONFÉRENCE

## EXECUTIVE PLANNING COMMITTEE • COMITÉ EXÉCUTIF DE PLANIFICATION

**Christine Williams, PhD (Chair)**  
Ontario Institute for Cancer Research

**Ruth Ackerman, BSc Phm, MBA**  
Patient/Family Representative CCRA

**Lucille Beudet, PhD, MBA**  
Cancer Research Society

**Cindy Bell, PhD**  
Genome Canada

**John Bell, PhD, FRSC**  
Ottawa Hospital Research Institute,  
University of Ottawa, and BioCanRx

**Judy Bray, PhD**  
Canadian Cancer Society

**Michelle Brazas, PhD**  
Ontario Institute for Cancer Research

**Michael Brundage, MSc, FRCPC,  
MD**  
Queen's University, Cancer Centre of  
Southeastern Ontario, and Canadian  
Association of Radiation Oncology

**Craig Earle, MD, MSc, FRCPC**  
Canadian Partnership Against Cancer

**Stuart Edmonds, PhD**  
Prostate Cancer Canada

**Stephen Herst**  
Terry Fox Research Institute

**Anne-Marie Mes-Masson,  
PhD, FCAHS, FRSC**  
Centre de recherche du Centre hospitalier  
de l'Université de Montréal (CRCHUM), and  
Fonds de recherche du Québec - Santé

**Stephen Robbins, PhD**  
University of Calgary and CIHR Institute of  
Cancer Research

**Sara Urowitz, PhD**  
Canadian Cancer Research Alliance,  
Canadian Partnership Against Cancer

**Barbara Vanderhyden, PhD**  
University of Ottawa and Ottawa Hospital  
Research Institute

**Kevin Wilson, BSP**  
Saskatchewan Cancer Agency

## LOCAL ORGANIZING COMMITTEE • COMITÉ D'ORGANISATION LOCALE

**John Bell, PhD, FRSC (Chair)**  
Ottawa Hospital Research Institute,  
University of Ottawa, and BioCanRx

**Judy Bray, PhD**  
Canadian Cancer Society

**Jean-Simon Diallo, PhD**  
Ottawa Hospital Research Institute and  
University of Ottawa

**Lesley Frey**  
Canadian Partnership Against Cancer

**Jennifer Ganton, MSc, BJ**  
Ottawa Hospital Research Institute

**Lakshmi Krishnan, PhD**  
National Research Council Canada

**Josée Quenneville**  
Ottawa Regional Cancer Foundation

**Jennifer Quizi, PhD**  
BioCanRx

**Denis Raymond, RSW, MSW**  
Patient Advocate and Brain Tumour  
Foundation of Canada

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## SCIENTIFIC PROGRAM COMMITTEE • COMITÉ DU PROGRAMME SCIENTIFIQUE

**Michael Brundage, MSc, FRCPC,  
MD (Co-Chair)**  
Queen's University, Cancer Centre of  
Southeastern Ontario, & Canadian  
Association of Radiation Oncology

**Barbara Vanderhyden,  
PhD (Co-Chair)**  
University of Ottawa & Ottawa Hospital  
Research Institute

**Lisa Barbera, MD**  
Tom Baker Cancer Centre, University of  
Calgary

**Nathalie Baudais, P. Eng.**  
Patient Advocate

**Mick Bhatia, PhD**  
McMaster University, Stem Cell and Cancer  
Research Institute

**Marie-Claude Bourgeois-Daigneault,  
PhD**

Centre de recherche du Centre hospitalier  
de l'Université de Montréal

**Winson Cheung, MD, MPH**  
Tom Baker Cancer Centre, University of  
Calgary

**Graham Dellaire, PhD**  
Department of Pathology, Dalhousie  
University

**Brenda Elias, BA, MA, PhD**  
Faculty of Health Sciences, College of  
Medicine, University of Manitoba

**Christine Friedenreich, PhD**  
Alberta Health Services and University of  
Calgary

**Anita Koushik, PhD**  
Centre de recherche du CHUM and École de  
santé publique de l'Université de Montréal

**Mark Levine, CM MD**  
Department of Oncology, McMaster  
University and Escarpment Cancer  
Research Institute

**Katerina Maximova, PhD**  
School of Public Health,  
University of Alberta

**Scott North, MD, FRCPC, MHPE**  
Cross Cancer Institute,  
University of Alberta

**Morag Park, PhD, FRSC, FCAHS**  
Goodman Cancer Research Centre,  
McGill University

**Stuart Peacock, DPhil**  
BC Cancer, Canadian Centre for Applied  
Research in Cancer Control, Simon Fraser  
University

**Marshall Pitz, MD, MHS, FRCPC**  
CancerCare Manitoba,  
University of Manitoba

**Denis Raymond, RSW, MSW**  
Patient Advocate and Brain Tumour  
Foundation of Canada

**Patricia Tonin, PhD**  
Departments of Medicine & Human  
Genetics, McGill University & Cancer  
Research Program, Centre for Translational  
Biology, The Research Institute of the  
McGill University Health Centre

The CCRA, enabled by member support, is pleased to offer the **Patient Involvement in Cancer Research Program (PIP)** as part of the 2019 CCRC. PIP provides an opportunity for persons affected by cancer to learn about leading edge science from Canada's cancer researchers and trainees and to, likewise, offer the scientific community an opportunity to learn from and interact with patients, survivors, and caregivers who have a keen interest in supporting and enriching cancer research with the patient perspective.

**In this year's program, we welcome:**

Ruth Ackerman	Don Desserud	Debi Lascelle	Marilyn Sapsford
Nathalie Baudais	Heather Douglas	Cathy McCallum	Danielle Smith
Louise Bird	Doreen Edward	Antonia Palmer	Bill Sutherland
Adrienne Co-Dyre	Sylvie Halde	Lucie Piché	Inge van Galen-Bouman
Melissa Coombs	Catherine Hays	Vera Samarkina	Debra Walker

For more information, please consult the conference app, where you will find participants' pictures and mini-biographies.

**We are grateful to the following organizations for supporting this year's program.**



We would also like to acknowledge the contribution of **Ms. Alyssa Vito**, PhD candidate at McMaster University, to this year's program.

If you are interested in finding out more about PIP, please contact us at [info@ccra-acrc.ca](mailto:info@ccra-acrc.ca).

## CCRA AWARD FOR EXCEPTIONAL LEADERSHIP IN PATIENT INVOLVEMENT IN CANCER RESEARCH

### PRIX DE L'ACRC POUR UN LEADERSHIP EXCEPTIONNEL POUR LA PARTICIPATION DES PATIENTS À LA RECHERCHE SUR LE CANCER

Awarded to an individual or organization who has made exceptional contributions to fostering patient involvement in cancer research in Canada. The inaugural award was presented at CCRC 2017 in Vancouver.

Remis à une personne ou à une organisation qui a contribué de manière exceptionnelle afin d'encourager la participation des patients à la recherche sur le cancer au Canada. Le prix inaugural a été présenté à la Conférence canadienne sur la recherche sur le cancer de 2017, à Vancouver.



**Mr. Patrick Sullivan**  
*Team Finn Foundation, Ac2orn (Advocacy for Canadian Oncology Research Network)*

## CCRA AWARD FOR EXCEPTIONAL LEADERSHIP IN CANCER RESEARCH

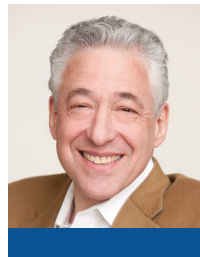
### PRIX DU LEADERSHIP EXCEPTIONNEL EN MATIÈRE DE RECHERCHE SUR LE CANCER DE L'ACRC

Awarded to an individual who has made exceptional contributions to fostering the development of cancer research in Canada through their leadership in organizations, or development of collaborative research opportunities or initiatives that have had a transformative impact.

Remis à une personne qui a contribué de façon exceptionnelle à favoriser le développement de la recherche sur le cancer au Canada, grâce à son leadership au sein d'organismes ou à la création de possibilités de recherche en collaboration qui ont transformé le domaine.



**Dr. Anne-Marie Mes-Masson,**  
**PhD, FCAHS, FRSC**  
*Institut du cancer de Montréal, CRCHUM,  
Université de Montréal*



**Dr. Gerald Batist,**  
**MD, FRCPC**  
*McGill University, Jewish General Hospital,  
McGill Centre for Translational Research in  
Cancer, Montreal Centre for Experimental  
Therapeutics in Cancer*

Short biographies of award winners can be found on our conference app.



## CCRA AWARD FOR OUTSTANDING ACHIEVEMENTS IN CANCER RESEARCH

## PRIX DES RÉALISATIONS EXCEPTIONNELLES EN MATIÈRE DE RECHERCHE SUR LE CANCER DE L'ACRC

Awarded to a Canadian cancer researcher from any research discipline for outstanding lifetime achievements which have had an impact in greatly advancing our understanding of cancer, the treatment of cancer, and/or cancer control.

Remis à un chercheur canadien dans le domaine du cancer, issu de l'une ou l'autre des disciplines liées à la recherche, pour souligner des réalisations exceptionnelles de toute une vie qui ont contribué à parfaire considérablement notre compréhension du cancer, du traitement du cancer ou de la lutte anticancéreuse.



**Dr. Lincoln D. Stein, MD, PhD**  
*Ontario Institute for Cancer Research,  
University of Toronto, Cold Spring Harbor  
Laboratory*

## CCRA AWARD FOR DISTINGUISHED SERVICE TO CANCER RESEARCH

## PRIX DES SERVICES EXCEPTIONNELS EN MATIÈRE DE RECHERCHE SUR LE CANCER DE L'ACRC

Awarded to an individual whose work has had a substantial impact on public education, policy, or discourse on cancer control and particularly cancer research in Canada.

Remis à une personne dont les travaux ont eu un effet important sur l'éducation, la politique ou le discours publics associés à la lutte anticancéreuse, et tout particulièrement à la recherche sur le cancer au Canada.



**Dr. Geoffrey T. Fong,  
PhD, FCAHS, FRSC**  
*University of Waterloo, Ontario Institute for  
Cancer Research*

# CONFERENCE OVERVIEW

## Saturday, November 2, 2019

12:30 pm Community Event – Rideau Canal Atrium

## Sunday, November 3, 2019

7:30 am Breakfast – Canada Hall 2 and 3

8:30 am Welcome Remarks – Canada Hall 1

9:30 am **Plenary Session: Novel Cancer Immunotherapies** – Canada Hall 1

11:00 am Break – Canada Hall 2 and 3

11:30 am	<b>A1</b> – Innovations in Cancer Proteomics – Room 214	<b>A2</b> – The Impact of Primary and Metastatic Tumour Microenvironments on Cancer Growth and Response to Therapy – Room 215	<b>A3</b> – Pediatric Oncology: A new frontier - navigating the opportunities and ethical challenges of precision medicine – Room 202	<b>A4</b> – Prevention: Enriching Knowledge by Addressing Time – Room 212	<b>A5</b> – Indigenous Populations and Cancer – Room 203
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1:00 pm Lunch – Canada Hall 2 and 3

2:00 pm	<b>B1</b> – Imaging and Metabolic Profiling of Cancer – Room 214	<b>B2</b> – Innovations in Cancer Care – Room 215	<b>B3</b> – Integrating Elements of a Palliative Care Approach – Room 202	<b>B4</b> – Stakeholder and Patient Engagement in Clinical Trials and Patient-Oriented Research – Room 212	<b>B5</b> – Hot Topics in Occupational Cancer Prevention in Canada – Room 203	<b>B6</b> – Metastasis – Canada Hall 1
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3:30 pm Poster Session and Exhibits – Canada Hall 2 and 3

5:00 pm Welcome Reception – Canada Hall 2 and 3

## Monday, November 4, 2019

7:30 am Breakfast – Canada Hall 2 and 3

8:30 am **Plenary Session: Cancer Genetics and Precision Oncology** – Canada Hall 1

10:00 am Rapid Fire Presentations – Canada Hall 1

10:30 am Break – Canada Hall 2 and 3

11:00 am	<b>C1</b> – Model Systems in Cancer Research – Room 214	<b>C2</b> – Cancer Stem Cells and Cellular Plasticity – Room 215	<b>C3</b> – Understanding the Fundamental Basis of Cancer Through the Study of Rare Tumours – Room 202	<b>C4</b> – Getting Real: The Expanding Role of Real-World Evidence (RWE) in Oncology – Room 212	<b>C5</b> – Cancer Prevention and Screening: Selected Updates – Room 203
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12:30 pm Lunch – Canada Hall 2 and 3

1:30 pm **Plenary Session: CCRA Awards Presentation** – Canada Hall 1

3:00 pm Poster Session and Exhibits – Canada Hall 2 and 3

4:00 pm	<b>D1</b> – Microbiome – Room 214	<b>D2</b> – Lessons from Aging – Room 215	<b>D3</b> – Poor Survival Cancers – Room 202	<b>D4</b> – Tackling Inequity in Cancer Care – Room 212	<b>D5</b> – Cannabis, Vaping and E-cigarettes: Canada's Evolving Drug Market and Implications for Cancer Control – Room 203
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## Tuesday, November 5, 2019

7:30am Breakfast – Canada Hall 2 and 3

8:30 am	<b>E1</b> – Mechanisms of Cancer Resistance – Room 214	<b>E2</b> – Cancer Immunotherapy – Room 215	<b>E3</b> – Meeting Healthcare Needs in the 'Era of Cancer Survivorship' – Room 202	<b>E4</b> – Accelerating Clinical Trials in a Genomic-driven Era – Room 212	<b>E5</b> – Consortium Based Research – Room 203
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10:00 am Break – Canada Hall 2 and 3

10:30 am **Plenary Session: The Future of Cancer Research** – Canada Hall 1

12:00 pm Closing Remarks – Canada Hall 1

# APERÇU DU PROGRAMME

## Samedi 2 novembre 2019

12 h 30 Événement communautaire – Rideau Canal Atrium

## Dimanche 3 novembre 2019

7 h 30 Déjeuner – Canada Hall 2 and 3

8 h 30 Mot de bienvenue – Canada Hall 1

9 h 30 **Séance plénière : Les nouveaux traitements d'immunothérapie contre le cancer** – Canada Hall 1

11 h Pause – Canada Hall 2 and 3

11 h 30	<b>A1</b> – Les innovations en protéomique du cancer – Room 214	<b>A2</b> – L'incidence du microenvironnement des tumeurs primaires et métastatiques sur la progression du cancer et la réponse au traitement – Room 215	<b>A3</b> – L'oncologie pédiatrique : une nouvelle frontière – explorer les possibilités et les défis d'ordre éthique associés à la médecine de précision – Room 202	<b>A4</b> – La prévention : enrichir les connaissances en abordant l'aspect temporel – Room 212	<b>A5</b> – Populations autochtones et cancer – Room 203
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13 h Dîner – Canada Hall 2 and 3

14 h	<b>B1</b> – Imagerie et profilage métabolique du cancer – Room 214	<b>B2</b> – Les innovations dans les soins contre le cancer – Room 215	<b>B3</b> – Intégrer les éléments d'une approche palliative des soins – Room 202	<b>B4</b> – La participation des intervenants et des patients aux essais cliniques et à la recherche axée sur les patients – Room 212	<b>B5</b> – Sujets brûlants du domaine de la prévention des cancers professionnels au Canada – Room 203	<b>B6</b> – Les métastases – Canada Hall 1
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15 h 30 Présentation par affiches et expositions – Canada Hall 2 and 3

17 h Réception de bienvenue – Canada Hall 2 and 3

## Lundi 4 novembre 2019

7 h 30 Déjeuner – Canada Hall 2 and 3

8 h 30 **Séance plénière : Génétique du cancer et oncologie de précision** – Canada Hall 1

10 h Présentations rapides – Canada Hall 1

10 h 30 Pause – Canada Hall 2 and 3

11 h	<b>C1</b> – Les systèmes modèles dans la recherche sur le cancer – Room 214	<b>C2</b> – Cellules souches cancéreuses et plasticité cellulaire – Room 215	<b>C3</b> – Comprendre les fondements du cancer par le biais de l'étude de tumeurs rares – Room 202	<b>C4</b> – Soyons concrets : l'oncologie et le rôle croissant des données obtenues en contexte réel – Room 212	<b>C5</b> – Prévention et dépistage du cancer – quelques mises à jour – Room 203
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12 h 30 Dîner – Canada Hall 2 and 3

13 h 30 **Séance plénière : Remis des prix l'ACRC** – Canada Hall 1

15 h Présentation par affiches et expositions – Canada Hall 2 and 3

16 h	<b>D1</b> – Le microbiome – Room 214	<b>D2</b> – Leçons liées au vieillissement – Room 215	<b>D3</b> – Les cancers associés à une survie médiocre – Room 202	<b>D4</b> – S'attaquer aux inégalités dans les soins contre le cancer – Room 212	<b>D5</b> – Cannabis, Vapotage et Cigarettes Électroniques : L'évolution du Marché Canadien des Drogues et ses Conséquences Pour la Lutte Contre le Cancer – Room 203
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## Mardi 5 novembre 2019

7 h 30 Déjeuner – Canada Hall 2 and 3

8 h 30	<b>E1</b> – Mécanismes de la résistance du cancer – Room 214	<b>E2</b> – L'immunothérapie contre le cancer – Room 215	<b>E3</b> – Répondre aux besoins en soins de santé à l'« ère de la survie au cancer » – Room 202	<b>E4</b> – Accélérer les essais cliniques à l'ère de la génomique – Room 212	<b>E5</b> – La recherche fondée sur les consortiums – Room 203
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10 h Pause – Canada Hall 2 and 3

10 h 30 **Séance plénière : L'avenir de la recherche sur le cancer** – Canada Hall 1

12 h Observations finales – Canada Hall 1

# SATURDAY, NOVEMBER 2, 2019 • SAMEDI 2 NOVEMBRE 2019

7:30 am

## **Hack4Cancer Hackathon: Unleashing the power of linked data**

*Room 102*

The Hack4Cancer Hackathon will bring together participants with a variety of analytic and health research backgrounds to compete in a time-limited and team-based analysis using a complex, linked, synthesized dataset prepared by Statistics Canada. The synthetic dataset mimics a real dataset that links the Canadian Cancer Registry (CCR) with six other administrative and survey datasets.

Pre-registration required.

8:30 am

## **Early Career Investigator Meeting**

*Room 105*

This program has been developed for newly established principal investigators/new faculty members (within their first 5 years of academic appointment) at Canadian universities, including new scientists, clinician scientists and senior postdocs (within 6 months of completing their training). The purpose of this program is to strengthen the professional development of junior faculty from the cancer research community.

This meeting is by invitation only.

8:30 am

## **Canadian Bioinformatics Workshop: Using Clouds for Big Cancer Data Analysis**

*Room 108*

The Cancer Genome Collaboratory is a compute cloud environment that was set up to facilitate analysis on big cancer genome data projects, including the ICGC and PCAWG. The Collaboratory provides access to configurable virtual machines (VM) with which to compute on this data and the Dockstore provides container packages of common genomic analysis tools and workflows. The CBW has developed a half-day course providing a hands-on introduction to launching and configuring your own virtual machine (VM), logging into your VM, copying unaligned sequence files into your VM, and performing sequence analysis on these files and saving the results.

Pre-registration required.

12:30 pm

## **Cancer: Piecing the Puzzle Together – Community Event**

*Rideau Canal Atrium*

Current and past individuals affected by cancer and their family and friends, donors to cancer charities, patient advocates, volunteers and members of the community will be invited to join the CCRA for a family-friendly afternoon to learn about cancer, cancer research, the impact of cancer research happening in Canada, the successes of cancer research investments thus far and learn about the future of cancer research.



# SUNDAY, NOVEMBER 3, 2019 • DIMANCHE 3 NOVEMBRE 2019

7:30 am

## Breakfast

Canada Hall 2 and 3

Sponsored by:



Canadian Cancer Society  
Société canadienne du cancer

8:30 am

## Welcome Remarks

Canada Hall 1

## Welcoming to the Traditional Territories

Canadian Cancer Research Alliance (CCRA)

**Mr. Peter Decontie**

**Dr. Cindy Bell**

Genome Canada, Chair, CCRA

**Dr. Sara Urowitz**

CCRA and Canadian Partnership Against Cancer

## Conference Co-Chairs

**Dr. John Bell**

Ottawa Hospital Research Institute, University of Ottawa

**Dr. Christine Williams**

Ontario Institute for Cancer Research

## Scientific Program Committee Co-Chairs

**Dr. Michael Brundage**

Queen's University, Cancer Centre of Southeastern Ontario, and Canadian Association of Radiation Oncology

**Dr. Barbara Vanderhyden**

University of Ottawa, and Ottawa Hospital Research Institute

9:30 am

## Plenary Session: Novel Cancer Immunotherapies

Canada Hall 1

Chair:

**Dr. John Bell**

Ottawa Hospital Research Institute, University of Ottawa

Engaging a patient's immune system to attack and destroy their own tumour has been an area of intense scientific investigation for over one hundred years, but only in the last decade or two have clinical results begun to realize the potential of the approach. In this plenary, there will be discussion of both the promise and limitations of immunotherapy to treat cancer patients. We will hear about novel approaches to strategically combine immunotherapies to expand the spectrum of patients who will benefit from these treatments. The use of genetically engineered T cells to treat patients with hematological malignancies will be highlighted from the Canadian perspective. Finally, we will discuss the financial challenges to our Health Care system of bringing these effective but sophisticated biological therapies to Canadian Cancer Patients.

## Exploring approaches to rational combination immunotherapies

**Dr. Pamela Ohashi**

Princess Margaret Cancer Centre – University Health Network, University of Toronto

## Implementation of Canadian made CAR-T cells in Clinical Trial: Experience from the CLIC-01 trial

**Dr. Natasha Kekre**

Ottawa Hospital Research Institute, The Ottawa Hospital, University of Ottawa

Sponsored by Ontario Institute for Cancer Research

## Novel Cancer Immunotherapy through a health economics perspective: Designed for value or valued for design?

**Dr. Jeffrey Hoch**

Division of Health Policy and Management, Department of Public Health Sciences, Centre for Healthcare Policy and Research, University of California, Davis

11:00 am

## Break

Canada Hall 2 and 3

## CONCURRENT SESSIONS A

**A1 – Innovations in Cancer Proteomics**

Room 214

Chairs:

**Dr. Hartland Jackson***University of Zurich***Ms. Cathy McCallum***Patient Advocate*

To understand the complex states of tissues and tumours, proteomics provides high-throughput measurements of the functional effectors within cells and their microenvironment. Beyond an inventory of components, proteomics can measure the dynamic protein interactions and modifications which determine how a cell thinks and behaves as they sense, compute and respond to stimuli through complex signaling networks. Even within genome-classified tumours, proteomics can identify differences in cellular composition and tumor-microenvironment crosstalk which drive multi-cellular activity and tumour aggressiveness. This session will highlight the use of innovative proteomics technologies to understand the actions of oncoproteins and tumour suppressors, to target tumour specific antigens, and to reveal patient subpopulations with distinct clinical outcomes.

Learning Objectives:

- To acquaint participants with novel proteomics technologies
- To provide examples of how proteomic methods can be used for the identification of therapeutic targets and mechanisms of malignancy
- To highlight the potential of proteomics to stratify patient outcomes within genome-classified cancer subtypes

**Proteomic analysis of formalin-fixed paraffin-embedded clinical specimens identifies a pervasive immune signature associated with increased survival in triple negative breast cancers**

**Dr. Gregg Morin***Michael Smith Genome Sciences Centre, Department of Medical Genetics, University of British Columbia*

**Activity and Targets of the C-terminal to LisH (CTLH) E3 Ubiquitin Ligase Complex**

**Mr. Matthew Maitland***University of Western Ontario*

**Selection of Tumor-selective Targets for Antibody-Drug Conjugate Development**

**Dr. Jennifer Hill***National Research Council Canada*

**The Single Cell Landscape of Breast Cancer: Cell Communities and Microenvironments**

**Dr. Hartland Jackson***University of Zurich***A2 – The Impact of Primary and Metastatic Tumour Microenvironments on Cancer Growth and Response to Therapy**

Room 215

Chairs:

**Dr. Peter Siegel***Department of Medicine, Rosalind and Morris Goodman Cancer Research Centre, Departments of Biochemistry, Anatomy and Cell Biology and Oncology, McGill University***Ms. Marilyn Sapsford***Patient Advocate*

**Brain metastatic cancer cells can induce an astrocytic reaction that is associated with invasive growth and sensitivity to STAT3 inhibitors**

**Dr. Peter Siegel***Department of Medicine, Rosalind and Morris Goodman Cancer Research Centre, Departments of Biochemistry, Anatomy and Cell Biology and Oncology, McGill University*

**Cancer-Associated Fibroblasts Drive the Progression of Cancer Cells through both Paracrine and Structural Mechanisms in Tumour Microenvironment**

**Dr. Frédéric Pouliot***Département de chirurgie, Urologie, Centre de recherche du CHU de Québec-Université Laval*

**Pattern recognition receptors in radiotherapy driven anti-tumour immunity**

**Dr. Shane Harding***Princess Margaret Cancer Centre – University Health Network*

**Investigating FGL2 as a Therapeutic Target in Ovarian Cancer**

**Ms. Kristianne Galpin***University of Ottawa, Ottawa Hospital Research Institute*

**A3 – Pediatric Oncology: A new frontier - navigating the opportunities and ethical challenges of precision medicine**

Room 202

Chairs:

**Dr. Jason Berman***Children's Hospital of Eastern Ontario Research Institute***Ms. Antonia Palmer***Patient Advocate*

Pediatric cancers have classically been treated with a one size fits all approach using multi-agent chemotherapy. While success rates are high in many types of pediatric tumours, recurrences portend a poor outcome and toxicities with life-altering consequences are common. The landscape has changed significantly in recent years with the advent of next generation sequencing and immunotherapy, both of which have resulted in novel tumour-specific targets and treatments, providing renewed hope and opportunities for patients and families. However, access to these treatments remains challenging due to high regulatory burden, lack of robust clinical trial information in a specific pediatric tumour context, and difficulties in prioritizing treatments when more than one option may be available. Patients and families have advocated for expedited access to these agents, while pediatric oncologists have looked at revamping clinical trial paradigms to more personalized single patient studies or "basket" trials, where numerous tumour diagnoses are grouped together due to common molecular features. Navigating this increasingly complex ecosystem can be confusing and even overwhelming for both providers and families. Clinicians may struggle to interpret genomic findings, synthesize limited literature for particular drugs, and provide adequately informed consent for experimental agents. Patients and their caregivers may differ in their approach to experimental therapies and their expectations regarding outcome. This session will describe coordinated efforts to incorporate state-of-the-art technology to personalize pediatric cancer therapy and the ethical issues to be considered and addressed in this rapidly evolving space. The parent perspective will be provided through a panel discussion at the end of the session.

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**Are the ethical challenges of phase I trials different in the age of precision medicine?**
**Dr. Conrad Fernandez***IWK Health Centre, Dalhousie University*


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**Emerging pipelines for personalizing therapy for hard-to-treat childhood cancers**
**Dr. Jason Berman***Children's Hospital of Eastern Ontario Research Institute*


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**Pinpointing the origins of pediatric brain tumors using single cell transcriptomic analysis**
**Ms. Selin Jessa***McGill University*


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 Panel Discussion: Patient Perspective. Moderated by Antonia Palmer and Patrick Sullivan with Adrienne Co-Dyre and Inge van Galen-Bouman
 

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**A4 – Prevention: Enriching Knowledge by Addressing Time**

Room 212

Chairs:

**Dr. Anita Koushik***Centre de recherche du CHUM and École de santé publique de l'Université de Montréal***Mr. Bill Sutherland***Patient Advocate*

Given the high costs associated with cancer treatment and screening, primary prevention offers the most cost-effective long-term strategy for saving and preserving the quality of people's lives. Examples of how we can successfully prevent cancer include smoke-free policies, healthy lifestyle promotion (e.g. physical activity, sun safety) and providing vaccines (e.g. human papillomavirus). Communities are able to prevent cancer by these means when they have the resources, plans and partners, but what is essential is knowledge on risk factors. Unfortunately for several cancers, little is known about their etiology and thus what are the risk factors amenable to prevention efforts. There is thus an important need for innovative research to better comprehend etiology. To maximize time- and cost-efficiency, the majority of cancer prevention research to date has been conducted on individuals in their later adulthood (among whom cancer incidence is higher), with exposures having been measured for this later adulthood period. However, there is increasing recognition of the important role of early life exposures to the later development of cancer. The multistage carcinogenic process from initiation to promotion to progression can span decades and include the in utero period, infancy, childhood, adolescence, early adulthood as well as later adulthood. Risk factor identification may be improved by assessing exposures over the whole life course. The research presented in this session specifically addresses exposure timing.

Learning objectives:

- to showcase results from studies examining exposure timing and subsequent cancer risk
- to acquaint participants with the life course approach and methodologic innovations in the field

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**Life-course approach to epidemiology and the relevance of time in cancer prevention**
**Dr. Belinda Nicolau***Faculty of Dentistry, McGill University*


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**A Bayesian approach to investigate life course hypotheses: Implications for cancer prevention**
**Dr. Sreenath Madathil***Faculty of Dentistry, McGill University*


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**Body size across adulthood and prostate cancer risk: results from the PROtEuS study in Montréal, Canada**
**Mr. Eric Vallières***Université de Montréal/INRS-Institut Armand-Frappier, Laval*


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**The joint effect of reproductive factors and radiation treatment for first breast cancer and risk of contralateral breast cancer: An update from the WECARE Study**
**Dr. Jennifer Brooks***Dalla Lana School of Public Health, University of Toronto*


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 Panel Discussion
 

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**A5 – Indigenous Populations and Cancer**

Room 203

Chairs:

**Dr. Brenda Elias***Faculty of Health Sciences, College of Medicine,  
University of Manitoba***Mr. Denis Raymond***Patient Advocate*

The Canadian Indigenous Research Network Against Cancer (CIRNAC) recently hosted the World Indigenous Cancer Conference (WICC) in September 2019 in Calgary, Alberta. This premiere event attended by over 450 Indigenous delegates from Canada, Australia, New Zealand, the United States of America (Pacific Islands and Territories), and South America identified Indigenous cancer as an urgent global concern. In Canada, Indigenous cancer rates while historically lower have increased but cancer screening and prevention tends to be lower. The cancer journey of Indigenous patients is often characterized by a poor cancer prognosis, treatment barriers, inaccessible health care and many unmet needs. Further complicating this journey is a multi jurisdictional system that complicates cancer services, treatments, patient supports and cancer surveillance and monitoring. Investments to improve outcomes are fragmented. Transformative partnerships are urgently required, including dedicated funding for research and strategy development. To address these issues, this session highlights Indigenous cancer leadership in improving cancer outcomes for Indigenous peoples in Canada.

Our first speaker is Dr. Angeline Letendre, the Lead Scientist of Indigenous Community Alberta Cancer Prevention at Alberta Health Services, who is the Chair of the Canadian Indigenous Research Network Against Cancer and the Conference Chair of the 2019 World Indigenous Cancer Conference. The second speaker is Dr. Amanda Sheppard, a new up and coming professor and cancer researcher in cancer surveillance at CancerCare Ontario and the University of Toronto. Following Amanda is Dr. Charlotte Loppie, a Professor in the School of Public Health and Social Policy at the University of Victoria and the Director of the University's Centre for Indigenous Research and Community-Led Engagement, who was recently awarded the CIHR Gold Leaf Prize for Transformative Patient Engagement. She is a social determinant, transformative engagement researcher who has worked in Indigenous women's cancer. For the last speaker, we return to Dr. Angeline Letendre, the Conference Chair of the World Indigenous Cancer Conference, who will provide a recap and next steps of the WICC.

**Indigenous leadership and Indigenous Cancer in Canada: How we can do it better**

**Dr. Angeline Letendre***Alberta Health Services*

**Indigenous Cancer Surveillance: How we are improving reporting**

**Dr. Amanda J. Sheppard***Indigenous Cancer Control Unit, Cancer Care Ontario, Dalla Lana School of Public Health,  
University of Toronto*

**Indigenous Cancer and Transformative patient engagement: What we can do better**

**Dr. Charlotte Loppie***School of Public Health and Social Policy, Faculty of Human and Social Development,  
University of Victoria*

**A recap of the World Indigenous Cancer Conference 2019: How Indigenous people are leading the way**

**Dr. Angeline Letendre***Alberta Health Services*

Panel Discussion

**1:00 pm****Lunch***Canada Hall 2 and 3***1:10 pm****Hack4Cancer Hackathon Awards Presentation***Canada Hall 2 and 3*

2:00 pm

## CONCURRENT SESSIONS B

**B1 – Imaging and Metabolic Profiling of Cancer**

Room 214

Chair:

**Dr. Frank Wuest**

Department of Oncology, Division of Oncologic Imaging, Cross Cancer Institute, Faculty of Medicine and Dentistry, University of Alberta

The session “Imaging and metabolic profiling of cancer” will present innovative imaging biomarker technologies as crucial indicators to study cancer biology and the pharmacological response to therapeutic interventions. The session will discuss positron emission tomography (PET), magnetic resonance imaging (MRI) and magnetic resonance spectroscopy as imaging biomarkers for the detection and metabolic profiling of cancer with special focus on breast cancer. The presentations will provide an overview on current opportunities and challenges of developing imaging biomarkers for the detection, characterization and therapy of cancer.

**Quantification of oncologically relevant metabolites in vivo with magnetic resonance spectroscopy at 9.4 T**

**Dr. Atiyah Yahya**

Department of Oncology, Division of *Medical Physics*, Cross Cancer Institute, Faculty of Medicine and Dentistry, University of Alberta

**Novel antigens for radioimmunotherapy of cancer**

**Dr. Ekaterina Dadachova**

University of Saskatchewan

**Imaging the arrest, retention, and proliferation of iron-labeled breast cancer cells in NSG and nude mice using MRI**

**Dr. Paula Foster**

Western University, Robarts Research Institute

**Targeting of GLUT5: Unlocking a new door for breast cancer imaging and therapy**

**Dr. Frank Wuest**

Department of Oncology, Division of Oncologic Imaging, Cross Cancer Institute, Faculty of Medicine and Dentistry, University of Alberta

Panel Discussion

**B2 – Innovations in Cancer Care**

Room 215

Chairs:

**Dr. Craig Earle**

Canadian Partnership Against Cancer

**Ms. Ruth Ackerman**

Patient Advocate

This session will showcase research addressing challenges in the delivery of new advances in cancer care. At the end of this session, participants will have learned new approaches to optimizing the quality of care given to patients with care.

**Women’s views on personalized risk-based breast cancer screening? A Canadian Perspective**

**Dr. Hermann Nabi**

Département de médecine sociale et préventive, Université Laval

**Living with Advanced Colorectal Cancer: How Prepared are Informal Caregivers to Care for their Loved ones?**

**Dr. Marc Kerba**

Tom Baker Cancer Centre, University of Calgary

**Chimeric Antigen Receptor (CAR) T-cell Therapies for Relapsed or Refractory B-cell Malignancies - Health Canada Authorization Perspectives**

**Dr. Kevin Sun**

Centre for Evaluation of Radiopharmaceuticals and Biotherapeutics, Health Canada

**A prediction model for pathologic complete response following neoadjuvant chemotherapy in breast cancer using routinely collected health record data in Alberta**

**Dr. Darren Brenner**

Oncology, University of Calgary

**B3 – Integrating Elements of a Palliative Care Approach**

Room 202

Chairs:

**Dr. Aynharan Sinnarajah***Calgary Zone Palliative/End of Life Care program, Alberta Health Services, University of Calgary***Ms. Debra Walker***Patient Advocate*

The American Society of Clinical Oncology guidelines recommend palliative care involvement within 8 weeks of advanced cancer diagnosis. The landmark study from Temel et al. in 2010 (New England Journal of Medicine) showed that routine, early palliative care in advanced lung cancer led to significant improvements in quality of life and mood, less aggressive care at end of life and surprisingly, longer survival. Several studies since then, have replicated these findings. However, Canadian health systems continue to struggle with providing routine provision of early palliative care.

In this session, four researchers will present the latest Canadian research on palliative care elements and provision to cancer patients as well as current projects underway in Canada to implement routine early palliative care.

Learning Objectives:

- Define early palliative care and describe the evidence and key elements of palliative care integration into cancer care
- Provide practical examples of projects that are integrating routine early palliative care into cancer care in Canada
- List the key stakeholders who need to be involved to provide best-evidence, patient-centered early palliative approach to care to patients with advanced cancer and their caregivers

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**Early palliative care: What is it and what is the evidence?**

**Dr. Camilla Zimmermann***Division of Palliative Care, University Health Network, Supportive Care Program, Princess Margaret Cancer Research Institute, Faculty of Medicine, University of Toronto*


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**Building CAPACITI in primary care: A quality improvement intervention to operationalize early palliative care into practice**

**Dr. Hsein Seow***Department of Oncology, Master University*


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**The Canadian Team to Improve Community Based Cancer Care along the Continuum (CanIMPACT): Current Research and Findings to Date**

**Ms. Bojana Petrovic***University of Toronto*


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**Palliative Care Early and Systematic (PaCES): Beginning Alberta's journey to provide systematic, early palliative care for advanced cancer patients**

**Dr. Aynharan Sinnarajah***Calgary Zone Palliative/End of Life Care program, Alberta Health Services, University of Calgary*


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Panel Discussion

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**B4 – Stakeholder and Patient Engagement in Clinical Trials and Patient-Oriented Research**

Room 212

Chairs:

**Ms. Judy Needham**

*Patient Advocate, Canadian Cancer Trials Group, Canadian Cancer Clinical Trials Network, BC Cancer*

**Ms. Lucie Piché**

*Patient Advocate*

In recent years, there has been increased support for patient-centered care, meaning that the patient is at the centre of the decision-making process, including the selection of the treatment (intervention) and whether the treatment is a success (outcome). Patient-centred research aims to enable patient-centre care by investigating two components: i) disease-oriented evidence (the scientific questions) which provides insight into the disease process by measuring the etiology, prevalence, and pathology of disease; and ii) patient-oriented evidence (the patient questions) which measures important aspects from the patient point of view, such as symptom improvement, quality of life, cost, morbidity, etc. In health research, this translates into including the patient perspective when setting the research agenda and designing research studies.

Patient engagement in research traditionally presented patients as participants in clinical trials. Patients as partners in research has evolved to include patient-oriented endpoints to accompany scientific disease-oriented endpoints and to formulate study designs that are feasible from a patient perspective, resulting in patient involvement in determining and prioritizing research questions, designing, developing and delivering research studies, and playing an active role in disseminating research results.

This session aims to provide researchers and patient participants with further clarity on the value of patient engagement in research, methods, and models of engagement, and examples of successful engagement.

**The Why's and How's of Patient Engagement in Research**

**Ms. Judy Needham**

*Patient Advocate, Canadian Cancer Trials Group, Canadian Cancer Clinical Trials Network, BC Cancer*

**Patient-Centred Clinical Trials Access: The Clinical Trials Navigator**

**Dr. Caroline Hamm**

*Oncology, Windsor Regional Hospital*

**Patient Priorities in Breast Cancer Research: The Canadian Metastatic Breast Cancer Priority Setting Partnership**

**Dr. Nancy Nixon**

*Tom Baker Cancer Centre, University of Calgary, Alberta Health Services*

**Engaging patients in developing an early-phase trial for CAR-T cell therapy for blood cancers: The GO-CART study**

**Dr. Justin Presseau**

*Ottawa Hospital Research Institute, University of Ottawa*

**B5 – Hot Topics in Occupational Cancer Prevention in Canada**

Room 203

Chairs:

**Dr. Cheryl Peters**

*Cancer Epidemiology and Prevention Research,  
Preventive Oncology and Community Health  
Sciences, Cumming School of Medicine,  
University of Calgary*

**Dr. Don Desserud**

*Patient Advocate*

This session will explore current topics in occupational cancer prevention, including methodological challenges, disparities in exposure and risk, and the need for continued research in occupational cancer prevention in the developed world. We will have four scientific presentations in this session from Canadian researchers. First, a broad overview of the current state of occupational cancer prevention in Canada and other developed countries will be provided by Dr. Cheryl Peters. She will make the case for why occupational exposures are still an important contribution to the burden of cancer, despite advances that have been made. Dr. Vikki Ho will then speak about her current projects examining potential sex differences in cancer etiology related to occupational exposures with an emphasis on endocrine disrupting chemicals. Third, Dr. Christine Barul will present recent results on whether night shift work may increase the risk of prostate cancer in Canadian men using data from a large case-control study in Montréal. Finally, Dr. Parveen Bhatti will speak about methodologic issues in human studies evaluating the mechanistic underpinnings of night shift work. The session will conclude with time for audience participation and discussion with the speakers. The learning objectives for this session are to gain a broad understanding of why occupational cancer prevention is still important in the Canadian setting, and to recognize a few of the current challenges we face as a field.

**Making the case for occupational cancer prevention in Canada****Dr. Cheryl Peters**

*Cancer Epidemiology and Prevention Research, Preventive Oncology and Community Health Sciences, Cumming School of Medicine, University of Calgary*

**Exploring sex differences in the etiology of cancer: a critical look at endocrine disrupting agents in the workplace****Dr. Vikki Ho**

*Centre de recherche du CHUM, Department of Social and Preventive Medicine, Université de Montréal*

**Nightshift work and prostate cancer risk: results from the Canadian case-control study PROtEuS****Dr. Christine Barul**

*INRS-Centre Armand-Frappier, Santé Biotechnologie*

**Night shift work as a human carcinogen: gaps in the mechanistic evidence****Dr. Parveen Bhatti**

*BC Cancer Research Centre*

Panel Discussion



**B6 – Metastasis**

Canada Hall 1

Chairs:

**Dr. Fred Dick**

Western University, London Regional Cancer Program, Children's Health Research Institute, Lawson Health Research Institute, London Regional Transgenic, and Gene Targeting Facility

**Ms. Heather Douglas**

Patient Advocate

Metastatic spread of cancer is the deadliest step of the disease, accounting for the vast majority of cancer associated mortality. In simple terms, metastasis refers to the dissemination of cancer cells from the primary disease site to distant locations in the body. All cancer types have preferred locations of metastatic spread, such as breast cancer frequently emerging in the bone, suggesting a cooperative process in which specific cancers drive their own dissemination and utilize unique features of their new environment to resume progression. As a result, many molecular factors are under investigation in an effort to explain how cancer spreads and how this deadly step can be treated in the clinic. In this session, current research into metastasis will highlight the routes that cancer spreads as well as specific molecular processes that contribute to it. Attendees will learn the basic principles of metastatic dissemination of cancer cells. They will also be exposed to examples of molecular processes that influence cell survival, cell shape, and expression patterns in metastatic cancer.

**The Role of Invadopodia in Tumour Cell Dissemination through the Lymphatic System****Ms. Sumreen Javed**

Faculty of Pharmaceutical Sciences, University of British Columbia

**CSDE1 impedes miRNA mediated silencing of PMEPA1 to promote metastasis in melanoma****Dr. Pavan Kumar Kakumani**

CRCHU de Québec - Université Laval

**Claudin-2 is a pathological marker and a prognostic stratifier of histological growth patterns in colorectal cancer liver metastasis****Dr. Sébastien Tabariès**

Faculty of Medicine, McGill University

**A CRISPR-Cas9 based screen approach to mapping cell survival during ovarian cancer metastasis****Dr. Fred Dick**

Western University, London Regional Cancer Program, Children's Health Research Institute, Lawson Health Research Institute, London Regional Transgenic, and Gene Targeting Facility

3:30 pm

Poster Session and Exhibits – Abstracts for poster presentations can be found on the conference app.

Canada Hall 2 and 3

5:00 pm

**Welcome Reception**

Canada Hall 2 and 3

# MONDAY, NOVEMBER 4, 2019 •

# LUNDI 4 NOVEMBRE 2019

6:30 am

## Terry Fox Run/Walk

Meet in the Parliament Foyer, 3rd Level

7:30 am

## Breakfast

Canada Hall 2 and 3

8:00 am

## Marathon of Hope Cancer Centres Network Presentation and Q&A Session

Canada Hall 2 and 3

The Marathon of Hope Cancer Centres Network is an exciting initiative linking designated Cancer Centres across Canada to advance precision medicine in cancer research. In March 2019 the Government of Canada announced a \$150-million commitment to this initiative, to be matched by participating centres and foundations. Learn how this new Network will enable sharing of molecular, imaging, clinical and outcomes data of cancer cases recruited nationally to benefit patients. We will explain how the Network program will rollout nationwide. Please join us to learn how you can contribute to, and benefit from, this most valuable Canadian resource.



THE TERRY FOX RESEARCH INSTITUTE  
L'INSTITUT DE RECHERCHE TERRY FOX

8:30 am

## Plenary Session: Cancer Genetics and Precision Oncology

Canada Hall 1

Chairs:

### Dr. Patricia Tonin

Departments of Medicine & Human Genetics,  
McGill University & Cancer Research Program,  
Centre for Translational Biology, The Research  
Institute of the McGill University Health Centre

### Ms. Nathalie Baudais

Patient Advocate

Over the past 25 years, the discovery and research of rare heritable high risk genetic variants has contributed to the understanding of the role genetic factors in cancer risk and management (screening and prevention), and more recently identified cancer patients that might benefit from new targeted therapies. The role of BRCA1 and BRCA2 pathogenic variants in heritable breast, ovarian and pancreatic cancers being prime examples. However, serious challenges remain in the translatability of findings necessitating further fundamental, evaluative and medical research. In this plenary session beginning with a patient's personal perspective of the role of medical genetics in management of their cancer, we present talks aiming to fulfill the following learning objectives:

- Challenges facing the implementation of next generation sequencing technologies in clinical settings to identify germline variants relevant to cancer risk, treatment or management
- Continuing challenges individuals face when receiving information about their carrier status regarding cancer risk and management
- Challenges facing the interpretation of variants and role that molecular biologists and biochemists can play in elucidating the biological significance of rare potentially pathogenic variants found in DNA repair pathway genes.

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**Testing for cancer genetic susceptibility: tides of change**

### Dr. Clare Turnbull

Genomic Medicine, Queen Mary University of London, Institute of Cancer Research

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**Genetic Testing at Time of Breast Cancer Diagnosis: Clinical Implications and Patient Perspectives**

### Dr. Kelly Metcalfe

Lawrence S. Bloomberg Faculty of Nursing, Faculty of Medicine, Department of Surgery in the Division of Plastic and Reconstructive Surgery, University of Toronto, Women's College Research Institute

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**Functional analysis of missense mutations in homologous recombination proteins**

### Dr. Jean-Yves Masson

Genome Stability Laboratory, Centre de recherche du CHU de Québec-Université Laval

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Panel Discussion

10:00 am

**Rapid Fire Presentations**

Canada Hall 1

Chairs:

**Dr. Michael Brundage**

Queen's University, Cancer Centre of Southeastern Ontario, and Canadian Association of Radiation Oncology

**Dr. Barbara Vanderhyden**

University of Ottawa, and Ottawa Hospital Research Institute

<b>Targeted reprogramming of cancer metabolism enhances the antitumor efficacy of oncolytic reovirus</b>	<b>Dr. Shashi Gujar</b> Dalhousie University
<b>Integrative genomic analysis reveals key oncogenic pathways in primary mediastinal large B-cell lymphoma</b>	<b>Dr. Stacy Hung</b> BC Cancer
<b>Targeting the IRE1 signalling axis in Triple Negative Breast Cancer</b>	<b>Dr. Susan Logue</b> University of Manitoba
<b>Shaping the immunogenicity and efficient range of oncolytic vaccinia virus by timed release of self-amplifying RNA containing virus-like-particles</b>	<b>Dr. Nikolas Tim Martin</b> Ottawa Hospital Research Institute
<b>Cancer prevention in Canada from the ComPARE project: How what we know today can help reduce the risk of cancer in the future</b>	<b>Dr. Darren Brenner</b> University of Calgary
<b>Canadian Strategy for Cancer Control (CSCC): What do we know about our baseline performance on the new priorities?</b>	<b>Ms. Kim Tran</b> Canadian Partnership Against Cancer
<b>Global trends in cancer incidence among adolescents and young adults (15-39 year-olds) between 1998-2012</b>	<b>Dr. Miranda Fidler-Benaoudia</b> Alberta Health Services
<b>Does co-consumption of vegetables and fruit, whole grains and fiber protect against the carcinogenic effect of processed meat: findings from Alberta's Tomorrow Project</b>	<b>Dr. Jennifer Vena</b> CancerControl Alberta, Alberta Health Services
<b>Early Detection of Chemoresistance in Colorectal Cancer Using a Metabolomics Approach</b>	<b>Ms. Jodi Rattner</b> University of Calgary
<b>PrOTYPE (Predictor of high-grade-serous Ovarian carcinoma molecular subTYPE): the development and validation of a clinical-grade minimal gene set classifier for the molecular subtypes of high grade serous tubo-ovarian cancer</b>	<b>Dr. Aline Talhouk</b> The University of British Columbia

10:30 am

**Break**

Canada Hall 2 and 3

11:00 am

**CONCURRENT SESSIONS C****C1 – Model Systems in Cancer Research**

Room 214

Chair:

**Dr. Graham Dellaire***Department of Pathology, Dalhousie University*

Clinical cancer research, human trials and ultimately diagnosis and treatment of patients represents the ideal outcome and translation of fundamental cancer research. In this respect, research using single cell (e.g. yeast) and multicellular animal models from flies to mice have been invaluable in defining the genetic and molecular underpinnings of malignancy that drive the development of new cancer therapies. Model systems allow the efficient evaluation of new therapeutic targets for cancer and often provide important information on how treatment resistance develops even before the first patient is treated. In short, modern cancer research is accelerated by and defined by the use of model systems. In this concurrent session, we will explore the various model systems used in cancer research and will hear about cutting edge research using baker's yeast to determine fundamental mechanisms of genomic instability driving cancer development. We will learn how the fruit fly can be used to understand metabolic changes in cancer cells, which represent metabolic vulnerabilities that could be exploited for therapy. Finally, we will conclude with talks on mouse models of cancer, including leukemia and glioblastoma, which can be used to determine fundamental processes that drive cancer development as well as explore mechanism of cancer recurrence.

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**Mechanisms of genome maintenance from yeast to human**
**Dr. Peter Stirling***Terry Fox Laboratory, BC Cancer Agency, Medical Genetics, University of British Columbia*


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**Decoding nutrient sensing and metabolic rewiring in the Hipk tumour model**
**Dr. Esther Verheyen***Molecular Biology and Biochemistry, Simon Fraser University*


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**Uncovering post-transcriptional circuitries governing leukemic stem cell function**
**Dr. Kristin Hope***Biochemistry and Biomedical Sciences, McMaster Stem Cell and Cancer Research Institute, McMaster University*


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**A pre-clinical model of glioblastoma recurrence to identify novel therapeutic targets**


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**Dr. Maleeha Qazi***Stem Cell & Cancer Research Institute, McMaster University***C2 – Cancer Stem Cells and Cellular Plasticity**

Room 215

Chair:

**Dr. Mick Bhatia***McMaster University, Stem Cell and Cancer Research Institute*

Cancer stem cells (CSCs) have been identified in several human tumour types and have provided an approach to understand and dissect the hierarchical organization of tumors and intra-tumour heterogeneity. The existence of CSCs is undeniable. However, current challenges include a deeper understanding of the response of CSCs to standard therapies, as well as classes or states of CSCs that may exist before or after therapy, and during disease evolution. This involves the control mechanisms that govern CSC fate decision including transcription networks, and unique epigenomic status of CSCs vs. other cells the comprise the tumor. These aspects will be described and discussed in this session.

- Definitions of human CSCs and changes in response to therapy.
- Understanding the transcriptional and epigenomic networks that govern CSCs.
- Gain insights into new technologies and approaches to dissect CSC biology.

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**Cancer Stem Cell Dynamics and Metastability in Response to Therapy**
**Dr. Mick Bhatia***McMaster University, Stem Cell and Cancer Research Institute*


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**SLUG Directs the Precursor State of Human Brain Tumour Stem Cells**
**Dr. Samuel Weiss***Cell Biology and Anatomy and Physiology and Pharmacology, Cumming School of Medicine, University of Calgary, CIHR Institute of Neurosciences, Mental Health and Addiction*

Sponsored by Genome Canada

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**Targeting epigenetics: from basic biology to therapeutics**
**Dr. Dalia Barsyte-Lovejoy***Structural Genomics Consortium, University of Toronto*


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**Pairtree: Using machine learning to reconstruct the evolutionary history of cancer**


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**Mr. Jeff Wintersinger***Department of Computer Science, University of Toronto*

**C3 – Understanding the Fundamental Basis of Cancer Through the Study of Rare Tumours**

Room 202

Chair:

**Dr. David Malkin**

*Cancer Genetics Program, Division of Hematology/Oncology, Genetics and Genome Biology Program, The Hospital for Sick Children, Departments of Pediatrics and Medical Biophysics, University of Toronto*

Rare cancers as a group comprise a substantial proportion of all human cancers. The talks in this session will focus on the unique biologic, genetic/genomic and clinical aspects of some of these tumors to highlight both the opportunities and challenges in studying them, and to use the information gleaned from these studies to inform the broader scope of cancer research. Both in vitro and in vivo model systems are described that aim to recapitulate both the biological growth of these cancers, as well as to explore novel therapeutic approaches – with particular focus on identification of novel genomic or epigenomic molecular targets. In addition, some appreciation of the role of early (germline) genetic events in the initiation and progression of certain rare tumors will be explored, and the impact that these findings may have in early tumour detection. The session will achieve several objectives; namely, 1) to raise awareness of the challenges in studying – and therefore effectively treating – ‘rare’ cancers; 2) to describe the complex biologic and genetic nature of a subset of these tumour types; and 3) to understand the effective use of in vitro and in vivo models to more effectively develop treatment strategies for patients with these tumors.

**Early Detection and Prevention of Cancer in Li-Fraumeni Syndrome**

**Dr. David Malkin**

*Cancer Genetics Program, Division of Hematology/Oncology, Genetics and Genome Biology Program, The Hospital for Sick Children, Departments of Pediatrics and Medical Biophysics, University of Toronto*

**Exploiting genetic vulnerabilities in Small Cell Carcinoma of the Ovary**

**Dr. Sidong Huang**

*Department of Biochemistry, McGill University*

**Aggressive Dedifferentiated Endometrial Cancer can be Recapitulated from Cell Line Models with Chromatin Remodeling Protein Deficiencies and Treated with Synthetic Lethality Approaches**

**Ms. Mackenzie Coatham**

*University of Alberta*

**Whole Genome Sequencing Defines Leiomyosarcoma Evolution and Identifies Therapeutic Opportunities in the DNA Damage Pathway**

**Dr. Rebecca Gladdy**

*University of Toronto, Lunenfeld-Tenenbaum Research Institute, Mount Sinai Hospital*

**C4 – Getting Real: The Expanding Role of Real-World Evidence (RWE) in Oncology**

Room 212

Chairs:

**Dr. Winson Cheung**

*Tom Baker Cancer Centre, University of Calgary*

**Ms. Catherine Hays**

*Patient Advocate*

Real-world evidence is emerging to be increasingly important in both cancer funding and cancer treatment decision making. At the end of this session, the audience will learn:

1. To distinguish the strengths plus limitations of different approaches to RWE generation in oncology
2. To understand how findings from RWE can complement findings from conventional clinical trials in cancer
3. To learn how RWE can inform the current and future drug reimbursement framework.

**A Framework to Assess the Quality of RWE**

**Dr. Kelvin Chan**

*Sunnybrook Research Institute, Odette Cancer Centre, Sunnybrook Health Sciences Centre, Canadian Centre for Applied Research in Cancer Control, Cancer Care Ontario*

**Cross-Roads: The Intersection Between Clinical Trials and RWE**

**Dr. Annette Hay**

*Canadian Clinical Trials Group, Hematology, Queen's University*

**How Decision Makers can use Real-World Evidence**

**Dr. Nicole Mittmann**

*Pan-Canadian Oncology Drug Review, Canadian Agency for Drugs and Technologies in Health, University of Toronto*

**A Prototype System for Patient Data Donation to power Real-World Evidence Cancer Research in Quebec**

**Dr. John Kildea**

*The Research Institute of the McGill University Health Centre*

**C5 – Cancer Prevention and Screening: Selected Updates**

Room 203

Chairs:

**Dr. Martin Tammemagi***Cancer Care Ontario, Department of Health Sciences, Brock University***Ms. Debi Lascelle***Patient Advocate*

This session covers selected topics in primary and secondary cancer prevention, that is preventing the disease from occurring or detecting it at an early more treatable stage. Identification of individuals at high risk for lung cancer for low dose computed tomography lung cancer screening using an accurate lung cancer risk prediction model is presented. Successful application of a lung cancer screening program in a difficult setting is described. An update on primary and secondary cervical cancer prevention is presented through discussion of current thinking in HPV vaccination and screening. The burden of hepatocellular carcinoma, intrahepatic and extrahepatic bile duct cancers and non-Hodgkin lymphomas associated with hepatitis B and C virus chronic infections in the U.S. and Canada are described, with the potential to prevent them through vaccination and treatment. A patient advocate will present her perspective on these states-of-knowledge presentations.

The session objectives include developing an understanding of:

1. How sophisticated cancer risk prediction models can more efficiently identify those at high risk who are more likely to benefit from screening, than existing approaches.
2. How cancer screening can be taken out of the hospital setting to successfully screen the hard-to-reach in the community.
3. The current thinking regarding optimal approaches to controlling cervical cancer through HPV vaccination and screening.
4. The burden of cancers in North America attributable to hepatitis B and C viruses and the potential to control this burden through vaccination and treatment.
5. Some patient perspectives on cancer prevention and screening.

**Lung cancer risk prediction and lung cancer screening**

**Dr. Martin Tammemagi***Cancer Care Ontario, Department of Health Sciences, Brock University*

**Application of risk models and lung cancer screening in the real-world setting**

**Dr. Philip Crosbie***Faculty of Biology, Medicine and Health, University of Manchester, North West Lung Centre, Wythenshawe Hospital, Manchester University NHS Foundation Trust*

**Cervical cancer - Prevention and early detection**

**Dr. Gina Ogilvie***Faculty of Medicine, University of British Columbia, Women's Health Research Institute, BC Centre for Disease Control*

**Cancers attributable to hepatitis viruses in North America: An analysis of established and newer hepatitis-cancer associations**

**Ms. Karena Volesky***McGill University*

**Patient advocate's perspective**

**Ms. Debi Lascelle***Patient Advocate*

Panel Discussion

**12:30 pm****Lunch***Canada Hall 2 and 3***12:40 pm****NRC Challenge Program: Disruptive Technology Solutions for Cell and Gene Therapy***Canada Hall 2 and 3*

The Disruptive Technology Solutions for Cell and Gene Therapy Program will unify the value chain for engineered cell and gene therapies across the continuum from discovery to commercialization. Through collaborative partnerships with key stakeholders, it will advance a unique initiative to bring disruptive solutions to the design, development and delivery of cell and gene therapy to patients in Canada.

In doing so, the NRC will coordinate a national effort, in collaboration with academic facilities, research centres and networks, clinicians, hospital centres and others, to increase the affordability and accessibility of these ground-breaking technologies to enable a national ecosystem for health innovation in the area of cell and gene therapies.

National Research  
Council CanadaConseil national de  
recherches Canada



1:30 pm

**Plenary Session: CCRA Awards Presentation**

Canada Hall 1

Chairs:

**Dr. Cindy Bell**

*Genome Canada, Chair, CCRA*

**Dr. Sara Urowitz**

*CCRA and Canadian Partnership Against Cancer*

In 2011, the CCRA initiated a biennial recognition program to acknowledge the contributions of individuals who have had a remarkable impact on cancer research and the cancer research community. In this session, you will hear the aspirational perspectives of our five distinguished awardees for this year. Please join us to recognize and congratulate these eminent members of the cancer research community!

**CCRA Award for Exceptional Leadership in Patient Involvement in Cancer Research**

**Mr. Patrick J. Sullivan**

*Team Finn Foundation, Ac2orn (Advocacy for Canadian Oncology Research Network)*

**CCRA Award for Exceptional Leadership in Cancer Research**

**Dr. Anne-Marie Mes-Masson**

*Institut du cancer de Montréal, CRCHUM, Université de Montréal*

**Dr. Gerald Batist**

*McGill University, Jewish General Hospital, McGill Centre for Translational Research in Cancer, Montreal Centre for Experimental Therapeutics in Cancer*

**CCRA Award for Outstanding Achievements in Cancer Research**

**Dr. Lincoln Stein**

*Ontario Institute for Cancer Research, University of Toronto, Cold Spring Harbor Laboratory*

**CCRA Award for Distinguished Service to Cancer Research**

**Dr. Geoffrey T. Fong**

*University of Waterloo*

3:00 pm

**Poster Session and Exhibits– Abstracts for poster presentations can be found on the conference app.**

Canada Hall 2 and 3

4:00 pm

**CONCURRENT SESSIONS D**

**D1 – Microbiome**

Room 214

Chairs:

**Dr. Kathy McCoy**

*Department of Physiology and Pharmacology, IMC Germ-free Program, Cumming School of Medicine, University of Calgary*

**Ms. Nathalie Baudais**

*Patient Advocate*

The human body is host to a vast number of microbes that colonize all body surfaces, particularly the gut. In healthy individuals, this microbiome and the host live synergistically in a mutually beneficial relationship. The gut microbiota provides the host with essential nutrients and vitamins, aids in the digestion of otherwise indigestible food components, provides colonization resistance against pathogens, and is involved in regulating host metabolism. Importantly, the microbiome is now recognized to be an important modulator of the immune system and is involved in the development of the immune system and the regulation of immune responses. Recent evidence suggests that the microbiome may play a role in determining susceptibility to cancers, influencing cancer progression, and even determine the level of responsiveness to immune therapy. For example, exciting new studies have highlighted how the microbiome can dictate the efficacy of immune checkpoint blockade therapy in a variety of cancers. This has led to increasing efforts that aim to modulate or target the gut microbiota for the treatment of cancer. It is clear that much more research is needed to elucidate a causal role for the microbiome in cancer and cancer therapy and to design therapeutic approaches to target the microbiota to enhance therapy. In this session we will hear about ongoing research aiming to understand the role of the microbiome in the development of cancer and the response to immunotherapy. We will also hear about ongoing efforts to ensure that the microbial samples are collected over time in individual patients and across multiple cancer types to allow greater translational research into the cancer microbiome.

**Microbes and Metabolites: Enhancing immune checkpoint blockade therapy in colorectal cancer**

**Dr. Kathy McCoy**

*Department of Physiology and Pharmacology, IMC Germ-free Program, Cumming School of Medicine, University of Calgary*

**Impact of the microbiome on the efficacy of the immunotherapy in cancer**

**Dr. Meriem Messaoudene**

*Centre de recherche du Centre hospitalier de l'Université de Montréal (CRHUM)*

**Investigating Mucin-type O-glycan-Microbiota Interactions in the Etiopathogenesis of Colorectal Cancer**

**Dr. Kirk Bergstorm**

*The University of British Columbia – Okanagan Campus*

**POET: Moving Precision Oncology to Where the Puck Will Be**

**Dr. Gwyn Bebb**

*Tom Baker Cancer Centre and University of Calgary*

**D2 – Lessons from Aging**

Room 215

Chair:

**Dr. Francis Rodier**

CRCHUM, Institut du Cancer de Montreal,  
Radiologie, Radio-oncologie et Médecine  
Nucléaire, Université de Montréal

Overall, age is the biggest risk factor for cancer. At the cellular level, molecular events inside the future cancer cell and cues within its microenvironment will determine its cancer fate. We cannot stop aging, but in the cancer context, age-related risk is highly modifiable by the environment via carcinogen exposure, stress, nutrition and exercise. Over the years, studying the molecular hallmarks of aging has informed us regarding carcinogenesis. For example, by defining how endogenous tumour suppressor genes that counteract oncogenes act as double-edged swords. Namely, they promote aging at the same time as they protect against cancer. More recently this dual interplay has been put in context with our environment to take in account the importance of lifestyle. New understanding of the interlaced factors above has allowed us to introduce drugs that have been developed for other purposes into the fight against cancer. This session will reveal the tip of the cancer-aging iceberg by highlighting Canadian researchers exploring these waters.

Learning objectives:

- Understand the tissue-dependence of the interplay between oncogenes and tumour suppressor genes
- Explore the interlaced links between aging, nutrition, metabolism and cancer
- Understand how drugs used for age-associated diseases can be repurposed to fight cancer
- Understand senescence as a therapy-induced cell fate decision

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**Cellular origin affects the phenotype of pancreatic ductal adenocarcinoma cells**

**Dr. Janel Kopp**

Department of Cellular & Physiological Sciences, University of British Columbia

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**High-fat diet fuels prostate cancer progression by rewiring the metabolome and amplifying the MYC program**

**Dr. David Labbé**

Department of Surgery, Division of Experimental Medicine, McGill University

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**eIF4F links translation to energy stress response in cancer**

**Dr. Laura Hulea**

Hôpital Maisonneuve-Rosemont, Université de Montréal

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**Multilayered senescence-centric synthetic lethal approaches for ovarian cancer therapy**

**Dr. Francis Rodier**

CRCHUM, Institut du Cancer de Montreal, Radiologie, Radio-oncologie et Médecine Nucléaire, Université de Montréal

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**D3 – Poor Survival Cancers**

Room 202

Chairs:

**Dr. Marshall Pitz**

*CancerCare Manitoba, University of Manitoba*

**Ms. Danielle Smith**

*Patient Advocate*

Despite considerable advances in the management of many cancers, there remain multiple types of cancer that continue to have a very aggressive and treatment-refractory course. Over time, these diagnoses will account for a greater proportion of the global burden of cancer. Most of these cancers have minimal or no early detection methods, high mortality rates with very few treatment options. Advances in the understanding of these cancers must be highlighted to drive further advances and make greater impact to patients. This session will feature two of the most aggressive human cancers; pancreatic cancer and glioblastoma.

Objectives:

- Highlight the importance of research for pancreatic cancer and glioblastoma.
- Gain a better understanding of research progress for these two poor survival cancers.
- Better understand the value of research to a patient diagnosed with a low survival cancer.
- Understand the changing epidemiology of pancreatic cancer.
- Identify the importance of microRNA in the context of pancreatic neuroendocrine tumour dedifferentiation, invasion, and metastasis.
- Describe the role and importance of CTRP8 in cytoskeletal organization in glioblastoma cells.
- Recognize the importance of genome-wide CRISPR-Cas9 screens in the proliferation of glioblastoma stem cells.

**Genome-wide CRISPR-Cas9 screens reveal conserved and context-specific drivers of glioblastoma stem cell proliferation**

**Dr. Graham MacLeod**

*Pharmaceutical Sciences, University of Toronto*

**Pancreatic cancer projected to become third leading cause of cancer death in Canada: research urgently needed!**

**Dr. Donna Turner**

*CancerCare Manitoba, Department of Community Health Sciences, University of Manitoba*

**Cytoskeletal reorganization by CTRP8 in brain cancer cells**

**Dr. Aleksandra Glogowska**

*Department of Human Anatomy and Cell Science, Faculty of Health Sciences, University of Manitoba*

**A set of microRNAs coordinately controls tumour dedifferentiation, invasion, and metastasis of pancreatic neuroendocrine tumors**

**Dr. Iacovos Michael**

*Swiss Institute for Experimental Cancer Research (ISREC), Swiss Federal Institute of Technology Lausanne (EPFL)*

Panel Discussion

**D4 – Tackling Inequity in Cancer Care**

Room 212

Chairs:

**Dr. Colleen Varcoe***School of Nursing, University of British Columbia***Ms. Louise Bird***Patient Advocate*

Social inequities, that is, inequities in access to education, employment, income are created by how societies are organized. Social inequities are widening around the globe and in Canada, with profound effects on health, and subsequent inequities in health and health care access. Like many health issues, cancer risk factors, prevalence, incidence, diagnosis, treatment and outcomes are all influenced by social determinants of health and health care access. Currently, those involved in cancer care, researchers, care providers, advocates, community members and those with lived cancer experience and their families are turning increasing attention to equity. In this session, participants will:

- Describe the patterns of and efforts to address social, health and health care inequities in Canada
- Describe the patterns of and efforts to address inequities related to cancer and cancer care in Canada
- Consider specific examples of how inequities manifest in relation to cancer care, with emphasis on socioeconomic influences
- Identify what is needed next to promote equity in relation to cancer prevention and cancer care

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**What is equity, why does it matter, and what can be done?**

**Dr. Colleen Varcoe***School of Nursing, University of British Columbia*


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**Inequity and Cancer Screening: How Are We Doing?**

**Dr. Linda Rabeneck***Cancer Care Ontario, University of Toronto*


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**Association between Socioeconomic Status and Access to Specialized Cancer Consultation and Treatment among Advanced Gastrointestinal Cancers**

**Ms. Laura Davis***Sunnybrook Health Sciences Centre*


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**Barriers and Facilitators to Lung Cancer Screening for High-Risk Individuals Living with Low Income in Downtown Toronto, Canada**

**Dr. Ambreen Sayani***MAP- Centre for Urban Health Solutions, St. Michael's Hospital*


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Panel Discussion

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**D5 – Cannabis, Vaping and E-Cigarettes: Canada's Evolving Drug Market and Implications for Cancer Control**

Room 203

Chairs:

**Dr. David Hammond***School of Public Health and Health Systems, University of Waterloo***Ms. Vera Samarkina***Patient Advocate*

Session Objectives:

1. To understand trends in cannabis and e-cigarette use in Canada, and implication for cancer risk factors.
2. To examine the role of medical cannabis use among cancer patients.
3. To consider policy developments in cannabis and e-cigarette regulation in Canada.

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**E-cigarettes in Canada: Trends and Policy Developments**

**Mr. Rob Cunningham***Canadian Cancer Society*


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**Medical cannabis as a therapy for cancer: current evidence and overview**

**Dr. Lynda Balneaves***College of Nursing, Faculty of Health Sciences, University of Manitoba*


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**Vaping, cannabis and the changing recreational drug market in Canada**

**Dr. David Hammond***School of Public Health and Health Systems, University of Waterloo*


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Panel Discussion

6:30 pm

**Trends in Cancer Research: Career Journeys and Opportunities***Location TBD*

Hosted by Science to Business Network,  
Ottawa Chapter

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# TUESDAY, NOVEMBER 5, 2019 • MARDI 5 NOVEMBRE 2019

7:30 am

## Breakfast

Canada Hall 2 and 3

8:00 am

## Canadian Strategy for Cancer Control Presentation

Canada Hall 2 and 3

The *Canadian Strategy for Cancer Control* (the Strategy) has guided Canada's progress in cancer control since 2006. Canada has made considerable progress since then, but there's still work left to do. One in two Canadians will be diagnosed with cancer during their lifetime. The Partnership recently led broad consultations across Canada to inform the modernization of the Strategy.

The modernized Canadian Strategy for Cancer Control builds on the original Strategy developed in 2006 and sets out a 10-year action plan with priorities and actions so that all Canadians will have access to high-quality cancer care no matter who they are or where they live. Recognizing the need for the development of a shared vision for Canadian cancer research that moves the country forward, the Strategy calls for better integration of research into clinical care settings. This would increase collaboration among clinicians and researchers, and opportunities to learn from the experience of every person living with cancer and improve outcomes for all people in Canada.

Designed to address new opportunities and growing pressures, the Strategy will ensure the health-care system remains sustainable into the future. Above all, it reflects the voices and priorities of Canadians.



8:30 am

## CONCURRENT SESSIONS E

### E1 – Mechanisms of Cancer Resistance

Room 214

Chairs:

#### Dr. Josie Ursini-Siegel

Lady Davis Institute for Medical Research,  
Departments of Oncology and Biochemistry,  
McGill University

#### Mr. Denis Raymond

Patient Advocate

Overcoming the development of intrinsic and/or acquired resistance to standard of care and targeted therapies remains an unmet clinical need to increase the long-term survival of cancer patients. This session will address novel strategies to prevent or surmount the development of drug resistance with a particular focus on identification of novel strategies to overcome intra-tumoral heterogeneity through multiple mechanisms, including epigenetic and metabolic reprogramming.

**Novel therapeutic strategies to enhance sensitivity and overcome resistance to biguanides in poor outcome breast cancers**

#### Dr. Josie Ursini-Siegel

Lady Davis Institute for Medical Research, Departments of Oncology and Biochemistry, McGill University

**Epigenetic therapy against first-line therapy resistant breast cancer**

#### Dr. Mathieu Lupien

Princess Margaret Cancer Centre, University of Toronto

**Cancer combination therapy using single cell sequencing**

#### Dr. Soheil Jahangiri-Tazehkand

Princess Margaret Cancer Centre – University Health Network

**The role of Ubiquinol-Cytochrome C Reductase Hinge Protein (UQCRH) methylation in clear cell renal cell carcinoma**

#### Dr. Claire Robinson

Laboratory Medicine and Pathobiology, University of Toronto



## E2 – Cancer Immunotherapy

Room 215

Chairs:

**Dr. Marie-Claude Bourgeois-Daigneault**

*Centre de recherche du Centre Hospitalier de l'Université de Montréal*

**Ms. Doreen Edward**

*Patient Advocate*

Cancer immunotherapies are treatment strategies that exploit the immune system to recognize and fight the disease. The main advantage is that the immune system remembers the cancer and therefore is ready to fight and eliminate malignant cells, which protects the patients in the case of a relapse without the need for further treatment. In this session, we will discuss different cancer immunotherapeutic approaches that are already used in the clinic or at the preclinical stage of development: adoptive cell therapy (the infusion of cancer-fighting immune cells), immune checkpoint blockade (antibodies that prevent immune inhibition and release the function of cancer-killing immune cells), oncolytic virotherapy (viruses that are specifically designed to destroy cancer cells and induce anti-cancer immunity) in combination with immune checkpoint blockade and stimulating inflammation to redirect the attention of immune cells towards the cancer.

**PD-1+-selected tumor-infiltrating T lymphocytes for adoptive immunotherapy**

**Dr. Simon Turcotte**

*Université de Montréal, CRCHUM et Institut du cancer de Montréal*

**Clinical Predictors of Lack of Benefit in Advanced NSCLC Following PD-1/PD-L1 Inhibitor Initiation**

**Mr. Elliot Smith**

*Princess Margaret Cancer Centre – University Health Network*

**A Combination of Clinical Chemotherapies and Oncolytic HSV Renders TNBC Susceptible to Checkpoint Blockade**

**Ms. Alyssa Vito**

*Department of Biochemistry and Biomedical Sciences, McMaster University*

**Stimulator of Interferon Genes Pathway Activation as an Immunotherapeutic Strategy for Soft Tissue Sarcoma**

**Ms. Kayla Marritt**

*University of Calgary*

## E3 – Meeting Healthcare Needs in the 'Era of Cancer Survivorship'

Room 202

Chairs:

**Dr. Stuart Peacock**

*BC Cancer, Canadian Centre for Applied Research in Cancer Control, Simon Fraser University*

**Ms. Melissa Coombs**

*Patient Advocate*

We are entering a new era in terms of how we think about cancer and how patients and their families experience cancer. This is the 'era of cancer survivorship'. Almost 1 in 2 Canadians will develop cancer in their lifetime, but with advances in early detection and treatment more than 60% of adults, and 80% of children, with cancer will now survive >5 years from the time of diagnosis. Cancer survivors are at risk of developing a range of late effects which are often related to their cancer treatment, including chemotherapy, radiation and/or surgery. These late effects can include cardiac complications, secondary cancers, endocrinopathy, organ dysfunction, fatigue and reproductive problems. Treatment modalities impact the individual's risk of late effects differently resulting in a unique late effects risk profile for each cancer survivor. Many survivors also experience ongoing psychosocial problems relating to fear of recurrence, distress, coping and decision-making, as well as family planning. With ever increasing numbers of cancer survivors we need to develop new interventions and approaches to meet the long terms needs of survivors and their families. Most important of all, we need to understand the lived experiences of those affected by cancer.

Learning objectives for this session include:

- Understanding the lived-experiences of cancer survivors, learning directly from survivors themselves
- Gaining insight into survivorship models of care and transitions into the community after patients complete active cancer treatment
- Learning evidence on effective programs for rehabilitation and physical activity from leading Canadian Cancer Survivorship Programs

**A personal perspective on lived experiences**

**Ms. Jayda Kelsall**

*Patient Advocate*

**Models of follow-up care: are we meeting survivors' needs after cancer treatment?**

**Dr. Robin Urquhart**

*Department of Surgery, Department of Community Health and Epidemiology and Division of Medical Education, Dalhousie University, Beatrice Hunter Cancer Research Institute, Nova Scotia Health Authority*

**Physical Activity and Endometrial Cancer Survival: A Prospective Cohort Study**

**Dr. Christine Friedenreich**

*Cancer Epidemiology and Prevention Research, Alberta Health Services*

**Cancer Rehabilitation and Exercise (CaRE): A multicomponent rehabilitation intervention for cancer survivors**

**Dr. Jennifer Jones**

*Princess Margaret Cancer Centre – University Health Network*

Panel Discussion

**E4 – Accelerating Clinical Trials in a Genomic-driven Era – Challenges & Opportunities**

Room 212

Chairs:

**Dr. Sharlene Gill***BC Cancer Agency, BC Cancer Research Centre***Ms. Sylvie Halde***Patient Advocate*

The goal of cancer clinical trials is to test the efficacy and safety of new therapies and strategies that will translate into better outcomes for patients with cancer. As our understanding of the genomics of cancer is advancing, the taxonomy of cancer is changing and we have entered an exciting era of biomarker-driven therapeutics. At the same time, payers and the public expect that these new therapies will be tested more rigorously and more quickly. How are clinical trials adapting to this changing landscape? In this session, the fundamental aspects of conventional clinical trial design, conduct and interpretation will be reviewed. The opportunities and challenges of novel clinical trial designs and methodologies will be presented.

**When changing practice is the goal - How do we design clinical trials for success?**

**Dr. Sharlene Gill***BC Cancer Agency, BC Cancer Research Centre*

**Mastering novel clinical trial designs: umbrellas, baskets and platforms**

**Dr. Martin Smoragiewicz***Canadian Cancer Trials Group, Queen's University*

**Can administrative data improve the quality and efficiency of clinical trial economic analyses?**

**Dr. Timothy Hanna***Cancer Research Institute, Division of Cancer Care and Epidemiology, Queen's University*

**New Biologics for Tumour Agnostic indications: Regulatory Challenges**

**Dr. James Rusthoven***Centre for Evaluation of Radiopharmaceuticals and Biotherapeutics, Health Canada***E5 – Consortium-Based Research**

Room 203

Chair:

**Dr. Philip Awadalla***Computational Biology, Ontario Institute for Cancer Research, Population and Medical Genomics, University of Toronto, Ontario Health Study, Canadian Partnership for Tomorrow Project, Genome Canada Canadian Data Integration Centre*

The Consortium-Based Research session will highlight research supported by large population and clinical cohorts in the areas of cancer research and clinical translation. Speakers will present discoveries arising from the Canadian Partnership for Tomorrow Project, and other major international consortia, including more traditional clinical cohorts or trials. One of the major advantages of cohort-based studies is that they allow for linkages to administrative health and environmental data holdings thus supporting the investigation of both the genomic and environmental determinants of cancer and related comorbidities along the full spectrum of disease development. In Canada, national and provincial activities capture data and biologics from participants who consent to broad research that includes linkages to administrative health data housed in provincial and Canadian centers, as well as tumour banks. Building on the strength of our population laboratories, combined with our universal health system, Canada is uniquely well positioned to interrogate the myriad of biologic and exposure-related factors associated with the development of cancers and other chronic disease, while providing insight into how together they contribute to clinical outcomes.

**Stem Cells Play a Role in Human Leukemia From the Beginning to the End**

**Dr. John Dick***Princess Margaret Cancer Centre - University Health Network, Department of Molecular Genetics, University of Toronto, Ontario Institute of Cancer Research*

**Metabolomics of lifestyle behaviours in the BC Generations Project**

**Dr. Rachel Murphy***Centre of Excellence in Cancer Prevention, School of Population & Public Health, Faculty of Medicine, University of British Columbia*

**Leveraging CPTP Data Across the Cancer Continuum**

**Dr. Winson Cheung***Tom Baker Cancer Centre, University of Calgary*

**Predicting health outcomes from hematopoietic evolution in large population cohorts**

**Ms. Kimberly Skead***Ontario Institute for Cancer Research*

10:00 am

**Break***Canada Hall 2 and 3*

10:30 am

**Plenary Session: Future of Cancer Research**

Canada Hall 1

Chairs:

**Dr. Stephen Robbins***University of Calgary and CIHR Institute of Cancer Research***Mr. Patrick Sullivan***Patient Advocate*

Progress made in our understanding of cancer over the past several decades has helped to focus our attention on what we need to do to ensure that everyone benefits from our research advances. At both the local and global levels, our increasing knowledge and scientific discoveries have not resulted in benefits for all. The global burden of cancer is, for example, notably higher in low- and middle-income countries and predicted to get worse. Primary and second prevention are key to changing this scenario. On the other side of the spectrum, despite the promise of precision medicine approaches and the significant research inroads, there are considerable environmental challenges and constraints to advancing this research and providing patients with leading-edge and effective therapeutics. In this session, we will look at these important challenges.

We will also share a long-range vision of cancer research in Canada that we hope will inspire and unite researchers, care providers, decision-makers, persons affected by cancer, and the general public to forge ahead together to support a cancer control system that supports innovative research and enables its translation into interventions that significantly reduce cancer risk and cancer burden across all populations.

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**Global cancer burden and research priorities in cancer prevention**
**Dr. Elisabete Weiderpass***International Agency for Research on Cancer*


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**Enabling combinatorial cancer immunotherapy clinical trials**
**Dr. Tania Bubela***Faculty of Health Sciences, Simon Fraser University*


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**Introducing the Canadian Cancer Research Vision**
**Dr. Stephen Robbins***University of Calgary and CIHR Institute of Cancer Research*


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**Discussion**
**Mr. Patrick Sullivan**

12:00 pm

**Closing Remarks**

Canada Hall 1

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**Conference Co-Chairs**
**Dr. John Bell***Ottawa Hospital Research Institute, University of Ottawa***Dr. Christine Williams***Ontario Institute for Cancer Research*


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**Canadian Cancer Research Alliance (CCRA)**
**Dr. Sara Urowitz***CCRA and Canadian Partnership Against Cancer*

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



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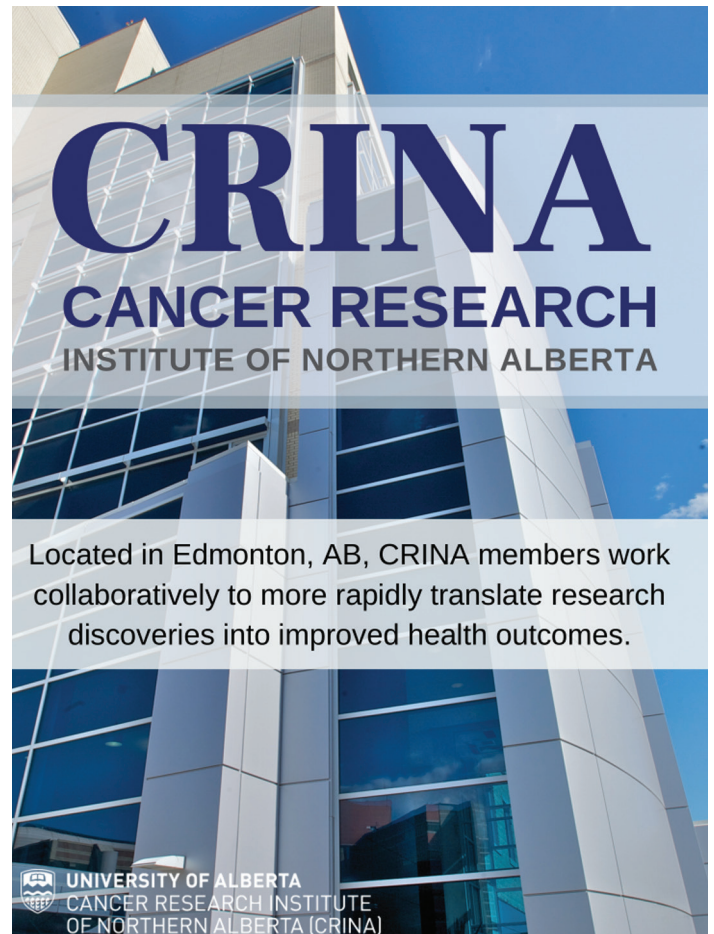
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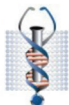
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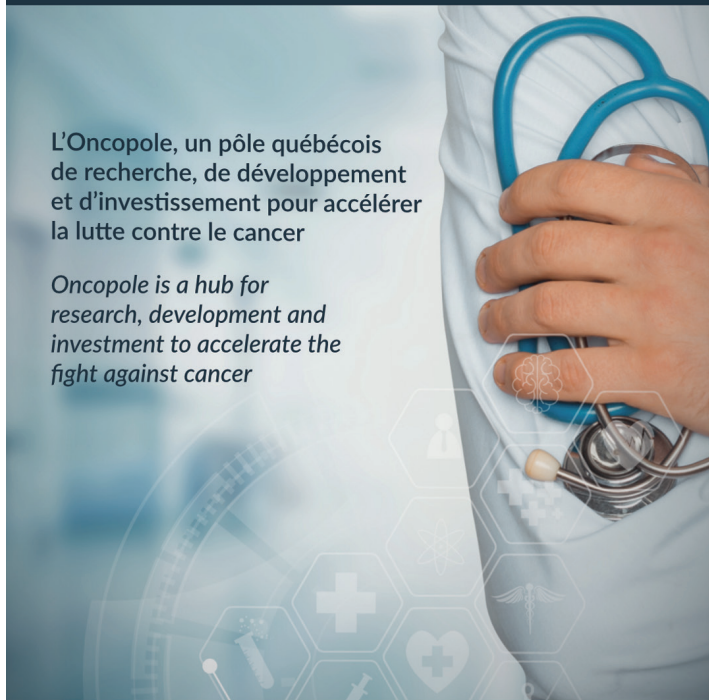


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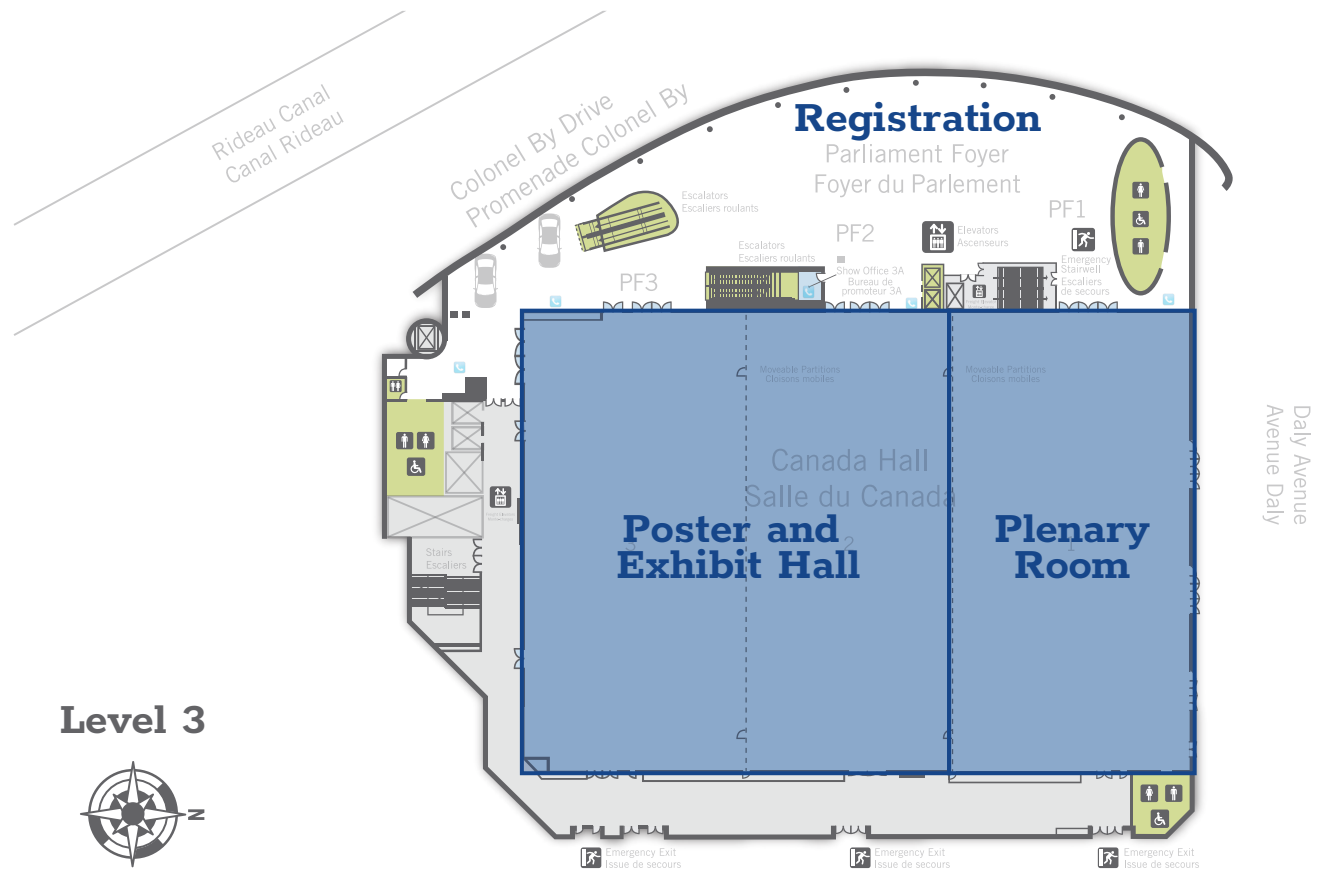
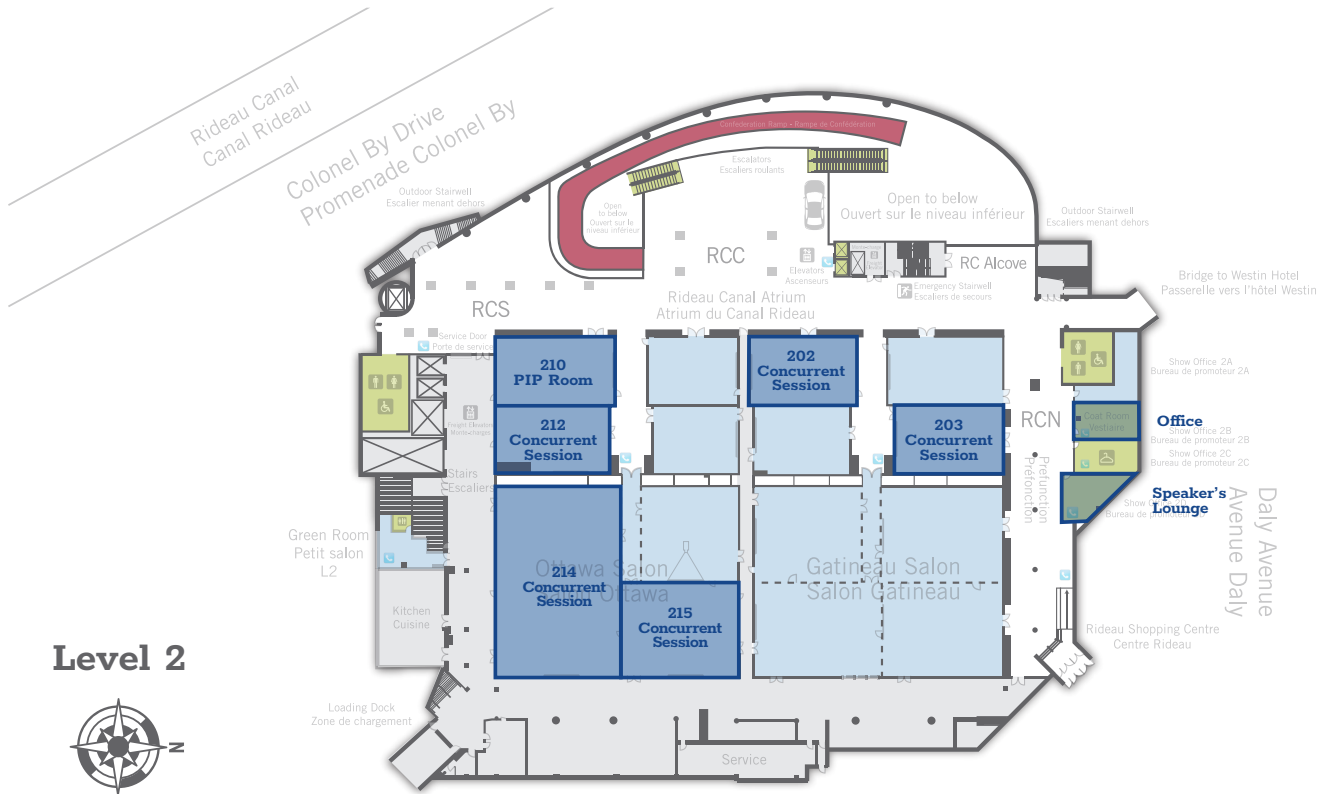
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