



Annual Reporting for Faculty Supported Research Centres and Networks

All Centres (provisional Centres; McGill Centres), Research groups and Networks that receive funding from the Faculty of Medicine are required to provide two components of reporting:

1. an Annual Report of Activities and Outcomes (see below),
2. a Financial Statement (see attached Excel document).

The reporting period is May 1, 2019 – April 30, 2020.

Deadline: Monday, May 25th, 2020 at 5pm

Please send both documents to Faculty of Medicine's Research Office (riac.med@mcgill.ca).

Continued support from the Faculty is contingent on:

1. the receipt of the reporting documents on time,
2. the evaluation of reported activities by the Faculty's Committee for Oversight of Research Units (CORU),
3. the availability of Faculty funds.

Your strong engagement in the Faculty's mission for continued research excellence and financial stewardship is truly appreciated.

Annual Report of Activities and Outcomes

Please respect the page limits, where indicated, or the report will be returned.

(The accepted font is Times New Roman or Calibri regular 11 pts)

1. Name of the Unit:

McGill Centre for Translational Research in Cancer (MCTRC)

2. Director's contact information:

Dr. Gerald Batist

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gerald.batist@mcgill.ca

3. If the Unit is a **Senate-approved** McGill Research Centre, indicate date of approval: 1996

4. Mission Statement of the Unit:

The MCTRC's mission is to:

- Further the advancement of scientific knowledge and generate novel approaches to cancer prevention, screening and treatment
- Promote the translation of innovative laboratory and clinical research findings into real health improvements of cancer patients

5. Number of Unit members: 60

6. Number of members affiliated with McGill's Faculty of Medicine: 51

7. **Unit's website:**

URL: <https://www.mcgill.ca/translational-research-cancer/>

Note: The website needs to feature the following:

- all sources of funding support (including the Faculty of Medicine's logo),
- the List of Members and their institutional affiliation with appropriate links,

- the activities supported by the Unit
- all previous Annual Reports.

8. Summary of past year's **goals and objectives** of the Unit. **(limit: ½ page)**

- Update and assemble the advisory board.
- Support innovative translational cancer research, focused on precision medicine.
- Assist the members on team grant applications that involve research collaborations between scientists and clinicians and among the specialists from different areas of cancer research.
- Support for high-quality educational training to next-generation scientists in translational cancer research.
- Advance the tumor tissue biobank initiative in improving and updating the biobanking process and increasing the accessibility of patient materials to researchers.
- Support and expand Molecular Tumor Boards.
- Organize scientific symposia, also meetings geared to the public.

9. **Major achievements** enabled by the support obtained from the Faculty. **(limit: 1 page)**

- The updated MCTRC Advisory Board has been assembled and is composed of Dr. Shari Baum, delegate for the dean of the Faculty of Medicine; Dr. Batist, director of the MCTRC; the Dean of Graduate and Postdoctoral Studies, Josephine Nalbantoglu, as the provost delegate; Dr. Mark Basik and Dr. Josie Ursini-Siegel as active members of the MCTRC; Kathryn Bozek as a grad student member; Dr. George Zogopoulos and Dr. Eduardo L. Franco, as external members.
- The MCTRC supports its researchers by providing infrastructure, training, services, funding and a point of contact. This year, we would like to highlight the involvement of this Centre in the implementation of a unique and revolutionary technology in cancer treatment, completely developed in Quebec. The project entitled « Traitement de cancers par guidage magnétique de bactéries chargées de médicaments » has its origins at Polytechnique Montreal and is being implemented clinically at the JGH with the leadership of Drs. **Batist and Vuong** and the active collaboration of several members of the Centre. This project has evolved from a successful 'Canada First' proposal led by the Polytechnique Montreal, which includes multiple hospital and research centres.
- The Centre is one of the 6 leading institutions of Quebec Cancer Consortium, launched in June, a project that aims to increase patient access to oncological clinical trials in Quebec and to discover biomarkers predictive of response and adverse effects for personalized treatments and immunotherapies.
- MCTRC members obtained over 60 new **operating grants** this year, totaling to more than 35 million dollars. Of the total successfully funded operating grants, 17 involve collaborative efforts among the Centre's members ([Appendix I](#)). Of note, Dr. Sonenberg, together with Dr. **Pollak** in a new collaboration with other researchers including three members of this Centre, were awarded \$6M, supported by the Stand up to Cancer initiative, the CCS, and the CIHR.
- MCTRC members published a total of 239 articles in peer-reviewed journals with focus on cancer research. Free open access content is available in 38% of the cases. An impressive 20% of the publications resulted from direct collaborations among members of the Centre ([Appendix II](#)). The full list includes publications from high impact journals including the NEJM (IF = 70.670), The Lancet (IF = 59.102), Nature Medicine (IF=30.641) and Cancer Cell (IF=23.916), among others.
- MCTRC members are principal and/or co-investigators on 77 ongoing clinical trials at the Clinical Research Unit (CRU) of the Jewish General Hospital ([Appendix III](#)), including 18 new studies. More than 500 patients benefited from the trials in the past year. Specifically, two trials in particular show the Centre's commitment in advancing the practice of personalized medicine and merit highlight:
 1. The Centre, via Drs. **Batist and Miller**, is the sole Canadian participant of the international WINTHER trial, a study that evaluates the use of DNA sequencing and RNA expression to guide

treatment recommendation, leading to an improved patient outcome and expanded benefits of personalized treatment (Rodon, et al. Nat Med, 2019).

2. The Molecular Tumor Board has been profiling patients in an attempt to screen for specific genetic alterations that would make them eligible for the CAPTUR (CCTG) trial of molecular based cancer therapy, as well as other biomarker-based trials to which they can be matched. Recent profiling by the National Centre of Excellence Exactis Innovations (G Batist is CMO), provide an additional NGS profiling capacity. In 2019 there was an increasing trend in patient profiling (34 cases in 6 months of 2018 and 88 in 2019).
 3. MCTRC is a key component of the Business-led National Centre of Excellence in Personalized Medicine (Exactis Innovations), which was renewed by the Federal National Centre of Excellence in 2019 for 5 years. Exactis has a large focus in Quebec institutions, as part of a 15 Centre pan-Canadian Network focused on precision medicine, and clinical trial matching.
- During the past year, members of the Centre continuously mentored 163 students ([Appendix IV](#)). As part of their training, the graduate students and postdoctoral fellows had the opportunity to present their results and receive constructive feedback from their colleagues and PIs. A total of 48 Lady Davis Institute (LDI) Cancer Seminars ([Appendix V](#)) were held, with an average of 30 attendees per session.
 - MCTRC members maintain high visibility in the scientific community. This year, the MCTRC members were invited to speak at more than 190 events at local, national and international levels. Members of the MCTRC organized 13 events ([Appendix VI](#)).
 - The members of the MCTRC took part in several knowledge translation activities ([Appendix VII](#)). Merit highlight: Dr. **Del Rincon**'s engagement in raising awareness on melanoma and pregnancy associated breast cancer and Dr. **Zahedi**'s team who developed a novel tool to quantify redox protein modifications in cells and tissues (Mnatsakanyan R. Nat Commun., 2019).
 - The researchers of the MCTRC received 10 awards and distinctions from several institutions, excluding salary awards ([Appendix VIII](#)).
 - The Centre made efforts to integrate the Proteomics Centre led by Dr. **Borchers** and Optilab, a government initiative aimed at the reorganization and accreditation of all clinical medical biology laboratories. The Centre played a key role in securing funds and the physical space necessary in the JGH to build the first in Quebec ISO 15189 certified environment with standardized SOPs to allow for the most rapid translation of proteomics assays into the clinical practice. When in operation, this will ultimately improve quality of cancer care in the province by improving precision medicine.
 - Part of the Centre's platforms and resources, the JGH biobanks, participated in the RRCancer's initiative to harmonize the information and consent form (ICF) as well as in the Montreal Cancer Consortium's initiative to harmonize SOPs for specimens of specific cancer types to ensure their high quality. The biobank committee launched webpages aimed at the open public and research community (<https://www.jgh.ca/care-services/segal-cancer-centre/research/biobanks/>).

10. **New Members** who joined the Unit in the past year and their **institutional affiliation(s)**.

Name Last, First	Title PI, Staff or Trainee [Graduate student (GS) or post-doctoral fellow (PDF)]	Type of Membership Full, Associate	Affiliation(s)
Del Rincon, Sonia	PI	Associate member	Faculty of Medicine, Gerald Bronfman Department of Oncology - McGill
Enger, Shirin A	PI	Full member	Faculty of Medicine, Gerald Bronfman Department of Oncology - McGill

Friedmann, Jennifer	PI	Associate member	Faculty of Medicine, Gerald Bronfman Department of Oncology - McGill
Rudd, Christopher	PI	Full member	Faculté de médecine, Dép. de microbiologie, infectiologie et immunologie - Udm
Mercier, François	PI	Associate	Faculty of Medicine, Dept. Medicine - Division of Experimental Medicine - McGill

11. Members who have **left the Unit** over the reported year.

Name Last, First	Title PI, Staff or Trainee [Graduate student (GS) or post-doctoral fellow (PDF)]	Type of Membership Full, Associate	Affiliation(s)
Carbonneau, Annie	Faculty Lecturer	Associate	Faculty of Medicine, Gerald Bronfman Department of Oncology - McGill
Yu, Eugene	Associate Professor	Associate	Princess Margaret Hospital, Dept. of Medical Imaging - University of Toronto

12. State how the current and forecasted activities of your Unit align with the Education or Research mission (Strategic Research Plan) of the Faculty of Medicine and/or other Faculties at McGill
(limit: ½ page):

The activities of the MCTRC center on its missions to foster innovative discoveries in the field of **oncology** and to take these discoveries from bench to bedside to make real impact in patient care. More specifically, translational research with a focus on **personalized medicine**, one of the Faculty's prioritized themes, has been and continues to be the main focus of the Centre since its inception in 1996. Based on each member's expertise, MCTRC researchers are grouped into 7 research themes. These themes represent crucial components of our approach to personalized and precision medicine, ranging from biomarker discovery, drug designing and immunotherapies and related adverse events and artificial intelligence & computer science applied to diagnostic methods. With the support of the Centre, our members maintain highly productive research activities, publishing an average of 200 papers each year and leading more than 70 ongoing clinical trials.

Our current and forecasted activities reflect the Centre's focus on translational medicine and are in line with the Faculty's implementation strategies:

- The Centre's continuous support to innovative cancer research and its role in assisting its members on team grant applications that involve research collaborations between scientists and clinicians and multidisciplinary projects show our focus on **strategic grouping and research funds**.
- The Centre member's continuous involvement in training of graduate students, postdoctoral fellows, medicine students and residents is a demonstration of the Centre's efforts in **building human capital**.
- The Centre's advances on the tumor tissue biobank initiative, as well as its eight current platforms provide invaluable resources to its researchers represent our engagement in **enabling tools and platforms** to the research community.

- The intense participation of the Centre's members in knowledge dissemination and exchange activities with media and within the research community, including the Centre's initiative on expanding and integrating Molecular Tumor Boards across the network of hospitals and the Centre's efforts in integrating the Proteomics Centre with Optilab, exemplifies the Centre's efforts to promote **knowledge translation** and improve patient care.

13. Explain why support from the Faculty of Medicine continues to be crucial to the operations of the Unit (**limit: ½ page**):

Both in the establishment the Translational Research Centre and in its subsequent operation, funding has been generated by leadership from private sources outside of the Faculty. The Faculty's support is solely the financial management of the MCTRC McGill endowment, as well as the ongoing fund created by the Investors Group Fund. An additional major endowment for MCTRC is managed at the Lady Davis Research Institute. The proceeds of these essential funds allow the Centre to employ two research coordinators essential personnel for its operations and support in multi-centre grant applications. The Centre also supports the Research Pathology Core Facility by complementing the salary costs of its staff. Every year, through the Centre's bridge fund for innovative projects, the Centre provides support to innovative projects. In 2019, the Centre provided support to Dr. Enger's, newly recruited to the JGH, by funding a 6 month studentship to James Schneider, a medical physics residency student to develop the project entitled 'Development of a General-Purpose Model Based Dose Calculation Engine based on Artificial Intelligence'. In addition, a research fellowship was attributed to Dr. Véronique Vendrely, to support her visiting fellowship in CRC radiation therapy. Next year the Centre will reiterate its support to Dr. Enger's lab by providing a startup fund to allow the purchase of essential equipment. The Centre also contributed to the infrastructure of the Artificial Intelligence-Assisted Radiomics program led by Dr. Forghani, as well as providing project management help in his development of proposals.

Going forward, financial support from the Faculty of Medicine will be very important in attaining the objectives we set out for the coming years, as the Centre plans to launch new supplementary initiatives (outlined below) to better support the members' research activities, education of their trainees and knowledge translation. MCTRC's new initiatives consist of:

- 1) Starting next year, the Centre plans to implement a Translational Research in Cancer Meeting Series. This would be a series of 3-4 multidisciplinary events, featuring key stakeholders. The aim is to facilitate the interaction between the various arms of translational research to promote collaboration and increase the translation of the Centre's discoveries to the bedside and ultimately benefit the patient. Faculty support by providing visibility and funds for the event would be crucial.
- 2) The Centre is actively developing a funding stream for graduate and postgraduate students working in Translational Medicine at the Faculty of Medicine at McGill University, a lacune created by the dissolution of CIHR training programs. The Centre is presently in ongoing negotiations with potential donors, collaborators in other Universities and Hospitals to start this fund. Contributions from the Faculty of Medicine would be essential in match fundraising for these students.

The successful outcomes of these initiatives will undoubtedly add values to the Faculty's research and educational mission.

14. List action items that the Unit has taken or will consider taking in the next year towards growth and sustainability of its operations (**limit: ½ page**)

The Centre would like to maintain several of its successful initiatives, including:

- 1) The continuous support to innovative cancer researches, in particular within large local, national and international Consortia, with a focus on personalized medicine. In this matter, the Centre is key in identifying funding opportunities and assisting its members on team grant applications.
- 2) The continuous support to precision medicine initiatives, including: the development and expansion of the McGill-wide Proteomics Program, Molecular Tumor Boards, which the Centre plans to support further, expand and integrate across the network of hospitals part of the Montreal Cancer Consortium, and the WINTHER trial.
- 3) Renew the Centre's participation in the RRCancer Network funded by FRQS. This funds a large portion of the Centre's Research Coordinator salary.
- 4) Establish adequate biobanking practices in the context of COVID-19, and promote longitudinal collection of patient samples.

The Centre would also like to initiate new projects, towards growth of its operations:

- 5) Implement a Translational Research in Cancer Meeting Series, featuring speakers from different backgrounds, including industrial partners, start-ups, decision makers, government, commercialization agencies, community groups, patient advocates and researchers. The aim is to facilitate the interaction between the various arms of translational research to promote collaboration and increase the translation of the Centre's discoveries to the bed side, ultimately benefiting the patient.
 - 6) Make the MCTRC website content universally available by adding a French version and including options to the visually impaired.
 - 7) Administratively, the Centre plans to work on the process of succession of its director and their new governance.
15. Provide suggestions about how the Faculty could do better to support the Unit and research efforts in general (e.g., centralized data repositories, institutional data management plans, support for software developments, guidance for adopting open-science practices, simplification of administrative procedures, etc.) **(no page limit but please be specific and unleash your creativity!)**
- In light of the Project Renaissance in which Medicine and Biomedical Sciences will be moving towards independent Educational Programs in the future Faculty of Medicine and Health Sciences, the MCTRC will play a crucial role in bridging the two programs, lab-based and clinical care, to integrate the teaching and basic research to improve clinical care. The best clinical care is informed by basic research. We believe that the Centre merits a higher profile in McGill's environment as it acts a bridge among McGill Hospitals and Institutions and between McGill and other Quebec Universities.
 - Funding support would be essential in our efforts of developing a funding stream for graduate and postgraduate students working in Translational Medicine at McGill University.
 - MCTRC is working with others on addressing Quebec's legal impediments to bio banking by moving towards an 'opt out' system. By addressing this change as one of the Faculty's major challenges, and becoming a unifying force to bring all the different Institutions together, and highlighting patient's voice by involving patient advocacy groups, we feel more assured of success.
 - MCTRC, again working with other institutions, is working on digital and connected health systems, to better integrate clinical data within and between hospitals.
 - The Centre plans to implement a Translational Research in Cancer Meeting Series. Faculty support will be crucial by providing visibility and funds for these events..
 - In regards to the education of our students and trainees, we believe that Faculty could provide free access to publications for trainees other than graduate students (e.g. postdoc fellows and residents).

In the attached (Excel) **Year-End Financial Report** please detail:

1. Expenditures of funding provided by the Faculty of Medicine and other sources, towards meeting the objectives of the Unit,
2. Any in-kind contributions provided to the Unit by other partners and sponsors,
3. Projected budget for the coming year (including request to the Faculty of Medicine)

Appendix List

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Appendix I: Grants

We would like to highlight three funding awards:

- a) Dr. Sonenberg, together with Dr. **Pollak** in a new collaboration with several other researchers including Drs. **Del Rincon, Miller, Kleinman**, active members of this Centre, were awarded 6M CAD supported by Stand up to Cancer initiative, the CCS, and the CIHR, with a project titled: “Targeting mRNA Translation to Effectively Treat Metastatic Breast Cancer”. The Dream Team is investigating a new way to treat metastatic breast cancer by making it impossible for cancer cells to manufacture the proteins they need to be aggressive and continue to spread to organs beyond the breast aims;
- b) A new collaboration between Drs. **Borchers, Spatz** and **Zahedi** was awarded over 1.4M to develop the next generation of precision cancer diagnostics has been awarded funding through Genome Quebec’s Genomic Applications Partnership Program (GAPP). This award will be used to develop next generation assays at the Segal Cancer Proteomics Centre, one of the MCTRC platforms. This assay is expected to be far more precise at determining the concentration of PD-L1 molecules in malignant tumors than the current immunohistochemistry staining method. Their patented technology is precise in determining the concentration of molecules per cell, and, thus, whether a PD-L1 inhibitor will help a specific patient;
- c) The Quebec Cancer Consortium, an innovation poles in oncology, was built on alliances established between six of the largest hospitals and oncology research centers of McGill University and the University of Montreal. Lead by Dr. Park and with the collaboration of several members of the MCTRC including Drs. **Batist, Assouline, Spatz, Miller, Borchers** and **Basik**, QCC aims to standardize and harmonize best practices in oncology between hospitals and research centers, promote a patient-centered approach to double patient recruitment in advanced clinical trials in oncology, and build longitudinal collections of biological samples from cancer patients and annotated clinical data.

Grants awarded to MCTRC members - 2019-2020*						
*Only includes grants that involve multiple researchers of the centre						
	Principal investigator	Co-investigators	Project Title	Funding Agency	Total Amount	Funding period
1	Dr. Nahum Sonenberg & Dr. Michael Pollak	Del Rincon, Wilson Miller, Claudia Kleinman, Elizabeth Eisenhauer, Brad Nelson, Poul Sorensen, Lynne Postovit, Sam Aparicio, Daniela Quail, Lynn Gentile, Candace Cook, John Mackey, Karen Gelmon	<i>Targeting mRNA Translation to Effectively Treat Metastatic Breast Cancer.</i>	Stand up to Cancer, CIHR, CCS, SU2C Canada Metastatic Breast Cancer Dream Team Research	\$ 2,500,000.00	2019 – 2021

	Principal investigator	Co-investigators	Project Title	Funding Agency	Total Amount	Funding period
2	Christoph Borchers	Alan Spatz, Rene Zahedi	<i>Development of Next-Generation PD=L1 Assays Using Precision Mass Spectrometry</i>	Genome Canada / Genome Quebec	\$ 1,449,000.00	2019 - 2022
3	Koren Mann	Lehoux, Stephanie; Richard, Stéphane	<i>Arsenic 3 methyltransferase: a role in arsenic-induced atherosclerosis and beyond?</i>	Canadian Institute of Health Research (CIHR PJT-166142)	\$ 822,000.00	2019 - 2024
4	John White	Sylvie Mader	<i>Bifunctional vitamin D analogues as novel therapeutics against triple-negative breast cancer</i>	Fondation Cancer du Sein du Quebec/IRICoR LeadAction Breast Cancer grant	\$ 400,000.00	2020 – 2023
5	Josie Ursini-Siegel	Michael Witcher	<i>Capitalizing on an oxidative stress response to sensitize poor outcome cancers to PARP inhibitors</i>	Canadian Institutes for Health Research Operating Grant (CIHR)	\$ 948,000.00	2020 - 2025
6	Siham Sabri	Dr. Bertrand Jean-Claude, Dr. Bassam Abdulkarim.	<i>Characterization of the immunosuppressive local microenvironment and therapeutic targets in Glioblastoma</i>	Cancer Research Society (CRS)- Operating Grant	\$ 120,000.00	2020 – 2022
7	Gerald Batist	Wu Jian Hui	<i>Chemical correction of mutated Keap1 generates highly selective chemosensitization; an entirely novel approach</i>	LeadAction-Onco competition; IRICoR, Oncopole and FRQS	\$ 600,000.00	2020 – 2022
8	Julie St-Pierre and Peter Siegel	Pollak M, Ivan Topisirovic, others	<i>Cross-talk between translational machinery and metabolic programs in breast cancer</i>	2019 Terry Fox New Frontiers Program Project Grant (PPG)”	\$ 6,000,000.00	2019 – 2025
9	Enger SA	Reinhold	<i>Development of a non-invasive positron detector to measure the arterial input function for pharmacokinetic modelling in dynamic positron emission tomography imaging</i>	CHRP (Collaborative Health Research Program CIHR+NSERC	\$ 1,303,806.00	2020 – 2023
10	Bertrand Jean-Claude, Siham Sabri	Moulay Alaoui-Jamali	<i>Diseases of altered immunity Engineering small molecules to target cell signaling, kill tumor cells and stimulate the immune system.</i>	McGill Interdisciplinary Initiative in Infection and Immunity	\$ 150,000.00	2019 - 2021
11	Josie Ursini-Siegel	Ivan Topisirovic	<i>Establishing the impact of deregulated “oncogenic kinase signaling on the translational machinery during breast cancer metastasis</i>	CRS Grant	\$ 60,000.00	2019 – 2021
12	Wilson Miller	Sonia del Rincon	<i>Identifying novel cellular functions and biological outcomes for MNK1.</i>	Cancer Research Society (The)	\$ 120,000.00	2019 – 2021

	Principal investigator	Co-investigators	Project Title	Funding Agency	Total Amount	Funding period
13	Park, M; Pollack, M; Mader S	Ferbeyre, G; Hassan, S; Deblois, G; Witcher, M; Basik, M	<i>Targetable vulnerabilities to overcome drug resistance in poor outcome breast cancers</i>	Oncopole Quebec, Operating grant	\$ 1,500,000.00	2019 – 2021
14	Jean-Claude Bertrand	Ciriaco Picirillo, Siham Sabri, and Bassam Abdulkarim	<i>Targeted DNA repair inhibition and drug-induced neoantigens (DIN): a novel drug design strategy towards the selective potentiation of clinical therapeutic modalities against refractory tumours</i>	CIHR Project Grant Spring 2020	\$ 1,500,000.00	2020 - 2025
15	Dr. Bertrand Jean-Claude, Dr. Moulay Alaoui-Jamali,	Siham Sabri,	<i>The combi-targeting concept: Engineering small molecules to target cell signaling, kill tumor cells and stimulate the immune system.</i>	McGill Interdisciplinary Initiative in Infection and Immunity Mi4 Seed Fund Grant Application: Diseases of altered immunity	\$ 150,000.00	2019 - 2021
16	Dr. Barbara Rivera Polo	Alexandre Orthwein	<i>The RAD51 interactome in ovarian and breast cancers</i>	Cancer Research Society Operating Grant	\$ 120,000.00	2019 – 2021
17	William Foulkes	Alexandre Orthwein, Pollak M	<i>Using mutational signatures and functional genomics to classify breast cancer gene variants</i>	Canadian Cancer Research Society Innovation Grant	\$ 200,000.00	2019 – 2021
18	Morag Park & George Zogopoulos	Gerald Batist, Fred Saad, Denis-Claude Roy, Sarit Assouline, Alan Spatz, Wilson Miller, Christoph Borchers, Mark Basik	<i>Quebec Consortium for Novel Cancer Therapeutics and Biomarker (QCC) - this is a multi-institutional project</i>	Fonds d'accélération des collaborations en santé (FACS) program; Consortium québécois sur la découverte du médicament (CQDM)	\$ 795,336.00 (to the JGH alone)	2019 - 2023

Appendix II: Publications

The researchers of the MCTRC are indicated in bold letters. Only the publications involving collaborations among the PI members of the Centre are listed.

The Lady Davis Institute (LDI) selects a paper each month from recently published articles of the researchers at the institute to highlight their significant contribution to the scientific field. In the past year, the June 2019 edition featured the multidisciplinary work Dr. **Koromilas** lab's article (Darini et al., 2019; Nat. Comm.), co-authored by four members of the Centre Drs. **Sabri**, **Ursini-Siegel**, **Basik** and **Abdulkarim**. The authors show the anti-tumor function of the protein kinase PKR and its substrate eIF2 α -P in a mouse HER2+ breast cancer model. The stimulation of eIF2 α -P by a phosphatase inhibitor substantially increased Trastuzumab potency in resistant HER2+ breast and gastric tumors murine models. Their discovery has potential implications in the treatment of Trastuzumab resistant HER2+ breast tumors in humans. The December 2019 edition featured the manuscript of Drs. **Foulkes** and **Fabian** (Apellaniz-Ruiz et al., 2019; NEJM). The authors suggest that Mesenchymal hamartoma of the liver (MHL), a benign tumor affecting children, as a new phenotype of DICER1 syndrome. In their study two cases of MHL revealed DICER1 mutations that dysregulate microRNAs and mimic the effect of the underlying cause of MHL.

The researchers of the MCTRC are also committed to clinical research, with significant contribution to the understanding and/or treatment of several types of cancer. In this report, we would like to highlight the work of Drs. **Esfahani** and **Miller** (Esfahani et al., 2019; NEJM) in which they describe the positive effects of targeting of CD52 on the treatment of myocarditis due to PD-1 immunotherapy.

1. Mesenchymal Hamartoma of the Liver and DICER1 Syndrome
Apellaniz-Ruiz M, Segni M, Kettwig M, Gloer S, Pelletier D, Nguyen VH, Wagener R, L³pez C, Muchantef K, Bouron-Dal Soglio D, Sabbaghian N, Wu MK, Zannella S, **Fabian MR**, Siebert R, Menke J, Priest JR, **Foulkes WD**.
N Engl J Med. 2019 May 9;380(19):1834-1842. doi: 10.1056/NEJMoa1812169.
2. Pervasive H3K27 Acetylation Leads to ERV Expression and a Therapeutic Vulnerability in H3K27M Gliomas
Krug B, De Jay N, Harutyunyan AS, Deshmukh S, Marchione DM, Guilhamon P, Bertrand KC, Mikael LG, McConechy MK, Chen CCL, Khazaei S, Koncar RF, Agnihotri S, Faury D, Ellezam B, Weil AG, **Ursini-Siegel J**, De Carvalho DD, Dirks PB, Lewis PW, Salomoni P, Lupien M, Arrowsmith C, Lasko PF, Garcia BA, **Kleinman CL**, Jabado N, Mack SC.
Cancer Cell. 2019 May 13;35(5):782-797.e8. doi: 10.1016/j.ccell.2019.04.004.
3. An integrated stress response via PKR suppresses HER2+ cancers and improves trastuzumab therapy
Darini C, Ghaddar N, Chabot C, Assaker G, **Sabri S**, Wang S, Krishnamoorthy J, Buchanan M, Aguilar-Mahecha A, **Abdulkarim B**, Deschenes J, Torres J, **Ursini-Siegel J**, **Basik M**, **Koromilas AE**.
Nat Commun. 2019 May 13;10(1):2139. doi: 10.1038/s41467-019-10138-8.
4. Radiomics in Glioblastoma: Current Status and Challenges Facing Clinical Implementation
Chaddad A, Kucharczyk MJ, Daniel P, **Sabri S**, Jean-Claude BJ, **Niazi T**, **Abdulkarim B**.
Front Oncol. 2019 May 21;9:374. doi: 10.3389/fonc.2019.00374. eCollection 2019.
5. Alemtuzumab for Immune-Related Myocarditis Due to PD-1 Therapy
Esfahani K, Buhlaiga N, Thibault P, Lapointe R, Johnson NA, **Miller WH Jr**.

- N Engl J Med. 2019 Jun 13;380(24):2375-2376. doi: 10.1056/NEJMc1903064.
6. Translation of cancer immunotherapy from the bench to the bedside
Guo Q, Huang F, Goncalves C, **Del Rincon SV**, **Miller WH Jr**.
Adv Cancer Res. 2019;143:1-62. doi: 10.1016/bs.acr.2019.03.001. Epub 2019 May 2.
 7. Identification of a Radiosensitivity Molecular Signature Induced by Enzalutamide in Hormone-sensitive and Hormone-resistant Prostate Cancer Cells
Ghashghaei M, **Niazi TM**, Aguilar-Mahecha A, Klein KO, **Greenwood CMT**, **Basik M**, **Muanza TM**.
Sci Rep. 2019 Jun 20;9(1):8838. doi: 10.1038/s41598-019-44991-w.
 8. Analysis of the Genomic Landscape in ALK+ NSCLC Patients Identifies Novel Aberrations Associated with Clinical Outcomes
Couotoux du Tertre M, Marques M, Tremblay L, Bouchard N, Diaconescu R, Blais N, Couture C, Pelsser V, Wang H, Higenell V, Izzi L, Gambaro K, Hoffert C, Srivastava A, **Spatz A**, Rousseau C, McNamara S, Cohen V, **Batist G**, Agulnik J.
Mol Cancer Ther. 2019 Sep;18(9):1628-1636. doi: 10.1158/1535-7163.MCT-19-0105. Epub 2019 Jun 26.
 9. An ErbB2/c-Src axis links bioenergetics with PRC2 translation to drive epigenetic reprogramming and mammary tumorigenesis
Smith HW, Hirukawa A, Sanguin-Gendreau V, Nandi I, Dufour CR, Zuo D, Tandoc K, Leibovitch M, Singh S, Rennhack JP, Swiatnicki M, Lavoie C, Papavasiliou V, Temps C, Carragher NO, Unciti-Broceta A, Savage P, **Basik M**, van Hoef V, Larsson O, Cooper CL, Vargas Calderon AC, Beith J, Millar E, Selinger C, Giguère V, Park M, Harris LN, Varadan V, Andrechek ER, O'Toole SA, **Topisirovic I**, Muller WJ.
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 10. mTOR as a central regulator of lifespan and aging
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Appendix III: Clinical Trials

The MCTRC investigators take part in designing and conducting clinical studies to evaluate the safety and efficacy of new drugs or more effective ways to use existing drugs. Closely tied to the MCTRC, the Clinical Research Unit (CRU) of the Jewish General Hospital plays a key role in the Centre’s bench-to-bedside approach. There are currently 77 ongoing clinical trials involving the members of the MCTRC. For more information on these trials, please refer to the table below. For a complete list of active trials currently recruiting patients, visit: <https://www.igh.ca/care-services/segal-cancer-centre/>

We would like to highlight the pioneering clinical trial conducted by Dr. **Basik**. In a radical departure from established treatment protocols, Dr. **Basik**, a surgical oncologist and researcher at this Centre, is spearheading an international effort that will lead to a clinical trial to forego surgery in breast cancer patients who show no signs of residual cancer following a course of pre-operative chemotherapy. In this study Dr. **Basik** will test the accuracy of needle biopsies of the breast to detect stray cancer cells after a complete response to therapy. The trial will determine whether the needle biopsy is sufficiently accurate in determining whether or not there is any remaining cancer so that the idea that surgery may be avoided can be reliably tested in a next clinical trial.

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
MK-3475-269	NCT02617849	Phase 2	11/2015-2019 Closed to enrollment	W. Miller	J. Friedmann, P. Kavan, A. Langleben, F. Patenaude, G. Batist	0	30	Lady Davis for Medical Research
Ribavirin=005	NCT02073838	Phase 2	05/2015-Ongoing	S. Assouline	A. Shamy, M. Gyger, S. Caplan, N. Johnson, C. Cassis, H. Knecht, A. Klil-Drori, R. Santiago	4	21	Investigator initiated trial
CRAD0014C409	NCT02753686	NA	03/2016-Ongoing	C. Ferrario	J.Friedmann, F. Patenaude, G. Batist, L. Panasci, V. Cohen	11	35	Novartis
CINC280X2108	NCT02795429	Phase 1b/2	06/2016 - 2019 Closed to enrollment	P. Kavan	J.Friedmann, W. Miller, C. Ferrario, D. Melnychuk, F. Patenaude	0	3	Novartis

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
CPDR001X2103	NCT02900664	Phase 1b	09/2016 - 2019 Closed to enrollment	W. Miller	M. F. Savard, C. Letendre, R. Santiago, R. Dalfen, K. Esfahani	0	22	Novartis
CPDR001G2101	NCT02988440	Phase 1b	04/2017- 2019 Closed to enrollment	P. Kavan	G. Batist, W. Miller, C. Ferrario, F. Patenaude, K. Esfahani, C. Letendre	0	6	Novartis
CPDR001X2106	NCT03111992	Phase 1/1b	08/2017- 2019 Closed to enrollment	A. Shamy	S. Assouline, M. Gyger, S. Caplan, C. Cassis, H. Knecht, N. Johnson	0	0	Novartis
CPDR001J2201	NCT03484923	Phase 2	01/2019- Ongoing	W. Miller	P. Kavan, F. Patenaude, K. Esfahani, N. Buhlaiga	3	4	Novartis
CLAG525B2101	NCT03499899	Phase 2	01/2018- 2019 Closed to enrollment	C. Ferrario	W. Miller, G. Batist, N. Buhlaiga, L. Panasci, F. Patenaude, J. Friedmann	1	2	Novartis
BO29554	NCT03178552	Phase 2/3	03/2018- ongoing	V. Cohen	J. Agulnik, C. Pepe, D. Small, L. Sakr	0	0	Roche Canada Inc.
BO39633	NCT03148418	Phase 3	12/2018- Ongoing	C. Ferrario	G Batist, V Cohen, F Patenaude	0	2	Roche Canada Inc.
RO6874281	NA	Phase 1b	05/2019- Ongoing	W Miller	K Esfahani, J Friedmann, F Patenaude, A Elkrief, N Papneja, P Nunes	2	2	Roche Canada Inc.
15834	NCT03102320	Phase 1b	08/2017- Ongoing	G. Batist	W Miller, C Ferrario, P Kavan, F Patenaude, V Cohen, D Small, L Sakr, K Esfahani, M F Savard, C Pepe, C Letendre, J Agulnik, L. Panasci	0	2	Bayer Pharmaceuticals Inc.

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
EFC13781	NCT02536755	Phase 3b	2015-Ongoing	S. Assouline	C. Cassis	0	1	Genzyme Corporation
GH29914	NCT02670044	Phase 1B/2	05/2016-Ongoing	S. Assouline	N. Johnson, S. Caplan, M. Gyger, A. Shamy, C. Cassis, H. Knecht, R. Santiago	1	3	Genentech Pharmaceuticals
GO29781	NCT02500407	Phase 1B/2	10/2017-Ongoing	S. Assouline	N. Johnson, S. Caplan, M. Gyger, A. Shamy, C. Cassis, H. Knecht, R. Santiago	12	35	Genentech Pharmaceuticals
GO39902	NCT03298516	Phase 1	01/2019-Ongoing	S. Assouline	S Caplan, H Knecht, C Cassis, N Johnson, T Skamene	0	1	Genentech Pharmaceuticals
D6020C00001	NCT02118337	Phase 1/2	10/2017-Ongoing	W. Miller	J. Agulnik, G. Batist, V. Cohen, K. Esfahani, C. Ferrario, P. Kavan, W. Gotlieb, C. Letendre, S. Lau, L. Panasci, F. Patenaude, M. Pollak, C. Pepe, L. Sakr, S. Salvador, D. Small, M. F. Savard	0	2	MedImmune LLC
ONT-380-206	NCT02614794	Phase 2	02/2017-Ongoing	C. Ferrario	W Miller, L Panasci, F Patenaude, G Batist, V Cohen, T Skamene,	0	4	Oncothyreon Inc.
CheckMate 436	NCT02581631	Phase 1/2	02/2016-Ongoing	N. Johnson	S. Assouline, S. Caplan, M. Gyger, A. Shamy	0	13	Bristol-Myers Squibb
CA018-005	NCT02996110	Phase 2	08/2017-Ongoing	W. Miller	P. Kavan, F. Patenaude, G. Batist, C. Lentendre, R. Santiago, M. Palumbo, K. Esfahani	0	5	Bristol-Myers Squibb
CA209-915	NCT03068455	Phase 3	06/2017-Ongoing	W. Miller	P. Kavan, F. Patenaude, C. Lentendre, K. Esfahani, Kim Ma	0	16	Bristol-Myers Squibb
CA209-649	NCT02872116	Phase 3	06/2017-Ongoing	P. Kavan	G. Batist, V. Cohen, R. Dalfen, C. Letendre, R. Santiago, W. Miller, K. Esfahani	0	8	Bristol-Myers Squibb
CA209-648	NCT03143153	Phase 3	01/2017-Ongoing	P. Kavan	G. Batist, V. Cohen, R. Dalfen, W. Miller	1	1	Bristol-Myers Squibb

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
CA224-047	NCT03470922	Phase 2/3	06/2018-Ongoing	W. Miller	P Kavan, F Patenaude, C Letendre, K Esfahani, N Buhlaiga, M Palumbo	0	5	Bristol-Myers Squibb
CA013-004	NCT02754141	Phase 1/2a	05/2019-Ongoing	W. Miller	F Patenaude, L Panasci, P Kavan, K Esfahani, P Nunes	1	1	Bristol-Myers Squibb
CC-122-DLBCL-002	NCT03283202	Phase 1/2	05/2018-Ongoing	N. Johnson	S. Assouline, S. Caplan, A. Shamy, C. Cassis, H. Knecht	0	2	Celgene
MK-3475-022	NCT02130466	Phase 1/2	09/2015-Ongoing	W. Miller	J.Friedmann, P. Kavan, A. Langleben, F. Patenaude, G. Batist	0	7	Merck
MK-3475-158	NCT02628067	Phase 2	01/2016-Ongoing	W. Miller	J.Friedmann, A. Langleben, F. Patenaude, G. Batist, P. Kavan, C. Ferrario	3	30	Merck
MK-3475-199	NCT02787005	Phase 2	08/2016-Ongoing	C. Ferrario	M. Pollak, J.Friedmann, M. F. Savard, W. Miller	0	4	Merck
MK-3475-361	NCT02853305	Phase 3	2016-Ongoing	C. Ferrario	W. Miller, T. Skamene, K. Esfahani	0	7	Merck
MK-8353-013	NCT02972034	Phase 1b	01/2017-Ongoing	W. Miller	J. Agulnik, G. Batist, V. Cohen, C. Ferrario, P. Kavan, K. Esfahani, W. Gotlieb, C. Letendre, S. Lau, L. Panasci, F. Patenaude, M. Pollak, C. Pepe, L. Sakr, S. Salvador, D. Small, M. F. Savard	5	17	Merck
MK-4280-001	NCT02720068	Phase 1	09/2017-Ongoing	W. Miller	G. Batist, P. Kavan, K. Esfahani, C. Letendre, L. Panasci, F. Patenaude, M. Pollak, L. Sakr, M. F. Savard, R. Santiago	1	17	Merck
MK-3475-585	NCT03221426	Phase 3	10/2017-Ongoing	P. Kavan	G. Batist; W. Miller, V. Cohen, C. Letendre, K. Esfahani	0	4	Merck
MK-3475-629	NCT03284424	Phase 2	2017-Ongoing	Osama Roshdy	G. Batist; W. Miller, C. Letendre, K. Esfahani, K. Pehr, R. K. Billick, M. Khanna, G. Fortier-Riberdy	0	3	Merck

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
MK-3475-590	NCT03189719	Phase 3	07/2017 - 2019 Closed to enrollment	P. Kavan	NA	0	0	Merck
MK-3475-651	NCT03374254	Phase 1b	02/2018-Ongoing	P. Kavan	W. Miller, G. Batist, F. Patenaude, L. Panasci, K. Esfahani, N. Buhlaiga	5	10	Merck
MK-3475-689	NCT03765918	Phase 3	01/2018-2019 Closed to enrollment	W. Miller	C. Ferrario, K. Esfahani, N Buhlaiga, M Hier, C Letendre, A Mlynarek, MF Savard, K Sultanem	0	0	Merck
MK-7123-034	NCT03473925	Phase 2	10/2018-Ongoing	W. Miller	C Ferrario, V Cohen, P Kavan, F Patendaude, G Batist, L. Panasci, K Esfahani, T Skaemane, J Friedmann, J Agulnik, L Sakr, D Small, C Pep	2	13	Merck
MK-3475-775	NCT03517449	Phase 3	10/2018-Ongoing	S. Lau	W. Gotlieb, S. Salvador	3	6	Merck
MK-3475-716	NCT03553836	Phase 3	11/2018-Ongoing	W. Miller	G Batist, F Patenaude, K Esfahani, N Buhlaiga	1	3	Merck
MK-4280-003	NCT03598608	Phase 1/2	02/2019-Ongoing	N. Johnson	S Assouline, S Caplan, T Skamene, H Knecht, A Shamy, C Cassis	5	5	Merck
MK3475-587 (ROLLOVER Trial)	NCT03486873	Phase 3	05/2019-Ongoing	W. Miller	K Esfahani, P Kavan, F Patenaude, J Friedmann, P Nunes	4	4	Merck
MK-7339-007	NCT04123366	Phase 2	02/2019-Ongoing	W. Miller	G Batist, F Patenaude, P Kavan, K Esfahani, C Ferrario, P Nunes, S Lau, W Gotlieb, S Salvador, D Small, C Pepe, J Friedmann, N Papneja	0	0	Merck

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
GT-GTI-4419	NA	Phase 3	02/2020-Ongoing	K Sultanem	B Bahoric, K Esfahani, D Melnychuk	1	4	Galera Therapeutics
D3610C00001	NCT01226316	Phase 1	02/2013-closed to enrollment	G. Batist	J.Friedmann, D. Melnychuk, C. Ferrario, L. Panasci, M. Basik, W. Gotlieb, S. Lau	0	11	AstraZeneca
D2615C00001	NCT02546661	Phase 1	11/2017-Ongoing	C. Ferrario	Skamene, Panasci, Miller, Patenaude, Cohen	0	0	AstraZeneca
D933SC00001	NCT03682068	Phase 3	08/2019-Ongoing	C. Ferrario	L Panasci, F Patenaude, G Batist, N Papneja, P Nunes, P Fallah	2	2	AstraZeneca
GS-US-352-4365	NCT03441113	Phase 2	11/2018-Ongoing	S. Sirhan	C Cassis, J Prchal	0	1	Gilead Pharmaceuticals
E7438-G000-101	NCT01897571	Phase 1/2	03/2016-2019 Closed to enrollment	S. Assouline	M. Gyger, S. Caplan, A. Shamy	1	9	Epizyme
ESPS-001	NCT02632448	Phase 1b/2a	04/2016-Ongoing	W. Miller	G. Batist, J.Friedmann, F. Patenaude, C. Ferrario, V. Cohen, L. Panasci, P. Kavan	5	21	Esperas Pharma Inc.
Onconova 04-30	NCT02562443	Phase 3	06/2016-Ongoing	S. Assouline	C. Cassis, M. Gyger, N. Johnson, H. Knecht, A. Shamy, S. Caplan	1	2	Onconova Therapeutics, Inc.
C34005	NCT02954406	Phase 1b	05/2017-2019 Closed to enrollment	S. Assouline	R. Santiago, S. Caplan, M. Gyger, A. Shamy, N. Johnson, C. Cassis, H. Knecht, A. Klil Drori	0	12	Takeda (Millennium Pharmaceuticals, Inc.)
TAK-659-C34008	NCT03357627	Phase 1b	07/2018-2019 Closed to enrollment	S. Assouline	S. Caplan, N. Johnson, C. Cassis, T. Skamene	0	8	Takeda (Millennium Pharmaceuticals, Inc.)

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
C34015	NCT03772288	Phase 1b	02/2019-07/2019 closed to enrollment	S. Assouline	S. Caplan, N. Johnson, C. Cassis, T. Skamene	0	0	Takeda (Millennium Pharmaceuticals, Inc.)
ZWI-ZW25-101	NCT02892123	Phase 1	04/2018-Ongoing	C. Ferrario	W Miller, V Cohen, P Kava, F Patendaude, G Batist, L Panasci, C Letendre, K Esfahani, MF Savard	1	4	Zymeworks Inc.
BGB-3111-212	NCT03332017	Phase 2	04/2018-Ongoing	S. Assouline	S. Caplan, N. Johnson, H Knecht, A Shamy, C. Cassis, T. Skamene	1	1	BeiGene
0610-02	NCT02158858	Phase 1/2	12/2018-Ongoing	S. Sirhan	C Cassis, J Prchal	1	3	Constellation Pharmaceuticals
201973	NCT02964507	Phase 1/2	12/2017-Ongoing	L. Panasci	F. Patenaude, G. Batist, V. Cohen, C. Letendre	0	3	GlaxoSmithKline (GSK)
209229	NCT04128696	Phase 2/3	10/2019 - Ongoing	W Miller	NA	0	0	GlaxoSmithKline (GSK)
ASTX660-01	NCT02503423	Phase 1/2	11/2017-Ongoing	S. Assouline	R. Santiago, S. Caplan, M. Gyger , A. Shamy, N. Johnson, H. Knecht, C. Letendre, V. Cohen, W. Miller, S. Lau, W. Gotlieb, S. Salvador, Esfhani K.	0	12	Astex Pharmaceuticals
16-214-02	NCT02983045	Phase 1/2	12/2017-Ongoing	V. Cohen	W. Miller, C. Ferrario, P. Kavan, F. Patenaude, G. Batist, L. Panasci, K. Esfahani, J.Friedmann, N. Buhlaiga	4	7	Nektar Therapeutics
PCYC-1143-CA	NCT03112174	Phase 3	05/2018-2019 Closed to enrollment	N. Johnson	A. Shamy, H. Knecht, Stephan Caplan, S. Assouline, C. Cassis, T. Skamene	2	3	Pharmacyclics LLC

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
MDV3800-01	NCT02997163	Phase 1	03/2017-2019 Closed to enrollment	C. Ferrario	W. Miller, G. Batist, M. F. Savard, V. Cohen, L. Panasci, F. Patenaude, A. Awan, T. Skamene, W. Gotlieb, S. Lau, M. Pollak, P. Kavan	0	15	Medivation, Inc.
MDV3800-13-EXT	NCT02921919	Phase 1	04/2017-2019 Closed to enrollment	C. Ferrario	W. Miller, G. Batist, M. F. Savard, V. Cohen, L. Panasci, F. Patenaude, A. Awan, W. Gotlieb, S. Lau, M. Pollak, P. Kavan	0	12	Medivation, Inc.
8374-CL-0101	NCT03260322	Phase 1b	04/2019-Ongoing	W. Miller	G Batist, L Panasci, P Kavan, C Ferrario, K Esfahani, F Patenaude, S Lau, S Salvador, W Gotlieb, N Papneja, P Nunes	1	1	Astellas Pharma Global Development, Inc.
ORATOR II	NCT03210103	Phase 2	05/2019-Ongoing	M. Hier	A Mlynarek, K Sultanem	0	0	Lawson Health Research Institute
TCD14678	NCT03192345	Phase 1/1b	09/2019-Ongoing	W. Miller	G Batist, F Patenaude, K Esfahani, N Papneja, P Nunes	0	0	Sanofi
INCMGA 0012-201	NCT03599713	Phase 2	05/2019-Ongoing	W. Miller	P Kavan, K Esfahani, J Friedmann, P Nunes	0	0	Incyte
TRPH-222-100	NCT03682796	Phase 1	04/2019-Ongoing	S. Assouline	S Caplan, N Johnson, A Shamy, H Knecht, C Cassis, T Skamene	0	0	Triphase R & D III Corp
H3B-6527-G000-101	NCT02834780	Phase 1	09/2019-Ongoing	P. Kavan	W Miller, K Esfahani, F Patenaude	0	0	H3 BIOMEDICINE
XL184-313	NCT03937219	Phase 3	02/2020-Ongoing	W. Miller	G Batist, F Patenaude, L Panasci, P Kavan, K Esfahani, J Friedmann, C Ferrario, N Papneja, P Nunes, V Cohen	0	0	Exelixis
EDP1503-101	NCT03775850	Phase 1/2	01/2020-Ongoing	J. Friedmann	C Ferrario, W Miller, P Kavan, L Panasci, G Batist, F Patenaude, K Esfahani, N Papneja, P Nunes, J Agulnik, C Pepe	0	0	Evelo Biosciences

Study name	ClinicalTrials.gov Identifier	Study Phase	Period	Principal Investigator	Co-Investigators	Number of patients recruited		Industrial Partner
						Current year	Total	
McGill 1132	NCT02928575	Phase 2	2014-Ongoing	B. Abdulkarim	NA	NA	42	Investigator initiated trial Pfizer, Canadian Cancer Society Research Institute (CCSRI)
NRG-BR005	NCT03188393	Phase 2	04/2017-Ongoing	M. Basik	NA	NA	NA	NRG Oncology, National Cancer Institute (NCI)
16.206, OZM-080	NCT02978404	Phase 2	12/2018-Ongoing	T. Muanza	Khalil Sultanem, J.Friedmann	0	0	Centre hospitalier de l'Université de Montréal (CHUM), Bristol-Myers Squibb
EF-25	NCT02831959	Phase 3	07/2016-Ongoing	T. Muanza	NA	NA	NA	NovoCure Ltd.

Appendix IV: New graduate students and trainees

The researchers of the MCTRC continue to dedicate their time to mentor and train graduate students, postdocs and fellows. Of those, 35 started their training and 3 are co-supervised by other MCTRC investigators. A total of 20 students received their degree during the reporting year. In the past year they mentored 40 students on the 2nd cycle, 76 on the 3rd cycle, 40 post-doctoral fellows and 7 fellows. Below is the list of trainees who either started or completed their training during the current reporting period. The members also put efforts into educating younger aspiring scientists in their undergraduate program.

Starting date	Study level	Project Title	Supervisor	Co-supervisor
2020-01-07	2nd cycle	mTOR	TOPISIROVIC, Ivan	
2020-01-06	2nd cycle	Defining epigenetic control of DNA damage repair.	WITCHER, Michael	
2019-09-30	2nd cycle	Investigation of rapsyn function in carcinogenesis.	ALAOUI-JAMALI, Moulay	
2019-09-06	2nd cycle	Association between SGLT-1 inhibitors and early breast cancer outcomes.	AZOULAY, Laurent	
2019-09-03	2nd cycle	Multidimensional integrative prognostic signatures combining tissue and plasma profiling in triple negative breast cancer patients.	BASIK, Mark	
2019-09-03	2nd cycle	Pathology research.	SPATZ, Alan	
2019-09-03	2nd cycle	Identification of vulnerabilities in residual acute myeloid leukemia following chemotherapy.	MERCIER, Francois	
2019-09-03	2nd cycle	Investigating N4BP-1 mediated post transcriptional control in the cellular control system.	FABIAN, Marc	
2019-09-03	2nd cycle	Cartographie le cerveau humain en développement pour identifier les origines des tumeurs cérébrales pédiatriques.	KLEINMAN, Claudia	
2019-09-02	2nd cycle	The role of low penetrance genes in susceptibility to cancer-anonymous collection of DNA samples from an unaffected control population.	RIVERA, Barbara	
2019-06-03	2nd cycle	Signalisation et séparation des dommages à l'ADN dans les tumeurs hématologique. Détermination des cibles thérapeutiques, de la pathogénèse et des complexes protéiques impliquées dans les cassures et réparation de l'ADN....	ORTHWEIN, Alexandre	
2019-05-15	2nd cycle	Plasmidic PCR thermocycler with detection in real time.	TRIFIRO, Mark A	

Starting date	Study level	Project Title	Supervisor	Co-supervisor
2019-05-01	2nd cycle	Targeting poly (ADP-ribose) glycohydrolase in breast cancer.	WITCHER, Michael	
2020-01-06	3rd cycle	Targeting novel bionano fluids for prostate cancer therapy.	TRIFIRO, Mark A	
2020-01-06	3rd cycle	No FRQS Form completed - title to be determined.	BASIK, Mark	
2019-09-01	3rd cycle	Tungsten alters the microenvironment of the bone marrow.	MANN, Koren	
2019-09-01	3rd cycle	Statistical methods on corrupted data selection using converse conditioned lasse.	GREENWOOD, Celia	
2019-09-01	3rd cycle	Role of the eukaryotic translation initiation factor eIF2B in KRAS lung tumorigenesis.	KOROMILAS, Antonis E.	
2019-09-04	Other internships	A predictor for metabolic pathway activity in cancer cells via single-cell RNA sequencing data.	KLEINMAN, Claudia	
2019-09-03	Other internships	CTCF knockout mutations effect on cancer reading and grin06 functtion.	WITCHER, Michael	
2019-06-18	Other internships	Correlating DNA mutation rates in prostate cancer to androgen receptor variant expression.	TRIFIRO, Mark A	
2019-06-10	Other internships	Nano-targeted photo abiation of HER2 positive breast cancer.	TRIFIRO, Mark A	
2019-06-03	Other internships	Arsenic and atherosclerosis: mechanisms in macrophages.	MANN, Koren	
2019-05-27	Other internships	Identifying factors of chemo-resistance in acute myeloid leukemia using in vivo gene CRISPR.	MERCIER, Francois	
2019-05-27	Other internships	P6-Apoptotic signaling dysfunction in aggressive lymphoma.	JOHNSON, Nathalie	
2019-05-13	Other internships	Gene-environment interaction study where the hypothesis is that the glucose control in a pregnant women influences methylation levels in the offspring, thereby leading to altered metabolism and overweight problems at age 6.	GREENWOOD, Celia	
2019-05-08	Other internships	Estimating cell type mixtures in bisulfite sequencing measures of methylation.	GREENWOOD, Celia	
2019-05-07	Other internships	Investigations of bioinformatics and statistical methods for bisulfite sequencing derived measures of DNA methylation.	GREENWOOD, Celia	
2019-05-06	Other internships	Biomarker for drug resistant triple negative breast cancers.	BASIK, Mark	
2019-05-01	Other internships	Investigating MARF-1-mediated gene silencing.	FABIAN, Marc	

Starting date	Study level	Project Title	Supervisor	Co-supervisor
2019-07-18	Fellow	Place de la radiothérapie dans la stratégie thérapeutique des patients présentant un cancer de la prostate oligo-métastatique résistant à la castration.	NIAZI, Mohammad Tamim	VUONG, Té
2019-07-02	Fellow	Rectal preservation in good responders after chemoradiotherapy for small rectal cancers: 1) Literature review, 2) Morpheus trial analysis, 3) Project of pooled analysis of 3 rectal preservation trials: Morpheus, opera and greccar 12.	VUONG, Té	BATIST, Gerald
2019-07-01	Fellow	Obstetrics and Gynecology Fellowship.	GOTLIEB, Walter	
2019-11-18	Postdoctoral fellow	Validation of p75NTR as a pharmacological target in retinopathy models, to prevent inflammation, neuronal loss, and pathological neovascularization.	SARAGOVI, Uri	
2019-09-01	Postdoctoral fellow	Role of PRMTs and RBPs in normal and diseased cells.	RICHARD, Stéphane	
2019-07-02	Postdoctoral fellow	Ovarian cancer diagnosis exploiting GD2 and GD2 tumor marker gangliosides in liquid biopsies.	GOTLIEB, Walter	SARAGOVI, Uri

Students who completed their training in 2019-2020 by Supervisor

William Foulkes

Student : Wu, Mona
3rd cycle

Student : De Kock, Leanne
3rd cycle

Claudia Kleinman

Student : Blanchet-Cohen, Alexis
3rd cycle

Mark Basik

Student : Brousse, Susie
Post-doctoral fellow

Nathalie Johnson

Student : Geoffrion, Dominique
2nd cycle

Antonis Koromilas

Student : Ghaddar, Nour
2nd cycle

Ivan Topisirovic

Student : Guénin, Sophie-Hélène
2nd cycle

Student : Hulea, Laura
Post-doctoral fellow

Josie Ursini-Siegel

Student : Ha, Jacqueline
3rd cycle

Alan Spatz

Student : Janssen, Sanne
3rd cycle

Walter Gotlieb

Student : Raban, Oded
Post-doctoral fellow

Celia Greenwood

Student : Jiang, Lai
Post-doctoral fellow

Tamim Niazi

Student : Kucharczyk, Michael
Fellow

Michael Pollak

Student : Tandoc, Kristofferson
2nd cycle

Micheal Witcher

Student : Wang, Li-Chun
Post-doctoral fellow

Appendix V: Seminars and Distinguish Lecture Series

In the reporting year, the students participating in the MCTRC had the opportunity to listen to the most productive minds in the field of oncology research featured in two seminar series: The Distinguish Lecture Series and the Cancer Seminar Series taking place at the Lady Davis Institute. The majority of the Distinguish Lectures Series featuring cancer research was hosted by researchers of the MCTRC (5 out of 6) and have attracted major attention and interest of the scientific community who filled the conference room to its full capacity at every lecture. The Cancer Seminar Series features presentations from visiting established researchers, graduate students and postdoctoral fellows. This series is an opportunity for the graduate students to present their work to a welcoming and friendly audience who will provide constructive feedback. The seminars are also a great time for networking and for establishing new collaborations.

*Please note that the Distinguish Lecture Series and the Cancer Seminar Series were cancelled from March 13th 2020 due to the restrictions up in place in the Lady Davis Institute in response to the COVID-19 pandemic. In April, the Cancer Seminar Series restarted as a virtual seminar series.

Distinguish Lecture Series - Cancer 2019-2020

Speaker	Title	Affiliation	Host	Date
Mike Tyers	Charting the chemical-genetic interaction landscape of human cells through genome-wide CRISPR screens	Professor, Department of Medicine - Udm	Alexandre Orthwein	May 7th
Brad Nelson	Deciphering and re-engineering the immune response to cancer	Professor and Distinguished Scientist - BC Cancer's Deeley Research Centre	Josie Ursini-Siegel	June 5th
Paul S. Frenette	Hematopoietic stem cell microenvironments in health and disease	Professor of Medicine and Cell Biology - Ruth L. and David S. Gottesman Institute for Stem Cell and Regenerative Medicine Research	Alexandre Orthwein	October 1st
Raúl Méndez	Cytoplasmic polyadenylation element binding proteins in tissue homeostasis and cancer	Catalan Institution for Research & Advanced Studies (ICREA), Institute for Research in Biomedicine (IRB) Barcelona, Spain	Ivan Topisirovic	October 29th
James McKay	Deciphering genetic susceptibility to lung cancer	Professor & Grouphead, Genetic Cancer Susceptibility Group International Agency for Research on Cancer WHO	Brent Richards	November 5th
David Scadden	Cancer through a stem cell lens	Gerald and Darlene Jordan Professor of Medicine at Harvard University. Co-Director, Harvard Stem Cell	François Mercier	November 19th

Cancer Seminar Series – 2019-2020

Speaker	Title	Level	Supervisor	Hosted by	Date
Nicholas De Jay	Epigenome dysregulation, repetitive element derepression and therapeutic opportunities in K27M-mutant gliomas	Ph.D. Student	Dr Kleinman	Dr. Ursini-Siegel	10-May-19

Cancer Seminar Series – 2019-2020					
Speaker	Title	Level	Supervisor	Hosted by	Date
Nancy Santos Martinez	Use of patient derived models to identify novel targets/therapeutics to overcome drug resistance in breast cancer	Postdoctoral Fellow	Dr. Basik	Dr. Ursini-Siegel	10-May-19
Alex Kentsis	Jumping genes and proteomics for new cancer therapies	Cornell University - Memorial Sloan Kettering Cancer Center		Dr. Topisirovic	13-May-19
Lyanne Postovit	Illuminating mechanism of tumour cell plasticity	Co-Director, Basic Research, Cancer Research Institute of Northern Alberta.		Dr. Ursini-Siegel	16-May-19
Constantinos Koumenis	The integrated stress response in tumor progression and metastasis: Challenges and opportunities for therapeutic intervention	University of Pennsylvania Perelman School of Medicine		Dr. Topisirovic	17-May-19
Ryuhjin Ahn	Stat3 signaling and immunosuppression	Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	17-May-19
Alex Gregorieff,	Hippo signalling in intestinal stem cell plasticity	Faculty of Medicine McGill University		Dr. Ursini-Siegel	24-May-19
Yanzhong (Frankie) Yang	Arginine methylation: an emerging epicenter of gene regulation	Dep. of Cancer Genetics and Epigenetics. Beckman Research Institute		Dr. Richard	28-May-19
Yang Yang	Understanding triple-negative breast cancer progression from primary to metastasis by single-cell transcriptomic analysis and spatial profiling	M.Sc. Student	Dr Kleinman	Dr. Ursini-Siegel	07-Jun-19
Kathryn Bozek	Using patient-derived xenograft models to overcome drug resistance in triple-negative and Her2+ breast cancer	M.Sc. Student	Dr. Basik	Dr. Ursini-Siegel	07-Jun-19
Noël J-M Raynal	Targeting MYC overexpressing leukemia with cardiac glycoside proscillaridin	Département de pharmacologie et physiologie Udm.		Stephane Richard	11-Jun-19
Amélie Fradet-Turcotte	Mechanisms driving oncogenesis and resistance to chemoradiation therapy in HPV infected cells	Department of Molecular Biology, Medical Biochemistry and Pathology Laval University		Dr. Orthwein	13-Jun-19
Nivine Srour	PRMT7 as a new immunotherapeutic target in cancer	Postdoctoral Fellow	Dr. Richard	Dr. Ursini-Siegel	14-Jun-19
David Papadopoli	Perturbations of cancer cell metabolism by the ant-diabetic drug canagliflozin	Postdoctoral Fellow	Drs. Pollak & Topisirovic's	Dr. Ursini-Siegel	14-Jun-19
Christopher E. Rudd	Manipulation of T-cell signaling in cancer immunotherapy	Department of Microbiology Udm		Dr. Del Rincon	21-Jun-19
Livia Garzia	A long way home: hematogenous spread of medulloblastoma to the leptomeninges	Cancer Research Program McGill University		Dr. Del Rincon	27-Sep-19
Alain Nepveu	A Novel Type of Cancer Gene: CUX1, a Haploinsufficient Tumour Suppressor Overexpressed in Cancers	Goodman Cancer Research Center Departments of Oncology, Biochemistry and Medicine McGill University		Dr. Ursini-Siegel	04-Oct-19
April Rose	Exploring novel therapeutic strategies for cancers with BRAFnonV600E mutations: an update from the BEAVER trial	University of Toronto Princess Margaret Cancer Center		Dr. Ursini-Siegel	11-Oct-19

Cancer Seminar Series – 2019-2020					
Speaker	Title	Level	Supervisor	Hosted by	Date
Carson Thoreen	Translational control of cell growth by the mTORC1 signaling pathway	Department of Cellular and Molecular Physiology Yale University		Dr. Topisirovic	25-Oct-19
Matthew Smith	Plasticity in small GTPase signaling	Department of Pathology and Cell Biology, Udm.		Dr. Ursini-Siegel	01-Nov-19
Susanne Bechstedt	How to make a microtubule - and why cells care	Department of Anatomy and Cell Biology, McGill University		Dr. Autexier	08-Nov-19
Vuk Stambolic	Protein Kinases in Cancer, What's NEKst?	Princess Margaret Cancer Centre, University Health Network Professor, University of Toronto		Dr. Ursini-Siegel	13-Nov-19
Bo-Jhih Guan	Vulnerability of cancer cells to endoplasmic reticulum dysfunction and potential therapeutics	Department of Genetics and Genome Sciences Case Western Reserve University, Cleveland, OH		Dr. Topisirovic	15-Nov-19
Lorey Smith	Adaptive post-transcriptional reprogramming of metabolism limits response to targeted therapy in BRAFV600 melanoma	Cancer Research Department Peter MacCallum Cancer Centre Melbourne, Australia		Dr. Topisirovic	18-Nov-19
Marie-Claude Bourgeois-Daigneault	Oncolytic viruses for anti-cancer vaccination	Departement de microbiologie, infectiologie et immunologie, Udm		Dr. Orthwein	22-Nov-19
Barbara Rivera	Going back to miRNA biogenesis	Department of Oncology McGill University		Dr. Ursini-Siegel	29-Nov-19
Daniela Quail	Myeloid dysfunction in obesity and cancer metastasis	Goodman Cancer Research Centre Department of Physiology, McGill University		Dr. Del Rincon	06-Dec-19
Connie Krawczyk	Insights into sex-specific immunity from the study of KDM5C in dendritic cells Connie Krawczyk,	Van Andel Research Institute, Grand Rapids, MI		Dr. Topisirovic	13-Dec-19
Alexandre Benoit	The role of mutated STAT6 in relapse/refractory DLBCL	Ph.D. Student	Dr. Mann	Dr. Ursini-Siegel	20-Dec-19
Lai Jiang	Machine learning for early detection of ovarian and endometrial cancer from mutation screening data	Postdoctoral Fellow	Dr. Greenwood	Dr. Ursini-Siegel	20-Dec-19
Francis Rodier	Ovarian cancer therapy-induced cell senescence, good or bad?	Département de Radiologie, Radio-oncologie et Médecine Nucléaire CRCHUM / Institut du Cancer de Montréal		Dr. Ursini-Siegel	10-Jan-20
Sathyen Prabhu	Identifying Novel Targets and Functions of MNK1	Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	17-Jan-20
Georgia Mitsa	Quantitative Proteomics of FFPE Tissue Specimens – An Improved Streamlined Workflow	Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	17-Jan-20
James Saliba,	Loss of NFE2L3 transcription factor protects against inflammatory colorectal cancer through modulation of the tumor microenvironment	Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	24-Jan-20

Cancer Seminar Series – 2019-2020					
Speaker	Title	Level	Supervisor	Hosted by	Date
Tatiana Shorstova	Bromodomain inhibitors as a novel therapeutic approach to treat ovarian cancers	Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	24-Jan-20
Khashayar Esfahani, M.D.,	Immune-related adverse events: At the crossroads of autoimmunity and cancer immune surveillance	Department of Oncology McGill University		Dr. Del Rincon	31-Jan-20
Hayley Kim,	The role of mTOR in the epigenetic regulation	Ph.D. Student	Dr. Topisirovic	Dr. Ursini-Siegel	07-Feb-20
Stephanie Totten	Oxidative stress as a therapeutic strategy to increase the clinical impact of biguanides in oncology	M.D./Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	07-Feb-20
Marie Coutelier	When the silent genome gets loud: Transcription of repeat genomic elements at single-cell resolution	Postdoctoral Fellow	Dr. Kleinman	Dr. Ursini-Siegel	14-Feb-20
Estelle Simo	Deciphering the contribution of RAD51 paralog to the maintenance of genome stability	Postdoctoral Fellow	Dr. Orthwein	Dr. Ursini-Siegel	14-Feb-20
Steven Findlay	Investigation of novel therapeutic vulnerabilities in multiple myeloma: A focus on poorly characterized DNA repair factors	Ph.D. Student	Dr. Orthwein	Dr. Ursini-Siegel	28-Feb-20
Maja Jankovic	CRISPR approaches to dissect hematopoietic and leukemic stem cell function in vivo	Ph.D. Student	Drs. Mercier & Orthweins	Dr. Ursini-Siegel	28-Feb-20
Samantha Worme	VIRTUAL SEMINAR - A leukemic stemness program shared across patients with diverse phenotypes	M.Sc. Student	Dr. Mercier	Dr. Ursini-Siegel	17-Apr-20
Raoul Santiago	VIRTUAL SEMINAR - Dynamics of tumor immune micro-environment in diffuse large B-cell lymphoma (DLBCL)	M.D.	Dr. Assouline	Dr. Ursini-Siegel	17-Apr-20
Ryan Rys	VIRTUAL SEMINAR – Title not available	Ph.D. Student	Dr. Johnson	Dr. Ursini-Siegel	24-Apr-20
Kyle Lewis	VIRTUAL SEMINAR – Title not available	Ph.D. Student	Dr. Ursini-Siegel	Dr. Ursini-Siegel	24-Apr-20

Appendix VI: Conferences

MCTRC members maintain high visibility in the scientific community. This year, the MCTRC members were invited to speak in more than 190 events, including conferences, workshops, seminars and symposiums at local, national and international levels. Of the 193 presentations, 29 took place at McGill. Of the remaining 164 invited presentations outside McGill, incl. Canada (63), USA (36), China (9), Russia (8), France (6), Australia (5), Germany (5), and others (32). Listed below are the list of events organized by members of the MCTRC, totalling 13 events.

Researcher	Role	Event type	Event	Date & Venue
Dr. Greenwood	Co-organizer	Workshop	Hackathon. Held in conjunction with the Polygenic Scores, Genetics & Brain Imaging Symposium.	20-21/11/19 McGill University.
Drs. Abdulkarim and Sabri	Organizer	Symposium	Brain Tumor Symposium and Awareness	23-24/10/19 MUHC.
Dr. Ferrario	Organizer and chair	Symposium	Post-ESMO-2019 Events “A practical review of new evidence presented at ESMO”	4/11/19 JGH
Dr. Borchers	Organizer	Workshop	MRM & PRM Proteomics Workshop,	05 - 08/11/19. Tuebingen, Germany
Dr. Borchers	Organizer	Symposium	9 th Symposium of Structural Proteomics	03 - 06/11/19 Göttingen, Germany.
Dr. Borchers	Organizer	Workshop	3rd Int. Workshop of PROTEOMICS – from Introduction to Clinical Applications	08 - 12/07/19 Iasi, Romania
Drs. Borchers and Zahedi	Organizer	Workshop	MRM & PRM Proteomics Workshop	14 - 17/06/19 Montreal
Drs. Borchers , Zahedi and Batist	Organizers	Symposium	Inaugural Symposium of the Integrated McGill Proteomics Centre	LDI
Dr. Enger	Organizer	Outreach	Industry day for the graduate students	Medical Physica Unit, MUHC
Dr. Enger	Organizer	Round Table	Monday Rounds with a delegation from Israel (Ben Gurion and Tel Aviv Universities + the company Alpha TAU)	Radiation oncology Dept. RI-MUHC
Dr. Ursini-Siegel	Speaker and Session Chair	Conference	5th Canadian Cancer Research Conference	3/11/19 Montreal
Dr. Ursini-Siegel	Organizer	Seminar Series	Cancer Seminar Series at the Lady Davis Institute	Fridays from Sept to June 2019/2020 LDI
Dr. Pollak	Organizer	Conference	AACR Annual Meeting	24-29/04/19 Virtual

Appendix VII: Knowledge Translation Activities

Knowledge translation is an important focus of the MCTRC activities. In the past year, the members of the MCTRC engaged in innumerable efforts to bring awareness to the general public of the cancer risk factors, the new treatment discoveries, and the strategies to prevent cancer. These efforts are evidenced by more than 50 interviews given to several media channels, including radio stations, television shows, newspaper articles and ongoing columns, and online blogs. In addition, they contributed to patient education via creation of informative pamphlets, podcasts, and participation and organization of several outreach events. An important effort was also made in the direction of practice change. Dr. Khare, a trainee under **Dr. Batist** organized a short film screening that follows a young cancer patient's journey from first presentation in primary care to an avoidable death while highlighting several system failures. The goal of this event is to brainstorm initiatives that could improve patient access, reduce diagnostic wait times, and improve patient experience (see poster add the end of this report). The Centre's researchers were also engaged in translating their discoveries from the lab to bedside. With this objective, Dr. Mader was emitted two patents:

1. US patent #10,324,085 filed Dec 23 2014, emitted June 18 2019
Title: "Systems and Methods for monitoring protein complex formation in cells"
Inventors: Cotnoir-White D, Mader S, Gagnon E, Bouvier M
2. US Patent #10,377,715 filed June 4 2015, emitted August 13 2019
Title: "18-20 member bi-polycyclic compounds"
Inventors: Bettoun D, Martinez E, Gleason JL, Mader S, Xing S

The complete list of knowledge translation activities of the MCTRC can be found below.

Researcher Name	Activity	Summary	Target Public	Vehicle
Dr. Gotlieb	Podcast	Podcast on robotic surgery post neoadjuvant chemotherapy	Academic	International Journal of Gynecologic Cancer
Drs. Sabri & Abulkarim	Media and news coverage	Media and news coverage following publication of study findings https://clincancerres.aacrjournals.org/content/25/24/7594	General public	Clinical Cancer Research
Drs. Sabri & Abulkarim	Interview	Interview with the CBC Radio host-show Sabrina Marandola (Let's go!)	General public	CBC Radio
Drs. Sabri & Abulkarim	Article	Article on RI-MUHC News featuring their discoveries	General public	RI-MUHC News
Drs. Sabri & Abulkarim	Article	Article on McGill Med e-News featuring their discoveries	General public	McGill Med e-News
Drs. Sabri & Abulkarim	Article	Article on The Suburban featuring their discoveries	General public	The Suburban
Drs. Sabri & Abulkarim	Press release	The Brain Tumor Foundation of Canada: published the press release among different international studies in their research news webpage.	General public	The Brain Tumor Foundation of Canada
Drs. Sabri & Abulkarim	Press release	Futurity: features the latest discoveries by scientists at top research universities in the world	General public	Futurity
Drs. Sabri & Abulkarim	Newsletter	Press release published in RTFLASH (Recherche et Technologie) weekly French newsletter	Academic	Futurity

Researcher Name	Activity	Summary	Target Public	Vehicle
Dr. Béliveau	TV Interview	Salut Bonjour – TVA Obésité et cancer	General public	TVA Salut Bonjour
Dr. Béliveau	TV Interview	TVA Nouvelle : Mortalité par cancer	General public	TVA
Dr. Béliveau	TV Interview	LCN Maintenant	General public	LCN
Dr. Béliveau	TV Interview	On va se le dire, « Journée du cancer »	General public	Radio Canada
Dr. Béliveau	Radio Interview	360 PM, « Obésité et cancer »	General public	Radio-Canada Première
Dr. Béliveau	Radio Interview	Sophie Durocher, « Sédentarité et cancer »	General public	QUB radio
Dr. Béliveau	Radio Interview	Drainville PM, « Les substituts de viande »	General public	98,5 FM
Dr. Béliveau	Radio Interview	Votre quotidien, « Journée du cancer »	General public	103,3 FM
Dr. Béliveau	Radio Interview	Isabelle Maréchal, « Immunothérapie et cancer »	General public	98,5 FM
Dr. Béliveau	Newspaper interview	Le Journal de Montréal, Montréal, « Biopsie liquide pour cancer »	General public	Le Journal de Montréal
Dr. Béliveau	Newspaper interview	Le Journal de Montréal, Montréal, « Sédentarité et cancer »	General public	Le Journal de Montréal
Dr. Béliveau	Weekly Column in Newspaper	Over the reporting period, a total of 23 articles were published in a weekly column featuring several aspects of cancer prevention, diagnostic, treatment and the benefits of healthy habits in fighting cancer	General public	Sun Media and Journal de Montréal
Dr. Kleinman	Behind the Paper	The Peter Pan syndrome: stalled development in pediatric brain tumors	Academic	Nature Research Community Blog
Dr. Kleinman	Highlight	Cancer du cerveau chez les enfants : l'origine des tumeurs démystifiée	Academic	FRQS Portal
Dr. Borchers	Web interview	“The Decade in Proteomics: Most Significant New Applications”	Academic	Genomeweb
Dr. Blank	Public Outreach event	President & Founder, Saint-Lambert Games for Cancer Research (since 2002)	General public	Cancer Research Society
Drs. Del Rincon & Esfahani	Public Outreach event	<p>“You Missed a spot”</p> <p>Dr. Del Rincon helped to host this melanoma public outreach event where more than 50 people stopped by during a two-hour period. Patient warriors, physicians, and researchers were on-site to increase public awareness of the efforts being done to decrease skin cancer instances nation-wide. Dr. Esfahani: Spokesperson, Melanoma Network of Canada</p>	General public	Melanoma Network of Canada

Researcher Name	Activity	Summary	Target Public	Vehicle
Dr. Del Rincon	Radio Interview	680 News with Alastair McNamara Melanoma awareness month interview on giving the audience practical tips for sun protection and self-body checks for the presence of abnormal moles.	General public	680 News
Dr. Del Rincon	Public Outreach event	Le FORUM “Let's not forget about postpartum breast cancer” Le FORUM is attended by over 500 people with high media coverage. https://don.rubanrose.org/program-forum	Patients and caregivers	the Quebec Breast Cancer Foundation (QBCF)
Dr. Esfahani	Miscellaneous	Spokesperson, Melanoma Network of Canada Multiple TV (BT television) and Radio (Radio Canada, NewsTalk) interviews	General public	Miscellaneous
Dr. Del Rincon	Interview	Interview with Camille Laurin-Desjardins Title : « Elles ont moins de 40 ans, ont allaité... et ont le cancer du sein » https://quebec.huffingtonpost.ca/entry/cancer-du-sein-allaitement_gc_5cf020d5e4b0e346ce7aea9c	General public	Huffington Post Québec
Dr. Del Rincon	Consortium	Member of ThéCell Network Consortium to provide networking between scientists and clinicians across Quebec institutions.	General public	ThéCell Network Consortium
Dr. Del Rincon	Patient Educational material (pamphlet)	Quebec Breast Cancer Foundation (QBCF) with Jida El Hajjar – Pamphlet on the risks and prevention of Postpartum Breast Cancer https://don.rubanrose.org/rubanrose/data/files/2019_depliant_grossesse_en.pdf	General public – Pregnant women	Quebec Breast Cancer Foundation (QBCF)
Dr. Del Rincon	TV Interview	Global News: Interview to ensure that the public is educated on active skin protection and recognizing the warning signs of melanoma https://globalnews.ca/video/5278576/melanoma-awareness-month	General public	Global News
Dr. Del Rincon	Newspaper Interview	Radio Canada International with Leonora Chapman (Interview in Spanish) https://www.rcinet.ca/es/2019/09/13/lo-que-hay-que-saber-sobre-el-melanoma-el-cancer-de-piel-mas-mortal/	General public	Radio Canada International
Dr. Del Rincon	Radio Interview	MyFM Strathroy with Grant Deme. In support of melanoma awareness month, Dr. Del Rincon gave this	General public	90.5 Exeter today 99.7 Norfolk today

Researcher Name	Activity	Summary	Target Public	Vehicle
		interview to ensure that the public is alert that melanoma is preventable in large part due to active skin protection from the sun.		
Dr. Enger	Industry Outreach	Industry day for the graduate students	Students	MUHC
Dr. R. Forghani	Radio Interview	“AI improves diagnostic imaging at Canadian hospitals.” By Norm Tollinsky.	Academic	Canadian Healthcare Technology

Appendix VIII: Awards and Distinctions

The list below exclude salary and fellowship awards

Awards and Distinctions	
Dr. Batist	Canadian Cancer Research Alliance, Award for Exceptional Leadership in Cancer Research
Dr. Foulkes	CSCI Distinguished Scientist Award, Canadian Society for Clinical Investigation
Dr. Gotlieb	Gloria's Girls Foundation in Ovarian Cancer: Recognition of Excellence
Dr. Mann	Lady Davis Institute Leadership Award
Dr. Miller	<ul style="list-style-type: none"> • SWCRF Investigator Award -Samuel Waxman Cancer Research Foundation • Distinguished James McGill Professor Award - McGill University Health Centre
Dr. Niazi	Teaching and Mentorship Award - 3rd Gerald Bronfman Department of Oncology Distinguished Lecture and Awards Ceremony
Dr. Pollak	Elected to the Royal Society of Canada (RSC)
Dr. Rudd	Elected Fellow of the Royal Society of Biology, London (FRSB)
Dr. White	Ann Wechsler Award for excellence in U3 undergraduate teaching, Dept. of Physiology.