

ANNUAL REPORT 2011

Submitted by Eduardo L. Franco, DrPH, FRSC, James McGill Professor and Interim Chair, Department of Oncology

Annual Report prepared by Gayle A. Shinder, PhD, Program Coordinator, Department of Oncology.

REPORT SUMMARY

1. Introduction

In January 2011 **Dr. Eduardo L. Franco** became the Acting Chair and then in May 2011, Interim Chair of the department. His tenure as Interim Chair has been extended through 2012 as the Department prepared for the University-mandated cyclical review. The Faculty of Medicine is expected to constitute a Search Committee for the new Chair of Oncology after the cyclical review is completed in mid-April 2012.

In May 1992 the Gerald Bronfman Centre (GBC) for Clinical Research in Oncology opened its doors as the focal point for oncology clinical trials at McGill thanks to a generous donation from Marjorie and Gerald Bronfman. The building is also home to the Department of Oncology Chair's office and is the central hub for the Department's administrative activities since its members are scattered around McGill and its teaching hospitals. Over the years several units (named Divisions or Programs) were established by the Chairs to capitalize on the wealth of cancer research activities by members of the Faculty of Medicine and coalesce them into specific subspecialties and domains of research, personnel training, and patient care. The GBC is also home to several of the Department's divisions and programs (Division of Cancer Epidemiology, Cancer Nutrition-Rehabilitation Program, McGill Programs in Whole Person Care, Cancer Genetics (in part), Psychosocial Oncology (in part), and coordination of specialty clinical training programs).

To mark the upcoming 20th anniversary of the GBC, on November 21, 2011 the Department hosted its inaugural Gerald Bronfman Centre Scientific Lecture. This extremely successful two hour event, organized by Dr. Franco featured special guest lecturer Dr. Simon B. Sutcliffe, President of the International Network for Cancer Treatment and Research in Canada, who spoke about "Cancer Control - Life and Death in an Unequal World". In addition, two prominent researchers from our Department (Drs. Michael Pollak and Michel Tremblay) also gave This was followed by a well-attended reception honouring 20 years of the Department's Clinical Research Program, as well as the outstanding academic contributions of its faculty (Research and Clinical Service Award to Dr. Henry R. Shibata; Teaching and Mentorship Award to Dr. George Shenouda; and Lifetime Achievement Awards to Drs. Carolyn Freeman - Radiation Oncology, Richard Margolese - Surgical Oncology, and Balfour Mount - Palliative Care). Also planned was an additional award in the category of support and service staff contributions to the department. However, due to the ongoing union strike and work disruption at the time we were unable to present an award in that category but will do so at next year's awards ceremony. Attendees included McGill dignitaries, Principal Heather Munroe-Blum, Chancellor Arnold Steinberg, VP Marc Weinstein, former Deans of Medicine, Drs. Richard Cruess and Abraham Fuks and the Interim as well as the Incoming Dean and VP Health Affairs, Drs. Sam Benaroya and David Eidelman, respectively. The two back-to-back events celebrating 20 years of the Gerald Bronfman Centre were praised very highly by the Department's donors, Mrs. Judy Bronfman-Thau and Mr. Isaac Thau. The events were featured in Medicine Focus as well as Med e-news.

Under the direction of Dr. Franco, the Department is striving to boost its visibility amongst its members and encourage a sense of belonging to McGill University as a primary affiliation.

Furthermore, the Department has a responsibility to fulfill the wishes of the Bronfman family and ensure that their generous endowment continues to support a strong and vibrant Department of Oncology housed at the Gerald Bronfman Centre and well-recognized for its cutting-edge research, education and training, and clinical care. To this end the Gerald Bronfman Centre banner was created for use on slide presentations and sent out to faculty. In addition, the GBC Scientific Lecture and Awards that marked the 20th Anniversary of the Gerald Bronfman Centre will be an annual event to honour the Bronfman family's commitment to clinical cancer research as well as to recognize the achievements of the department members. Finally, the MAHN Rossy Cancer Network that will be set up over the next few years aims to unite the cancer care programs in the McGill-affiliated hospitals, developing common practices and generating improvements in cancer care across all hospitals and units. This will ultimately translate into training and recruitment opportunities and new research initiatives for the McGill Department of Oncology.

2. Divisions and Programs

The Department has 20 Divisions and Programs: Medical Oncology, Surgical Oncology, Hematology/Oncology, Radiation Oncology, Head and Neck Oncology, Pediatric Oncology, Adolescent and Young Adult Oncology Program, Geriatric Oncology, Community Oncology Program, Gynecologic Oncology, McGill Cancer Nutrition-Rehabilitation Program, McGill Programs in Whole Person Care, Palliative Care McGill, Oncology Nursing, Psychosocial Oncology Program, Cancer Genetics, Cancer Prevention, Cancer Epidemiology, the Clinical Research Program, and Basic and Translational Cancer Research. Combined, they incorporate research, teaching/training of future clinicians and researchers, and clinical care. The section *Research and Clinical Activities* in this Annual Report gives a detailed listing of each faculty member's activities by Division/Program.

3. Research and Publications

Research in the Department is broad in scope tackling cancer-related topics in the fields of basic and translational research, medical physics, cancer epidemiology, cancer prevention, cancer genetics, psychosocial oncology and palliative care. In addition, many clinicians in the Department conduct phase I, II and III clinical research studies managed either through the Department of Oncology-based clinical research program or their respective hospital sites. Faculty members continue to receive research funding from major Canadian granting agencies and foundations as well as from those in the US and abroad. In addition, many receive pharmaceutical company funding for the conduct of clinical trials. Grant funding information is provided in the summaries that some faculty provided to us for this 2011 Annual Report. Faculty have continued to publish in a range of high impact journals as per the 2011 publications listed in this Annual Report.

The Clinical Research Program (CRP) has recently undergone a series of financial reviews by the Faculty of Medicine regarding how the Program is run in light of its continued cost overruns. In 2011, Dr. Franco commissioned the first comprehensive report on the financial standing and medical and scientific impact of the CRP. The report outlined the improvements it has made to boost efficiency, cut costs and generate more revenue, and presented a proposal for repaying its debt to the Faculty.

4. Teaching and Learning

The Department does not grant degrees, nor does it have its own undergraduate and graduate level courses. Courses relevant to oncology are under the auspices of other McGill Units such as the Division of Experimental Medicine, Department of Epidemiology & Biostatistics, Department of Human Genetics, Medical Physics Unit, School of Nursing etc. Many of the Department's faculty members teach their own courses or lecture in courses relevant to oncology. Examples include EXMD 504 (Biology of Cancer), EXMD 611 (Seminars in Oncology), EXMD 614 (Environmental Carcinogenesis), EXMD 635 (Experimental and Clinical Oncology), EPIB 671 (Cancer Epidemiology and Prevention), HGEN 690 (Inherited Cancer Syndromes), MDPH 702 (Current Topics in Radiation Oncology Physics), NUR2 705 (Palliative Care and Whole Person Care) and NUR2 783 (Psychosocial Oncology Research).

The Psychosocial Oncology Research Training Program (PORT) directed by **Dr. Carmen Loiselle** supports predominantly graduate students and 3-4 postdoctoral fellows. Trainees come from 6 Universities across Canada including McGill, and are required to take the NUR2 783 course, attend the annual scientific meeting and present their work, and engage in transdisciplinary activities and exchanges. In the 2010/2011 academic year 4 MSc, 17 PhD and 3 postdoctoral fellows were supported by this training program.

The McGill Integrated Cancer Research Training Program (MICRTP) currently co-directed by **Drs. Nicole Beauchemin** and **Alan Spatz**, is a joint initiative of the Goodman Cancer Centre and the Segal Cancer Centre and provides funding for MSc, PhD, postdoctoral and clinical fellow training in basic and translational cancer research. Awards are typically for one year only. The Program also offers travel awards and summer studentship awards. More than 30 graduate/postgraduate trainees are accepted into the Program each year. In the 2010/2011 academic year 35 undergraduate, 8 MSc, 11 PhD and 5 postdoctoral fellows were supported by this training program.

The McGill Education Programs in Medical Physics were created in 1979. The MSc and PhD Programs (currently directed by **Dr. Jan Seuntjens**) have been accredited by the Commission for Accreditation of Medical Physics Education Programs (CAMPEP) since 1993. The Residency Program in Radiation Oncology Physics directed by **William Parker, MSc,** has been accredited since 2000. To date the graduate program has conferred 194 MSc and 30 PhD degrees and the residency program has graduated 31 residents. In 2011 there were 23 MSc and 10 PhD students enrolled in the Program.

The Division of Cancer Epidemiology under the direction of **Dr. Eduardo Franc**o provides research training to MSc and PhD students as well as to postdoctoral fellows and visiting scholars. In 2011 there were 7 MSc and 3 PhD students as well as 2 postdoctoral fellows and 1 visiting professor. Two of the students (1 MSc and 1 PhD) submitted their thesis in 2011 and have now completed their degree.

The Department also continues to be involved in teaching and training of medical students, residents and fellows in the field of oncology. It offers its own successful residency training programs in medical, surgical and radiation oncology. The residents are required to attend the Multidisciplinary Oncology Education for Residents (MORE) teaching session which are

combined with bimonthly Journal Clubs (coordinated by **Dr. Franco** and assisted by his senior trainees), as well as Tumour Boards. In the 2010/2011 academic year there were 5 residents in medical oncology, 3 in surgical oncology and 17 in radiation oncology. In the 2011/2012 academic year there are 9 residents in medical oncology, 3 in surgical oncology and 17 in radiation oncology.

There is a strong education program in palliative care at both the undergraduate and postgraduate level. In 2011 Palliative Care McGill had its second biennial Continuing Medical Education Day. Participants (107) attended a full day of lectures on a range of topics relevant to palliative care. Registrants included family physicians, specialists, residents, nurses and other health care professionals. The feedback was very positive.

The Department of Oncology has been at the forefront of developing robotic surgery in Montreal and has established a reputation for being innovators and leaders in this new field. **Dr. Walter Gotlieb** and his team in gynecologic oncology have published several papers in robotic surgery, given lectures locally, nationally and internationally on the topic and offered surgical proctoring and life demonstrations in Canada and around the world.

The Visiting Speakers Program in Oncology (VSPO) hosted a number of very successful lectures in 2011 on a range of topics including palliative care, chromosomal abnormalities in myeloma, androgen deprivation and radiotherapy in prostate cancer and novel targets for treating metastatic gastric cancer.

5. Involvement in the Community

As can be seen from the individual faculty member summaries below, many are involved in a wide range of community activities including sitting on external committees and boards, organizing conferences, grant and scientific paper reviews etc.

Three faculty members from McGill's Department of Oncology (**Drs. Morag Park**, **Eduardo Franco** and **Gerald Batist**) served on the Scientific Program Committee for the First Canadian Cancer Conference held in November 2011 in Toronto and which attracted 1032 delegates. McGill's Oncology was also featured prominently in the program content, with two plenary lectures (**Drs. Franco** and **Philip Branton**), one symposium (**Dr. Batist**), and one award recipient (**Dr. Branton** for Exceptional Leadership in Cancer Research).

In addition, McGill's Oncology is also represented in another important event in 2012. Dr. **Franco** is also a member of the Executive of the Host Committee and track Co-Chair in the Program Committee for the UICC World Cancer Congress, which will be held in Montreal in August 2012. **Drs. Batist** and **Carolyn Freeman** are also members of the Host Committee. This largest of the conferences in cancer control will attract more than 3000 delegates to our city.

Community outreach is a very important component of many of the faculty members' activities Through public lectures within McGill and its hospitals or at community organizations and schools, as well as through interviews with the media, the Department's oncology physicians and researchers use their expertise to inform the general public about clinical issues as well as the latest research being done to further the understanding and treatment of cancer and its physical

and psychological sequelae. In addition, many faculty members work closely with community support groups such as Hope & Cope at the Jewish General Hospital and Cedars CanSupport at the MUHC.

6. Partnerships

The Visiting Speakers Program in Oncology is a joint initiative with the Université de Montréal. Many of the faculty members have ongoing collaborations with local, national and international researchers.

7. New Hires/Appointments

Dr. Bassam Abdulkarim was hired as the new Director of the Division of Radiation Oncology. Dr. Franck Bladou was appointed as Professor in Surgical Oncology (January). Assistant Professors appointed to the Department in 2011 were Drs. Emilie Soisson (January), and Alasdair Syme (March) in Medical Physics, Dr. Melissa Henry (February) in Psychosocial Oncology, Drs. Jamil Asselah (April), Marie Vanhuyse (April), Nathaniel Bougamin (July) and Scott Owen (July) in Medical Oncology, Dr. Nathalie Johnson (July) in Hematology/Oncology, and Drs. Ivan Topisirovic (February), Vanessa Dumeaux (August) and Siham Sabri (August) in Basic Cancer Research. Associate members appointed were Dr. Miltiadis Paliouras (July) in Basic Cancer Research and Dr. Beatrice Wang (July) in Dermatology Oncology. Dr. Annie Carbonneau was appointed as a Faculty Lecturer in Radiation Oncology (July). Three adjunct professors were appointed in 2011: Dr. Jean Archambault (Radiation Oncology) in June, Dr. Isabelle Dumont (Psychosocial Oncology) in September and Dr. Victor Sandor (Clinical Science Research) in November. Dr. Edson Moreira Jr. arrived in August as a Visiting Professor in Cancer Epidemiology. Hope Makena was hired in August to replace Sara Marcil-Johnson as Administrative Affairs Coordinator in Palliative Care.

8. Departures

The following people left the Department in 2011: **Dr. Lorraine Portelance**, Assistant Professor in Radiation Oncology (March), **Dr. Marc Tischkowitz**, Associate Professor in Cancer Genetics (June), **Nathalie Slavtcheva**, Research Nurse in Cancer Epidemiology (July), **Sara Marcil-Johnson** (see above).

9. Promotions

Drs. Lucy Gilbert, **Walter Gotlieb** and **Jan Seuntjens** were promoted to Full Professor while **Dr. Mark Basik** was promoted to Associate Professor with Tenure.

10. Other

At the end of 2011 **Dr. Michel Tremblay** stepped down as Director of the Goodman Cancer Centre to pursue other academic interests. **Dr. Peter Siegel** is serving as the Interim Director until a permanent Director is selected. **Dr. Thierry Alcindor** replaced the departing **Dr. Marc Tischkowitz** as Co-director of the Visiting Speakers Program in Oncology. In 2011 **Dr. Gayle Shinder's** position as Research Grants Coordinator was converted to Program Coordinator for the Department.

11. Honours, Awards and Prizes

Dr. Gerald Batist was elected as a Canadian Academy of Health Sciences (CAHS) Fellow. Dr. Philip Branton was given the 2011 Canadian Cancer Research Alliance (CCRA) Award for Exceptional Leadership in Cancer Research. Dr. Issam El Naga received an MUHC award. Dr. Eduardo Franco became a Fellow of the Royal Society of Canada and received the McLaughlin-Gallie Award, Royal College of Physicians and Surgeons of Canada. Dr. Carolyn **Freeman** was elected *President of the International Radiation Oncology Society* for 2011-2014. Dr. Freeman as well as Dr. Richard Margolese and Dr. Balfour Mount were honoured with Lifetime Achievement Awards from the Department of Oncology. Dr. Philip Gordon was given the Master in Colorectal Surgery award at the Annual meeting of the American Society of Colon and Rectal Surgery. **Dr. Tarek Hijal** was given a Simone and Morris Fast Award in Oncology, by the MUHC. Dr. Nathalie Johnson was awarded a Chercheur-boursier clinicien, Junior 1 from the Fonds de recherche du Québec - Santé (FRQS). Dr. Neil Kopek was awarded a Simone and Morris Fast Award for Oncology from the MUHC. Dr. Carmen Loiselle was appointed as the inaugural Christine and Herschel Victor/Hope & Cope Chair in Psychosocial Oncology and a celebration was held at the Faculty of Medicine Deanery on June 14th. In addition, she and her graduate student, Alain Biron, were selected as International Award Recipient of the Best Scientific Paper of the journal: Worldviews on Evidence-Based Nursing at the Honor Society of Nursing, Sigma Theta Tau International's 41st Biennial Convention. Dr. Neil MacDonald received the Balfour Mount Leadership Award - Canadian Hospice and Palliative Care Association. Dr. Balfour Mount received the 2011 Canadian Medical Association's Medal of Service. **Dr. Jan Seuntjens** received the Herbert S Lang Award in Oncology and Surgery from the McGill University Health Centre. Inaugural Gerald Bronfman Centre Awards went to Dr. George Shenouda for Teaching and Mentorship and Dr. Henry Shibata for Research and Clinical Service. Dr. Luis Souhami was elected as a 2011 ASTRO Fellow. He was also given a Gold Medal Award by the Brazilian Society of Radiotherapy (Sociedade Brasileira de Radioterapia). Dr. Josie Ursini-Siegel was awarded a Canadian Institutes of Health Research New Investigator Salary Support Award. Dr. Jonathan Wan was given a Simone & Morris Fast Award for Oncology from the MUHC.

12. Administration and Oversight

In 2011, Dr. Franco constituted three new committees to assist the governance of the department: (i) Mentorship, (ii) Financial Oversight, and (iii) Awards. The Mentorship Committee is tasked with the mission to advise our junior faculty in their academic trajectory at McGill. Many of our junior faculty appointed in hospitals primarily, were not being appropriately mentored. It is the obligation of all university departments to nurture the careers of their faculty members. Once recruited, many of our junior members struggle with the difficulties of establishing themselves as researchers, trying to get their grants funded, applying for salary awards, and publishing. As they become engrossed in this process it is not uncommon that they neglect to develop track records in the other two pillars of academic success at McGill: teaching and service to the scholarly communities. When the time comes for their tenure or promotion evaluations they may fail to achieve the required two superior marks out of three, for the components of academic performance. In consequence, they will have their applications rejected or much additional work from the Chair may be needed to substantiate their merits to the university. With proper supervision, the young faculty will have much better chances of success. The Mentorship Committee oversees progress in the trajectory of all junior faculty recruited in oncology to

provide advice and guidance in their initial years, as they build up their CVs and academic dossiers for the upcoming evaluation. Three junior faculty members have already benefitted from advice from this committee.

The Financial Oversight Committee (FOC) advises the Chair on all decisions concerning financial policy in allocating expenses to programs in the Department of Oncology. FOC members are senior faculty members with experience and acumen in financial and administrative affairs. The FOC will also ensure transparency, fairness, and balance in decisions vis-à-vis the political forces that emanate from the inherent diversity in the Department of Oncology's research areas (basic, clinical, population, psychosocial) and secondary affiliation (MUHC, JGH, other teaching hospitals, research centres) of its members. The FOC will identify priority concerns, provide the imprimatur for difficult financial decisions that the Chair is required to make, help to build consensus among the oncology faculty concerning programs that must be favoured for assistance, and seek solutions to increase revenue and reduce expenses.

Finally, the Awards Committee has been established to meet the needs for honouring our faculty and staff and the Bronfman family. As explained above, Dr. Franco created three recurring annual awards: (i) research and clinical service, (ii) teaching and mentorship, and (iii) support service. These awards are named Gerald Bronfman Centre awards and are to be given during the annual Bronfman lecture. These GBC awards will also help create a sense of pride among our faculty and staff to belong to the oncology community at McGill. In 2011, the Department also gave three Lifetime Achievement Awards: to **Drs. Carolyn Freeman**, **Balfour Mount**, and **Richard Margolese**, for their enormous contributions to oncology at McGill. The Lifetime Achievement awards may be given every other year to acknowledge emeritus faculty of recognized merit and long-term dedication to oncology at McGill.

An Interdisciplinary Oncology Education Committee oversees the various oncology training programs at the undergraduate and postgraduate level. The committee needs to be more proactive in addressing the concerns of students. For example in 2008 there was much dissatisfaction with the Oncology section of the ICM course according to comments on the course evaluation form. In 2011 the complaints are pretty much the same. This committee should report updates to the OMC on a regular basis. Dr. Franco has decided to change the composition of this Committee to include himself as ex-officio member, the three residency training program directors, the undergraduate program director, and the chief residents in the three specialty areas. This new committee will meet soon in 2012.

13. Finances

Dr. Franco has enforced the 2011 budget reduction requirement from the Faculty of Medicine with a strong sense of duty. Our contraction is already in place but was implemented without penalizing substantially any oncology programs. However, the present situation is unsustainable without a review of our budgetary needs or a change on how we sustain our programs.

14. Improvements to the Gerald Bronfman Centre

After 20 years, the Gerald Bronfman Centre is in need of a facelift. There are a number of safety concerns regarding falling brickwork, several roof leakages and unsafe front staircases. The University has committed to making the necessary repairs to the outside of the building. Inside,

it needs to be re-vitalized as well. Dr. Franco constituted a Gerald Bronfman Centre Workplace & Renovation Committee that included staff representatives of its resident units. This committee arrived at a consensus for improved workspace distribution and worked with McGill-appointed architects and managers to develop a plan for the ensuing renovations. As part of the plan, it was decided to convert the large front room of the building into a welcoming reception area for visitors and staff where the accomplishments of the department and of the GBC will be shown in an electronic display. In addition, there will be more space for the Clinical Research Program so that their supplies can be stored safely and securely in locked rooms rather than in the hallways. Dr. Franco has earmarked some financial support from the existing departmental budget for the inside renovations but additional funds need to be raised in order to cover the costs. Through the collaboration with DAR, we hope to raise additional funds for this work.

RESEARCH AND CLINICAL ACTIVITIES

1. BASIC AND TRANSLATIONAL RESEARCH IN CANCER

Goodman Cancer Centre, Segal Cancer Centre/Lady Davis Institute (Jewish General Hospital), MUHC- Montreal General Hospital, Royal Victoria Hospital, Montreal Children's Hospital

Bassam Abdulkarim – Breast cancer molecular subtype and radiosensitivity; Surrogate biomarkers for normal tissues response to radiation; Biomarkers for invasion in glioblastoma multiforme

Moulay Alaoui-Jamali – Cancer progression; Biomarkers; Therapeutic targets; Preclinical models; Drug discovery.

Raquel Aloyz - Target therapies for hematological malignancies

Mark Basik – Tissue Microarrays; Gene Expression; siRNA; Chemokines; Tumour Banks; Diagnostic Tumour Markers; Cancer Genomics; Drug Resistance

Gerald Batist – Molecular Pharmacology; Chemoprevention; Identification and validation of biomarkers of therapeutic resistance to cancer.

Nicole Beauchemin – Colon cancer; CEACAM1; Intercellular Adhesion Molecules; Protein Tyrosine Phosphatases; Tumourigenesis; Tumour Progression and Metastasis

Philip Branton – Adenoviruses; Apoptosis; Cell Death; Signal Transduction; Cell Cycle Regulation
 Pnina Brodt – Cancer Metastasis; Angiogenesis Cell Adhesion Receptors; Inflammatory Cytokines;
 Growth Factors; IGF-IR; Cell Signaling; E-selectin; VCAM-1; PECAM-1; ICAM-1

Simone Chevalier – Establishment of the clinical and functional significance of protein kinases implicated in androgen-independent (castration-resistant) progression of prostate cancer; Identification of new markers and therapeutic targets; New therapeutic modalities for benign prostatic hyperplasia and prostate cancer in large animal models.

Mario Chevrette - Research interests include the characterization of new tumor suppressor genes implicated in prostate or ovarian cancer and the regulation of telomerase

Terry Chow - DNA recombination repair

Denis Cournoyer – Gene therapy of cancer by hematopoietic chemoprotection

Vanessa Dumeaux – Information not available

Nicoletta Eliopoulos – Adult Stem and Progenitor Cells for Pre-Clinical and Clinical Cell and Gene Therapy Studies

Lorenzo Ferri – The Role of Soluble L-selection in Altered Leukocyte Function in Sepsis; Influence of Systemic Inflammation in Cancer Metastasis - TLR-4; Signaling in cancer cells – Neutrophil facilitated cancer progression

Vincent Giguère – Breast Cancer; Orphan Nuclear Receptors; Estrogen receptors; Vitamin A Signaling; Functional Genomics

Phil Gold – Abnormalities of the immune system; Immunologic identification of tumor associated molecules, and the use of these materials in tumour diagnosis and therapy; Clinical Trials Research, Phases I-III

Walter Gotlieb - Ovarian cancer, Translational Research, IGF Receptor pathway.

Celia Greenwood – Statistical methods for genetics and genomics

Philippe Gros - Resistance to chemotherapy in tumour cells, Genetic basis of susceptibility to infectious diseases, Genetic basis of neural tube defects in neurogenesis.

John Hiscott – The innate immune response to virus infection, regulation of gene expression in cancer cells, and mechanisms of immune evasion by viruses.

Nada Jabado – Molecular profiling of pediatric gliomas

Thomas Jagoe - Mechanisms of muscle wasting; muscle metabolism; cancer cachexia

Bertrand Jean-Claude - Pharmacokinetics

Nathalie Johnson –Lymphoma and the impact of certain gene mutations

Antonis Koromilas – Signal Transduction; Virus Infection; Virus-Mediated Oncogenesis; Protein Phosphorylation; mRNA Translation, Cell Cycle Control; Cell Proliferation; Apoptosis; Interferon; Endoplasmic-Reticulum Stress; Tumour Suppressor p53.

Koren Mann - Arsenic as both a chemotherapeutic and environmental contaminant. Developing novel combination of therapies to enhance the therapeutic spectrum on arsenic trioxide in cancer

Greg Matlashewski - Human papillomaviruses and Cervical Cancer

Luke Martin McCaffrey - Tumor invasion, metastasis, cell polarity, signal transduction, epithelial morphogenesis, stem cells

Wilson Miller – Mechanisms of response and resistance to arsenicals and epigenetic therapies of cancer; Novel therapeutics targeting oncogenic protein translation factors

Thierry Muanza - Translational Research: Interaction of Ionizing Radiation and Molecular Targeted Therapies and Biomarkers

Alain Nepveu – Breast Cancer; Genomic Analysis And Transcriptional Regulation; Cell Cycle Regulation and Checkpoint Controls; Targeting of Point Mutations to Transcribed Regions

Miltiadis Paliouras - Hereditary Non-Polyposis Colorectal Carcinoma (HNPCC), Prostate Cancer (CaP), and Malignant/Recurrent Thyroid Cancer (TC).

Lawrence Panasci – Anticancer Agents; Nitrogen Mustard; Chloroethylnitrosourea; SarCNU; EMT Transporter; Chronic Lymphocytic Leukemia (CLL); Drug Resistance.

Morag Park – Breast Cancer; Tumourigenesis; Receptor Tyrosine Kinases; Hepatocyte Growth Factor-Scatter Factor; Signal Transduction; Cell Motility and Invasion.

Jerry Pelletier – Cancer Genetics; Chemical Genomics; mRNA Translation; Protein Synthesis; Small Molecule Ligands

Alan Peterson – Developmental Genetics

Kevin Petrecca – Identification of novel compounds inhibiting brain cancer invasion

Michael Pollak – Cancer Risk; Cancer Prevention; Hormones; Carcinogenesis; Animal Models; Insulin Resistance; Insulin-Like Growth Factors; Population Studies

Shafaat A. Rabbani - Tumor progression and metastasis

Janusz Rak - Angiogenesis, oncogenes, EGFR, HER-2, ras, VEGF, tissue factor, microvesicles

Stephane Richard – Epigenetics, DNA damage signalling and RNA metabolism in cancer and multiple sclerosis

Siham Sabri – Biological subtyping of breast cancer; MGMT and glioblastoma invasion

Horacio Uri Saragovi - Drug Development, Receptor Pharmacology, Cancer & Neurodegeneration

Esther Schirrmacher - Radiopharmaceutical Chemistry; Neuroendocrine Tumours

Alan Spatz – Molecular pathology; Melanoma; Ovarian cancers; X chromosome

Ivan Topisirovic – mTOR Signaling and Regulation of Gene Expression at the Post-transcriptional Level in Cancer

Michel Tremblay – Protein Tyrosine Phosphatases; Signal Transduction; Mouse Genetics

Robert Turcotte - Molecular profiling of breast cancer bone metastasis

Josie Ursini-Siegel – Breast Cancer; Transgenic Mouse Models; Receptor Tyrosine Kinase; ShcA; Signal Transduction; Angiogenesis; Tumour Immunity

Jonathan Wan – Radiation and Molecularly targeted therapies; Biomarker development

Michael Witcher – Epigenetic Regulation of Gene Expression and Oncogenesis; Drug Discovery

Jian Hui Wu - Development of methods in Computational Biology & Chemistry; Structure-based identification of bioactive small molecules for overcoming drug resistance due to point mutations in drug targets; Designing novel antiandrogens for the treatment of prostate cancer

Maria Zannis-Hadjopoulos – DNA Replication; Replication Proteins; Tumorigenesis and Initiation of DNA replication; Breast Tumorigenesis; Cruciform DNA; Cruciform Binding Protein.

2. CANCER GENETICS

William Foulkes – Clinical Care: Cancer Genetics

Research: Hereditary breast cancer, BRCA1 and BRCA2 mutations, Inherited susceptibility to cancer

Patricia Tonin – Research: Inherited predisposition to breast and ovarian cancers involving the BRCA1 and BRCA2 cancer susceptibility genes; Molecular genetic attributes of ovarian cancer

3. CANCER PREVENTION

Micahel Pollak – See basic and translational research in cancer section and medical oncology section.

4. CANCER EPIDEMIOLOGY

Paul Allison - Psychosocial and behavioural aspects of oral health and oral health care and how psychosocial factors along the life course may be related to the incidence of head and neck cancers.

Laurent Azoulay – Cancer Epidemiology

Jocelyne Feine - Patient-based outcomes, quality of life, chronic conditions, oral health.

Eduardo Franco – Epidemiology of cancers of the uterine cervix, upper aero-digestive tract, prostate, endometrium, and childhood tumours; assessment of cancer prevention and screening strategies.

Mark Goldberg - Short and long term effects on human health and ambient air pollution; Environmental and occupational risk factors for female breast cancer; Health services provided to women with breast cancer.

Celia Greenwood – Statistical methods for genetics and genomics

Raghu Ragan - Cervical Cancer, Epidemiology

Agnihotram Ramana-Kumar - Infection Epidemiology (HPV), Bio-statistics and Statistical methods, Cancer Epidemiology, Cancer Registration, Environmental Epidemiology, Demography

5. CANCER NUTRITION-REHABILITATION

Thomas Jagoe – <u>Clinical Care:</u> Nutrition and exercise rehabilitation in Cancer Cachexia; Pulmonary Medicine

Clinical Research: See basic and translational research section.

Neil MacDonald – <u>Clinical Care:</u> Cancer Nutrition; Cancer Cachexia; Palliative Care; Symptom Management; Ethics.

<u>Clinical Research:</u> Cancer Nutrition; Cancer Cachexia; Palliative Care; Symptom Management;

6. ONCOLOGY NURSING

Antonia Arnaert – Home Telecare, Tele-nursing care, Self-care management, Whole-person Care, Patients with Chronic Diseases, Family Caregivers.

Linda Edgar - Oncology Nursing; Nucare Coping Skills; Psychosocial Oncology; Volunteerism in Oncology

Carmen Loiselle – Patient information-seeking behaviour and decision making; patient-health care provider communication; psychosocial oncology, and the use of information technology in cancer care.

7. PSYCHOSOCIAL ONCOLOGY

Paul Allision – Research: Psychosocial and behavioural aspects of oral health and oral health care and How psychosocial factors along the life course may be related to the incidence of head and neck cancers.

Sylvie Aubin – <u>Clinical Care:</u> Psychosocial Oncology; Adolescent and Young Adult Oncology; Urooncology

Research: Adjustment and coping skills of adolescents and young adults diagnosed with cancer

Robin Cohen – <u>Research:</u> Palliative Care; Outcome Measurement (Quality of Life; Satisfaction with Care); Family Caregiver; Existential Well-being; Bereavement; Psychosocial Oncology; Volunteers; Health Services Research

Linda Edgar – <u>Research:</u> Oncology Nursing; Nucare Coping Skills; Psychosocial Oncology; Volunteerism in Oncology

Tanya Fitzpatrick – Research: Physical fitness activities, cognitive health and quality of life in older cancer survivors

Melissa Henry – <u>Clinical Care:</u> Head and Neck Oncology

<u>Research:</u> Quality of Life; Advanced Cancer; Head and Neck Cancer; Psychosocial Trajectories; Psychosocial Interventions.

Lawrence Hoffman – No information available

Annett Körner – Research: Psychosocial oncology, skin cancer, educational and psychological interventions for individuals diagnosed with melanoma, psychological aspects of medicine and health care, relationship patterns, personality, psychotherapy process

Carmen Loiselle – Research: Patient information-seeking behaviour and decision making; patient-health care provider communication; psychosocial oncology, and the use of information technology in cancer care

Karl Looper – Clinical Care: Psychiatry

Research: Psychosocial predictors of health outcomes in cancer patients; Screening for depression in cancer patients; Determinants of clinical trials participation

Mary Ellen Macdonald - Research: Palliative and End-of-Life Care; Bereavement; Aboriginal Health Sylvain Néron – Clinical Care: Psychosocial Oncology; Psychotherapy, Hypnotherapy Research: Hypnotherapy

Zeev Rosberger – Clinical Care: Psychosocial Oncology; Quality of Life; Coping; Psychotherapy; Cognitive Behaviour Therapy; Distress.

Research: Cancer related infertility; Psychosocial issues in HPV screening, testing and the HPV vaccine; Quality of life, sexuality and satisfaction with robotic surgery in gyne-oncology patients; Screening for distress

8. PALLIATIVE CARE

Bernard Lapointe – <u>Clinical Care:</u> Palliative Care

Clinical Research: Pain and Symptom Control; Models of Care; Family Caregivers

Robin Cohen – Research: Palliative Care; Outcome Measurement (Quality of Life; Satisfaction with Care); Family Caregiver; Existential Well-being; Bereavement; Psychosocial

Oncology; Volunteers; Health Services Research

Manuel Borod – Clinical Care: Palliative Care

Benoit Deschamps – Clinical Care: Palliative Care

Justine Farley – <u>Clinical Care:</u> Palliative Care

Bruno Gagnon - Clinical Care: Palliative Care

Clinical Research: Cancer Pain and Symptom Management; Cancer Anorexia-Cachexia Syndrome; Delirium; Neuropathic Pain; Methadone; Health Services at the End of Life.

Charles Hackett - Clinical Care: Palliative Care

Krista Lawlor - Clinical Care: Palliative Care

Stephen Liben – Clinical Care: Pediatric Palliative Care

Mary Ellen Macdonald – Research: Palliative and End-of-Life Care; Bereavement; Aboriginal Health

Anna Towers – <u>Clinical Care:</u> Palliative Care; Lymphedema; Pain and Symptom Control

Clinical Research: Lymphedema; Palliative Care

Golda Tradounsky – Clinical Care: Palliative Care

Antonio Vigano – Clinical Care: Palliative Care; Cachexia-Anorexia-Asthenia Syndrome

<u>Clinical Research:</u> Clinical Epidemiology; Translational/Correlative Research in

Cancer Cachexia; Pain and Symptom Control; Prognostic Studies

in Advanced Cancer Patients; Development of Databases.

9. WHOLE PERSON CARE

Thomas Hutchinson - Quality of life of patients with end stage renal disease; Programs in Whole Person Care

Steven Jordan - Use of qualitative research methodologies to explore and better understand the social organization and practice of medicine in its various forms and settings.

10. MEDICAL ONCOLOGY

Jason Agulnik - Clinical Care: Medical Oncology; Lung Cancer

Clinical Research: Lung Cancer

Paul Ahlgren – Clinical Care: Medical Oncology

Clinical Research: Breast Cancer

Thierry Alcindor – <u>Clinical Care:</u> Medical Oncology

Clinical Research: Digestive Cancers; Sarcomas; Cancer treatment strategies.

Jamil Asselah – <u>Clinical Care:</u> Medical Oncology

Gerald Batist – <u>Clinical Care:</u> Medical Oncology

Clinical Research: Novel therapeutics; See basic and translational research section

Nathaniel Bougamin – Clinical Care: Medical Oncology

Victor Cohen – Clinical Care: Medical Oncology

Clinical Research: Lung Cancer; Gastrointestinal Cancers; Breast Cancer

Richard Dalfen - Clinical Care: Medical Oncology; Gastrointestinal Cancer

Clinical Research: Gastrointestinal Cancers; Breast Cancer; Lung Cancer

Polymnia Galiatsatos – Clinical Care: Gastroenterology

Clinical Research: Gastrointestinal Cancers

Ingrid Hings – <u>Clinical Care:</u> Medical Oncology

Clinical Research: Geriatric Oncology, Breast Cancer; Sarcoma

Vera Hirsh – <u>Clinical Care:</u> Medical Oncology

Clinical Research: Lung Cancer

Petr Kavan – Clinical Care: Medical Oncology; Adolescent and Young Adult Oncology

Clinical Research: Neuro-oncology; Gastrointestinal Cancers

Adrian Langleben – Clinical Care: Medical Oncology

Clinical Research: Gastrointestinal Cancers; Genitourinary Cancers; Breast Cancer;

Head and Neck Cancer; Lung Cancer

Christine Legler – Clinical Care: Breast Cancer, Gynecologic Cancer

Clinical Research: Gynecologic Cancers; Breast Cancer

David Melnychuk - Clinical Care: Medical Oncology

Clinical Research: All cancers except Hematology Cancers

Catalin Mihalcioiu - Clinical Care: Lung Cancer; Melanoma, Breast Cancer, Brain Metastases

Clinical Research: Melanoma; Lung Cancer; Breast Cancer

Wilson Miller – Clinical Care: Medical Oncology

Clinical Research: Breast Cancer; Genitourinary Cancers; Gastrointestinal Cancers;

Melanoma; Phase I Clinical Trials. See basic and translational research section.

escaren section.

Linda Ofiara – Clinical Care: Lung Cancer

Clinical Research: Lung Cancer

Scott Owen – Clinical Care: Medical Oncology

Clinical Research: Lung Cancer

Lawrence Panasci – Clinical Care: Medical Oncology

<u>Clinical Research:</u> Breast Cancer; Gynecologic Cancers. See basic and translational research section

Francois Patenaude – Clinical Care: Medical Oncology

Clinical Research: Breast Cancer; Hematologic Cancers; Genitourinary Cancers

Carmela Pepe – Clinical Care: Lung Cancer

Clinical Research: Lung Cancer

Michael Pollak - Clinical Care: Medical Oncology

Clinical Research: Breast Cancer. See basic and translational research section

Jaroslav Prchal – Clinical Care: Polycythemia; Myeloproliferative disorders

Clinical Research: Hematologic Cancers; Breast Cancer

Raghu Rajan - Clinical Care: Medical Oncology

<u>Clinical Research:</u> Genitourinary Cancers; Gastrointestinal Cancers; Breast Cancer; Melanoma. See Cancer Epidemiology section.

Donna Stern – <u>Clinical Care:</u> Medical Oncology

Clinical Research: All cancers except hematological

Jeremy Sturgeon – Clinical Care: Medical Oncology

Clinical Research: Genitourinary Cancers; Gynecologic Cancers

Michael Thirlwell – Clinical Care: Medical Oncology

Clinical Research: All Cancers (No Hematologic Cancers)

David Thomson – <u>Clinical Care:</u> Medical Oncology

Marie Vanhuyse – Clinical Care: Medical Oncology; Gastrointestinal; Genitourinary

Clinical Research: Cancer treatments

Beatrice Wang – <u>Clinical Care:</u> Melanoma and other skin cancers - Dermatologic surgery - Moh's micrographic surgery for skin cancer

Joan Zidulka – Clinical Care: Medical Oncology

Clinical Research: All Cancers (No Hematologic Cancers)

11. SURGICAL ONCOLOGY

Dawn Anderson - Clinical Care: Breast Cancer; Colon Cancer; Thyroid Cancer

Maurice Anidjar – Clinical Care: Urologic Oncology, Endourology and Laparoscopy

Armen Aprikian – Clinical Care: Urologic Oncology

<u>Clinical Research:</u> Biology of Prostate Cancer progression; Familial and genetic prostate cancer

Mark Basik – Clinical Care: Breast Cancer

<u>Clinical Research:</u> Breast Cancer; Gastrointestinal tumours. See basic and translational research section.

Franck Bladou - Clinical Care: Uro-oncology - Minimal Invasive Surgery, Robot-Assisted Surgery

Clinical Research: Prostate Cancer: new diagnostic tools, focal therapy, quality

insurance for surgical treatment, screening of high-risk population,

prognostic factors

Martin Black – See Head and Neck Oncology

Prosanto Chaudhury – <u>Clinical Care:</u> Hepato-Pancreato-Biliary Surgery; Pancreatic Cancer; Biliary Tract Cancer; Colon Cancer; Liver Metastasis; Hepatocellular

Carcinoma

<u>Clinical Research:</u> Clinical and Translational Research, Surgical Outcomes, Nutrition and Performance in Cancer Patients Rolando Del Maestro – Clinical Care: Neuro-oncology

Clinical Research: Malignant Glial Tumours; Brain Tumour Invasiveness; Brain

Tumour Tissue Banking; Development of simulation

technologies for surgical oncology

Anna Derossis- Clinical Care: Breast Cancer; Sentinel Node Biopsy

Lorenzo Ferri – <u>Clinical Care:</u> Surgical Oncology

Clinical Research: Clinical Chemotherapy Trials for Thoracic Malignancies;

Neoadjuvant chemotherapy – gastric and esophageal cancer – Adjuvant chemotherapy – lung cancer. See basic and translational

research section.

David Fleiszer – Clinical Care: Surgical Oncology; Breast Cancer

Lucy Gilbert – See Gynecologic Oncology

Jeff Golan – <u>Clinical Care:</u> Neurology and Neurosurgery

Clinical Research: Surgical impact and quality of life in patients following surgical

decompression for spinal metastasis

Philip Gordon – <u>Clinical Care:</u> Colon Cancer

Walter Gotlieb – See Gynecologic Oncology

Michael Hier – See Head and Neck Oncology

Suzie Lau – See Gynecologic Oncology

Alexander Sender Liberman – Clinical Care: Surgical Oncology

<u>Clinical Research:</u> Examining outcomes in colorectal surgery;

Evaluating minimally-invasive approaches to surgery

in colorectal cancer

Antoine Loutfi – <u>Clinical Care:</u> Surgical Oncology **Richard Margolese** – Clinical Care: Breast Cancer

Clinical Research: Clinical Trials in: Breast Cancer Surgery, Adjuvant therapy in

Breast Cancer, Breast Cancer Prevention.

Markus Martin – Clinical Care: Gynecology, including Gynecologic Oncology

Clinical Research: Gynecologic Cancers

Sarkis Meterissian – Clinical Care: Surgical oncology

Clinical Research: Application of the stromal-derived prognostic predictor (SDPP)

in early breast cancer; Promotion of protein anabolism in colorectal cancer patients perioperatively; Accuracy of axillary ultrasound in early stage breast cancer; S-classification of melanoma sentinel node metastases as a predictor of non-

sentinel node metastases; Integrated approaches to human health.

Catherine Milne – Clinical Care: Breast Cancer

David Mulder – <u>Clinical Care:</u> Thoracic Surgery

Kevin Petrecca – <u>Clinical Care:</u> Surgical treatment of brain tumors

Clinical Research: See basic and translational research section

Gerald Stanimir – Clinical Care: Surgical Oncology

Barry Stein – Clinical Care: Colon and rectal cancer prevention – colonoscopy; colorectal cancer

Hartley Stern – Clinical Care: Colorectal Cancer

Roger Tabah – Clinical Care: Head and Neck Cancer

Simon Tanguay – Clinical Care: Urologic Oncology

Clinical Research: Urologic Oncology

Robert Turcotte – <u>Clinical Care:</u> Orthopaedic Oncology

Clinical Research: See basic and translational research section.

Carol-Ann Vasilevsky – Clinical Care: Colon & Rectal Surgery; Colorectal Cancer; Inflammatory

Bowel Disease; Colonoscopy; Anorectal Disorders

Marvin Wexler – <u>Clinical Care:</u> Thyroid Cancer; Gastric Cancer; Breast Cancer; Colon Cancer <u>Clinical Research:</u> Breast Cancer

12. RADIATION ONCOLOGY

Bassam Abdulkarim - Clinical Care: Breast Cancer; Brain Tumour

<u>Basic Research:</u> Breast Cancer; Glioblastoma Multiforme. See basic and translational research section.

Boris Bahoric – Clinical Care: Brachytherapy; GU Malignancies (Prostate, Bladder, Testicle, etc...); GI Malignancies (Stomach, Pancreas, Rectum, Anal Canal); Gynecological Malignancies; Breast Cancer

<u>Clinical Research:</u> Radiotherapy for Gynecological and Genito-Urinary Malignancies; Brachytherapy for Gynecological Tumors, Prostate, Breast, and Head and Neck

Annie Carbonneau – Clinical Care: Radiotherapy

Fabio Cury – <u>Clinical Care:</u> Radiotherapy

Clinical Research: Radiotherapy; Head and Neck Cancer; Genitourinary Cancer

Marc David – <u>Clinical Care:</u> Breast Cancer; Prostate Cancer; Upper Gastrointestinal Cancer; Palliative Radiotherapy

Clinical Research: Radiotherapy; Head and Neck Cancer; Genitourinary Cancer

Marie Duclos – <u>Clinical Care:</u> HDR Brachytherapy; Prostate Cancer; Breast Cancer, Gynecological Cancer; Lung Cancer.

<u>Clinical Research:</u> Prostate Cancer; HDR Brachytherapy in Prostate, Breast and Head & Neck Cancers

Sergio Faria – <u>Clinical Care:</u> Radiotherapy; Lung Cancer; Prostate Cancer; Rectal Cancer; Breast Cancer <u>Clinical Research:</u> Radiotherapy

Carolyn Freeman – <u>Clinical Care:</u> Radiotherapy; Pediatric Radiation Oncology; Brain Tumours; Soft Tissue Sarcomas

Clinical Research: Radiotherapy

Tarek Hijal – <u>Clinical Care</u>: Radiotherapy; Breast, Hematologic and Gastrointestinal Cancers <u>Clinical Research</u>: Radiotherapy; Breast and Gastrointestinal Cancers

Neil Kopek – Clinical Care: Radiotherapy

Christine Lambert – Clinical Care: Radiotherapy

<u>Clinical Research:</u> Radiotherapy; Breast Cancer; Lymphoma; Central Nervous System Cancers

Shirley Lehnert – <u>Clinical Care:</u> Radiotherapy

Research: Radiobiology; Tumour Biology; Functional Imaging; Drug Delivery

Thierry Muanza – <u>Clinical Care:</u> Breast, CNS, Lung Cancer and Adolescent & Young Adult Oncology <u>Clinical Research:</u> Radiotherapy; Lung Cancer; Breast Cancer;

Gastrointestinal/Rectum. See basic and translational research section.

Mohammad Tamim Niazi - Clinical Care: GU Malignancies (Prostate, Bladder, Testicle) GI

Malignancies (Esophagus, Stomach, Pancreas, Rectum, Anal Canal) Gynecological Malignancies (Cervix and Uterus)

<u>Clinical Research:</u> Radiotherapy; Upper Gastrointestinal Cancers; Prostate Cancer

Valerie Panet-Raymond – Clinical Care: Radiotherapy

David Roberge - Clinical Care: Radiotherapy

<u>Clinical Research:</u> Radiotherapy; Head and Neck Cancers; Liver Cancer; Sarcoma; Lymphoma; Central Nervous System Cancers; Breast Cancer **George Shenouda** – <u>Clinical Care:</u> Radiotherapy; Head and Neck Cancer; Ocular Oncology; Neuro-Oncology; Cutaneous Malignancies

<u>Clinical Research:</u> Head and Neck Cancer; HPV and Erythropoietin Receptor expression in orpharyngeal cancer; Central Nervous System Cancers; Ocular Oncology

Luis Souhami – <u>Clinicial Care:</u> Radiation Therapy; Stereotactic Radiosurgery; Brachytherapy;
Gynecologic Malignancies; Central Nervous System Malignancies,
Genito-Urinary Malignancies and Lung Malignancies

<u>Clinical Research:</u> Combined chemotherapy and radiotherapy in cancer; Stereotactic radiosurgery; Altered fractionation schedules in radiotherapy; Gynecologic malignancies; Central Nervous System malignancies; Prostate cancer and lung cancer.

Khalil Sultanem - Clinical Care: Radiotherapy; Head and Neck Oncology; Skin Cancer; Breast Cancer Clinical Research: The use of integral concomitant as a tool for dose intensification in Head and Neck Neoplasms; The use of 3D ultrasound in the planning and treatment delivery of breast irradiation; The use of 3D ultrasound in planning of Head and Neck irradiation; Breast Cancer; Lung Cancer; Head and Neck Cancer; Brain Cancer; Skin Cancer

Té Vuong – <u>Clinical Care:</u> Radiotherapy; Rectal Cancer; Esophageal Cancer; ENT Tumours <u>Clinical Research:</u> Intensity modulated radiotherapy (IMRT); Rectal Cancer; Radiation technology; Brachytherapy

Jonathan Wan – Clinical Care: Radiotherapy

<u>Clinical Research:</u> Early phase trial development; High precision image guided radiotherapy for lung cancer; Evaluation of radiosurgical doses on lung parenchyma; Breast Cancer. See basic and translational research section.

MEDICAL PHYSICS

Wamied Abdel-Rahman – <u>Research:</u> Medical Physics

François DeBlois – <u>Clinical:</u> General linac QA procedures; verification of external beam treatment plans; QA, planning and delivery of stereotactic/radiosurgery treatments; maintenance of clinical softwares.

<u>Research:</u> Photon and electron beam dosimetry, stereotactic radiosurgery, Monte Carlo treatment planning and medical physics softwares

Slobodan Devic – Research: GafChromic Film dosimetry; Development of new treatment techniques for GI cancers; PET/CT based biological target volume definition and implementation to treatment planning for lung and rectal carcinomas

Issam El Naqa – Research: Oncology Bioinformatics, Computational and Systems Biology, Multimodality Imaging, Adaptive Radiotherapy

Michael Evans – <u>Clinical:</u> Treatment Planning; Chamber Calibration; Radiation Safety; Brachytherapy; External Beam Radiotherapy.

William Parker – Clinical Research: Application of modern radiotherapy techniques for pediatric patients including intensity modulated radiation therapy and image guided radiotherapy. Patient safety and modern QA concepts.

Stereotactic body radiation therapy clinical trials.

Horacio Patrocinio – Research: Stereotactic radiosurgery, image-guided stereotactic body radiation therapy, motion and margin assessment in radiotherapy, image-guided brachytherapy

Russell Ruo – Research: Medical Physics

Jan Seuntjens – Research: Radiation Dosimetry; Monte Carlo Simulation; 4D Radiation Therapy;

Ionization Chambers

Emilie Soisson – No information available

Gabriella Stroian - No information available

Alasdair Syme – Research: Radiotherapy treatment plans; Assessment of different types of radiation therapies

13. HEMATOLOGY/ONCOLOGY

Sarit Assouline – Clinical Care: Hematology/Oncology

Clinical Research: Hematologic Cancers

Geoffrey Blake - Clinical Care: Hematology/Oncology

Stephen Caplan – <u>Clinical Care:</u> Hematology/Oncology

Clinical Research: Hematologic Cancers

Max Katz – Clinical Care: Hematology/Oncology

Pierre Laneuville – <u>Clinical Care:</u> Hematology/Oncology

Clinical Research: Hematologic Malignancies (No Lymphoma)

Horace Laryea – Clinical Care: Hematology/Oncology

Arthur Rosenberg – <u>Clinical Care:</u> Hematology/Oncology

Clinical Research: Hematologic Cancers

Michael Sebag – Clinical Care: Multiple Myeloma

<u>Clinical Research:</u> Hematologic Cancers

Chiam Shustik – Clinical Care: Hematology/Oncology

Clinical Research: Hematologic Cancers (No Leukemia)

Susan Solymoss – Clinical Care: Hematology/Oncology

Gwen Spurll – <u>Clinical Care:</u> Hematology/Oncology

<u>Clinical Research:</u> Hematologic Cancers

14. HEAD AND NECK ONCOLOGY

Martin Black - Clinical Care: Head and Neck Cancer

Clinical Research: Head and Neck Cancer

Michael Hier – Clinical Care: Head and Neck Cancer

Clinical Research: Head and Neck Cancer

Roger Tabah – Clinical Care: Head and Neck Cancer

Anthony Zeitouni – Clinical Care: Head and Neck Cancer

15. GYNECOLOGIC ONCOLOGY

Lucy Gilbert - Clinical Care: Gynecologic Cancer; Breast Cancer; Quality of Life, Fertility

Preservation in Gynecologic Cancer

Clinical Research: Ovarian cancer

Walter Gotlieb - Clinical Care: Robotic Surgery, Gynecologic Cancers

Clinical Research: Robotic Surgery, Gynecological Cancers; See basic and

translational research section.

Hananel Holzer: Clinical Care: Fertility Preservation for Female Cancer Patients

Suzie Lau – Clinical Care: Gynecologic Cancer

16. PEDIATRIC ONCOLOGY

Sharon Abish – Clinical Care: Pediatric Oncology

Jean-Pierre Farmer – Clinical Care: Pediatric Oncology

Clinical Research: Outcome of surgery/radiotherapy in children with Brainstem Gliomas

Nada Jabado – Clinical Care: Pediatric Hematology and Oncology

José Montes – Clinical Care: Pediatric Neurosurgery

17. ADOLESCENT AND YOUNG ADULT ONCOLOGY

Petr Kavan – See medical oncology section

18. GERIATRIC ONCOLOGY

Doreen Wan-Chow-Wah – <u>Clinical Care:</u> Geriatric Oncology

<u>Research:</u> Oncology physician decision-making regarding chemotherapy for older cancer patients

Howard Bergman - Research: Oncology physician decision-making regarding chemotherapy for older

cancer patients; Cancer in older patients – study of potential medication problems, hospitalization, emergency department visits and visits to the

general practitioner.

Johanne Monette – <u>Research:</u> Systematic review of all available geriatric assessment instruments for

older cancer patients; Cancer in older patients – study of potential medication problems, hospitalization, emergency department visits and

visits to the general practitioner

19. COMMUNITY ONCOLOGY

Jaroslav Prchal – See medical oncology section

20. PATHOLOGY

Jocelyn Arseneau - Gynecologic Pathology

Miguel Burnier – Ophthalmic Pathology

René Michel - Pathology

Kevin Watters - Dermatopathology with an emphasis on the pathology of melanoma.