DIVISION HEAD
Dr. Victor Blanchette

FULL-TIME
Dr. Oussama Abla
Dr. Sarah Alexander
Dr. Ute Bartels
Dr. Sylvain Baruchel
Dr. Eric Bouffet
Dr. Leonardo Brandão
Dr. Manuel Carcao
Dr. Helen Chan
Dr. John Doyle
Dr. Yigal Dror
Dr. Adam Gassas
Dr. Ron Grant
Dr. Abha Gupta
Dr. Hans Hitzler
Dr. Annie Huang
Dr. Meredith Irwin
Dr. Walter Kahr
Dr. Melanie Kirby
Dr. David Malik
Dr. Ahmed Naqvi
Dr. Paul Nathan
Dr. Isaac Odame
Dr. Angela Punnett
Dr. Lillian Sung
Dr. Uri Tabori
Dr. Sheila Weitzman
Dr. Suzan Williams

CROSS-APPOINTED/ PART-TIME
Dr. Anthony Chan
Dr. Stephen Comay
Dr. Lee Ann Gallant
Dr. Mark Greenberg
Dr. David Hodgson
Dr. Nicole Inch

Dr. Normand Laperriere
Dr. Barbara-Ann Millar
Dr. Aubrey Maze
Dr. Ben Saxon
Dr. Jill Solomon
Dr. Angela Punnett
OVERVIEW
The Division of Haematology/Oncology provides a diagnostic service and specialist care for children <18 years of age with cancer (paediatric oncology), non-malignant blood disorders (paediatric haematology) and hematopoietic stem cell (blood and marrow) transplantation. The division is the largest of its kind in Canada and among the largest of such programs worldwide. Approximately 300 new cancer cases are registered in the oncology program each year, and The Hospital for Sick Children (SickKids) is the designated site for haematopoietic stem cell transplantation for patients < 18 years of age in the Province of Ontario. Reflecting the size and diversity of its clinical services, the division is functionally organized into six sections and three programs: the leukemia/lymphoma section (Section Head, Dr. Sheila Weitzman); the neurooncology (brain tumor) section (Section Head, Dr. Eric Bouffet); the solid tumor section (Section Head, Dr. Ron Grant); the haematology section (Section Head, Dr. Victor Blanchette); the inpatient services section (Section Head, Dr. Sarah Alexander); the long-term follow up program (Program Head, Dr. Mark Greenberg); the new agents and experimental therapies program (Program Head, Dr. Sylvain Baruchel); and the cancer genetics program (Program Co-Heads, Drs. David Malkin and Rosanna Weksberg). The haematology section has large programs in paediatric thrombosis and haemostasis, the paediatric haemoglobinopathies and the paediatric marrow failure syndromes. The division is an active member of the Children’s Oncology Group (COG), the largest paediatric clinical trials group in North America (SickKids Principal Investigator, Dr. Ron Grant), and is committed to the improvement in outcomes of children with cancer through participation in ethics approved, prospective clinical trials. The division is a member of the paediatric oncology phase I Consortium of COG (Principal Investigator, Dr. Sylvain Baruchel), and is an active participant in activities of the Société Internationale d’Oncologie Pédiatrique (SIOP), the Histiocyte Society and the Berlin Frankfurt Munster (BFM) paediatric leukemia clinical trials group.

The division is the largest Royal College of Physicians and Surgeons of Canada accredited training program for the specialty paediatric haematology/oncology in Canada (Training Program Director, Dr. Angela Punnett). The education program in the division also includes a very large international training program in paediatric haematology/oncology and offers subspecialty training opportunities in areas such as paediatric leukemia/lymphoma, neurooncology, cancer genetics, blood and marrow transplantation and paediatric thrombosis and haemostasis.

Research in the division spans clinical to basic science with a special focus on translational research. Currently, 13 of the division’s 27 full-time faculty have appointments as clinician-scientists or clinician-investigators in the Department of Paediatrics with parallel appointments in the Research Institute. Research in the division is multidisciplinary, involving health care professionals with expertise in a variety of areas (e.g., nursing, pharmacy, psychology, social work). The division is committed to facilitating knowledge exchange through international partnerships with a particular focus on countries lacking the health care resources available in Canada.

A major development over the past year was the approval of the Comprehensive Cancer Centre at SickKids. The Centre will serve as the “hub” linking clinicians and researchers working in the field of cancer at SickKids with the goal of establishing SickKids as an international leader in the field of pediatric cancer research, education and clinical care. The Executive of the Comprehensive Cancer Centre includes Dr. David Malkin, Dr. David Kaplan, Dr. James Rutka, Judy Van Cleave and Dr. Victor Blanchette.

CLINICAL AND RESEARCH FELLOWS
Dr. I. Abosoudah  Dr. O. Alharbi  Dr. A. Lee Chong  Dr. O. Teuffel
Dr. F. Al-Abbas  Dr. P. Angelini  Dr. C. Macartney  Dr. T. Truong
Dr. S. Al-Afghani  Dr. L. Avila  Dr. A. Muhammad  Dr. M. Van den Akker
Dr. T. Al-Asaad  Dr. J. Baker  Dr. J. Robertson  Dr. B. Williams
Dr. R. Al-Mahmoud  Dr. V. Breakey  Dr. M. Rojas  Dr. P. Wong
Dr. O. Al-Sharif  Dr. M. Cada  Dr. K. Scheinemann  Dr. P. Yenson
Dr. Q. Alharbi  Dr. P. Gibson  Dr. C. Seghieh  Dr. O. Teuffel
Dr. P. Angelini  Dr. C. Lam  Dr. P. Sivaprakasam

ADMINISTRATIVE STAFF
Bibi Ali  Ingrid Argiropoulos  Shanaaz Karim
Ingrid Argiropoulos  Barbara Black  Philippa McCaffrey
Barbara Black  Sandra Carbone-Walker  Christal Malcolm
Sandra Carbone-Walker  Sylvia Muir  Sylvia Muir
Connie Grillo  Annabel Sousa  Arlene Zaldivar
Lucy Holford  Laurel Willmott  Arlene Zaldivar
The administrative team for the division includes Dr. Victor Blanchette (Division Head), Dr. Sheila Weitzman (Associate Director, Clinical), Judy Van Cleef (Director, Child Health Services) and Lucy Holford (Team Leader, Administrative and Support Services).

**HONOURS AND AWARDS**

Blanchette V: Dr. Richard Rowe Award for Clinical Excellence, Department of Paediatrics, 2008.


Hitzler H: Alvin Zipursky Teaching Award, Division of Haematology/Oncology, The Hospital for Sick Children. 2008.

Irwin M: MDM2 International Workshop Young Investigator Award, 2007.

Irwin M: American Society of Pediatric Haematology Oncology Young Investigator Award, 2007.

Irwin M: Elsie Winifred Crann Memorial Trust Award for Research in Life Sciences, University of Toronto, 2007.


Sung L: University of Toronto Junior Researcher Award, 2008.

**PUBLICATIONS**


Abdelhaleem M, Shago M, Sayeh E, Abla O: Childhood myeloid/natural killer precursor acute leukaemia with der(5) t(4;5)(q31;q31.3) and t(14;17) (q32;q23). Cancer Genetics and Cytogenetics 2007: 178: pp 141-143.


**BOOKS AND BOOK CHAPTERS**


**FUNDING**

A group-wide phase II study of ET-743 in recurrent paediatric sarcoma. Baruchel S. Children’s Oncology Group ($75,000 2007-2010)

A phase 1 study of IV feneretinide in recurrent neuroblastoma. Baruchel S. **New Advances Neuroblastoma Therapy** ($3,200 per patient 2008)

A phase I study of MIBG ultratrace in recurrent neuroblastoma. Baruchel S. **New Advances Neuroblastoma Therapy** ($3,200 per patient 2008)

A phase I study of sorafenib in recurrent solid tumours. Reference laboratory. Wideman B, Baruchel S. **Children’s Oncology Group** ($32,000 2007-2008)

A phase I study of VEGF trap in children with refractory solid tumours. Baruchel S. **Sanofi-Aventis Pharmaceuticals**

A phase I/II study of CP751,851 and IGF IR antibody in refractory/recurrent solid tumours. Baruchel S. **Pfizer** ($22,349 per patient 2008-2010)

A phase I/II study of temsirolimus in refractory/recurrent solid tumours (Funding includes an additional $31,800 per patient) Baruchel S. **Wyeth CSA** ($75,072 2008-2010)


Acute megakaryocytic leukaemia in Down’s syndrome. Hitzler J. National Cancer Institute of Canada ($137,484 2006-2009)

Biochemical and genetic analyses of JPO2, a novel c-Myc oncogene interacting protein. New investigators equipment grant. Huang A. National Cancer Institute of Canada ($29,479 2006-2009)

Biochemical and genetic analyses of JPO2, a novel of c-Myc oncogene interacting protein. Huang A. National Cancer Institute of Canada ($440,082 2006-2009)


Cross-cultural validation of the CHO-KLAT (Canadian Haemophilia Outcomes–Kids’ Life Assessment Tool). Blanchette V, Young N, McCusker P. Bayer Health Care Canada ($260,000 2006-2008)

Defining the clinical phenotype of inherited marrow failure syndromes and the risk factors of severe haematological complications and cancer by the Canadian Inherited Marrow Failure Registry (CIMFR). Dror Y. Council of Canadian Paediatric Haematology/Oncology Directors Research Network ($83,000 2005-2008)


Establishment of a comprehensive genetic bank for children with brain tumours. Tabori U, Malkin D. b.r.a.i.n. child ($42,600 2008-2010)


Functional analysis of the p53 family members p73 and p63 roles in apoptosis, development and cancer. Irwin MS. Canada Research Chair, Tier II ($500,000 2003-2008)

Genetic alterations converge on cell adhesion pathways in childhood sPNET. Huang A. Brain Tumour Society USA ($200,000 2008-2010)

Genetic causes of neutropenia and susceptibility to leukaemia in patients with inherited neutropenia. Dror Y. Neutropenia Association of Canada ($30,000 2007-2008)

Genetic determinants of predisposition to childhood brain tumour initiation and progression. Tabori U, Malkin D. b.r.a.i.n. child ($49,500 2008-2010)

Genetic epidemiology of osteosarcoma. Spector L, Malkin D, Ross J, Sklar C, Nagarajan R. National Institutes of Health ($1,000,000 2006-2011)

Genetic variation and risk of infection in children with primary acute myeloid leukaemia. Sung L. Ministry of Research and Innovation ($100,000 2007-2011)


Genomic analyses of paediatric supratentorial primitive neuroectodermal tumours. Huang A, Li M, Rutka J. American Brain Tumour Association Basic Science Research Award ($70,000 2006-2008)


Identification of genetic pathways that regulate survival and development of cancer and cancer stem cells. Guidos C, Hitzler J. Genome Canada ($330,000 2005-2009)

Identification of interstitial germline deletions in children with complex clinical syndromes that include medulloblastoma. Taylor M, Bouffet E. Pediatric Brain Tumour Foundation Institute Award ($100,000 2006-2008)

Identification of leukemogenic genes that convert a normal human haematopoietic cell into a leukemic stem cell. Dick J, Hitzler J. Specialized Centre of Research (SCOR), Leukaemia Lymphoma Society Grant ($748,575 2004-2009)


Immune thrombocytopenic purpura (ITP) quality of life instrument cross-cultural validation study. Blanchette VS, Klaassen R, Young N. Amgen Canada ($45,000 2007)


In vivo antitumour and antimetastatic activity of administration of CXCR4 antagonist and anti-CTLA4 in neuroblastoma. Baruchel S. Pfizer Canada Inc. ($45,000 2007-2008)

In vivo anti-tumour and anti-metastatic activity of administration of sutent and low-dose chemotherapy in preclinical neuroblastoma mouse model. Baruchel S., Zhang L. Pfizer Canada Inc. ($50,000 2007-2008)


Moderate term musculoskeletal outcomes with escalating dose prophylaxis: the Canadian Haemophilia Prophylaxis Follow-Up Study (CHPS-3). Feldman BM, Blanchette Versus Bayer ($742,500 2006-2009)


Molecular basis of CNS leukaemia. Subversion of developmental and survival programs in leukemogenesis. Danska J, Hitzler J. Specialized Centre of Research, Leukaemia Lymphoma Society ($750,000 2004-2009)

Molecular determinants of tumour formation in Li-Fraumeni Syndrome. Malkin D. National Cancer Institute of Canada ($423,000 2007-2010)


Neuroblastoma stem cell bank and a preclinical research unit in novel therapeutic drug discovery. Baruchel S. Solving Kids Cancer NYC ($400,000 2008-2009)


Orphan late effect in paediatric brain tumour survivors. Lafay-Cousin L, Sockeyt E, Bouffet E. b.r.a.i.n.child ($30,000 2005-2007)

P53 Family in cancer and chemosensitivity. Irwin MS. Premier’s Research Excellence Award ($150,000 2004-2009)

P73 Modulatory proteins: roles in apoptosis and chemosensitivity. Irwin MS. National Cancer Institute of Canada/Canadian Cancer Society ($400,682 2007-2010)


Predicting the risk of infection in children receiving chemotherapy for acute myeloid leukaemia. Sung L, Allen U, Beyene J. Canadian Institute for Health Research ($582,104 2008-2012)