Division of Gastroenterology, Hepatology and Nutrition

OVERVIEW
The Division of Gastroenterology, Hepatology and Nutrition is one of the only programs in Canada with a fully integrated specialty program in clinical paediatric GI, hepatology, transplantation (liver and small bowel) and nutrition, and vertical programs in education and research which span the clinical spectrum. The program offers one year of clinical training and two research years. The clinical component includes a wide array of experiences including: procedures (endoscopy, manometry and calorimetry), inpatient management of complex patients, including those awaiting and undergoing transplantation, those with inflammatory bowel disease and more; ambulatory clinics (including home TPN, dysphasia, general GI, IBD, hepatology, transplantation and nutrition); and evidence-based educational rounds and training in ethics and communication. Our research spans the spectrum from basic and translational to patient-based in such areas as inflammatory bowel disease, pancreatic diseases, ulcer disease, liver diseases, GI microbiology and immunology, nutritional metabolism and nutrient requirements. Many of our trainees in the research program (two years) combine a formal degree-granting program at the University of Toronto (M.Sc. or PhD) within their research fellowship years. The majority of our fellows have gone on to very successful careers in academic paediatric gastroenterology.

This year, staff and fellows in the division have been honoured with awards, fellowships and named lectureships, including Canadian Association of Gastroenterology Visiting Professorship, Fellow of the American Society of Nutrition, the Joseph M. West Family Memorial Award, the Levy/Thomson Award for Outstanding Oral Presentation, the Miriam Neveren Memorial Award, the Canadian Child Health Clinician Scientist Program (CCHCSP) Career Enhancement Program Award, and many more. The staff members of the division have published over 60 peer-reviewed publications, nine books or book chapters and have received well over $10 million of grant funding for projects spanning the next five years.

HONOURS AND AWARDS
Benchimol E: Canadian Child Health Clinician-Scientist Program Doctoral Award, 2008.
Benchimol E: The Hospital for Sick Children Clinician-Scientist Training Program Research Fellowship, 2007.
Benchimol E: Joseph M. West Family Memorial Fund, Department of Post-Graduate Medical Education, University of Toronto, 2007.
Hussey S: The Elizabeth Arbuthnot Dyson Fellowship, 2008.
Hussey S: The Miriam Neveren Memorial Award, 2008.

SUBSPECIALTY RESIDENTS
Dr. Kesete Bezru

ADMINISTRATIVE STAFF
Chona Callejo
Roxanne Francis


Sherman P: Canada Research Chair, Tier 1 (renewal), 2008.

Sherman P: Canadian Association of Gastroenterology Visiting Professor Award, 2008.


Wine E: The Hospital for Sick Children Clinician Scientist Training Program (CSTP), 2007.

Wine E: The University of Toronto Faculty of Medicine, Postgraduate Award (Javenthey Soobiah, Charles Fell Charitable Trust, Chisholm Memorial Fellowship Joseph M. West Family Memorial Fund), 2007.


PUBLICATIONS


Zlotkin S: Editorial - ‘Control of Anemia: the time to act is now’. Indian Pediatrics 2007: 44: pp 84-86.
**BOOKS AND BOOK CHAPTERS**


**FUNDING**

A multicentre study of the safety and efficacy of N-acetylcysteine in the treatment of acute liver failure in paediatric patients not caused by acetaminophen. Ng VL, Fecteau A. National Institutes of Health/National Institute of Diabetes and Digestive and Kidney Diseases (US$69,000 2005-2010)

A multi-disciplinary human study on the genetic, environmental and microbial interactions that cause IBD. Croitoru K, Griffiths AM, Ropelski M, Moyeddi P. Crohn’s and Colitis Foundation of Canada ($5,600,000 2007-2012)

A novel candidate susceptibility gene at the IBD6 locus. Griffiths AM, Rotin D. Crohn’s and Colitis Foundation of Canada New Innovations Grant ($50,000 2007)

A prospective study of linear growth in paediatric IBD. Denson LA, Griffiths AM. Crohn’s and Colitis Foundation of America ($150,000 per year 2007-2010)

Adalimumab in pediatric Crohn’s disease: a multicentre study. Griffiths AM. Abbott Laboratories (per patient remuneration; anticipated $90,000 2007-2009)
Arginine and CF. Grasemann H, Ratjen F, Pencharz P. Canadian Cystic Fibrosis Foundation ($140,000 2007-2010)

Assessment of activity and prediction of outcome in paediatric ulcerative colitis. Turner D, Steinhart H, Griffiths AM. Canadian Association of Gastroenterology/Canadian Institutes of Health Research ($65,000 per year 2006-2008)

Cell signals; cell signalling in mucosal inflammation and pain. Ellen R, Jones NL. Canadian Institutes of Health Research ($300,000 2002-2008)


Clinician scientist training program in clinical nutrition research. Pencharz P. Canadian Institutes of Health Research ($265,000 2002-2008)

Determining the threshold of CFTR function that causes CF disease. Durie PR. Canadian Cystic Fibrosis Foundation ($110,000 per year 2005-2008)


Development and validation of an objective skill assessment for colonoscopy. Ling SC, Walsh C. The Hospital for Sick Children Paediatric Consultants Partnership ($4,968 2007)

Development of a new sweat test using sweat potential measurements. Durie PR. Cystic Fibrosis Foundation Therapeutics, Inc. ($70,818 US 2008)


Diagnosing cystic fibrosis in neonates and adults: where do we draw the line? Durie PR, Tullis E, Ratjen F. Canadian Cystic Fibrosis Foundation ($120,000 per year 2008-2011)


Evaluation of CFTR function ex-vivo in sweat glands of perfused skin as a translational tool for future drug trials in CF. Durie PR, Pang C, Bear CE, Gonska T. (SickKids) Research Institute, New Ideas Grant ($50,000 2008-2009)


Genetic predictors of time to recurrence following ileal resection in early onset Crohn’s disease. McLeod R, Griffiths AM. Crohn’s and Colitis Foundation of Canada ($150,000 per year 2007-2010)

Host responses to Helicobacter pylori infection: role of STAT3 during H. pylori infection. Jones NL. Canadian Institutes of Health Research ($100,000 2007-2008)


Induction of autophagy by H. pylori. Jones NL. Canadian Association of Gastroenterology/Canadian Institutes of Health Research/Abbott ($45,000 2007-2009)

Infliximab in paediatric ulcerative colitis: a multicentre study. Griffiths AM. Centocor (per patient remuneration; anticipated $100,000 2007-2009)

Innovative strategies for optimizing management of infants with biliary atresia. Gutman O (co-supervisors: Ng VL, Roberts EA.) Canadian Association for the Study of Liver Disease/Canadian Institutes of Health Research Fellowship Award ($55,000 2007-2008)

International Collaboration Project. Zlotkin S. Canadian Institutes of Health Research ($25,000 2007-2008)

Investigation of Helicobacter pylori survival in host cells. Jones NL. Early Researcher Award, Ontario Ministry of Research and Innovation ($150,000 2006-2011)

Knowledge translation award. Zlotkin S. Canadian Institutes of Health Research ($100,000 2006-2007)

Molecular genetics, SBDS function and deficiency in SDS. Rommens JM, Durie PR. National Institutes of Health ($1,250,000 2004-2009)

Neonatal protein and energy metabolism. Pencharz P. Medical Research Council/Canadian Institutes of Health Research ($136,817 2006-2011)


Opportunity fund: funding for infrastructure associated with a Canada Research Chair. Sherman PM. Canada Foundation for Innovation, Leaders ($427,348 total [$170,939 direct from CFI] 2008)

Outcomes in severe paediatric ulcerative colitis: a multicentre study. Griffiths AM. Schering Canada ($350,000 2007-2009)


Protocol AI463-08: evaluation of the pharmacokinetics, safety, tolerability and efficacy of entecavir (ETV) in paediatric subjects with chronic hepatitis B virus (HBV) infection who are HBeAg-positive. Ling SC. Bristol-Myers Squibb ($25,000 per patient, 2007-2013)
Role of autophagy in Helicobacter pylori infection and disease. Jones NL. Canadian Institutes of Health Research ($103,959 per year 2008-2013)

Role of probiotics in the management of experimental inflammatory bowel disease. Sherman PM. Crohn’s and Colitis Foundation of Canada Fay Shapiro Cutler Grant-In-Aid of Research ($375,000 2007-2010)

Salary award: Tier 1 (renewal). Sherman PM. Canada Research Chair ($1,400,000 2008-2015)

SBDS protein expression in peripheral blood leukocytes. Durie PR, Rommens JM, Shimamura A. Shwachman Diamond Syndrome Foundation (US$30,000 per year 2006-2008)


Sprinkles project support. Zlotkin S. HJ Heinz Company Foundation ($600,000 2006-2007)

Studies of paediatric liver transplantation (SPLIT). Ng V, Fecteau A. National Institutes of Health/ National Institute of Diabetes and Digestive and Kidney Diseases (US$75,000 2005-2010)

Studies of primary sclerosing cholangitis (STOPSC). Ling SC, Durie P, Griffiths AM. Musette and Allen Morgan Jr. Foundation (annual and patient-based stipends, $10,000 per year plus $200 per patient 2006-2009)


The contribution of genetic modulators of disease severity in cystic fibrosis to other diseases with similarities of clinical phenotype. Durie PR, Zielenski J. Genome Canada ($5,787,862 2005-2009)

The use of indicator amino acid oxidation to determine amino acid requirement. Pencharz P, Ball R. Medical Research Council/Canadian Institutes of Health Research ($152,967 2005-2010)

Training grant: cell signalling in mucosal inflammation and pain. Ellen R, Sherman PM. Canadian Institutes for Health Research ($300,000 per year 2002-2008)
