



**DEPARTMENT OF PEDIATRICS –
ACCOUNTABILITY REPORT FOR MCHF FUNDING RECEIVED IN 2016-2017**

A. Pediatrician-in-chief – MUHC Stipend – Michael Shevell

Administrative responsibilities:

- Pediatrician-in-Chief, McGill University Health Centre (MCH) (2011-)
- Member (ex-officio) Council of Services for Children & Adolescents (2011-)
- Member (ex-officio) Montreal Children's Hospital Foundation Board of Directors (2011-)
- Chairman (CEO), Pediatric Medical Group (PMG) and PMG Advisory Committee (2011-2016)
- Member (ex-officio) Executive Committee – Council of Physicians, Dentists and Pharmacists MCH (2011-)
- Member (ex-officio), Executive Budget Committee, Medical Service Staff Association (MSSA) (2011-)
- Member, MUHC Research Institute Management Committee (2015-)
- Member, MUHC Research Institute Council (2011-)
- Member, MUHC Qualifications Committee (2011-)
- Member, MUHC Medical Advisory Committee (2011-)
- Member, MUHC Mission Table (2011-)
- Member, MUHC Ambulatory Services Steering Committee (2013 -)
- Member, MCH Executive Committee (2013 -)
- Member, MCHF Ad-Hoc Search Committee [Executive Director] (2017)
- Member, MCH Building the Future of Excellence in Academic Childcare (2016-)

B. Researchers Post-Salary :

1) NANCY BRAVERMAN

Funding:

1. Braverman, Nancy – Associate Professor (Principal Applicant)
“Observational (Retrospective) Natural History Study for Peroxisome Biogenesis Disorders”
2016-2019 - Retrophin, Inc Academic Grant - \$120,000 CAD
2. Braverman, Nancy – Associate Professor (Principal Applicant)
“Translating Peroxisome Biogenesis Disorders: Identifying Pharmacological Therapies and Clinical Trial Endpoints”
2016-2019 - Canadian Institutes of Health Research (CIHR) - \$333,000 CAD

Publications:

1. Duker AL, Eldridge G, Braverman NE, Bober MB. (2016). Congenital heart defects common in rhizomelic chondrodysplasia punctata. American Journal of Medical Genetics Part A. 170(1): 270-272.

2. Duker AL, Niiler T, Eldridge G, Brereton NH, Braverman NE, Bober MB. (2016). Growth charts for individuals with rhizomelic chondrodysplasia punctata. *American Journal of Medical Genetics Part A*. doi: 10.1002/ajmg.a. Epub ahead of print.
3. Mikhail M, Modabber M, Koenekoop RK, Braverman N, Khan A. (2016). Delayed vitreous haemorrhage after paediatric cataractsurgery in Lowe syndrome. *Eye (London, England)*. 9(30): 1272-1273.
4. Rush ET, Goodwin JL, Braverman NE, Rizzo WB. (2016). Reply: Low bone mineral density is a common feature of Zellweger spectrum disorders. *Search Results Molecular Genetics and Metabolism Reports*. 7: 94-95.

Presentations

1. *Part 2. Peroxisome biogenesis disorders: PBD from beside-to-bench andback*. Academic Half Day, MUHC Department of Medical Genetics, Jan 15 2016.
2. *Urea Cycle Disorders*. Academic Half Day, MUHC Department of Medical Genetics, March 3, 2016
3. *Peroxisome biogenesis disorders: Clinical perspectives and challenges forthrapy*. MCH Pediatric Neurology resident teaching series. March 17, 2016

Invitations (Visiting professor, Invited speaker, Etc)

1. Zellweger Spectrum Disorder from Bench to bedside, Workshop on Peroxisome Biogenesis disorders. European Society of Human Genetics Annual Meeting, Barcelona, May 21, 2016.
2. Rhizomelic chondrodysplasia punctata due to PEX7 deficiency- clinical spectrum, mouse models and clinical trials. First International Symposium on Plasmalogens and Bioactive lipids: from bench to bedside, Fukuyoka, Japan, Nov 7-8, 2016.

2) PAUL GOODYER

Funding:

1. Principal Investigator: ELX-02 restores CTNS expression in cystinosis. Research Grant, Eloxx Pharmaceuticals (\$76,000) April 2016 – Mar 2017.

Publications:

1. Akpa MM, Iglesias D, Chu L, Thiébaud A, Jentoft I, Hammond L, Torban E, **Goodyer PR**. Wilms Tumor Suppressor, WT1, Cooperates with MicroRNA-26a and MicroRNA-101 to Suppress Translation of the Polycomb Protein, EZH2, in Mesenchymal Stem Cells. *J Biol Chem*. 2016 Feb 19;291(8):3785-95
2. Langman CB, Barshop BA, Deschênes G, Emma F, **Goodyer P**, Lipkin G, Midgley JP, Ottolenghi C, Servais A, Soliman NA, Thoene JG, Levtchenko EN; for Conference Participants* Controversies and Research Agenda in Nephropathic Cystinosis: Conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) Controversies Conference. *Kidney International*, 2016 Jun;89(6):1192-203. doi: 10.1016/j.kint.2016.01.033.

Invitations (Visitation Professorship, Invited speaker, etc):

1. Am Soc Nephro “Cystinosis: evolution and outcomes” Chicago
2. Invited Consultant, KDIGO consensus conference on Rare Disease, Amsterdam
3. Cystinosis Research Foundation, Nonsense mutation readthrough therapy in cystinosis” Newport Beach, CA
4. ERare Consortium, “Renal Progenitor Cell Therapy in Cystinosis, an update”. Barcelona

5. CHUM Research Symposium, Renal Progenitor Cell Therapy”, Montreal
6. Raptor Advisory Board speaker, “Diagnosis and presentation of cystinosis” Boston, MA

3) INDRA GUPTA

Funding:

1. Indra Gupta for her success in obtaining funding for her project “Paradigms in Branching Morphogenesis by NSERC – total \$155,000 over 5 years“. (2016-2021, NSERC Operating Grant, PI: I. Gupta, Paradigms in Branching Morphogenesis, Awarded: \$155,000)
2. 2016-2017, MCH Foundation New Directions Grant Competition, PI: A. Ryan (50%) and I. Gupta (50%), Title: *Development of Novel Therapies for Kidney Stone Patients*, Awarded: \$50,000

Publications:

1. Auguste D, Maier M, Baldwin C, Aoudjit L, Robins R*, Gupta IR, Takano T, Disease-causing mutations of RhoGDIalpha induce Rac1 hyperactivation in podocytes. Small GTPases in press 2016. Funded by CIHR
2. Tokhmafshan F*, Gbadegesin RA, Brophy PD, Gupta IR Vesicoureteral Reflux and the Extracellular Matrix Connection. Pediatric Nephrology in press 2016. Funded by CIHR.

Invitations (Visitation Professorship, Invited speaker, etc):

1. Invited as speaker International Society of Pediatric Nephrology, September 2016, Iguacu, Brazil-declined for personal reason. “Vesico-ureteric reflux and reflux nephropathy”.

4) MICHAEL KRAMER

Funding:

1. Socioeconomic Position, Ethnocultural Background, and Perinatal Outcome in Canada. Canadian Institutes of Health Research, 2011- 2016, \$141,071/yr (Principal Investigator).
2. Breastfeeding Duration and Exclusivity: Impact on Child Health and or co-PI. Development. Canadian Institutes of Health Research, 2011-2014 (extension approved to March 31, 2018), \$432,680/yr (Principal Investigator) .
3. Breastfeeding RCT: Adolescent Neurocognitive and Respiratory Function. National Institutes of Health, 2011-2015 (extension approved to June 30, 2016), \$450,000/yr (Co-Investigator).

Publications:

1. Aris IM, Bernard JY, Chen LW, Tint MT, Pang WW, Lim WY, Lee YS. Infant body mass index peak and early childhood cardio-metabolic markers in a multi-ethnic Asian birth cohort. Int J Epidemiol Advance Access published September 20, 2016.
2. Bernard JY, Cohen E, Kramer MS. Breast feeding initiation rate across Western countries: does religion matter? An ecological study. BMJ Glob Health 2016;1:e000151. doi:10.1136/bmjgh-2016-000151.
3. Bushnik T, Yang S, Kramer MS, Kaufman JS, Sheppard AJ, Wilkins R. The 2006 Canadian Birth-Census Cohort. Health Reports 2016;27:11-19.
4. Chen L-W, Tint M-T, Fortier MV, Aris IM, Bernard JY, Colega M, ... Lee YS. Maternal macronutrient intake during pregnancy is associated with neonatal abdominal adiposity:

- The Growing Up in Singapore Towards healthy Outcomes (GUSTO) Study. *J Nutr* first published ahead of print July 6, 2016 as doi: 10.3945/jn.116.230730.
5. Fell DB, Savitz DA, Kramer MS, Gessner BD, Katz MA, Knight M, ... Ortiz JR. Maternal influenza and birth outcomes: systematic review of comparative studies. *BJOG* 2016;DOI: 10.1111/1471-0528.14143.
 6. Fok D, Aris IM, Ho J, Lim SB, Chua MC, Pang WW, ... Chong YS, GUSTO Study Group. A comparison of practices during the confinement period among Chinese, Malay, and Indian mothers in Singapore. *Birth* 2016;43:247-254.
 7. Joseph KS, Basso M, Davies C, Lee L, Ellwood D, Fell DB, ... Williams K. Rationale and recommendations for improving definitions, registration requirements and procedures related to fetal death and stillbirth. *BJOG* 2016; DOI: 10.1111/1471-0528.14242.
 8. Joseph KS, Basso M, Davies C, Lee L, Ellwood D, Fell DB, ... William K. Rationale and recommendations for improving definitions, registration requirements and procedures related to fetal death and stillbirth. *BJOG* published online 7 September 2016.
 9. Kramer MS, Zhang X, Bin Aris I, Dahhou M, Naimi A, Yang S, ... Platt RW. Methodological challenges in studying the causal determinants of child growth. *Int J Epidemiol Advance Access* published June 12, 2016.
 10. Launay E, Cohen JF, Bossuyt PM, Buekens P, Deeks J, Dye T, ... Chalumeau M. Reporting studies on time to diagnosis: proposal of a guideline by an international panel (REST). *BMC Medicine* 2016;14:146.
 11. Lim AJR, Huang Z, Chua SE, Kramer MS, Yong E-L. Sleep duration, exercise, shift work and polycystic ovarian syndrome-related outcomes in a healthy population: A cross-sectional study. *PLOS One*, November 21, 2016.
 12. Lim GH, Toh JY, Aris IM, Chia A-R, Han WM, Saw SM, ... Chong MF-F. Dietary pattern trajectories from 6 to 12 months of age in a multi-ethnic Asian cohort. *Nutrients* 2016;365:doi:10.3390/nu8060365.
 13. Liu S, Joseph KS, Luo W, Lisonkova S, Van den Hof M, Evans J, ... Kramer MS, for the Canadian Perinatal Surveillance System (Public Health Agency of Canada). Effect of folic acid food fortification in Canada on congenital heart disease subtypes. *Circulation* 2016;134:647-655.
 14. McKinnon B, Yang S, Kramer MS, Bushnik T, Sheppard AJ, Kaufman JS. Comparison of black-white disparities in preterm birth between Canada and the United States. *CMAJ* 2016;188:E19-E26.
 15. Pang WW, Aris IM, Fok D, Soh S-E, Chua MC, Lim SB, ... Chong Y-S on behalf of the GUSTO Study Group. Determinants of breastfeeding practices and success in a multi-ethnic Asian population. *Birth* 2016;43:68-77.
 16. Shapiro GD, Bushnik T, Sheppard AJ, Kramer MS, Kaufman JS, Yang S. Paternal education and adverse birth outcomes in Canada. *JECH Online First*, published on June 24, 2016 as 10.1136/jech-2015-206894.
 17. Shapiro GD, Bushnik T, Sheppard AJ, Kramer MS, Kaufman JS, Yang S. Missing paternal data and adverse birth outcomes in Canada. *Health Reports* 2016;27:3-9.
 18. Tint MT, Ward LC, Soh SE, Aris IM, Chinnadurai A, Saw SM, ... Lee YS. Estimation of fat-free mass in Asian neonates using bioelectrical impedance analysis. *Br J Nutr* 2016;115:1033-1042.
 19. Tint MT, Fortier MV, Godfrey KM, Shuter B, Kapur J, Rajadurai VS, ... Lee Y-S. Abdominal adipose tissue compartments vary with ethnicity in Asian neonates: Growing Up in Singapore Toward Healthy Outcomes birth cohort study. *Am J Clin Nutr* 2016;103:1311-1317.
 20. Van Lee L, Tint MT, Aris IM, Quah PL, Fortier MV, Lee YS, ... Chong M F-F. Prospective associations of maternal betaine status with offspring weight and body composition at

birth: the GUSTO (Growing Up in Singapore Toward healthy Outcomes) cohort study. *Am J Clin Nutr* first published ahead of print September 21, 2016 as doi: 10.3945/ajcn.116.138818.

21. Zhu R, Lee BH, Huang Z, Indran IR, Li J, Shen L, Kramer MS, Yong EL. Antimüllerian hormone, antral follicle count and ovarian volume predict menstrual cycle length in healthy women. *Clin Endocrinol* 2016;84:870-877.

Invitations (Visiting Professorship, Invited speaker, etc.):

1. The Epidemiologic Evidence for the Developmental Origins of Health and Disease: Is Prevention Just Around the Corner? Canadian National Perinatal Research Meeting, 11 February 2016, Banff, AB.
2. The Epidemiologic Evidence for the Developmental Origins of Health and Disease: Is Prevention Just Around the Corner? Keynote Address (Lilienfeld Award), Epidemiology Congress of the Americas, Miami, FL, 24 June 2016.
3. International Disparities in Preterm Birth. National University of Singapore, Department of Obstetrics & Gynaecology, Singapore, 23 August 2016.
4. Effects of Breastfeeding on Long-Term Neurocognitive Function: Results of a Cluster-Randomized Trial. National University of Singapore, Department of Obstetrics & Gynaecology, Singapore, 25 October 2016.

5) LARRY LANDS

Funding:

1. Larry Lands who has received a Clinic Incentive grant (2016-2017) (\$27,622) from the Cystic Fibrosis Canada.
2. (PI) Kriebel Foundation, Translational Research Program in Cystic Fibrosis, \$75,000 US, 1 year, 2016

Publications:

1. Boikos C, Joseph L, Martineau C, Papenburg J, Scheifele D, Lands LC, De Serres G, Chilvers M, Quach C. Influenza Virus Detection Following Administration of Live-Attenuated Intranasal Influenza Vaccine in Children With Cystic Fibrosis and Their Healthy Siblings. *Open Forum Infect Dis*. 2016 Aug 30;3(4):ofw187.
2. Dauletbaev N, Lands LC. Could relative abundance of airway lipoxins be the clue to restore corticosteroid sensitivity in severe asthma? *J Allergy Clin Immunol*. 2016 137(6):1807-8.
3. Kishta OA (S), Guo Y, Mofarrahi M, Lands LC*, Hussain SN*. *Equal contribution. Regulation of autophagy in skeletal muscles in a mouse model of pulmonary *P. aeruginosa* infection: Effects of a pressurized whey protein-based diet. In revision for Food and Nutrition Research.
4. Lands LC, Stanojevic S. Oral non-steroidal anti-inflammatory drug therapy for lung disease in cystic fibrosis. *Cochrane Database Syst Rev*. 2016 Apr 7;4:CD001505.
5. Lau L, Al-Ismaili Z, Harel-Sterling M, Pizzi M, Caldwell JS, Piccioni M, Lands LC, Mottes T, Devarajan P, Goldstein SL, Bennett MR, Zappitelli M. Serum cystatin C for acute kidney injury evaluation in children treated with aminoglycosides. *Pediatr Nephrol*. 2017 Jan;32(1):163-171.
6. Mak, DYF, Sykes J, Stephenson AL, Lands LC. The benefits of newborn screening for cystic fibrosis: The Canadian Experience. *J CF* 2016 May;15(3):302-8.

7. Mazi A (F), Lands LC, Zielinski D. Methacholine challenge test: comparison of tidal breathing and dosimeter methods in children. Submitted to Ped Pulmonol.
8. Withington DE, Fontela PS, Harrington KP, Lands LC. Perioperative Steroids in Pediatric Cardiopulmonary Bypass: We Still Do Not Have All the Answers. *Pediatr Crit Care Med*. 2016 May;17(5):475.

Presentations

1. Canadian Respiratory Research Network Trainee Day. Halifax. Knowledge Translation. Mentor Participant. April 2016.
2. European Cystic Fibrosis Society. Basel, Switzerland. Exercise as an outcome measure. June, 2016.
3. Miami Children's Hospital Annual Cystic Fibrosis Day. Exercise in Cystic Fibrosis. October, 2016.
4. North American Cystic Fibrosis Conference. Orlando. Why assess exercise capacity and habitual physical activity? October, 2016.
5. Israeli Cystic Fibrosis Conference. Ein Gedi, Israel. Exercise in CF: Let's Get Active. November 2016.
6. Israeli Cystic Fibrosis Conference. Ein Gedi, Israel. Inflammation in Cystic Fibrosis: Where do we go from here? November 2016.
7. Hadassah Medical Center, Pediatric Respiratory Medicine Division. Jerusalem, Israel. Dyspnea in Children. November 2016.

6) BRUCE MAZER

Funding:

1. Principle Investigator BD Mazer, Co-investigators: J Fritz; M Divangahi. CIHR Transitional Operating Grant: Regulatory B-cells inhibit Allergic Airways Disease: Role of Semaphorin 4C. 2015-2018 -- \$700,757
2. Bruce D Mazer, Principal Investigator, Anne Clarke and Jean Marshal Co-PI's and 12 co-investigators. CIHR Team Grant: Genes, Environment, and Tolerance: Food Allergy Clinical Tolerance Studies (Get-Facts), 2013-2018 -- \$1,980,000
3. Allergen NCE Canadian Food Allergy Therapeutics Network. 2012-2016 -- \$89,000 per annum

Publications:

1. Duerr C.U., McCarthy C.D., Mindt B.C., Rubio M., Meli A.P., Pothlichet J., Eva M.M., Gauchat J.F., Qureshi S.T., Mazer B.D., Mossman K.L., Malo D., Gamero A.M., Vidal S.M., King I.L., Sarfati M., Fritz J.H. (2016). Type I interferon restricts type 2 immunopathology through the regulation of group 2 innate lymphoid cells. *Nat Immunol*.17(1): 65-75.
2. Gohal G, McCusker C, Mazer B.D., Alizadehfar R, Lejtenyi D, Ben-Shoshan M. T-cell receptor phenotype pattern in atopic children using commercial fluorescently labeled antibodies against 21 human class-specific v segments for the tcr β chain (v β) of peripheral blood: a cross sectional study. *Allergy Asthma Clin Immunol*. 2016 Mar 2;12:10. doi: 10.1186/s13223-016-0115-3.

3. Xue, D., Desjardins, M., Kaufman, G.N., Beland, M., Al-Tamemi, S., Ahmed, E., Tao, S., Friedel, R.H., Mourad, W., Mazer, B.D. Semaphorin 4C: A Novel Component of B-Cell Polarization in Th2 Driven Immune Responses. *Frontiers in Immunology*. 2016.7:558.
4. Massoud AH, Kaufman GN, Beland M, Mourad W, Piccirillo CA, Mazer BD. Peripherally Induced Foxp3+ Regulatory T Cells Mediate the Immunomodulatory Effects of Intravenous Immunoglobulin in Allergic Airways Disease. *Journal of Immunology*, in Press, Accepted 2016.
5. Perez EE, Orange JS, Bonilla F, Chinen J, Chinn IK, Dorsey M, El-Gamal Y, Harville TO, Hossny E, Mazer BD, Nelson R, Secord E, Jordan SC, Stiehm ER, Vo AA, Ballow M. J Update on the use of immunoglobulin in human disease: A review of evidence.. *Allergy Clin Immunol*. 2016 Dec 24. pii: S0091-6749(16)31141-1. doi: 10.1016/j.jaci.2016.09.023. [Epub ahead of print]
6. Gabriel N Kaufman, Amir H Massoud, Madelaine Yona, Ciriaco A Piccirillo, Bruce D Mazer. (2015). Induction of regulatory T cells by IVIg: a bridge between adaptive and innate immunity. *Frontiers in Immunology*. 11(6): 469-475.
7. Di Xue, Gabriel N. Kaufman, Marieme Dembele, Marianne Beland, Amir H. Massoud, Barbara C. Mindt, Ryan Fiter, Elizabeth D. Fixman, James G. Martin, Roland H. Friedel, Maziar Divangahi, Jörg H. Fritz, Bruce D Mazer. Semaphorin 4C Protects against Allergic Inflammation: Requirement of Regulatory CD138+ Plasma Cells. *Journal of Immunology*. Accepted for Publication December 2016.
8. Di Xue, Marilyn Desjardins, Gabriel N. Kaufman, Marianne Beland, Salem Al-Tamemi, Eisha Ahmed, Shao Tao, Roland Friedel, Walid Mourad, Bruce David Mazer. (Nov 2016) Semaphorin 4C: A Novel Component of B-Cell Polarization in Th2 Driven Immune Responses. *Frontiers in Immunology*. Accepted for Publication November 2016.
9. Bonilla FA, Khan DA, Ballas ZK, Chinen J, Frank MM, Hsu JT, Keller M, Kobrynski LJ, Komarow HD, Mazer BD, Nelson RP Jr, Orange JS, Routes JM, Shearer WT, Sorensen RU, Verbsky JW, Bernstein DI, Blessing-Moore J, Lang D, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph CR, Schuller D, Spector SL, Tilles S, Wallace D; Practice parameter for the diagnosis and management of primary immunodeficiency. Joint Task Force on Practice Parameters, representing the American Academy of Allergy, Asthma & Immunology; the American College of Allergy, Asthma & Immunology; and the Joint Council of Allergy, Asthma & Immunology. *J Allergy Clin Immunol*. 2015 Nov;136(5):1186-205.e1-78. doi: 10.1016/j.jaci.2015.04.049.

7) CHRISTINE McCUSKER

Funding:

1. Canadian Primary Immunodeficiency Evaluation Study - C-Primes: a cross-Canada initiative
Principal Investigator: Christine McCusker
2014-present Operating Funds CSL-Behring \$25,000.00
2. GETFACTS: Genetics, Environment and Therapies: Food allergies clinical tolerance studies
\$1,960,605.00
Principal Investigator: Dr B Mazer -- Amount awarded to Christine McCusker \$100,000.00
2014-present
3. US Department of Defense
Discovery Prevention and Treatment of Food Allergy (USD) through STAT6-IP-Mediated Immunomodulation
Principal Investigator: Christine McCusker
2015-present - Award \$290,000.00

4. Montreal Children's Hospital Foundation
Allergies all around us?: Community Outreach and Education : Programs in allergic diseases for the general public, students, patients and health care providers.
Co-PI: Christine McCusker
2016-present -- \$5000.00

Publications:

1. Depner M, Fuchs S, Raabe J, Frede N, Glocker C, Doffinger R, Gkrania-Klotsas E, Kumararatne D, Atkinson TP, Schroeder HW Jr, Niehues T, Dückers G, Stray-Pedersen A, Baumann U, Schmidt R, Franco JL, Orrego J, Ben-Shoshan M, McCusker C, Jacob CM, Carneiro-Sampaio M, Devlin LA, Edgar JD, Henderson P, Russell RK, Skytte AB, Seneviratne SL, Wanders J, Stauss H, Meyts I, Moens L, Jesenak M, Kobbe R, Borte S, Borte M, Wright DA, Hagin D, Torgerson TR, Grimbacher B. The Extended Clinical Phenotype of 26 Patients with Chronic Mucocutaneous Candidiasis due to Gain-of-Function Mutations in STAT1. *J Clin Immunol*. 2016 Jan; 36(1):73-84. doi: 10.1007/s10875-015-0214-9.
2. Gohal G , McCusker C , Mazer B, Alizadehfar R, Lejtenyi D and Ben-Shoshan B. T-cell receptor phenotype pattern in atopic children using commercial fluorescently labeled antibodies against 21 human class-specific v segments for the tcr β chain (v β) of peripheral blood : a cross sectional study. *Allergy, Asthma Clin Immunol*. 2016 Mar 2;12:10. doi: 10.1186/s13223-016-0115-3. eCollection 2016.
3. OKeefe A, Halbrich M Ben-Shoshan M and McCusker CT. Immunodeficiency for the Primary Care Physician. *Pediatr Child Health*. 2016 Mar;21(2):e10-4..

8) JESSE PAPENBURG (start-up funding support)

Funding:

1. Jesse Papenburg who successfully obtained funding as part of the Établissement de jeunes chercheurs cliniciens for his project: "Infections virales respiratoires sévères chez l'enfant: épidémiologie et optimisation de l'utilisation des outils diagnostics".

Publications :

1. Boikos C, Joseph L, Martineau C, Papenburg J, Scheifele D, Lands L, De Serres G, Chilvers M, Quach C. Influenza virus detection following administration of live attenuated intranasal influenza vaccine in children with cystic fibrosis and their healthy siblings. *Open Forum Infect Dis*. 2016 Aug 30;3(4):ofw187.
2. Hui C, Paes B, Papenburg J, Mitchell I, Li A, Lanctôt KL, and the CARESS investigators. Palivizumab adherence and outcomes in Canadian Aboriginal children. Accepted. *Pediatr Infect Dis J*. 2016 Nov;35(11):1187–1193.

9) CONSTANTIN POLYCHRONAKOS

Funding :

1. Juvenile Diabetes Research Foundation, Clonal Genomics in Type 1 Diabetes, \$110,000 (US), 2016/03-2017/02
2. The Memorial University of Newfoundland Service contract to establish an exome – sequencing pipeline. \$40,000, 2016

Invitations (Visiting Professorship, Invited speaker, etc.):

1. How to write and submit a paper for an international journal, Course organized by the Chinese journal of General Practice, Beijing, May 2016.
2. Clonal Genomics of autoreactive T-cells in type 1 diabetes. Keynote speaker at the 7th Sino-American Symposium on Clinical Translational Medicine, Beijing May 2016.
3. How to write and submit a paper for an international journal, lecture given and the Maternal and Child Health Hospital, Xuzhou, China, November 2016.
4. Clonal Genomics of autoreactive T-cells in type 1 diabetes. Invited speaker, annual symposium of the Department of Physiology, National Kapodistrian University, Athens, Greece.

10) ERNEST SEIDMAN

Funding:

1. Seidman EG (PI), Jon Wyse 2012 – present \$90,000. *Prospective Study on the Clinical Utility of Serum Biomarkers for Functional Bowel Disorders (IBS)*.
2. GRIFFITHS, Anne Marie; BENCHIMOL, Eric I; JACOBSON, Kevan; KAPLAN, Gilaad G; MACK, David R; MUISE, Aleixo M; OTLEY, Anthony R; SEIDMAN, Ernest G; VALLANCE, Bruce A; WALTERS, Thomas D; WATERHOUSE, Christopher C; WINE, Eytan. (Principal investigators) CH.I.L.D-CIHR Inflammatory Bowel Disease Network. 2013-18; \$503,031/yr -- \$40,000/yr to MCH site. *Canadian Children Inflammatory Bowel Disease Network*.
3. Seidman EG (PI) 2015-2016 \$111,569 total Dairy Farmers of Canada *The influence of vitamin D on monocyte-macrophage function in patients with Crohn's disease*.
4. Bitton A & Seidman EG (co-PIs) Promoting Access and Care through Centres of Excellence (PACE) network Montréal Centre: McGill University Health Centre (MUHC) Area of Focus: Quality indicators of care Funding: Crohn's and Colitis Canada: 2016-21 20% of \$2,500,000

Publications:

1. Kopylov U, Seidman EG. Predicting durable response or resistance to anti-TNF drugs in inflammatory bowel disease *Therapeutic Advances in Gastroenterology* 2016; 1-14
2. Koulaouzidis A, Sipponen T, Nemeth A, Makins R, Kopylov U, Nadler M, Giannakou A, Yung DE, Johansson GW, Bartzis L, Thorlacius H, Seidman EG, Eliakin R, Plevris JM, Toth E.. Association between Fecal Calprotectin Levels and Small-bowel Inflammation Score in Capsule Endoscopy: A Multicenter Retrospective Study. *Digestive diseases and sciences*. 2016 Mar 23:1-8.
3. Nemeth A, Kopylov U, Koulaouzidis A, Johansson GW, Thorlacius H, Amre D, Eliakim R, Seidman EG, Toth E. Use of patency capsule in patients with established Crohn's disease. *Endoscopy*. 2016 Apr;48(04):373-9.
4. Tremblay E, Thibault MP, Ferretti E, Babakissa C, Bertelle V, Bettolli M, Burghardt KM, Colombani JF, Grynspan D, Levy E, Lu P, Mayer S, Ménard D, Mouterde O, Renes IB, Seidman EG, Beaulieu JF. Gene expression profiling in necrotizing enterocolitis reveals pathways common to those reported in Crohn's disease. *BMC Med Genomics* 2016; 9:6. DOI: 10.1186/s12920-016-0166-9
5. Yancu D, Blouin MJ, Birman E, Florianova L, Aleynikova O, Zakikhani M, VanderMeulen H, Seidman E, Pollak M. Insulin-like growth factor-3 knockout mice are resistant to experimental dextran sulfate sodium colitis. *Journal of Gastroenterology and Hepatology*. 2016 Jan 1.10.1111/jgh.13461

11) SAM SHEMIE

Funding:

1. Senior Responsible Investigator Physician Services Incorporated (PSI) Dhanani SD, Seely A, Ramsay T, Guerguerian AM, Shemie SD, Herry C, Scales N, Hornby L, Van Beinum
Continuous waveform analysis to improve prediction of time to death after withdrawal of life sustaining therapy in critically ill patients.
2016---2018. \$168,000.
2. Death Determination in Intensive Care: Multicenter Canadian Study in collaboration with the Canadian Critical Care Trials Group and Loeb Research Consortium:
<http://www.ddepict.com/> Senior Responsible Investigator
3. Dhanani S, Shemie SD, Ward R, Hornby L
DEPPART Study--- Death Prediction and Physiology after Removal of Treatment
A CIHR Canadian Transplant Network Research Program Grant
2013-2017 \$780,000.
4. Chair and Project Director . Potential Donor Identification and System Accountability, Canadian Blood Services in collaboration with the Canadian Resuscitation Outcome Consortium and Resuscitation in Motion.
Canadian Blood Services- Canadian National Transplant Research Network.
2015-2017. \$80,000
5. Co-chair and Project Director. ECMO-CPR-Organ Donation project, Canadian Blood Services in collaboration with the Canadian Resuscitation Outcome Consortium and Resuscitation in Motion. Canadian Blood Services. \$85,000. 2016-2018
6. Planning Meeting to Develop an Interdisciplinary Research Network for Extracorporeal Cardiopulmonary Resuscitation (ECPR) in Canada
CIHR Meeting Grant 2016-17 \$15,000.

Publications:

1. Citerio G, Cypel M, Dobb G, Dominguez-Gill B, Frontera JA, Greer DM, Manara AR, Shemie SD, Smith M, Valenza F, Wijdicks EFM. Organ Donation: A Critical Care Perspective. Intensive Care Med. 2016 Mar;42(3):305-15.
2. Norton L, Gibson RM, Gofton T, Benson C, Dhanani S, Shemie SD, Hornby L, Ward R, Young GB. Electroencephalographic Recordings during Withdrawal of Life Sustaining Therapy until Thirty Minutes after Declaration of Death. Can J Neurol Sci, Published online: 28 October 2016, pp. 1-7, 2016
3. Trickey K, Hornby L, Shemie SD, Teitelbaum J. Mechanism of Death after Decompressive Craniectomy in Non-Traumatic Brain Injury. Can J Neurol Sci, 2016 Dec 5:1-4.
4. Weiss, M, Hornby L, Witteman W, Shemie SD. Pediatric Donation after Circulatory Death. A Scoping Review. Pediatr Crit Care Med. 2016 Mar;17(3):e87-e108.

12) MICHAEL SHEVELL

Funding

- 1) The Canadian Cerebral Palsy Registry
Kids Brain Health Foundation (NeuroDevNet Program Research Awards)
M. Oskoui(Co-PI), M, Shevell(Co-PI)
2015-2018 \$301,800

- 2) CIHR Foundation Grant
The Alberta Perinatal Stroke Program: Neuromodulation to Optimize Outcomes
CA Kirton (PI), M Shevell (Co-I)
2015-2022 \$2,823,520
- 3) Research Foundation of the Cerebral Palsy Alliance (Australia)
Genetic Insights into the Causes of Cerebral Palsy
M. Oskoui (PI), M. Shevell
2016-2019 \$241,911
- 4) CIHR -- PROMPT Identification of Cerebral Palsy: Primary-care Referral of Motor-impaired children: Physician Tools
Majnemer (PI), S Ahmed, J Andersen, H Bergman, A Bussieres, L Dagenais, VB Darsaklis, D Fehlings, A Kirton, P Li, R Rodriguez, M Shevell, K Shikako Thomas, L Snider, J Thibault (Co-I)
2014-2018 \$451,604

Publications

1. Oskoui M, Messerlian C, Blair A, Gamache P, Shevell MI. Variation in cerebral palsy profile by socio-economic status. *Dev Med Child Neurol* , 58: 160-166, 2016.
2. Huberman L, Boychuck Z, Shevell MI, Majnemer A. Age at referral of children for initial diagnosis of cerebral palsy and rehabilitation : Current practices. *J Child Neurology*, 31: 364-369, 2016.
3. Zeidman LA, Ziller MG, Shevell MI. Ilya Mark Scheinker : Controversial Neuroscientist and Refugee from National Socialist Europe. *Can J Neurol Sciences*. 43 : 334-344, 2016.
4. Bolbocean C, Wintermark P, Shevell MI, Oskoui M. Perinatal Regionalization And Implications For Long-Term Health Outcome In Cerebral Palsy? *Canadian Journal of Neurological Sciences*. 43: 248-253, 2016.
5. *Garfinkle J, Wintermark P, Shevell MI, Oskoui M. Cerebral palsy following neonatal encephalopathy: Do neonates with suspected asphyxia have worse outcomes? *Dev Med Child Neurol*, 58: 189-194, 2016.
6. *Frank R, Garfinkle J., Oskoui M, Shevell M. Clinical profile of children with cerebral palsy born term compared to late- and post-term: A retrospective cohort study. *Br J Obs Gyn* (2016)
7. Racine E, Bell E, Farlow B, Miller S, Payot A, Rasmussen LA, Shevell M, Thomson D, Wintermark P. ouR-HOPE" approach for ethics and communication about neonatal neurological injury. *Dev Med Child Neurology*. 59:125-135, 2017.
8. *Garfinkle J, Wintermark P, Shevell MI, Oskoui M. Canadian Cerebral Palsy Registry. Children born at 32-35 weeks with birth asphyxia & later cerebral palsy are different from those born after 35 weeks. *J Perinatol* (In Press)
9. Al Yazidi G, Srour M, Shevell MI. Two Novel KCNQ2 Mutations in 2 families with Benign Familial Neonatal Convulsions. *Child Neurology Open*. (2017)
10. Alt C, Shevell M, Poulin C, Rosenblatt B, Saint-Martin C, Srour M. Clinical and radiologic spectrum of septo-optic dysplasia: Review of 17 cases. *J Child Neurology*. (2017)
11. Oskoui M, Ng P, Dorais M, Pigeon N, Koclas L, Lamarre C, Malouin F, Richards CL, Shevell M, Joseph L. Accuracy of administrative claims data for cerebral palsy: A retrospective cohort study. *CMAJ Open*. (2017)

Chapters/Invited papers

- 1) Garfinkle J, Shevell M. Neurodevelopmental outcomes of neonates with seizures. In: *Neonatal Seizures*. Nagarajan L (Ed). Mac Keith Press. 163-171, 2016.

- 2) Sherr E, Shevell MI. Global Developmental Delay and Intellectual Disability. In: Swainman's Pediatric Neurology and Practice (6th Edition). Swainman KF, Ashwal S, Ferreiro DM, Schor NF, Finkel R, Gropman A, Pearl P, Shevell MI (Eds). Elsevier. 418-423, 2017.
- 3) Oskoui M, Shevell MI, Swaiman KF. Cerebral Palsy. In: Swainman's Pediatric Neurology and Practice (6th Edition). Swainman KF, Ashwal S, Ferreiro DM, Schor NF, Finkel R, Gropman A, Pearl P, Shevell MI (Eds). Elsevier. 734-740, 2017.

Invitations (Visiting Professorship, Invited speaker, etc.):

- 1) February 2016 - Understanding Cerebral Palsy through a National Registry: Types, classification, comorbidities, correlates. 7th Child NeuroCon India. The Association of Child Neurology (AOCN) India. Lucknow, India -- Cancelled (death in family).
- 2) March 2016 - Cerebral Palsy: Beyond the Diagnosis – Lessons from a National Registry Neurosciences Grand Rounds. King Faisal University, Riyadh, Saudi Arabia.
- 3) March 2016 -- Challenges in Education and Research in Child Neurology: An Oslerian Perspective. 1st Pediatric Neurology Conference, Saudi Arabian Pediatric Neurology Society. Riyadh, Saudi Arabia.
- 4) March 2016 -- Contemporary Understandings of the Genetics of Global Developmental Delay and Cerebral Palsy: A Pragmatic Approach. 1st Pediatric Neurology Conference, Saudi Arabian Pediatric Neurology Society. Riyadh, Saudi Arabia.
- 5) June 2016 -- A National CP Registry & Its Use as a Platform for Discovery. 5th International Conference on Cerebral Palsy, 28th Annual Meeting European Academy of Childhood Disability. Stockholm, Sweden.
- 6) June 2016 -- Cost-Effective Prevention & Management of Cerebral Palsy: What Can Low Resource Settings Learn from a High Resource Setting? 5th International Conference on Cerebral Palsy, 28th Annual Meeting European Academy of Childhood Disability. Stockholm, Sweden.
- 7) August 2016 -- Contemporary Understanding of the Genetics of Cerebral Palsy & Global Developmental Delay/Intellectual Disability. Hospital Grand Rounds, National University Hospital (NUH) Kids, Singapore.
- 8) August 2016 -- Evaluating Developing Delay & Intellectual Disability in the Clinic: Current Approaches. Wong Hock Boon Visiting Professorship 2016, National University Hospital (NUH) Kids. Singapore.
- 9) August 2016 -- Oslerian Challenges in Education & Research in Child Neurology. Wong Hock Boon Visiting Professorship 2016. National University Hospital (NUH) Kids. Singapore.
- 10) August 2016 -- A Tale of Two Constructs: Perinatal (Intrapartum) Asphyxia & Cerebral Palsy. Wong Hock Boon Visiting Professorship 2016. National University Hospital (NUH) Kids. Singapore.
- 11) August 2016 -- What is Cerebral Palsy? An Update on Classification & Diagnosis. Wong Hock Boon Visiting Professorship 2016. National University Hospital (NUH) Kids. Singapore.
- 12) August 2016 -- Cerebral Palsy Beyond the Diagnosis: Lessons from a National Registry. Wong Hock Boon Visiting Professorship 2016. National University Hospital (NUH) Kids. Singapore.
- 13) August 2016 -- A National Cerebral Palsy Registry & its Use as a Platform of Discovery. Wong Hock Boon Visiting Professorship 2016. National University Hospital (NUH) Kids, Singapore.
- 14) August 2016 -- Current Strategies to Prevent & Manage Cerebral Palsy. Wong Hock Boon Visiting Professorship 2016. National University Hospital. Singapore.
- 15) May 2017 -- Conceptualization, Diagnosis & Prevention of Cerebral Palsy. Chinese Association of Pediatric Neurology, Teaching Course. Xiamen, China.

C. Researchers Matching FROS :

FONTELA PATRICIA

Funding :

1. Patricia Fontela and Patricia Li (co-applicants)
Evaluation of infection markers in children with severe bacterial infections (PI), CIHR – Institute of Human Development, Child, and Youth Health (CIHR – IHDCYH), \$299,961 CAD
2. FRSQ – Subvention d'établissement de jeune chercheur (PI). \$15,000.
3. Transfusion-related acute lung injury and delayed TRALI : A prospective study in critically ill children (co-investigator). Canadian Blood Services (CBS) / Canadian Institutes of Health Research (CIHR). July 2016 – June 2018. \$477,651.

Publications :

1. Weiss SL et al. New or progressive multiple organ dysfunction syndrome in pediatric severe sepsis: a sepsis phenotype with higher morbidity and mortality. *Pediatr Crit Care Med* 2017; 18(1):8-16.
2. TFontela PS, Quach C, Karim ME, Wilson DF, Gilfoyle E, McNally JD, Gonzales M, Papenburg J, Reynolds S, Lacroix J. Determinants of antibiotic use in pediatric intensive care: a national survey. *Pediatr Crit Care Med*.
3. Fontela PS, Lacroix J. Procalcitonin: Is this the promised biomarker for critically ill patients ? *J Pediatr Intensive Care*, 2016.
4. Withington D, Fontela PS, Harrington KP, Lands L. Perioperative steroids in pediatric cardiopulmonary bypass: we still do not have all the answers. *Pediatr Crit Care Med*, 2016; 17(5): 475

D. Global Child Health Program (GCHP) Update

1. Clinical capacity building within the Department of Pediatrics, Centre Hospitalier Universitaire de Kigali (CHUK), Rwanda

- a. NICU training: In October 2016, Dr Therese Perreault, the Head of Neonatology at the MCH, travelled to CHUK to meet with our partners and to complete a needs assessment of their Neonatal unit. Dr. Perreault identified a multitude of needs, one of the most pressing being infection control improvements as hospital-acquired multidrug resistant infections are a frequent cause of mortality among babies in the unit. Next steps include bringing a senior pediatric resident from CHUK to the MCH for further training in Neonatology and Infection control, and implementing a quality improvement project in antibiotic stewardship.
- b. Nursing partnership: In October 2016, Elissa Remmer, the MCH NICU nursing educator travelled to CHUK to meet with our partners and to complete a needs assessment of their nursing department. She identified several needs, including training a nurse as a nursing educator to teach skills related to acute care and infection control. Next steps include bringing the Head of Pediatric Nursing at CHUK for a visit at the MCH, and providing training for a nurse at CHUK to become a nursing educator.
- c. Pediatric Conference at CHUK in 2017: The GCHP is helping our partner site at CHUK organize a conference for Fall 2017. Several health care professionals from the MCH will likely travel and present at this conference. In addition, we may help organize a second MicroResearch Workshop, following the successful one held in February 2016.
- d. Teleconferencing : The GCHP will purchase teleconferencing equipment for CHUK so that we can hold regular, 1-2 monthly, medical education exchanges, and collaborate more effectively on research projects.

2. Global Child Health education, McGill

- a. Advanced Curriculum in Pediatric Global Health: The Advanced Curriculum in Pediatric Global Health is a multi- and inter-disciplinary course that is now in its 4th year. The 2-year curriculum provides advanced teaching on a broad range of pediatric global health topics, through monthly evening didactic sessions with invited speakers and group work. The course is currently being attended by a diverse group of forty nurses, pediatric and family medicine residents from the MCH, the HSJ and other health care facilities in Montreal. In addition, it is being made available via teleconference to pediatric residents at CHEO in Ottawa.
- b. Pediatric Global Health Skills conference: As part of its educational mandate, the GCHP held a 2-day skills conference in June 2016. The sessions offered included Helping Babies Breathe (HBB), Emergency Triage Assessment and Treatment (ETAT) and a Post-travel debriefing workshop. This conference supplemented the GCHP's advanced curriculum by teaching practical skills not taught in didactic lectures. The GCHP is organizing a second annual Pediatric Global Health Skills Conference in Fall of 2017. Possible sessions include Pediatric Ultrasound for Global Health, HBB and several sessions on practical skills needed in global health sessions. This would be a 2 to 3-day conference. Maximum number of participants per session would be 20.
- c. Community Education sessions: The GCHP hopes to expand the MCH's community's access to Global Health education and raise awareness of global health issues and needs. The GCHP helped organize the Hillman Lectureship in Global Health for the MCH Grand Rounds in January 2017. In addition, it has organized two other global health-related lectures open to

the MCH community in December 2016 and January 2017. The GCHP plans to organize several more such sessions in the remainder of the 2017.

- d. Pediatric resident electives: The GCHP helps organize Global Health electives for pediatric residents. A senior pediatric resident will complete an elective at CHUK in May 2017, and another will complete an elective at a pediatric hospital in Haiti in August 2017.

E. Social Pediatrics Program Report of Activity

The Social Pediatrics Training Program continues to be a Leader in the Training of medical students and residents in Canada. The past year has seen significant evolution of the Training program, with

1. Increased popularity and visibility of the Social Pediatrics Training program across Québec and Canada as evidenced by a significant increase in number of applicants to the Social Pediatrics Elective.
2. Royal College of Physicians and Surgeons of Canada recognition of the importance of Social Pediatrics training for all Pediatrics residents across Canada. The rotation became a mandatory part of the training of all Pediatrics residents in 2016. McGill has been visionary, as this rotation has been mandatory for all Pediatric residents since 2003. The Training Program, Objectives, and ITERS were updated to be in line with the new Royal College requirements.
3. Expansion of the Training program to include Visa sponsored trainees.
4. Increased numbers of trainees over the past year, now accommodating 1-3 trainees per block.
5. Expansion of the Social Pediatrics Training program by adding new sites (at present, over 50 community based sites, and over 10 hospital based sites), supervisors, resources, and curriculum development for medical students, residents and fellows. Expansion of sites continues to allow for wide variety and flexibility of choice of areas to obtain clinical training (tailored to the interest and specific goals of each trainee).
6. Ongoing feedback from trainees incorporated into the continuous improvement of the program.
7. Resident and student initiated Advocacy projects.
8. Outreach (trainee as the teacher) to the community eg YMCA (refugee program), and Mères avec Pouvoir (added 2016).
9. Excellent core group of teachers, covering key subject areas (Ethics, Youth Protection, Child Maltreatment, Literacy, Sociocultural, Physician Health). New collaboration with the office of Sociocultural Consultation and Interpretation Services (including Homelessness initiative, and Equity and Inclusion Teaching sessions for trainees).
10. Successful application, government funding (through the formation complémentaire) for Social Pediatrics Fellow training.
11. Preparation and successful presentation of Social Pediatrics Fellowship report to the Residency Training Committee, Residency Program Directors, the Advanced Pediatrics Training Committee, and the Associate Dean of McGill Postgraduate Medical Education.
12. Supervision of advanced pediatric training for Social Pediatrics Fellow.

F. Fellowships And Tuition Subsidies

The following Fellows received financial support:

- Dr Altit, Fellow in Neonatology & Respiratory Medicine
- Dr Dotan, Fellow in Hematology/Oncology
- Dr Migowa, Fellow in Rheumatology
- Dr Fontana, Fellow in Pediatric Emergency Medicine
- Dr Kuwabara, Fellow in Pediatric Intensive Care Unit
- Dr Imbroise, Fellow in Neonatology and Respiratory Medicine

Respectfully submitted,

Michael Shevell, MDCM, FRCPC, FCAHS
Chairman, Department of Pediatrics, McGill University
Pediatrician-in-Chief, Montreal Children's Hospital, MUHC
June 2017