

## New Investigator Research Grants

New Investigator Research Grants is a jointly sponsored program of SickKids Foundation and the Canadian Institutes of Health Research - Institute of Human Development, Child and Youth Health (IHDCYH). New Investigator Research Grants provide important early career development support to child health researchers. It is intended that New Investigator Research Grants will enhance the grant recipient's ability to compete with more senior investigators for research grants from other funders.

### 2016 – 2017

**Impact of the Sperm Epigenomic Status on the Progeny Born by Assisted Reproductive Technologies**

Dr. Clémence Belleannée, University of Laval  
Approved Funding: \$299,022 over 3 years

**Connectome-informed Simulations of Pediatric Epilepsy Surgery**

Dr. Boris Bernhardt, Montreal Neurological Institute and  
Dr. Dewi Schrader, British Columbia Children's Hospital  
Approved Funding: \$294,250 over 3 years

**Impact of Prenatal Flame Retardant Exposure on Brain Development: A multimodal neuroimaging study in a cohort of school aged children**

Dr. Jean-Francois Lepage, Université de Sherbrooke  
Approved Funding: \$294,100 over 3 years

**Sustained Inflation During Chest Compression**

Dr. Georg Schmaolzer, University of Alberta  
Approved Funding: \$281,132 over 3 years

**Evolution of Infection Markers in Children with Severe Bacterial Infections**

Approved Funding: Dr. Patricia Fontela, McGill University Health Centre Research Institute  
\$299,961 over 3 years

**Addiction Treatment Among Vulnerable Youth**

Approved Funding: Dr. Kora DeBeck, Simon Fraser University  
\$300,000 over 3 years

## 2015 – 2016

### **Diagnostic and Treatment of Inflammation During Pregnancy**

Dr. Sylvie Girard, Sainte-Justine Hospital  
Approved Funding: \$300,000 over 3 years

### **Resting-state Presurgical Mapping in Children with Epilepsy**

Dr. Anne Gallagher, CHU Sainte-Justine Research Centre  
Approved Funding: \$290,716 over 3 years

### **Costs and Clinical Consequences of Pediatric Whole Genome Sequencing**

Dr. Robin Hayeems, The Hospital for Sick Children  
Approved Funding: \$296,050 over 3 years

### **Piperacillin – Tazobactam Extended Infusion in Infants and Young Children**

Dr. Julie Autmizguine, CHU Sainte-Justine Research Centre  
Approved Funding: \$257,325 over 3 years

### **cMET and Fracture Healing**

Dr. Peter Kannu and Dr. Irina Voronov, The Hospital for Sick Children  
Approved Funding: \$167,000 over 3 years

### **Genetic characterization of focal malformations of cortical development**

Dr. Myriam Srouf, McGill University Health Centre-Research Institute  
Approved Funding: \$298,855 over 3 years

## 2014 – 2015

### **3D Ultrasound in Hip Dysplasia**

Dr. Jacob Jaremko, University of Alberta  
Approved funding: \$257,245 over 3 years

### **Effect of Obesity-Associated Inflammation on the Maternal-Fetal Interface in Early Pregnancy**

Dr. Alexander Beristain, University of British Columbia  
Approved funding: \$299,385 over 3 years

### **Ilagiinut: Collaborative Mental Health Care from Communities, to Professionals, to Policy Change for Inuit of Canada**

Dr. Sarah Fraser, University of Montreal  
Approved funding: \$283,288 over 3 years

### **Effects of Prenatal Distress and Nutrition on Neurodevelopment and Neuroendocrine Function in Preschoolers**

Dr. Gerry Giesbrecht, University of Calgary  
Approved funding: \$299,454 over 3 years

**Role of B Cells in Celiac Disease**

Dr. Valerie Abadie, CHU Sainte-Justine Research Centre

Approved funding: \$292,116 over 3 years

**Thymic Imprinting of T effector Function Throughout Ontogeny**

Dr. Heather Melichar, Hôpital Maisonneuve-Rosemont

Approved funding: \$300,000 over 3 years

**2013 - 2014**

**Multicentre Schroth Exercise Trial for Scoliosis (Multicentre SETS study)**

Dr. Eric Parent, University of Alberta

Approved funding: \$300,000 over 3 years

**Transcranial Direct Current Stimulation (tDCS) for Depression in Pregnancy**

Dr. Simone N. Vigod, Women's College Hospital

Approved funding: \$113,274 over 2 years

**Childhood Nutritional and Bacterial Stresses Dictate Obesity-Driven Disease**

Dr. Jonathan D. Schertzer, McMaster University

Approved funding: \$300,000 over 3 years

**Early Detection and Neurodevelopment Impact of Late Onset IUGR**

Dr. Mike Seed, The Hospital for Sick Children

Approved funding: \$298,390 over 3 years

**Incidence of Altered Craniofacial Morphology and Malocclusion in Children and Youth with Obstructive Sleep Apnea**

Dr. Nelly Huynh, University of Montreal

Approved funding: \$280,712 over 3 years

**Learning and reinforcement in adolescents with Autism Spectrum Disorder**

Dr. Signe Bray, University of Calgary

Approved funding: \$ 296,080 over 3 years

**2012 – 2013**

**Understanding Voltage-Grated Sodium Channel Related Cardiomyopathy**

Dr. Elod Szabo, the Hospital for Sick Children

Approved funding: \$299,981 over 3 years

**What are the Mental Health Service Needs of Youth in Northern Ontario**

Dr. Chiachen Cheng, St. Joseph's Care Group Thunder Bay

Approved funding: \$298,614 over 3 years

**Early Identification of Asphyxiated Newborns at Risk of Developing Significant Brain Injury despite Hypothermia Treatment**

Dr. Pia Wintermark, McGill University Health Research Institute

Approved funding: \$300,000 over 3 years

**Prevalence and Healthcare Utilization Pattern of Children with Cerebral Palsy**

Dr. Maryam Oskoui, McGill University Health Research Institute

Approved funding: \$205,140 over 3 years

**(Co) Producing Help-Seeking Narratives with Children of Parents with Mental Illnesses**

Dr. Brenda Gladstone, the Hospital for Sick Children

Approved funding: \$178,219 over 2 years

**Interrogation of SLC6A14 as a Modifier for Drug Treatment in CF disease**

Dr. Tanja Gonska, the Hospital for Sick Children

Approved funding: \$299,172 over 3 years

**2011 – 2012**

**Pathways from Early Childhood Behaviour and Development to Adolescent Depression**

Dr. Ian Coleman, University of Alberta

Approved funding: \$282,491 over 3 years

**The Glycocalyx During Vascular Development**

Dr. Elizabeth Jones, McGill University

Approved funding: \$296,679 over 3 years

**Enhancing CD8 T Cell Responses to RSV (Respiratory Syncytial Virus)**

Dr. Theo Moraes, The Hospital for Sick Children

Approved funding: \$300,000 over 3 years

**Reversibility of Neurobehavioural Deficits Associated with Manganese Exposure From Drinking Water**

Dr. Maryse Bouchard, CHU Sainte-Justine Research Centre

Approved funding: \$296,708 over 3 years

**2010 – 2011**

**Targetting Aurora Kinase A in Paediatric Sarcomas**

Dr. Christopher Maxwell, University of British Columbia

Approved funding: \$307,064 over 3 years

**A Multi-Model Approach to a Family-Centred Educational Program of Developmental Care for Preterm Infants: Development and Implementation**

Dr. Thuy Mai Luu, University of Montreal

Approved funding: \$311,124 over 3 years

**Autism Comes to the Hospital: Experiences of Hospital Care**

Dr. Barbara Muskat, The Hospital for Sick Children

Approved funding: \$190,000 over 3 years

**2009 – 2010**

**Diffusion Tensor Imaging Assessment of White Matter Injury in Children with Non-Lesional Intractable**

Dr. Elysa Widjaja, The Hospital for Sick Children

Approved funding: \$289,043 over 3 years

**Spatial Navigation and the Brain During Normal Development**

Dr. Jason Lerch, The Hospital for Sick Children

Approved funding: \$432,619 over 3 years

**Identification of a Gene for Joubert Syndrome**

Dr. Kym Boycott, Children's Hospital of Eastern Ontario

Approved funding: \$300,966 over 3 years

**Nonconvulsive Seizures Among Critically Ill children**

Dr. Cencil Hahn, The Hospital for Sick Children

Approved funding: \$431,694 over 3 years

**2008 – 2009**

**3-D Facial Reconstruction: Positive Identification of Missing Children of Canadian Aboriginal Ancestry and Fostering Self-Worth within Aboriginal Youth**

Dr. Tanya Peckmann, St. Mary's University

Approved funding: \$75,750 over 2 years

**Effect of Omega-3 Fatty Acids on Th2 Immunity**

Dr. Lisa Cameron, University of Alberta

Approved funding: \$120,000 over 2 years

**Innate Immune Defences in Neonates Born Early in Gestation**

Dr. Pascal Lavoie, British Columbia's Children Hospital

Approved funding: \$129,840 over 2 years

**Characterizing a new AE1 mutant causing HS and dRTA**

Dr. Emmanuelle Cordat, University of Alberta

Approved funding: \$126,730 over 2 years

**Signalling Mechanisms of Childhood Kidney Disease**

Dr. Nina Jones, University of Guelph

Approved funding: \$128,800 over 2 years

**The Molecular Mechanisms of Programming in the Liver**

Dr. Daniel Hardy, University of Western Ontario

Approved funding: \$130,000 over 2 years

**SMARCAL1 Modulated Pathways**

Dr. Cornelius Boerkoel, University of British Columbia

Approved funding: \$130,000 over 2 years

**Returning to Activities after a Mild Traumatic Brain Injury in Children and Adolescents**

Dr. Isabelle Gagnon, The Montreal Children's Hospital

Approved funding: \$129,200 over 2 years

**The Study of Familial Infantile Seizures in First Nation Children of British Columbia**

Dr. Michelle Demos, British Columbia's Children's Hospital

Approved funding: \$169,985 over 2 years

**Maternal Obesity causes Fetal and Neonatal Mitochondrial Dysfunction: Implications for Childhood Obesity**

Dr. Sandeep Raha, McMaster University

Approved funding: \$129,995 over 2 years

**The Canadian Triage and Acuity Scale for Children; A Prospective Multi-Center Evaluation**

Dr. Jocelyn Gravel, Sainte Justine Hospital

Approved funding: \$128,500 over 2 years

**2007 – 2008**

**Breastfeeding Analgesia in Preterm Infants**

Dr. Liisa Holsti, University of British Columbia

Approved funding: \$103,888 over 2 years

**Development of a Neonatal Pertussis Vaccine: One Shot for Life**

Dr. Tobias Kollmann, University of British Columbia

Approved funding: \$129,000 over 2 years

**Young Infants with Acute Recurrent Wheezing-To Puff or Not to Puff? A Randomized Controlled Trial**

Dr. Hartmut Grasmann, The Hospital for Sick Children

Approved funding: \$130,000 for 2 years

**Quantitative MRI of angiogenesis and cellularization in tissue regeneration**

Dr. Hai-Ling Margaret Cheng, The Hospital for Sick Children

Approved funding: \$129,223 for 2 years

**Presurgical assessment of motor function in children**

Dr. William Gaetz, The Hospital for Sick Children

Approved funding: \$128,444 for 2 years

**Palmitoylation of the Lysosomal Sorting Receptors**

Dr. Stephane Lefrancois, Hopital Maisonneuve-Rosemont

Approved funding: \$129,894 over 2 years

**Short Bowel Syndrome Neonatal Piglet Models**

Dr. Justine Turner, University of Alberta, Dr. Justine Turner, University of Alberta

Approved funding: \$125,380 over 2 years

**Genetic Basis of Neural Tube Defects**

Dr. Zoha Kibar, Sainte Justine Hospital

Approved funding: \$130,000 over 2 years

**Periodontal Disease and its Relation with Microbial Invasion of Amniotic Cavity (MIAC) and Spontaneous Preterm Birth or PPROM Prior to 34 Weeks' Gestation**

Dr. Emmanuel Bujold, Laval University

Approved funding: \$127,254 over 2 years

**Using Spinal Cord as a Model to Study Neuronal Migration Disorder**

Dr. Artur Kania, Clinical Research Institute of Montreal

Approved funding: \$130,000 over 2 years

**Globus Pallidus Deep Brain Stimulation in Children with Dystoni**

Dr. Teesta Soman, The Hospital for Sick Children

Approved funding: \$118,617 over 2 years

**Severe Influenza in Children: Genetic Determinants and Related Epidemiology**

Dr. Dat Tran, The Hospital for Sick Children

Approved funding: \$129,926 over 2 years

**2006 – 2007**

**Randomized Controlled Trial of Cast Versus Splint in Children with Acceptably Angulated Wrist Fractures**

Dr. Kathy Boutis, The Hospital for Sick Children

Approved funding: \$129,775 over two years

**Cognitive Orientation to Occupational Performance (CO-OP): A New Approach for Children with Cerebral Palsy**

Dr. Debra Cameron, University of Toronto

Approved funding: \$78,964 over two years

**Placental Steroids & Respiratory Control Development**

Dr. Vincent Joseph, Centre Hospitalaire-Universitaire du Quebec (CHUQ)

Approved funding: \$129,464 over two years

**Imaging and Genetic Strategies in Paediatric Major Depressive Disorder**

Dr. John Strauss, University of Toronto

Approved funding: \$130,000 over two years

**Auditory Development Promoted by Bilateral Cochlear Implantation**

Dr. Karen Gordon, The Hospital for Sick Children

Approved funding: \$130,000 over two years

**Role of FLVCR1 in Diamond Blackfan Anemia**

Dr Chetankumar Tailor, The Hospital for Sick Children

Approved funding: \$82,322 over two years GIFTS ways \$82,322

**Functional Regulation of Thromboxane Receptor in Hypoxic Myocytes**

Dr. Shyamala Dakshinanmurti, University of Manitoba

Approved funding: \$129,875 over two years

**The Progression of Brain Injury in Term Newborns with Encephalopathy**

Dr. Steven Miller, University of British Columbia

Approved funding: \$130,000 over two years

**The Hypotonic Versus Isotonic Parenteral (HIP) Fluid Study, a Randomized Controlled Trial**

Dr. Steven Aurora, McMaster University

Approved funding: \$130,000 over two years

**Prevention of cisplatin ototoxicity in cancer patients**

Dr. Sam Daniel, Montreal Children's Hospital

Approved funding: \$129,880 over two years

**The Efficacy of an Intelligent Prompting System to Develop Self-Care Activities in Children with Autism**

Dr. Alex Mihailidis, University of Toronto

Approved funding: \$129,470 over two years

**Effects of Right Ventricular Intra-ventricular Mechanical Dyssynchrony on Right and Left Ventricular Dysfunction in Tetralogy of Fallot**

Dr. Mark Friedberg, The Hospital for Sick Children

Approved funding: \$108,766 over two years

**Breastfeeding Analgesia in Preterm Infants**

Dr. Liisa Holsti, University of British Columbia

Approved funding: \$103,888 over two years

**Development of a Neonatal Pertussis Vaccine: One Shot for Life**

Dr. Tobias Kollmann, University of British Columbia

Approved funding: \$129,000 over two years



**Young Infants With Acute Recurrent Wheezing-To Puff or Not to Puff? A Randomized Controlled Trial**

Dr. Hartmut Grasmann, The Hospital for Sick Children

Approved funding: \$130,000 over two years

**Quantitative MRI of Angiogenesis and Cellularization in Tissue Regeneration**

Dr. Hai-Ling Margaret Cheng, The Hospital for Sick Children

Approved funding: \$129,223 over two years

**Presurgical Assessment of Motor Function in Children**

Dr. William Gaetz, The Hospital for Sick Children

Approved funding: \$128,445 over two years

**2005 – 2006**

**Role of Osteopontin in Inflammatory Colitis**

Dr. Ron Zohar, University of Toronto,

Approved funding: \$115,796 over two years

**Functional Genomic Dissection of the Initiation and Progression of Medulloblastoma**

Dr. Michael Taylor, SickKids Hospital

Approved funding: \$130,000 over two years

**Improvement of ICU Therapeutics during Mechanical Ventilation**

Dr. George Hatzakis, Hôpital Sainte-Justine Centre de Recherche

Approved funding: \$120,060 over two years

**Early Detection of Brain Injury by Measuring Cerebral Oxygen**

Dr. Keith St. Lawrence, Lawson Health Research Institute

Approved funding: \$126,635, over two years

**A Cognitive Intervention for Children with Asperger's Syndrome: A Pilot RCT**

Dr. Angela Mandich, The University of Western Ontario

Approved funding: \$112,493, over two years

**Investigation of Placental Insufficiencies Caused by Caspase 8 Disruption**

Dr. Andrea Jurisicova, Mount Sinai Hospital

Approved Funding: \$130, over two years

**Mechanistic Analysis of the Oncoenic Role of EAR-2 in Leukaemia**

Dr. Richard Wells, Sunnybrook and Women's College Research Institute

Approved funding: \$130,000 over two years

**Examination of the Respiratory Coronaviruses Group-specific Genes**

Dr. Brian Lichty, McMaster University

Approved funding: \$130,000 over two years

**Role of Innate Immunity and Toll-Like Receptor Signalling in Protecting Children from Severe Pneumococcal Infections**

Dr. Stuary Turvey, British Columbia's Children's Hospital

Approved funding: \$127,000 over two years

**Regulation of the Germinal Centre Response by TNF Family Members**

Dr. Jennifer Gommerman, University of Toronto

Approved funding: \$130, over two years

**Predictors for Diagnostically Accurate Ultrasound in Children with Suspected Appendicitis,**

Dr. Andrea Doria, The Hospital for Sick Children

Approved funding: \$128,783 over two years

**SBDS in Granulopoiesis,**

Dr. Yigal Dror, The Hospital for Sick Children

Approved funding: \$128,960 over two years

**Correcting Purine Nucleoside Phosphorylase (PNP) Deficiency Using Lenti-Virus Mediated Human PNP Gene Delivery Into Hematopoietic Stem Cells,**

Dr. Eyal Grunebaum, The Hospital for Sick Children,

Approved funding: \$130,000 over two years

**The Critical Illness Impact Scale for Young Children, Dr. Janet Rennick**

McGill University Health Centre Research Institute

Approved funding: \$128,145 over two years

**Brain Growth and Development in the Fetus with Congenital Heart Disease,**

Dr. Catherine Limperopoulos, McGill University

Approved funding: \$129,970 over two years

**2004 – 2005**

**A Novel Noninvasive Marker of Asthma Airway Inflammation: Urine NMR**

Dr. Darryl J. Adamko, University of Alberta

Approved funding: \$130,000 over two years

**Phosphatidylinositol 3-kinase Sub-pathways in Allergic Sensitization and Asthma**

Dr. Aaron J. Marshall, University of Manitoba

Approved funding: \$130,000 over two years

**Early Life Stress and Asthma, Dr. Harissios Vliagoftis,**

University of Alberta

Approved funding: \$130,000 over two years

**Cell Death Signaling Pathways Controlled by ATRX**

Dr. Nathalie Bérubé, University of Western Ontario

Approved funding: \$130,000 over two years

**Role of Fanconi Anemia Proteins in Development**

Dr. Madeleine Carreau, CHUQ-Hôpital St-François d'Assise

Approved funding: \$128,918 over two years

**Exposure to Hyperhomocysteinemia During Development and Epigenetic Regulation of Vascular Gene Expression**

Dr. Angela M. Devlin, British Columbia Research Institute for Children's and Women's Health

Approved funding: \$106,000 over two years

**PSA-NCAM in Enteric Nervous System,**

Dr. Christophe Faure, Sainte-Justine Hospital

Approved funding: \$130,000 over two years

**Regulation of Muscle Progenitor Cells in Response to Muscle Damage**

Dr. Thomas J. Hawke, York University

Approved funding: \$130,000 over two years

**Evaluating Children's Roles in the Governance of a Paediatric Hospital: The Perceived Impact of a Children's Council**

Dr. Donna Koller, SickKids Hospital

Approved funding: \$97,145 over two years

**The Determinants of Health in Children with Hydrocephalus,**

Dr. Abhaya V. Kulkarni, SickKids Hospital

Approved funding: \$94,536 over two years

**Novel Signaling Pathways in Neutrophil Degranulation,**

Dr. Paige Lacy, University of Alberta

Approved funding: \$130,000 over two years

**GSK3 $\beta$  Signalling in Coxsackievirus-Induced Myocardial Injury,**

Dr. Honglin Luo, University of British Columbia

Approved funding: \$130,000 over two years

**Dissection of the Developing Program of the Hypothalamus,**

Dr. Jacques Michaud, Hôpital Sainte-Justine Centre de Recherche

Approved funding: \$129,298 over two years

**Are Executive Dysfunctions in Autism Reflected in Altered Coordination Dynamics of Brain Activity?**

Dr. Jose Luis Perez Velazquez, SickKids Hospital

Approved funding: \$129,290 over two years

## **2003 – 2004**

### **Induction of Innate Immunity Against Genital HSV-2 Infection via TLR3 Signaling**

Dr. Ali A. Ashkar, McMaster University

Approved funding: \$120,500 over two years

### **Regulation of MafF by Cytokines in Uterus and Placenta**

Dr. Volker Blank, Lady Davis Institute for Medical Research/Jewish General Hospital

Approved funding: \$81,600 over two years

### **The Roles of Arginine, Nitric Oxide and Blood Flow in Small Intestinal Adaptation in the Neonatal Piglet**

Dr. Janet Brunton, Memorial University of Newfoundland

Approved funding: \$116,713 over two years

### **Reliability Study of Non-Invasive Assessment of the 3-D Trunk Asymmetry in Adolescent Idiopathic Scoliosis**

Dr. Farida Cheriet, Hôpital Sainte-Justine Centre de Recherche

Approved funding: \$129,680 over two years

### **A Prevention Strategy to Reduce the Incidence of Injury in High School Sport: A Cluster Randomized Clinical Trial**

Dr. Carolyn Emery, University of Calgary

Approved funding: \$78,960 over two years

### **The Search for an Optimal Bladder Substitute**

Dr. Walid Farhat, The Hospital for Sick Children

Approved funding: \$130,000 over two years

### **The Role of the Zinc Finger Transcription Factor Krox-26 in Developmental Defects of Tooth and Enamel Formation**

Dr. Bernhard Ganss, University of Toronto

Approved funding: \$86,300 over two years

### **Pain Behaviours in Extremely Low Birth Weight Infants**

Dr. Sharyn Gibbins, Sunnybrook & Women's College Health Sciences Centre

\$91,838 over two years

### **Illness to Wellness: Building Health Capacity for Youth with Spinal Cord Injuries**

Dr. Donna Goodwin, University of Saskatchewan

Approved funding: \$49,950 over two years

### **High Affinity Receptor of IgE (FcεRI) in Airway Smooth Muscle Cells**

Dr. Abdelilah Soussi Gounni, University of Manitoba

Approved funding: \$130,000 over two years

**Perinatal Steroids are Necessary for the Normal Development of the Respiratory Controller Network**

Dr. Vincent Joseph, Centre hospitalier universitaire du Quebec (CHUQ)

Approved funding: \$72,769 over two years

**Neuroimaging and Cognitive Function in Children with Brain Tumors**

Dr. Donald J. Mabbott, The Hospital for Sick Children

Approved funding: \$129,395 over two years

**Understanding Respiratory and Mucosal Allergy Using an Ex Vivo Lymph Node Model**

Dr. Bruce Mazer, McGill University

\$129,176 over two years

**Improving the Effectiveness of Brace Treatment for Adolescent Scoliosis**

Dr. Marc J. Moreau, University of Alberta

Approved funding: \$76,640 over two years

**Role of Oxidative Stress in Utero Programming of Hypertension**

Dr. Anne Monique Nuyt, Hôpital Sainte-Justine

Approved funding: \$129,910 over two years

**Effect of Postural Control Devices for Preschoolers on Child Performance, Family Functioning and Caregiver Assistance**

Mr. Stephen Ryan, Bloorview MacMillan Centre

Approved funding: \$104,860 over two years

**Epigenetic Approaches to Identifying Autism Susceptibility Genes**

Dr. John B. Vincent, Centre for Addiction and Mental Health

Approved funding: \$129,550 over two years

**Bone Mass and Growth Following Necrotizing Enterocolitis**

Dr. Wendy Ward, University of Toronto

Approved funding: \$86,236 over two years