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, Universite 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 Heath 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 Srour, 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 Grasemann, 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 Dystonia
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 Hospitale-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 GfITS 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 cisplatinum 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 Grasemann, 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 Gommmerman, 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

GSK3β 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 (FceRI) 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 Nuys, 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