

**Résultats de la 2e ronde de financement 2020-2022 du RCS : Programme
d'accélération de la translation clinique**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|---|-----------------------|
| <p>Lucie Germain, Université Laval (ULaval)</p> <p>Manuel Caruso (ULaval), Bartha Knoppers (McGill University), Elena Pope (The Hospital for Sick Children)</p> | <p>Towards an epidermolysis bullosa clinical trial with tissue-engineered skin after ex vivo gene therapy correction</p> | <p>400 000 \$</p> |
| <p>Guy Sauvageau, Université de Montréal (UMontréal), Hôpital Maisonneuve-Rosemont (HMR)</p> <p>Vincent-Philippe Lavallée (UMontréal), Peter Zandstra (University of British Columbia), Silvy Lachance (HMR)</p> | <p>Bone marrow stem cell expansion with UM171: a better solution for patients and donors</p> | <p>400 000 \$</p> |
| <p>James Shapiro, University of Alberta (UAlberta)</p> <p>Gregory Korbitt (UAlberta), Patrick MacDonald (UAlberta), Colin Anderson (UAlberta), Jean Buteau (UAlberta), Andrew Pepper (UAlberta), Timothy Kieffer (University of British Columbia)</p> | <p>Autologous Patient-derived Islets from Induced Pluripotent Stem Cells (iPSC): The Next Generation Diabetes Therapy</p> | <p>400 000 \$</p> |
| <p>Glen Tibbits, Simon Fraser University, BC Children's Hospital Research Institute</p> <p>Filip Van Petegem (University of British Columbia), Shubhayan Sanatani (University of British Columbia), Francis Lynn (University of British Columbia), SR Wayne Chen, (University of Calgary), Mu Chiao (University of British Columbia), Zachary Laksman (University of British Columbia), Patrice Eydoux (BC Children's Hospital Research Institute), Leif Hove-Madsen (Institut d'investigacions Biomèdiques de Barcelona)</p> | <p>Developing a hiPSC-CM based model for personalized treatment of catecholaminergic polymorphic ventricular tachycardia (CPVT)</p> | <p>399 950 \$</p> |
| <p>Ann Yeh, The Hospital for Sick Children (SickKids), University of Toronto</p> | <p>Pharmacological recruitment of endogenous neural precursors to</p> | <p>399 997 \$</p> |

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| Donald Mabbott (SickKids), Douglas Munoz (Queen's University), Freda Miller (SickKids), David Kaplan (SickKids), Cindi Morshead, (University Health Network), Jing Wang (Ottawa Hospital Research Institute), Paul Frankland (SickKids), Wolfram Tetzlaff (University of British Columbia), Jiwon Oh (St. Michael's Hospital), Giulia Longoni (SickKids) | promote white matter repair in MS | |
| J.C. Zúñiga-Pflücker , Sunnybrook Research Institute Donna Wall (The Hospital for Sick Children), Jonas Mattsson (Princess Margaret Cancer Centre) | Production of progenitor T cells for immune-reconstitution and targeted immunotherapies (ProTImm) | 400 000 \$ |

Résultats de la 2e ronde de financement 2020-2022 du RCS : Programme de soutien des partenariats biotechnologiques

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|--|-----------------------|
| Bernard Thébaud , Ottawa Hospital Research Institute (OHRI), University of Ottawa, Children's Hospital of Eastern Ontario (CHEO) Sarah Wootton (University of Guelph), Dean Fergusson (OHRI), Rénaud Gilbert (National Research Council Canada), Parminder Chahal (National Research Council Canada), John Bell (OHRI), Amine Kamen (McGill University), Larry Nogee (John Hopkins University School of Medicine), Jeffrey Whitsett (University of Cincinnati), Alice Tarantal (UC Davis School of Medicine), Michael Jamieson (OHRI), Hartmut Grasmann (University of Toronto), Nicolaus Schwerk (Hannover Medical School), Matthias Griese (Ludwig-Maximilian Universität), Kednapa Thavorn (OHRI) | AAVenger: Adeno-Associated Virus Engineered Gene Epithelial progenitor cell Regeneration | 364 000 \$ |
| Peter Zandstra , University of British Columbia (UBC) | Enabling a platform for customized pluripotent stem cell derived T-cell therapies | 350 000 \$ |

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| Robert Holt (UBC), David Knapp (Université de Montréal), J.C. Zúñiga-Pflücker (Sunnybrook Research Institute), Christopher Sturgeon (Washington University School of Medicine) | | |
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Résultats de la 2e ronde de financement 2020-2022 du RCS : Programme de soutien à la recherche innovante pour les chercheurs en début de carrière

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|---|-----------------------|
| Natasha Chang , McGill University Imed Gallouzi (McGill University), Jerry Pelletier (McGill University), Gerald Pfeffer (University of Calgary) | Targeting muscle stem cells to enhance endogenous repair in Duchenne muscular dystrophy | 150 000 \$ |
| Jessica Esseltine , Memorial University of Newfoundland Kathleen Hodgkinson (Memorial University of Newfoundland), Terry-Lynn Young (Memorial University of Newfoundland), Darren O’Rielly (Eastern Health Molecular Genetics Lab), Sean Connors (Memorial University of Newfoundland), Bruno Stuyvers (Memorial University of Newfoundland) | A personalized, translational approach to understanding inherited Arrhythmogenic Right Ventricular Cardiomyopathy in Newfoundland | 150 000 \$ |
| Mireille Khacho , University of Ottawa (UOttawa) Jodi Warman (UOttawa), Mary-Ellen Harper (UOttawa), Julie St. Pierre (UOttawa), William Stanford (UOttawa), Michael Rudnicki (UOttawa), Valentina Perissi (Boston University) | Mitochondrial dynamics as a therapeutic target for muscle stem cells in muscle wasting diseases | 150 000 \$ |
| Yun Li , The Hospital for Sick Children (SickKids) Julien Muffat (SickKids), Michael Wilson (SickKids), Lu-Yang Wang (SickKids) | Engineering an organoid model of the hippocampal neurogenic niche for basic and translational research | 150 000 \$ |
| Stephanie Protze , McEwen Stem Cell Institute, University Health Network | Developing stem cell-based biological pacemakers for | 150 000 \$ |

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| Zachary Laksman (University of British Columbia), Michael Laflamme (University Health Network), Gary Bader (University of Toronto), Igor Efimov (George Washington University) | patients with sick sinus syndrome | |
| Jo Anne Stratton , McGill University Tom Durcan (McGill University), Luke Healy (McGill University) | Human iPSC ependymal cells: An innovative model to study human brain in health and disease | 150 000 \$ |
| Amy Wong , The Hospital for Sick Children (Sickkids) Sidhartha Goyal (University of Toronto), Brent Stead (Specific Biologics Inc.) | Elucidating the role of CFTR in human fetal lung lineage development | 150 000 \$ |

Résultats de la 2e ronde de financement 2020-2022 du RCS : Programme de soutien à la translation de la recherche au profit de la société

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|---|--|-----------------------|
| Bernard Thébaud , Ottawa Hospital Research Institute (OHRI), University of Ottawa, Children’s Hospital of Eastern Ontario (CHEO) Manoj Lalu (OHRI), Kelly Cobey (OHRI), Jacques Galipeau (University of Wisconsin-Madison), Donald G. Phinney (The Scripps Research Institute), Douglas Sipp (Keio University), Michael Matthay (University of California), Tania Bubela (Simon Fraser University), Michael Rosu-Myles (Health Canada), Dean Fergusson (OHRI), David Moher (OHRI), Jeremy Grimshaw (OHRI) | Clearing-up the stem-cell-mess: Delphi-based definition and reporting guidelines to improve transparency in MSC research | 175 000 \$ |

Résultats de financement : L'intervention de recherche rapide du RCS contre la COVID-19

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|---|-----------------------|
| <p>Duncan Stewart, Ottawa Hospital Research Institute (OHRI)</p> <p>Dean Fergusson (OHRI), Shane English (OHRI), Manoj M. Lalu (OHRI), Bernard Thébaud (OHRI), David Courtman (OHRI)</p> | <p>Cellular Immuno-Therapy for COVID-19 induced Acute Respiratory Distress Syndrome: the CIRCA-19 Trial</p> | 300 000 \$ |
| <p>William Stanford, Ottawa Hospital Research Institute (OHRI)</p> <p>Amy Wong (The Hospital for Sick Children), Molly Shoichet (University of Toronto), Stephen Juvet (University of Toronto), Samira Mubareka (Sunnybrook Research Institute), Scott Gray-Owen (University of Toronto), Mitchell Sabloff (OHRI)</p> | <p>Identifying and targeting pulmonary and immune mechanisms in COVID-19 using human stem cell derived lineages</p> | 195 870 \$ |
| <p>Julien Muffat, The Hospital for Sick Children (SickKids)</p> <p>Yun Li (SickKids), Samira Mubareka (Sunnybrook Research Institute), Scott Gray-Owen (University of Toronto), Jason Moffat (University of Toronto), Louis Flamand (CHU de Québec-Université Laval)</p> | <p>Investigating the role of inflammatory responses in neurological effects of COVID-19, using patient-derived stem cell models</p> | 180 000 \$ |

Publié en avril 2020

**Résultats de la première ronde de financement 2019-2022 du RCS :
Accélération de la transposition clinique**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|---|--|-----------------------|
| <p>Zachary Laksman, University of British Columbia (UBC)</p> <p>Gordon Keller (University Health Network) Glen Tibbits (UBC), Liam Brunham (UBC), David Vocadlo (Simon Fraser University), Francis Lynn (UBC), Lior Gepstein (Technion – Israel Institute of Technology), Patrick Boyle (University of Washington), Shubhayan Sanatani (BC Children’s Hospital Research Institute)</p> | <p>Pipeline Towards Stem Cell Driven Personalized Medicine for Atrial Fibrillation</p> | <p>586 000 \$</p> |
| <p>Michael Laflamme, McEwen Stem Cell Institute, University Health Network (UHN)</p> <p>Nilesh Ghugre (Sunnybrook Research Institute), Graham Wright (Sunnybrook Research Institute), Gordon Keller (UHN), Ren-Ke Li (UHN), Terrence Yau (UHN), Kumaraswamy Nanthakumar (UHN), Lior Gepstein (Technion – Israel Institute of Technology), Matthew Kay (George Washington University)</p> | <p>Heart Regeneration with Mature Ventricular Cardiomyocytes from Human Pluripotent Stem Cells</p> | <p>599 685 \$</p> |
| <p>M. Cristina Nostro, McEwen Stem Cell Institute, University Health Network (UHN), University of Toronto</p> <p>Greg Korbitt (University of Alberta), Andrew Pepper (University of Alberta), Esme Dijke (University of Alberta), James Shapiro (University of Alberta), Joanna Preston (TEC Edmonton), Atul Humar (UHN)</p> | <p>Co-localized hiPSC-derived Beta Cells and Immunosuppression-loaded Micelles as a Novel Approach for T1D Treatment</p> | <p>600 000 \$</p> |
| <p>Bruce Verchere, University of British Columbia (UBC)</p> | <p>Genetic Manipulation of hES-derived Insulin-producing Cells to Improve Graft Outcomes</p> | <p>600 000 \$</p> |

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| Francis Lynn (UBC), Megan Levings (UBC), Tim Kieffer (UBC), Dina Panagiotopoulos (UBC), Brad Hoffman (UBC), Greg Korbutt (University of Alberta) | | |
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**Résultats de la première ronde de financement 2019-2022 du RCS :
Partenariats biotechnologiques**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|--|--------------------------|
| <p>Gilbert Bernier, Hôpital Maisonneuve-Rosemont (HMR), Université de Montréal (UMontréal)</p> <p>May Griffith (HMR), Jean-François Bouchard (UMontréal), Stéphane Faubert (St-Hyacinthe Veterinary School), Cynthia Qian (HMR), Flavio Rezende (HMR)</p> | Photoreceptor Transplantation for the Treatment of Retinal Degenerative Diseases | 500 000 \$ |
| <p>Tim Kieffer, University of British Columbia (UBC)</p> <p>Corinne Hoesli (McGill University), James Piret (UBC), Megan Levings (UBC), Steven Paraskevas (The Research Institute of McGill University Health Centre), Richard Leask (McGill University), Patrick MacDonald (University of Alberta)</p> | A Bioprinted Insulin-Producing Device for Diabetes | 500 000 \$ |
| <p>Massimiliano Paganelli (CHU-Sainte-Justine, Université de Montréal (UMontréal))</p> <p>Christopher Rose (UMontréal), Michel Lallier (CHU-Sainte-Justine), Constantine Karvellas (University of Alberta), Siofradh McMahon (CCRM)</p> | iPSC-derived Encapsulated Liver Tissue to Treat Acute Liver Failure: Pivotal Confirmation in Large Animals | 500 000 \$ |

**Résultats de la première ronde de financement 2019-2022 du RCS :
Avancement des essais cliniques**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|---|-----------------------|
| <p>Sandra Cohen, Hôpital Maisonneuve-Rosemont (HMR), Université de Montréal (UMontréal)</p> <p>Jean-Sébastien Delisle (HMR), Gizelle Popradi (McGill University Hospital Center), Frédéric Barabé (Centre de recherche CHU de Québec-Université Laval), Nadia Bambace (HMR), Léa Bernard (HMR), Guy Sauvageau (UMontréal), Josée Hébert (UMontréal), Filippo Milano (Fred Hutchinson Cancer Research Center), Peter Zandstra (University of British Columbia), Sébastien Lemieux (UMontréal), Gabriel Tremblay (Purple Squirrel Economics), Lambert Busque (HMR), Denis-Claude Roy (HMR)</p> | <p>UM171-Expanded Cord Blood Grafts Offer Potential Cure for Very High-Risk Leukemia Patients</p> | <p>1 000 000 \$</p> |
| <p>Lucie Germain, Université Laval (ULaval)</p> <p>François A. Auger (ULaval), Bartha M. Knoppers (McGill University), Richard Bazin (ULaval), Isabelle Brunette (UMontréal), Allan Slomovic (Toronto Western Hospital), Mohib Morcos (McGill University), Michel Ouellet (Patient representative), Charles Giguère (Centre de recherche de l'Institut universitaire en santé mentale de Montréal)</p> | <p>Cultured Epithelial Corneal Autografts for the Treatment of Canadians with Limbal Stem Cell Deficiency</p> | <p>500 000 \$</p> |
| <p>Véronique Moulin, Université Laval (ULaval)</p> <p>François A. Auger (ULaval), Lucie Germain (ULaval), Bartha M. Knoppers (McGill University), Isabelle Perreault (CHU-Sainte-Justine), Sarvesh Logsetty (Winnipeg Burn Unit), Ariane Bussière (Québec Burn Unit), Patricia Bortoluzzi (CHU-Sainte-Justine), Vince Gabriel (Calgary Firefighter Burn Treatment Centre), Duncan Nickerson (Calgary Firefighter Burn Treatment Centre), Sally Hynes (BC Children's Hospital Research Institute), Edward Tredget (Walter C. Mackenzie Health Sciences Centre), Josh Wong (Walter C. Mackenzie Health Sciences Centre), Peter Kwan</p> | <p>Self-Assembly Skin Substitutes (SASS) for the Treatment of Acute Wounds of Canadian Burn Patients</p> | <p>470 645 \$</p> |

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| (Walter C. Mackenzie Health Sciences Centre), Joel Fish (The Hospital for Sick Children), Claudia Malik (Children's Hospital of Eastern Ontario), Marc Jeschke (Sunnybrook Research Institute), Sue-Ling Chang (Patient representative) | | |
| Bernard Thébaud , Ottawa Hospital Research Institute (OHRI), University of Ottawa (UOttawa), Children's Hospital of Eastern Ontario (CHEO) Dean Fergusson (OHRI), Justin Presseau (UOttawa), Kednapa Thavorn (UOttawa), Brigitte Lemyre (CHEO), Mario Ruediger (Technische Universität Dresden), Nadya Ben Fadel (CHEO), Robert Jankov (CHEO), Jana Feberova (CHEO), David Courtman (OHRI) | HULC-I: Helping Underdeveloped Lungs with Mesenchymal Stromal Cells – A phase I Trial | 638 150 \$ |

**Résultats de la première ronde de financement 2019-2022 du RCS :
Application et société**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|--|-----------------------|
| Bartha M. Knoppers , McGill University Christine Bear (The Hospital for Sick Children), Felix Ratjen (The Hospital for Sick Children), Amy Wong (The Hospital for Sick Children), Paul Eckford (The Hospital for Sick Children), Elizabeth Stephenson (The Hospital for Sick Children), Michael Szego (University of Toronto), Julie Fradette (Université Laval), Mark Rothstein (University of Louisville School of Medicine) | Ethical and Legal Framework for <i>Direct-to-Participant</i> (DTP) Recruitment | 75 000 \$ |

**Résultats de la première ronde de financement 2019-2022 du RCS :
Recherche innovante**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|---|--|-----------------------|
| Florian Bentzinger , Université de Sherbrooke (USherbrooke) Eric Marsault (USherbrooke), Penney Gilbert (University of Toronto), Mannix Auger-Messier (USherbrooke), Ubaka Ogbogu (University of Alberta), Jerome Feige (Nestlé Research), Nicolas Dumont (CHU-Sainte-Justine), Alison McGuigan (University of Toronto) | Targeting Endogenous Repair: A Novel Mutation Independent Pharmacological Approach for Treatment of Muscular Dystrophy | 330 000 \$ |

Sommaire du résultats de la première ronde de financement 2019-2022 du RCS

| Demandes reçues | Demandes dont l'acceptation recommandée | Pourcentage d'acceptation des demandes | Investissement total |
|-----------------|---|--|----------------------|
| 37 | 13 | 35% | 6,9 M\$ |

Publié en mars 2020

Résultats de financement 2018-2019 du RCS : Essais cliniques

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|---|---|-----------------------|
| Jean Roy , Hôpital Maisonneuve-Rosemont (HMR) Guy Sauvageau (UMontréal), Jean-Sebastien Delisle (HMR), Richard Leblanc (HMR), Sandra Cohen (HMR), Silvy Lachance (HMR), Imran Ahmad (HMR), Émilie Lemieux-Blanchard | Allogeneic stem cell transplant using UM171 expanded cord bloods for patients with high-risk multiple myeloma | 500 000 \$ |

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| (CRCHUM), Michael Sebag (MUHC), Sebastien Lemieux (UMontréal), Gabriel Tremblay (Geneconomic) | | |
| James Shapiro, U of A Peter Senior (U of A), Peter Light (U of A), Gregory Korbitt (U of A), Eugene Brandon (Viacyte Inc.), Howard Foyt (Viacyte Inc.), Sylvain Bedard (CEPPP), Bart Roep (U Leiden), Joanna Preston (TEC Edmonton), Chris McCabe (U of A) | Pancreatic Progenitor Cell Therapy: Solving Supply and Survival Issues of Islet Cell Transplantation for T1DM | 500 000 \$ |
| Duncan Stewart, OHRI David Courtman (GMP Facility OHRI), Michael Kutryk (SMH), Chris Glover (UOHI), Hung-Ly Quoc (MHI), Alexander Dick (UOHI), Michel Lemay (UOHI), Kim Connelly (SMH), Howard Leong Poi (SMH), Josep Rodes-Cabau (U Laval), Dominique Joyal (JGH), Vincent Laroche (U Laval) | Enhanced Angiogenic Cell Therapy for Acute Myocardial Infarction (ENACT-AMI) | 500 000 \$ |

**Résultats de financement 2018-2019 du RCS :
Équipes de recherche sur les maladies**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|--|-----------------------|
| Gilbert Bernier, Hôpital Maisonneuve-Rosemont (HMR) May Griffith (UMontréal), Jean-Francois Bouchard (UMontréal), Flavio Rezende (HMR), Cynthia Qian (UMontréal), Mario Filion (INRS) | Macula transplantation for the treatment of retinal degenerative diseases | 200 000 \$ |
| Joanna Matsubara, UBC Marinko Sarunic (SFU), Orson Moritz (UBC), Sean Lumb (UBC), Christopher Laver (UBC) | Treating advanced retinal degeneration – rebuilding multiple co-dependent retinal layers with stem cells | 100 000 \$ |
| Lauralyn McIntyre, OHRI Shirley Mei (OHRI), Duncan Stewart (OHRI), Dean Fergusson (OHRI), John Marshall (SMH), Keith Walley (UBC), Claudia dos Santos (SMH), Brent Winston (U of C), Shane English (OHRI), Alexis Turgeon (U Laval), Geeta Mehta (U of T), | Cellular Immunotherapy for Septic Shock (CISS2): A Phase II Multicentre Clinical Trial | 200 000 \$ |

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| Robert Green (DU), Alison Fox-Robichaud (Hamilton Health Sciences Corporation), Margaret Herridge (UHN), John Granton (U of T), Paul Hebert (CRCHUM), Kednapa Thavorn (OHRI), Timothy Ramsay (OHRI), David Courtman (GMP Facility OHRI), Dana Devine (CBS), Sowmya Viswanathan (UHN) | | |
| Freda Miller, The Hospital for Sick Children (HSC) Donald Mabbott (HSC), David Kaplan (HSC), Cindi Morshead (U of T), Jing Wang (OHRI), Ann Yeh (HSC), Douglas Munoz (Queens U), Paul Frankland (HSC), Wolfram Tetzlaff (UBC) | Pharmacological recruitment of endogenous neural precursors to promote pediatric white matter repair | 200 000 \$ |
| Massimiliano Paganelli, CHU Sainte-Justine Elie Haddad (UMontréal), Christian Beausejour (UMontréal) | Safety and efficacy of stem cell-derived encapsulated liver tissue to treat liver failure without immunosuppression | 100 000 \$ |
| James Shapiro, U of A Gregory Korbitt (U of A), Joanna Preston (TEC Edmonton), Peter Senior (U of A), Bruce Verchere (UBC) | Development of a novel stem cell-derived transplant modality for type 1 diabetes | 100 000 \$ |
| Bruce Verchere, UBC Francis Lynn (UBC), Megan Levings (UBC), Tim Kieffer (UBC), Dina Panagiotopoulos (UBC), Brad Hoffman (UBC), Garth Warnock (UBC), Gregory Korbitt (UofA) | Genetic manipulation of hES-derived insulin-producing cells to improve graft outcomes | 200 000 \$ |

Résultats de financement 2018-2019 du RCS : Recherche d'impact

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
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| Commercialisation | | |
| Derrick Rancourt, U of C | Enhancing the Efficiency of Genome Engineering in Human Pluripotent Stem Cells | 100 000 \$ |

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| <p>Peter Zandstra, UBC</p> <p>Fiona Watt (King's College, London, UK), Davide Danovi (King's College, London, UK)</p> | <p>A robust, quantitative, and high-throughput assay to rapidly characterize human induced pluripotent stem cells</p> | <p>100 000 \$</p> |
| <p><i>Politique publique</i></p> | | |
| <p>Timothy Caulfield, U of A</p> <p>Amy Zarzeczny (UofR), Barbara von Tigerstrom (UofA), Tania Bubela (SFU), Yann Joly (McGill), Zubin Master (Mayo Clinic), Jeremy Snyder (SFU), Ubaka Ogbogu (UofA)</p> | <p>The Next Step: Specific Strategies for Addressing the Marketing of Unproven Stem Cell Therapies</p> | <p>40 000 \$</p> |
| <p>Bartha Knoppers, McGill</p> <p>Rosario Isai (OHRI), Tim Caulfield (UofA), Amy Zarzeczny (UofR), Tania Bubela (SFU), Ubaka Ogbogu (UofA), Vardit Ravitsky (UMontréal)</p> | <p>Reforming Canadian Stem Cell Policy: Moving Beyond the Assisted Human Reproduction Act (AHRA)</p> | <p>39 736 \$</p> |
| <p><i>Transfert des découvertes</i></p> | | |
| <p>Florian Bentzinger, USherbrooke</p> <p>Eric Marsault (USherbrooke), Mannix Auger-Messier (USherbrooke), Nicolas Dumont (CHU-Sainte-Justine, UMontréal), Frederic Balg (USherbrooke)</p> | <p>Apelinergic Compounds for the treatment of muscular dystrophy</p> | <p>99 000 \$</p> |
| <p>Mick Bhatia, McMaster</p> <p>Rima Al-Awar (OICR)</p> | <p>Identification of kinases and their target substrates in early human PSC specification</p> | <p>100 000 \$</p> |
| <p>Nicolas Dumont, CHU Sainte-Justine, UMontréal</p> <p>Sylvie Girard (UMontréal), Cam-Tu Nguyen (UMontréal), Phillipe Campeau (UMontréal), Christian Beauséjour (UMontréal)</p> | <p>Targeting muscle stem cells to mitigate Duchenne muscular dystrophy</p> | <p>100 000 \$</p> |
| <p>John Hassell, McMaster</p> <p>Rima Al-awar (OICR)</p> | <p>HTR5A as a target for anticancer stem cell drug discovery</p> | <p>99 500 \$</p> |
| <p><i>Clinical Translation & Accelerator</i></p> | | |
| <p>Timothy Kieffer, UBC</p> | <p>Assessment of Cell Maturation and</p> | <p>100 000 \$</p> |

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| Ali Rezania (Viacyte Inc.) | Function in Subcutaneous Macroencapsulation Devices in Rodents | |
| Zachary Laksman, UBC Glen Tibbits (SFU) | Using stem cells to test new drugs for atrial fibrillation | 100 000 \$ |
| Lauralyn McIntyre, OHRI Shirley Mei (OHRI), Duncan Stewart (OHRI), Dean Fergusson (OHRI), John Marshall (SMH), Keith Walley (UBC), Claudia dos Santos (SMH), Brent Winston (U of C), Shane English (OHRI), Alexis Turgeon (U Laval), Geeta Mehta (U of T), Robert Green (DU), Alison Fox-Robichaud (McMaster), Margaret Herridge (U of T), John Granton (U of T), Paul Hebert (CRCHUM), Kednapa Thavorn (OHRI), Timothy Ramsay (OHRI), Sowmya Viswanathan (UHN) | Cellular Immunotherapy for Septic Shock (CISS): A Phase II Multicentre Clinical Trial | 100 000 \$ |
| Bernard Thébaud, OHRI Mervin Yoder (Hospital for Children, Indianapolis), Dylan Burger (U of O) | Endothelial Progenitor Cell-derived Therapies for Neonatal Pulmonary Hypertension | 99 905 \$ |
| Glen Tibbits, SFU Thomas Claydon (SFU), Zachary Laksman (UBC), Shubhayan Sanatani (UBC) | Developing an hiPSC-CM based protocol to investigate SIDS-implicated sudden cardiac arrest in infants | 99 500 \$ |
| Eve Tsai, OHRI Xudong Cao (U of O), Ruth Slack (U of O) | Translating an animal endogenous stem/progenitor cell repair strategy for stroke to humans | 100 000 \$ |

Résultats de financement 2016-2018 du RCS : Essais cliniques

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|---|--|-----------------------|
| <p>Harold Atkins, Ottawa Hospital Research Institute (OHRI)</p> <p>Gary Levy (UHN)</p> | Using hematopoietic stem cell transplantation to regenerate a naïve immune system tolerant to liver allografts | 215 700 \$ |
| <p>Sandra Cohen, Hôpital Maisonneuve-Rosemont (HMR)</p> <p>Jean-Sébastien Delisle (HMR), Guy Sauvageau (U de M)</p> | Making cord blood hematopoietic stem cell expansion competitive | 999 968 \$ |
| <p>Timothy Kieffer, UBC</p> <p>David Thompson (UBC), Garth Warnock (UBC), Graydon Meneilly (UBC), Megan Levings (UBC)</p> | A stem cell therapy for insulin replacement in patients with diabetes | 500 000 \$ |
| <p>Lauralyn McIntyre, OHRI</p> <p>John Marshall (U of T), Keith Walley (UBC), Claudia dos Santos (St Michael's Hospital), Brent Winston (U of C), Shane English (OHRI), Alexis Turgeon (Laval U), Geeta Mehta (Sinai Health System), Robert Green (Dalhousie), Alison Fox-Robichaud (McMaster), Margaret Herridge (U of T), John Granton (U of T), Paul Hebert (CRCHUM), Duncan Stewart (OHRI), Shirley Mei (OHRI), Dean Fergusson (OHRI), Kednapa Thavorn (OHRI), Timothy Ramsay (OHRI)</p> | Cellular immunotherapy for septic shock (CISS): A phase II multicenter clinical trial | 1 000 000 \$ |
| <p>James Shapiro, U of A</p> <p>Peter Senior (U of A)</p> | Clinical trials in stem cell transplantation - solving the supply and the survival problem in Type 1 diabetes | 499 596 \$ |
| <p>Duncan Stewart, OHRI</p> <p>David Courtman (OHRI)</p> | Enhanced angiogenic Cell Therapy in Acute Myocardial Infarction (ENACT-AMI) | 999 546 \$ |

**Résultats de financement 2016-2018 du RCS :
Équipes de recherche sur les maladies**

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|--|---|-----------------------|
| <p>Timothy Kieffer, UBC</p> <p>James Johnson (UBC), Francis Lynn (UBC), Brad Hoffman (UBC)</p> | Optimizing stem cell derived beta-cell therapy for diabetes | 500 000 \$ |
| <p>Anne Marinier, U de M</p> <p>Guy Sauvageau (U de M), Connie Eaves (UBC), Keith Humphries (UBC)</p> | Development of hematopoietic stem cell expanding molecules towards the ideal transplant | 500 000 \$ |
| <p>Freda Miller, The Hospital for Sick Children (HSC)</p> <p>Cindi Morshead (U of T), Jing Wang (OHRI), Paul Frankland (HSC), David Kaplan (HSC), Ann Yeh (HSC), Doug Munoz (Queen's U), Donald Mabbott (HSC), Wolfram Tetzlaff (UBC)</p> | Pharmacological recruitments of endogenous neural precursors to promote pediatric white matter repair | 500 000 \$ |
| <p>Andras Nagy, Lunenfeld-Tanenbaum Research Inst.</p> <p>Armand Keating (UHN), Mohit Kapoor (UHN), Sowmya Viswanathan (UHN)</p> | Combining gene and mesenchymal stromal cell therapies: steps toward curing arthritis | 394 623 \$ |
| <p>Massimiliano Paganelli, CHU Sainte-Justine</p> | Treatment of chronic liver failure by stem cell-derived mature liver tissue | 199 982 \$ |
| <p>James Shapiro, U of A</p> <p>Gregory Korbitt (U of A)</p> | Development of a novel stem cell-derived transplant modality for type 1 diabetes | 496 905 \$ |
| <p>Vahab Soleimani, Jewish General Hospital</p> <p>Colin Crist (McGill), Simon Tran (McGill), Faleh Tamimi Marino (McGill), Hamed S. Najafabadi (McGill)</p> | Interfering niche-related reprogramming of stem cells during aging | 200 000 \$ |

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| Bruce Verchere (UBC) Francis Lynn (UBC), Timothy Kieffer (UBC), Megan Levings (UBC) | Genetic manipulation of hESC-derived insulin-producing cells to improve graft outcomes | 490 000 \$ |
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Résultats de financement 2016-2018 du RCS : Recherche d'impact

| Chercheur principal, Cochercheurs et Collaborateurs | Titre du projet | Fonds du RCS octroyés |
|---|---|-----------------------|
| <i>Transposition clinique</i> | | |
| Liam Brunham , UBC Glen Tibbits (SFU) | Using human pluripotent stem cell-derived cardiomyocytes to investigate the mechanisms of ibrutinib-induced atrial fibrillation | 100 000 \$ |
| Colin Crist , Jewish General Hospital Jean-Philip Lumb (McGill) | Activation of muscle stem cells by pharmacological inhibitors of eIF2a phosphorylation | 99 842 \$ |
| Lucie Germain , Laval U Bartha Knoppers (McGill) | Treatment of patients with corneal limbal stem cell deficiencies using cultured epithelial corneal autografts | 100 000 \$ |
| James D. Johnson , UBC | Imaged-based screening to enhance insulin production in human embryonic stem cells | 100 000 \$ |
| Timothy J. Kieffer , UBC | Biodistribution of differentiated stem cells following subcutaneous transplant | 100 000 \$ |
| Megan Levings , UBC | Garbage to gold: expansion of | 100 000 \$ |

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| Lori West (U of A) | therapeutic regulatory t-cells from discarded thymus | |
| Kelly McNagny, UBC | CAR-T cell therapy targeting tumor-specific modifications of podocalyxin in triple negative breast cancer | 100 000 \$ |
| Sowmya Viswanathan, UHN Paula Foster (UWO), Mohit Kapoor (UHN) | Iron labeled-mesenchymal stromal cells for clinical tracking in amended phase 1 trial in osteoarthritis patients | 100 000 \$ |
| Peter Zandstra, U of T Guy Sauvageau (U de M), Julie Audet (U of T) | Clinical culture optimization to maximize cord blood derived hematopoietic stem cell expansion osteoarthritis patients | 100 000 \$ |
| <i>Politique publique</i> | | |
| Timothy Caulfield, U of A Amy Zarzeczny (U of R) | Stem cells and misleading marketing claims | 50 000 \$ |
| Judy Illes, UBC | Decision-making in translation: urgency, access, and evaluation in off-label stem cell interventions | 50 000 \$ |
| Ubaka Ogbogu, U of A Amy Zarzeczny (U of R) | Regulating the future: model policies for emerging stem cell research activities, including research on gene-edited and reconstituted embryos | 50 000 \$ |
| <i>Commercialisation</i> | | |
| Kristin Hope, McMaster | Methods and compositions for | 100 000 \$ |

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| | expansion of human hematopoietic stem and progenitor cells | |
| Joanne Matsubara, UBC Marinko Sarunic (SFU) | Treating advanced retinal degeneration - rebuilding multiple co-dependent retinal layers with a single injection of stem-cell-derived-graft | 99 502 \$ |
| Ian Rogers, Lunenfeld-Tanenbaum Research Institute | Improving efficacy and economics of kidney disease therapies using iPS cells | 90 811 \$ |
| Mark Ungrin, U of C | Scalable production of engineered micro tissues | 100 000 \$ |
| Stephanie Willerth, U of V | 3D bioprinting of neural tissue from human pluripotent stem cells | 100 000 \$ |

* Les titres des projets sont affichés selon la langue de soumission

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