

Senate Research Report – October 1, 2019

Funding Table

Recipient	Department	Project Title	Value
American Genetic Association			
Friedman, Jannice	Biology	Using comparative transcriptomics to characterize adaptive cold responses Matthew Rubin, Post Doc	\$9,598
AMSPP			
Healey, Jenna	Medicine	HISM-070-018 Life before Medicare – Hissan Butt	\$7,541
Banting Postdoctoral Fellowship			
Robinson, Dylan	Dan School of Drama and Music	Decolonizing Canadian Music: Partnerships, Protocols, and Pathways Towards Reparation Jeremy J Strachan, Post Doc	\$140,000
Canadian Institute for Advanced Research: Boundaries, Membership & Belonging			
Kymlicka, Will	Philosophy	n/a	\$70,000
Canadian Institutes of Health Research (CIHR) – Catalyst Grant			
Groll, Dianne	Psychiatry	Pan Canadian Public Safety Personnel: Ongoing Knowledge Translation and Strategic Development	\$10,000
CIHR – Collaborative Health Research Project			
Mousavi, Parvin	School of Computing	An integrated spectroscopy-US surgical navigation system for residual cancer detection in breast surgery	\$198,350
CIHR Doctoral Award – Frederick Banting and Charles Best Canada Graduate Scholarship			
Groome, Patti Mann, Stephen (co-PI)	Public Health Sciences	Hemiarthroplasty versus total hip arthroplasty for femoral neck fracture: propensity-score matched cohort study and census of orthopaedic surgeons in Ontario - Mina Tohidi	\$105,000
Groome, Patti Hanna, Timothy (co-PI)	Cancer Care and Epidemiology	Understanding and improving the quality of melanoma diagnosis in Ontario: A population based study	\$105,000

CIHR – Operating Grant			
Johnson, Ana Tenbenschel, Timothy Gerard Green, Michael Egan, Rylan Graham Donnelly, Catherine Anne	Public Health Sciences	Evaluation of Health Links in the South East Local Health Integration Network	\$199,905
Miller, Jordan Donnelly, Catherine Anne Vader, Kyle Bobbette, Nicole Palel, Rupa	School of Rehabilitation Therapy	Evaluating the outcomes and experiences of chronic pain self-management support with an opioid de-prescribing intervention: a mixed methods study	\$100,000
CIHR – Planning and Dissemination Grant - Institute Community Support			
Johri, Amer	Medicine - Cardiology	Canadian Cardiovascular Society Sport Group Mobilization Event for the Cardiovascular Screening of Athletes - A planning meeting to collaborate, identify barriers and establish the foundations for a National cardiovascular screening and care of athletes program Nicholas Grubric	\$15,000
Brooks, Steven	Emergency Medicine	Neighbours saving Neighbours: Planning a community volunteer resuscitation program for victims of out-of-hospital cardiac arrest in Canada	\$14,992
Sharma, Sanjay Irrcher, Isabella Ewart, Robert	Ophthalmology	Nutrition for the management of systemic inflammation	\$10,874
CIHR – Project Grant			
Brundage, Michael Isaranuwatjai, Wanrudee Ng, Terry L Booth, Christopher Galica, Jacqueline	Cancer Care and Epidemiology	Understanding how cancer patients value progression-free survival	\$175,951
Chin Sang, Ian	Biology	The role of insulin signaling in neuronal development	\$688,500
Greer, Peter	Cancer Research Institute	Targeting the calpain protease in breast cancer	\$918,000

Lomax, Alan Vanner, Stephen Gloor, Gregory Emma, Allen-Vercoe Reed, David	Medicine	Modulation of pain in IBD by microbial proteases	\$791,776
Miller, Jordan Richardson, Julie Anne Sallsbury, Garry Taljaard, Monica Whittaker, Jacqueline	School of Rehabilitation Therapy	Determining the impact of a physiotherapist-led primary care model for low back pain - A cluster randomized controlled trial	\$1,403,776
CIHR – Team Grant			
Cramm, Heidi	School of Rehabilitation Therapy	Focusing on the family: enhancing resiliency in public safety personnel families	\$30,000
Nazanin, Alavi	Psychiatry	Delivering online cognitive behavioural therapy (iCBT) to address mental health challenges in correctional officers and other public safety personnel	\$30,000
CIHR – Travel Award			
Levesque, Lucie	School of Kinesiology and Health Studies	Idea Fair & learning Circle on Indigenous Gender and Wellness - Brittany McBeath	\$1,185
Ouellette Kuntz, Helene	Public Health Sciences	Implementation of a consensus statement: an analysis of care plans for frail and pre-frail adults with intellectual and developmental disabilities in Ontario, Canada Victoria Marie Barabash	\$1,000
Rauh, Michael	Pathology and Molecular Medicine	CIHR IRSC Travel Award - Christina Ferrone	\$1,350
CIHR – Undergraduate Summer Studentship Award - institute community support			
Fichtinger, Gabor Borschneck, Daniel	School of Computing	Deep Learning approach to localization of skeletal landmarks in ultrasound for scoliosis measurement - Victoria Wu	\$5,000
Canada Foundation for Innovation – JELF			
Abdelaal, Fady	Civil Engineering	Long term performance of bituminous & modern geomembrane liners with high interface shear strength	\$200,000
Alam, Muhammad	Electrical & Computer Engineering	Optical metasurface for optoelectronics and renewable energy applications	\$125,000

Alkins, Ryan	Surgery	Enhancing CAR cell immunotherapy of brain tumours with MRI-guided focused ultrasound	\$150,000
Balogh, Levente	Mechanical and Materials Engineering	High-Intensity and High-Resolution X-ray Diffraction Laboratory	\$200,000
Genikomsou, Aikaterini	Civil Engineering	Seismic behaviour of retrofitted continuous concrete slabs	\$150,000
Giroux, Guillaume	Physics, Engineering Physics and Astronomy	Advances in the search for dark matter with bubble chambers and spherical proportional counters	\$200,000
Magpantay, Felicia	Mathematics & Statistics	Analysis of infectious diseases systems with long-lasting transient dynamics and feedback delays	\$150,000
Ploeg, Heidi-Lynn Rainbow, Roshni	Mechanical and Materials Engineering	Patient Specific Bone and Joint Health Technologies	\$200,000
Tusche, Anita	Psychology/Economics	Neurocomputational approaches to individual differences in 'virtuous' decision-making	\$100,000
van Anders, Sari	Psychology	Social Neuroendocrinology Lab	\$250,000
Capicciotti, Chantelle	Chemistry/ Biomedical and Molecular Sciences/Surgery	Uncovering the Function of Glycans: Examining Interactions with their Biological Binding Partners at the Cellular Level	\$150,000
Harrison, Anna	Geological Sciences and Geological Engineering/School of Environmental Studies	Gas-fluid-mineral interactions: Implications for element cycles and CO2 storage	\$200,000
Persaud, Suraj	Mechanical and Materials Engineering	High Temperature Oxidation and Corrosion Laboratory	\$125,000
Selinger, Jessica	School of Kinesiology and Health Studies	Mechanisms underlying the optimization of human walking	\$150,000
Thomson, Laura	Geography and Planning	Establishing the Snow and Ice Research Laboratory at Queen's University	\$100,000
Wang, Peng	Chemistry	Discovery and Development of Crystalline Radiation Detection Materials	\$200,000
Community Foundation for Kingston and Area			
Khalid Khan, Sarosh Davidson-Harden, Jennifer	Psychiatry	Helping youth with complex mood and anxiety disorders and school refusal to attend school in an alternative classroom setting	\$14,808
Crohn's and Colitis Canada			
Vanner, Stephen Lomax, Alan Reed, David	Medicine	Reducing IBD pain: targeting novel opioid G protein-coupled receptor signaling in DRG neurons	\$375,000

Cystic Fibrosis Canada			
Jia, Zongchao	Biomedical and Molecular Sciences	Inhibition of polyphosphate kinase in <i>P. aeruginosa</i> as a novel antimicrobial strategy for CF therapeutics	\$300,000
Department of foreign affairs, trade and development			
Woo, Kevin	School of Nursing	ELAP Faculty Mobility Grant	\$7,000
Education Award Endowment -- SEAMO			
Kkurshid, Faiza	Paediatrics	Developing evidence-based recommendations for optimal interpregnancy intervals in high-income countries: an international cohort study	\$19,647
MacPherson, Peter Braund, Heather Dalgarno, Nancy Grewal, Karen	Paediatrics	Evaluating Medical Students' experiences with a pediatrics eBook	\$13,300
French Embassy -- France-Canada Research Fund			
Dahan, Samuel	Faculty of Law	AI Tribunal for small claims : Improving the Small Claims Court System through AnalyticsTechnology (Test case: Ontario)	\$14,000
Government of Canada Doctoral: Vanier Canada Graduate Scholarships award in partnership with SSHRC			
Whitelaw, Graham	School of Environmental Studies	The operationalization of indigenous knowledge in environmental planning and decision-making: Indigenous-led Institutional development for self-determination and sustainability - Clement, Krista Marie	\$150,000
Heart and Stroke Foundation			
Andrew, David	Biomedical and Molecular Sciences	Activation and opening of a channel that kills neurons during ischemia	\$167,000
IC-IMPACTS Centres of Excellence -- Joint call between IC-IMPACTS and Department of Science and Technology, India			
Green, Mark	Civil Engineering	Improving Occupant Survivability in Buildings During Fires	\$61,500
Kidney Foundation of Canada -- Allied Health Research Grant			
Smith, Mary Silva e Silva, Vanessa	School of Nursing	Circles towards Indigenous solutions for kidney health: A strength-based approach	\$97,710

Mitacs – Accelerate			
Jessup, Lynda Priewe, Sascha DeLuca, Christopher	Art History	Toronto's City Diplomacy: Arts, Culture and Heritage Interns: Bronwyn Jacques, Hannah Burge Luviano, Emily Sanders	\$106,667
Stroman, Patrick	Centre for Neuroscience Studies	Functional MRI investigation of the neural processes underlying pain modulation of human participants	\$273,200
Hutchinson, Robin	Chemical Engineering	Investigating polysaccharide-protein conjugation: characterization and effects of glycation conditions	\$66,500
McAuley, Kimberley	Chemical Engineering	A comprehensive kinetic model for diffusion-controlled diacrylate photocuring	\$30,000
Lloyd-Ellis, Huw	Economics	Economic impact and feasibility analysis of public investments in broadband connectivity and in other sectors	\$80,000
Lord, Susan	Film and Media	The Social Ecology of Digital Archiving in Queer Arts Spaces	\$55,000
Brison, Jeffrey	History	The International Dimension of Canada's Museums	\$133,333
Yao, Zhongwen Daymond, Mark	Mechanical and Materials Engineering	Advanced characterization of zirconium hydrides in Zr-2.5Nb Pressure Tube in CANDU Reactors - Fei Long	\$45,000
Greer, Peter	Pathology & Molecular Medicine	Development of a biosensor for high-throughput screening of novel ezrin inhibitors for treatment of metastatic breast cancer	\$30,000
Ghahreman, Ahmad	Robert M. Buchan Department of Mining	Neutral and alkaline bio-heap oxidation of refractory gold ores with adaptive moderate-thermophilic and mesophilic microorganisms	\$595,333
Ghahreman, Ahmad	Robert M. Buchan Department of Mining	Atmospheric copper leaching in oxygen supersaturated solutions: evaluating the application of ultrasonic oxygen solubilization in copper leaching (Intern: Harshit Mahandra)	\$166,667
Kessler, Dorothy	School of Rehabilitation Therapy	Creating a New Standard for Vision Loss Rehabilitation in Canada	\$26,667
Kelebek, Sadan	The Robert M Buchan Department of Mining	Selective recovery of Ni-Co-Mn in sulfate media, and graphite from spent Lithium Ion Batteries	\$90,000
Ortiz, Julian	The Robert M Buchan Department of Mining	Assimilation of different data types with machine learning methods for resource classification	\$15,000

Mitacs – Accelerate PDF Fellowship			
Beauchemin, Diane	Chemistry	Development of compact enhanced nebulization systems for inductively coupled plasma spectrometry	\$165,000
Mitacs – Globalink			
Jerkiewicz, Gregory	Chemistry	The Effect of Ultrasound on Faradaic Reactions Occurring at Polycrystalline Pt - Intern: Marina Tintor	\$6,000
Leybourne, Matthew	Geological Sciences and Geological Engineering/School of Environmental Studies	Postprandial zinc isotope effect in human serum	\$6,000
Beauchemin, Diane	Chemistry	Bioaccessibility risk assessment of soil using a continuous on-line leaching method (Host institution Nottingham University - British Geological Survey Centre for Environment - Michael Watts) Intern: Alastair Kierulf	\$6,000
Cooper, Amanda	Faculty of Education	A Critical Transition in the Common Core: Analyzing Networks for Mathematics Implementation - Stephen MacGregor	\$6,000
DeLuca, Chris	Faculty of Education	Perceptions of Fairness and Equity of Accommodated Classroom Assessments for Students with Disability - Amir Rasooli	\$6,000
Gharesifard, Bahman	Mathematics & Statistics	AI Techniques to Explore the Relationship Between Structural and Function Brain Connectivities - Imogen den Otter Moore	\$6,000
Jerkiewicz, Gregory	Chemistry	Synthesis of Nanostructured Mesoporous Nickel Materials for Energy Storage Applications - Sho Fujita	\$6,000
Jerkiewicz, Gregory	Chemistry	Preparation of Mesoporous Oxides for Electrochemical Applications	\$6,000
Ji, Li-Jun	Psychology	The Expression of Depressive Symptoms Across Cultures - Brendan Lam	\$6,000
Morelli, Jordan	Physics, Engineering Physics and Astronomy	Edge Biasing of Field Reversed Configuration Plasma	\$3,000
Rainbow, Michael	Mechanical and Materials Engineering	The effect of physiotherapy on patellofemoral joint function with varying bone morphology. (Mitchell Wheatley)	\$6,000
MacDonald, Tara	Psychology	Mitacs Globalink Research Award	\$6,000
Pollard, Andrew Lavoie, Philippe	Mechanical and Materials Engineering	PIV measurements in turbulent jet flows - Milad Samie	\$6,000

Mitacs – PDF Fellowship			
Milne, Frank	Economics	Financial and Economic Analysis for the Integration of Wind Generation into Electricity Grids - Pejman Bahramian	\$110,000
MSSC Fellowship			
Ghasemlou, Nader	Biomedical and Molecular Sciences	Julia Segal: MS Society Doctoral Award - Julia Segal	\$11,000
National Cancer Institute, NIH – Cooperative Clinical Research Agreement			
Dancey, Janet	CCTG	Canadian Cancer Trials Group - Canadian Collaborating Clinical Trials Network	\$17,884,870
NCE – ArcticNet			
Lafreniere, Melissa Lamoureux, Scott Arnott, Shelley	Geography and Planning	Ensuring water security in the High Arctic: understanding the impacts of changing permafrost and hydrology on water quality and aquatic ecosystems	\$309,000
Way, Robert	Geography and Planning	Understanding and predicting future climate-vegetation-cryosphere interactions in Nunatsiavut, Nunavik and NunatuKavut	\$270,236
Way, Robert	Geography and Planning	ArcticNet Field Aircraft Support 2019-2020	\$15,000
NSERC – Collaborative Health Research Project			
Mousavi, Parvin	School of Computing	An integrated spectroscopy-US surgical navigation system for residual cancer detection in breast surgery	\$198,350
NSERC – Collaborative Research and Development Grant			
Cunningham, Michael	Chemical Engineering	Block-random copolymers as stabilizers in emulsion polymerization Industry Partner: BASF Canada Inc., \$200k	\$319,980
Etemad, SAE	Electrical & Computer Engineering	Using Real-time Facial Recognition for Vehicle Driver Authentication Industry Partner: Irdeto Canada Corporation, \$80k	\$160,000
Ghahreman, Ahmad	Robert M Buchan Department of Mining	1-step acid gold bioleaching by the use of iron and sulfur oxidizing and thiocyanate (SCN) generating microorganisms Industry Partner: McEwen Mining Inc., \$52.8k	\$105,600
Greenspan, Michael	Electrical & Computer Engineering	Object recognition in bin picking Industry Partner: Bluewrist Inc., \$150k	\$300,000

Hassan, Ahmed	School of Computing	Ensuring the Trustworthiness of Data Science Systems in a Cost Effective Manner Industry Partner: BlackBerry, \$346,270	\$692,540
Kim, Il Yong	Mechanical and Materials Engineering	Topology Optimization for Additive Manufacturing and Lightweight Composite Design Industry partner: Bombardier Aerospace, \$80k	\$160,000
Kim, Il Yong	Mechanical and Materials Engineering	Multidisciplinary Design and Packaging Optimization for Retractable Aircraft Landing Gear Industry Partner: Safran Landing Systems Canada, \$84k	\$168,000
Kueper, Bernie Mumford, Kevin	Civil Engineering	Remediation of soil and groundwater impacted by per- and polyfluoroalkyl substances Industry Partner: Imperial Oil Ltd., \$114,500	\$229,000
Yao, Zhongwen	Mechanical and Materials Engineering	Investigation of Irradiated Spacer Materials (X750 and Zr-Nb-Cu)	\$164,400
NSERC – Discovery Grant			
Aarsen, Lonnie	Biology	Exploring the ‘Harperian’ paradox: Leaving descendants in a crowded plant world	\$140,000
Arnott, Shelley	Biology	A multi-scale approach to identifying the ecological impact of co-occurring environmental stressors	\$235,000
Bonier, Frances	Biology	The role of phenotypic plasticity in responses to environmental challenges	\$200,000
Friedman, Jannice	Biology	Mechanisms and evolution of plant reproductive strategies	\$200,000
Lougheed, Stephen	Biology	The roles of geographical isolation, secondary contact, and mitonuclear disequilibrium in speciation	\$235,000
Paterson, Andrew	Biology	Using paleolimnology to assess the effects of multiple stressors on Boreal Shield lakes	\$125,000
Allingham, John	Biomedical and Molecular Science	Molecular mechanisms of kinesins that control microtubule and actin polymerization dynamics	\$250,000
Zhang, Shetuan	Biomedical and Molecular Science	Identification of the S1-S2 linker as a novel mechanosensor for Kv1.5 regulation	\$210,000
Escobedo, Carlos	Chemical Engineering	Hybrid Graphene-Metallic Optofluidic Nanostructures for the Point-of-Care Detection of Illicit Drugs and Biological Agents	\$140,000
Guay, Martin	Chemical Engineering	Optimization and control in large-scale uncertain processes	\$195,000
Li, Xiang	Chemical Engineering	Rigorous decomposition methods for planning and scheduling of energy networks	\$140,000
Carrington, Tucker	Chemistry	New iterative, tensor, and collocation methods for computing ro-vibrational spectra and inelastic rate constants	\$525,000

Horton, Hugh	Chemistry	Fabrication, characterization and application of novel, highly stable, carbene-based self-assembled monolayers	\$120,000
Liu, Guojun	Chemistry	Nanostructured Polymer Coatings, Filters, Batteries, and Hydrovoltaic Devices	\$525,000
Loock, Hans-Peter	Chemistry	Instrument development in analytical spectroscopy – spectrometers, microcavities, fiberprobes	\$470,000
Filion, Yves	Civil Engineering	Energy Cost Savings in Canadian Water Distribution Systems Through Data Analytics	\$215,000
Kueper, Bernard	Civil Engineering	Remediation of Soil and Groundwater using Thermal Treatment Technologies	\$180,000
Moore, Ian	Civil Engineering	Reserve strength and rehabilitation of deteriorated pipe infrastructure	\$392,500
Alajaji, Fady	Electrical & Computer Engineering	Source-Channel Coding, Data Privacy and Contagion Mitigation in Communication and Information Networks	\$230,000
Alam, Muhammad	Electrical & Computer Engineering	Development of metasurface for opto-elctronic applications	\$140,000
Blostein, Steven	Electrical & Computer Engineering	Wireless Communications and Signal Processing for the Internet of Things	\$195,000
Kim, Il Min	Electrical & Computer Engineering	Enhanced Non-Orthogonal Multiple Access (NOMA) or 5G Wireless Systems based on Deep Learning	\$230,000
Korenberg, Michael	Electrical & Computer Engineering	Modelling and Feature Selection with Applications to Big Data Problems	\$115,000
Liu, Yan-Fei	Electrical & Computer Engineering	Power Cycle Modulation Control for High Efficiency GaN Switch Based Power Supplies	\$320,000
Chen, Dongmei	Geography & Planning	Target-based multi-scale change detection from time series remotely sensed environmental data	\$215,000
Lafreniere, Melissa	Geography & Planning	Water quality impacts of mobilization of permafrost carbon & nitrogen in High Arctic watersheds	\$215,000
Mabee, Warren	Geography & Planning	A systems approach to maximizing emission reductions through bio-based products	\$130,000
Thomson, Laura	Geography & Planning	NÉVÉFLO: Northern Environmental Variability at the Expedition Fiord Landscape Observatory	\$150,000
Treitz, Paul	Geography & Planning	Remote Sensing of Vegetation Types, Productivity and Change in the Canadian High Arctic	\$180,000
Harrison, Anna	Geological Sciences & Geological Engineering	Mechanisms and applications of gas-driven mineral weathering: Implications for the geologic carbon cycle and engineered carbon storage	\$175,000

Hutchinson, Jean	Geological Sciences & Geological Engineering	Developing Slope Asset Management Tools Considering Geotechnical and Remote Sensing Data for Transportation Infrastructure	\$215,000
James, Noel	Geological Sciences & Geological Engineering	Facies anatomy and early diagenesis of carbonate rocks	\$150,000
Steel, Linn-Elisabeth	Geological Sciences & Geological Engineering	Controls on Lateral Spreading Rates of Sustained Turbidity Currents	\$125,000
Gharesifard, Bahman	Mathematics & Statistics	Robust Decentralized Control of Large-Scale Networked Systems: Fundamental Limits and Data-Driven Feedbacks	\$275,000
Lewis, Andrew	Mathematics & Statistics	The exponential map for flows and its application in geometric control theory	\$105,000
Lin, Chungang Devon	Mathematics & Statistics	Uncertainty Quantification for Complex Computer Models	\$100,000
Offin, Daniel	Mathematics & Statistics	Index theory, stability of orbits and heteroclinic phenomenon.	\$85,000
Pfaff, Catherine	Mathematics & Statistics	Outer automorphisms of free groups, outer space, and related deformation spaces	\$80,000
Rodgers, Bradley	Mathematics & Statistics	Applications of random matrix theory in analytic number theory	\$110,000
Takahara, Glen	Mathematics & Statistics	Some Problems in Spectral Methods and Discrete Probability	\$90,000
Yui, Noriko	Mathematics & Statistics	Calabi-Yau Manifolds and Mirror Symmetry	\$75,000
Ciccarelli, Gabriel	Mechanical and Materials Engineering	Detonation propagation in a rotating detonation engine	\$195,000
Mechefske, Chris	Mechanical and Materials Engineering	Hybrid Data-driven Physics-based Modeling for Machine Fault Detection, Diagnosis, and Prediction	\$195,000
Ploeg, Heidi-Lynn	Mechanical and Materials Engineering	Bone Integrity for a Lifetime with Mechanical Loading	\$230,000
Rainbow, Roshni	Mechanical and Materials Engineering	Mechanochemical Regulation of Muscle on Developing Cartilage	\$140,000
Wu, Amy	Mechanical and Materials Engineering	Human-robot gait coordination and interaction	\$135,000
Shastri, Bhavin	Physics, Engineering Physics & Astronomy	Programmable Nanophotonics for Deep Learning and Neuromorphic Computing	\$135,000
Courteau, Stephane	Physics, Engineering Physics and Astronomy	Towards a detailed understanding of galaxy structure and evolution	\$305,000
van Anders, Greg	Physics, Engineering Physics and Astronomy	Statistical Physics of Design: Materials to Macroscale	\$165,000
Widrow, Lawrence	Physics, Engineering Physics and Astronomy	Origin, Evolution, and Implications of Wavelike Motions in the Stellar Disk of the Milky Way	\$170,000

Dringenberg, Hans	Psychology	How special is sleep for human memory consolidation?	\$140,000
Flanagan, Randy	Psychology	Planning and Control of Object Manipulation Tasks	\$480,000
Menard, Janet	Psychology	Joint contributions of affiliative social contact, stress in adolescence and oxytocin to fear behaviour in adult rats	\$140,000
Munhall, Kevin	Psychology	Multisensory cues for conversational coordination	\$269,005
Tusche, Anita	Psychology	Neurocomputational approaches to individual differences in 'virtuous' decision-making	\$165,000
Chen, Bingshu	Public health Sciences	Statistical Inference for survival data with non-parametric methods and deep learning	\$90,000
Hassan, Ahmed	School of Computing	Leveraging development and field knowledge to assist developer and operators of large software systems	\$445,000
Hassanein, Hossam	School of Computing	Collaborative Service Provisioning at the Edge in 5G Wireless Networks	\$445,000
Kunz, Manuela	School of Computing	Computational methods for planning of image-guided surgery methods	\$140,000
Tian, Yuan	School of Computing	Reliable and Explainable Recommender Systems for Efficient Software Development	\$165,000
Zulkernine, Mohammad	School of Computing	Integrating and monitoring security in software applications	\$34,000
Winn, Louise	School of Environmental Studies	Triphenyl phosphate and ecosystem toxicity	\$140,000
Pyke, Kyra	School of Kinesiology and Health Studies	The influence of shear stress and sex hormones on vascular function and structure	\$165,000
Selinger, Jessica	School of Kinesiology and Health Studies	Mechanisms underlying the energy optimization of human walking	\$187,000
Wang, Jue	Stephen J R Smith School of Business	Diagnosis, Learning and Optimization of Smart and Connected Products	\$130,000
Pickles, Chris	The Robert M Buchan Department of Mining	Microwave Augmented Reduction Using Hydrogen Enriched Methane	\$165,000
NSERC – Discovery Grant Accelerator Supplement			
Gharesifard, Bahman	Mathematics & Statistics	Robust Decentralized Control of Large-Scale Networked Systems: Fundamental Limits and Data-Driven Feedbacks	\$120,000
Ploeg, Heidi-Lynn	Mechanical and Materials Engineering	Bone Integrity for a Lifetime with Mechanical Loading	\$120,000

NSERC Discovery Grant Northern Research Supplement			
Lafreniere, Melissa	Geography & Planning	Water quality impacts of mobilization of permafrost carbon & nitrogen in High Arctic watersheds	\$100,000
Thomson, Laura	Geography & Planning	NÉVÉFLO: Northern Environmental Variability at the Expedition Fiord Landscape Observatory	\$105,000
NSERC Discovery Launch Supplement			
Alam, Muhammad	Electrical & Computer Engineering	Development of metasurface for opto-elctronic applications	\$12,500
Thomson, Laura	Geography & Planning	NÉVÉFLO: Northern Environmental Variability at the Expedition Fiord Landscape Observatory	\$12,500
Harrison, Anna	Geological Science and Geological Engineering	Mechanisms and applications of gas-driven mineral weathering: Implications for the geologic carbon cycle and engineered carbon storage	\$12,500
Steel, Linn-Elisabeth	Geological Science and Geological Engineering	Controls on Lateral Spreading Rates of Sustained Turbidity Currents	\$12,500
Pfaff, Catherine	Mathematics & Statistics	Outer automorphisms of free groups, outer space, and related deformation spaces	\$12,500
Rodgers, Bradley	Mathematics & Statistics	Applications of random matrix theory in analytic number theory	\$12,500
Rainbow, Roshni	Mechanical and Materials Engineering	Mechanochemical Regulation of Muscle on Developing Cartilage	\$12,500
Wu, Amy	Mechanical and Materials Engineering	Human-robot gait coordination and interaction	\$12,500
van Anders, Greg	Physics, Engineering Physics and Astronomy	Statistical Physics of Design: Materials to Macroscale	\$12,500
Tusche, Anita	Psychology	Neurocomputational approaches to individual differences in 'virtuous' decision-making	\$12,500
Tian, Yuan	School of Computing	Reliable and Explainable Recommender Systems for Efficient Software Development	\$12,500
Selinger, Jessica	School of Kinesiology and Health Studies	Mechanisms underlying the energy optimization of human walking	\$12,500
Wang, Jue	Stephen J R Smith School of Business	Diagnosis, Learning and Optimization of Smart and Connected Products	\$12,500
NSERC Engage			
Cunningham, Michael	Chemical Engineering	Cellulose nanocrystal reinforced polymer composites	\$25,000
Kontopoulou, Marianna	Chemical Engineering	Implementation of a Scalable Thermomechanical Graphite Exfoliation Method to Produce High Yields of Few-Layer Graphene	\$25,000
Moore, Ian	Civil Engineering	Numerical Analysis of Corrugated Steel Pipes Rehabilitated Using Cementitious Liner	\$25,000

NSERC Promoscience			
Howard, Melanie	Faculty of Engineering & Applied Science	STEM Professional Development Project for First Nations Educators	\$450,000
NSERC Promoscience supplement for Science Odyssey			
Howard, Melanie	Faculty of Engineering & Applied Science	PromoScience Science Odyssey Supplement 2019	\$3,146
NSERC Research Tools and Instruments			
Jerkiewicz, Gregory	Chemistry	Urgent Replacement of a Laue X-Ray Diffraction System for Research in Interfacial Electrochemistry and Electrocatalysis	\$150,000
Wang, Suning	Chemistry	A time-resolved phosphorimeter for research on light-emitting materials	\$59,149
Gallivan, Jason	Psychology	MRI-compatible data collection and monitoring system for neuroimaging studies in humans and non-human primates	\$119,332
NSERC Subatomic Physics - Individual			
Di Stefano, Philippe	Physics, Engineering Physics and Astronomy	Optical characterization of materials at low temperatures for rare-event searches	\$190,000
NSERC Subatomic Physics - Project			
Noble, Tony	Physics, Engineering Physics and Astronomy	PICO Search for Dark Matter with Bubble Chambers	\$576,000
Ontario Society of Occupational Therapists			
Donnelly, Catherine Tranmer, Joan Miller, Jordan Mofina, Amanda	Centre for Health Services and Policy Research	The Association Between home Care occupational therapy services and health utilization outcomes among individuals with multimorbidity	\$10,000
PFIZER			
Enriquez, Andres	Medicine	DO ACeCV-QI Kingston Health Sciences Centre (KHSC) Quality Improvement Initiative to optimize oral anticoagulation adherence for electrical cardioversion patients	\$40,000
Royal College of Physicians and Surgeons of Canada			
Trier, Jessica	Physical Medicine and Rehabilitation	Creating a culture of coaching at Queen's University: exploring coaching behaviours in post graduate medical education	\$11,585

Hall, Andrew	Emergency Medicine	Rapid evaluation of the competence by design implementation: Readiness fidelity, and outcomes	\$19,020
SANOFI Genzyme			
Asai, Yuka	Medicine	A needs assessment for a multi-disciplinary clinic in atopic diseases	\$25,000
SEAMO – AFP Innovation Research Fund			
Johri, Amer	Medicine	Canada's First Centre of Excellence for the Cardiovascular Screening and Care of the Athlete Program	\$50,000
Mizubuti, Glenio Ms. DuMerton Shore Debbie, Dr. Michael McMullen, Dr. Glykeria Martou, Dr. Robert Tanzola, Ms. Wilma Hopman, Dr. Anthony Ho, Mrs. Dana Thompson Green, Ms. Rachel Phelan	Anesthesiology and perioperative medicine	ANAE-341-19 Can Dobutamine and goal directed fluid therapy improve tissue oxygenation in deep inferior epigastric perforator (DIEO) flap breast reconstruction surgery	\$96,050
SEAMO – Education Award Endowment			
Digby, Genevieve Dalgarno, Nancy Awad, Sara Murphy, Johanna Egan, Rylan	Respiratory and Critical Care	Evaluation of a Formal Patient Safety curriculum and informal experiential learning on internal medicine resident's knowledge, skills and attitudes related to Quality improvement and patient safety: Informing a curriculum and competency-based assessment	\$14,300
Johri, Amer Pang, Stephen Sanfilippo, Anthony Milne, Laura	Medicine	Integrating Cardiac and Lung POCUS into the Medical School curriculum: Didactic methods compared to E-Learning	\$15,000
SSHRC Connection Grant			
Grant, J. Andrew Cleary, Sean	Political Studies	Green Finance: New Directions in Sustainable Finance Research and Policy	\$21,881

Moore, Margaret	Political Studies	Indigenous Land Rights and Reconciliation?	\$20,601
SSHRC Individual Indigenous Research Capacity and Reconciliation Connection Grant			
Scott, Jill	Languages, Literatures & Cultures	Ratiwennonkwas: Gathering Models for Kanien'kéha Language Revitalization	\$38,296
SSHRC Insight Development Grant			
Beach, Pamela	Faculty of Education	The Role of the Internet in Teachers' Professional Learning: A Pan-Canadian Exploratory Study	\$62,470
Butler, Alana Cheng, Lying	Faculty of Education	Beating the Odds: An intergenerational examination of cultural barriers to post-secondary education for low-income Ontario youth	\$57,304
D'Elia, Una	Art History	Statues that Blush and Bleed: Painted Sculpture in Northern and Southern Italy in the Sixteenth Century	\$50,947
Flores, Luis Hollenstein, Tom	Psychology	How Social Networks Help Emerging Adults Strive for Goals	\$70,000
Ghahari, Setareh McColl, Mary Ann	School of Rehabilitation Therapy	Accessing Community Help for Immigrants: Empowerment, Voice & Enablement (ACHIEVE program)	\$71,498
Gil, Richard	Smith School of Business	Efficiency in Charitable Organizations and NGOs: Skill-transferability and Economies of Scale.	\$56,400
Hall, Rebecca	Global Development Studies	Post-Extractive Futures: Decolonizing Regional Development in the NWT and Alberta	\$71,171
Hauser, David	Psychology	Mother nature's fury: How antagonistic agent metaphors impact reasoning about natural disasters	\$56,896
Jenkin, Tracy Ovchinnikov, Anton	Smith School of Business	Understanding Human-AI Collaborations	\$73,856
Kennedy, Jen	Art History	Beyond Zeros and Ones: Exploring Cyberfeminism's History and Impact on Contemporary Art	\$53,230
Kerr, Lisa	Faculty of Law	Sentencing Racialized Defendants: Collective Experience and the Promise of a Fit Sanction	\$45,553
Lefort-Favreau, Julien	French Studies	Une quête pour l'indépendance éditoriale en contexte francophone : discours et pratiques	\$48,928
Pasolli, Lisa	History	Historical Perspectives on Tax Expenditures and Social Policy	\$35,536
Prouse, Carolyn	Geography & Planning	Towards a Conjunctural Methodology for Human Milk Exchange	\$45,306
Szto, Courney	School of Kinesiology and Health Studies	Not So Green Bikes: A sociological life cycle analysis of bike waste	\$74,294

Taylor, Peter	Mathematics & Statistics	Documenting the effects of a new kind of mathematics curriculum in Grades 11-12	\$69,200
Tienhaara, Kyla	Global Development Studies	Fossil Fuel Finance: The Role of Export Credit Agencies	\$46,955
Vasanthakumar, Ashwini	Faculty of Law	Transitional Justice as Transnational Justice: partnering with diasporas to secure transitional justice abroad	\$33,649
Weinrib, Jacob	Faculty of Law	Just Administration: A Unified Theory	\$55,612
SSHRC Partnership Engage Grant			
Goerzen, Anthony	Stephen J R Smith School of Business	IMPACT Transforming Natural Resource Management	\$25,000
The International Society of Nephrology			
Yeates, Karen	Medicine	International Society of Nephrology Sister Centre Program Level A	\$15,000
TIME			
Reed, David Craig, Andrew	Medicine	Psychological stress-food antigen triggers IBS symptoms via loss of oral tolerance	\$75,000
TIPS – Canada Research Chair			
Aldersey, Heather	School of Rehabilitation Therapy	Canada Research Chair in Disability Inclusive Development	\$500,000
Booth, Christopher	Oncology	Canada Research Chair in Population Cancer Care	\$500,000
Hassan, Ahmed	School of Computing	Canada Research Chair in Software Analytics	\$500,000
Morcom, Lindsay	Faculty of Education	Canada Research Chair in Language Revitalization and Decolonizing Education	\$500,000
Take, Andy	Civil Engineering	Canada Research Chair in Geotechnical Engineering	\$500,000
Zou, Ying	Electrical & Computer Engineering	Canada Research Chair in Software Evolution	\$500,000
Panchenko, Anna	Pathology and Molecular Medicine	Canada Research Chair in Computational Biology and Biophysics	\$1,400,000
TIPS – New Frontiers in Research Fund			
Capicciotti, Chantelle Ormiston, Mark	Chemistry	Developing a High-Throughput Platform to Identify Glycan Targets for Novel Cancer Immunotherapies	\$250,000
Colautti, Robert	Biology	In situ detection, characterization, risk assessment, and management of tick-borne diseases	\$248,050

Dahan, Samuel Zhu, Xiaodan Levin, Yuri	Faculty of Law	AI-Tribunal for Small Claims: Building an Intelligent Dispute Resolution System	\$244,562
Morcom, Lindsay Freeman, Kate St. Amant, Deborah	Education	Immersive Digital Environments and Indigenous Knowledges: Co-Creation in Virtual Reality Environments to Advance Artmaking, Digital Poetics and Reconciliation	\$249,849
Selinger, Jessica	Kinesiology and Health	Improving gait performance using energy incentivized movement therapy	\$249,843
Stamplecoskie, Kevin Liu, Guojun	Chemistry	Hydrovoltaics - Harnessing Canada's Most Abundant & Clean Energy Resource	\$250,000
Thomson, Laura	Geography and Planning	Rekindle the Past to Spark the Future: New Frontiers in Glacier Research	\$250,000
Women's College Research Institute – Women's Xchange			
Othman, Maha	DBMS	BLISS: Building Lessons in Sexual Health Stories	\$15,000