OFFICE OF THE VICE-PRESIDENT
RESEARCH & INNOVATION

RYERSON UNIVERSITY

External Research Funding Awarded in 2013-14

The following is a list of external research grants from major funding competitions awarded to Ryerson faculty in 2013-14. The list does not include sub-grants or awards that are not yet public. Available and announceable details, reported as of September 2014, are provided below.

Natural Sciences and Engineering Research Council

Collaborative Research and Development Grants

Ebrahim Bagheri (Electrical Engineering)	Intelligent Infrastructure for Large-Scale Product Knowledge Management	$440,300
Ling Guan (Electrical Engineering)	An Intelligent Rendering Framework for Adaptive Mixed Reality Applications on Canada's Historic Heritage Sites	$400,000
Ebrahim Bagheri (Electrical Engineering)	Semantics-Driven Learning Adaptation Framework	$298,600
Marcus Escobar-Anel (Mathematics)	Modeling a Fund of HedgeFunds by means of stochastic covariance processes	$220,000
Xavier Fernando (Electrical Engineering)	Green, Hybrid Communication Network for Localization in Underground Mines	$200,000
Shudong Yu (Mechanical and Industrial Engineering)	Modelling vibration of 37-element CANDU fuel string in an aged pressure tube	$134,667
Marcus Escobar-Anel (Mathematics)	Wireless Performance Monitoring of Plug-in Electric Vehicules	$129,560
Mark Gorgolewski (Architectural Science)	Building performance evaluation of leading Canadian green buildings	$48,000

Collaborative Health Research Project Grant

Michael Kolios (Physics)	Characterization of blood storage lesions using photoacoustic technologies	$242,597
Stephen Waldman (Chemical Engineering)	Patient-specific cartilage implants: Development and Surgical Implantation	$177,386
Mark Towler (Mechanical and Industrial Engineering)	Transformative Bioglass Coatings for Surgical Applications	$165,773

Discovery Grant

Marcello Papini	Mechanical and Industrial Engineering	Models to determine the process parameters required to sculpt desired micro-feature topographies on flat and curved surfaces using abrasive jet technology	$290,000
Lian Zhao	Electrical Engineering	Dynamic Radio Resource Management for Advanced Wireless Communication Systems	$200,000
Alan Fung	Mechanical and Industrial Engineering	Novel Building Integrated Energy Systems Toward Net-zero Energy Status	$190,000
Victor Yang	Electrical Engineering	Optical coherence tomography, optical topographical imaging and fluorescence guided surgical laser ablation	$175,000
Debora Foster	Chemistry and Biology	Environmental modulation of the virulence program of enterhemorrhagic E. coli	$165,000

John Marshall	Chemistry and Biology	Biophysical and biochemical techniques for the analysis and targeting of the Fc receptor supramolecular complex	$165,000
Habiba Bougherara	Mechanical and Industrial Engineering	Towards Sustainable Green Composite Materials for Medical Implants	$160,000
Lixia Yang	Psychology	The Integration of Emotion and Cognitive Control in the Aging Brain	$145,000
Mark Towler	Mechanical and Industrial Engineering	Inorganic biomaterials with therapeutic potential	$145,000
Xijia Gu	Electrical Engineering	Development of High power all-fiber Q-switched and mode-locked Lasers for industrial and medical applications	$145,000
Michael Arts	Chemistry and Biology	Biochemical changes in aquatic organisms in a warming world	$135,000
Lili Ma	Psychology	A developmental approach to the effects of scarcity on judgment and decision-making	$125,000
Fei Yuan	Electrical Engineering	Design techniques for remote calibration of passive wireless microsystems	$120,000
Kaamran Raahemifar	Electrical Engineering	Unsafe Driver Behavior Detection Using Novel Dictionary Algorithm	$120,000
Cory Searcy	Mechanical and Industrial Engineering	Measuring Sustainability Performance in Supply Chains	$115,000
Khaled Sennah	Civil Engineering	Development of Cost-Effective Accelerated Bridge Construction in Skew and Right Alignments	$115,000
Serhan Guner	Civil Engineering	Development of Nonlinear Analysis Tools for Concrete Frame Structures under Extreme Loads	$110,000
Jinyuan Liu	Civil Engineering	Fundamental investigation of compensation grouting using transparent soil	$105,000
Comondore Ravindran	Mechanical and Industrial Engineering	Phenomenological studies on solidification and casting of aluminum and magnesium alloys	$100,000
Farhad Ein-Mozaffari	Chemical Engineering	Investigation of Continuous-Flow Mixing of Non-Newtonian Fluids through Advanced Flow Visualization Techniques (e.g. Tomography and Ultrasonic Velocimetry) and Computational Fluid Dynamics	$100,000
Kathryn Woodcock	Occupational and Public Health	Human factors engineering tools for amusement attraction design and evaluation	$95,000
Khandaker Hossain	Civil Engineering	High Performance Engineered Concrete Materials and Structural Systems for Innovative and Sustainable Construction	$95,000
Russell Richman	Architectural Science	Research and Development to Support an Ultra-Energy-Efficient Residential Building Stock in Ontario	$95,000
Marcus Escobar-Anel	Mathematics	Stochastic covariance and first passage time for multidimensional stochastic processes	$90,000
Jahan Tavakkoli	Physics	Ultrasound Guidance and Monitoring of High-power Ultrasound Therapies	$85,000
Janet Koprivnikar	Chemistry and Biology	Parasitism in Aquatic communities - Environmental Influences and Multiple Stressors	$50,939
Pablo Olivares	Mathematics	Pricing and Hedging under Processes with Conditional Independent Increments	$50,000
Stephen Waldman	Chemical Engineering	Chondrocyte Mechanotransduction and the Pruinergic Receptor Pathway	$41,942
Ziad Saghir	Mechanical and Industrial Engineering	Experimental measurement and theoretical estimation of diffusion coefficients for multi-components fluid mixtures	$26,000

Simant Ranjan Upreti	Chemical Engineering	Fundamental characterization and enhancement of chemical engineering processes using advanced optimal control techniques	$20,000
Abdolreza Abhari	Computer Science	Data Mining for Information Retrieval and Processing in Web 2.0 Social Networking	$19,000
Dietmar Cordes	Physics	Spatially constrained analysis of functional MRI data with CCA	$17,000
Alexander Alvarez	Mathematics	Multivariate modelling of financial markets	$10,000

Research Tools and Instruments

Robert Botelho	Chemistry and Biology	A Facility for Environmentally-controlled Live-Cell Imaging	$125,697
Comondore Ravindran	Mechanical and Industrial Engineering	An Apparatus for Measuring the Thermal Conductivity of Various Materials	$62,860

Engage Grants Program

Alagan Anpalagan	Electrical Engineering	Development of a Sensor-based Generic Remote Project Delivery Platform	$50,000
Ali Miri	Computer Science	Cloud-Based Business Intelligence and Analytics	$50,000
Jinyuan Liu	Civil Engineering	Statistical Correlations between SPT-N Values and Soil Parameters	$50,000
John Marshall	Chemistry and Biology	Identity of micro organisms and enzymes that bio-degrade the surfactants, required to disperse heavypetroleum oil, in a model environment	$50,000
Khandaker Hossain	Civil Engineering	Bond characteristics of V-ROD GFRP bars in engineered cementitious composites	$50,000
Lesley Campbell	Chemistry and Biology	Identifying plant biofilters using predictive phylogenetics	$50,000
Mohammed Kianoush	Civil Engineering	Shrinkage and Temperature Cracking in FRP Reinforced Liquid Containing Structures	$50,000
Pawel Pralat	Mathematics	Exploiting Big Data for Customized Online News Recommendation System	$50,000
Raffi Karshafian	Physics	Biofouling control by ultrasound-induced cavitation within water treatment systems	$50,000
Russell Richman	Architectural Science	Development of a Field Testing Standard for Residential Greywater Recovery Systems	$50,000
Zouheir Fawaz	Aerospace Engineering	Experimental Assessment of the baseline static properties of Titanium (Beta C) bar materials for landing gear spring applications	$50,000
Jelena Misic	Computer Science	Building algorithms for calculation of identity verification scores	$49,396
Joon Chung	Aerospace Engineering	Development of Cabin Interior Design Optimization Tool for Bombarider Aerospace	$48,400
Ahmed Abdelrahman	Civil Engineering	Radiometric correction of multispectral Lidar data	$25,000
Alexander Ferworn	Computer Science	Multi-Orientation Mount for Micro-Unmanned Aerial Vehicles for Inspection of Urban Disaster Environments	$25,000
Alexandre Douplik	Physics	Experimental evaluation of biotissue ablation performance for the novel tunable MOPA laser system towards development of a novel	$25,000
Ayse Bener	Mechanical and Industrial Engineering	Context-aware Collaborative Filtering System	$25,000
Bryan Koivisto	Chemistry and Biology	Next-Generation Light Source for Solar Simulators	$25,000

Der Chyan (Bill) Lin	Mechanical and Industrial Engineering	Development of a wearable long-term cardiac health information system device	$25,000
Dewei (David) Xu	Electrical Engineering	Investigation of Matrix Converters for AC/DC Front-end Power Supplies	$25,000
Fei Yuan	Electrical Engineering	Study of non-invasive real-time on-chip di/dt events	$25,000
Gideon Wolfaardt	Chemistry and Biology	Combined ultrasound-antibiotic treatment of biofilms	$25,000
Guang Jun Liu	Aerospace Engineering	Hydraulic Random Vibration Testing System Modeling and Signal Generation	$25,000
Hesham Marzouk	Civil Engineering	Health monitoring strategy for Oakville Rebecca Street Bridge	$25,000
Hua Lu	Mechanical and Industrial Engineering	Reliability study for fiber optic sensor element and packaging	$25,000
Joseph (Carl) Kumaradas	Physics	Characterization of biological samples using Raman spectroscopy	$25,000
Kristiina Valter McConville	Electrical Engineering	Dry Wearable ECG for health monitoring	$25,000
Lian Zhao	Electrical Engineering	MCU-based Data Acquisition for Structural Health Monitoring	$25,000
Mark Towler	Mechanical and Industrial Engineering	A glass-based carrier for bone morphogenetic proteins	$25,000
Scott Tsai	Mechanical and Industrial Engineering	Magnetic pre-concentration of arsenic nanoparticles in water for detection with portable spectroscopy	$25,000
Seth Dworkin	Mechanical and Industrial Engineering	A Smart Manifold for Ground Source Heat Pump Applications	$25,000
Soosan Beheshti	Electrical Engineering	Equipping RFID technology with image processing counting verifier	$25,000
Ziad Saghir	Mechanical and Industrial Engineering	Analytical model for the diffusion rate of SO2 into the asymmetric hollow fiber ceramic tube	$25,000
Jahan Tavakkoli	Physics	A real-time ultrasound image processing technique for computer-assisted and image-guided interventional technologies	$24,935
Sanjiwan Bhole	Mechanical and Industrial Engineering	Characterization and optimization of ceramic coatings for industrial furnace environments	$24,500
Abhay Sharma	Graphic Communications Management	Method for Quantification of Ink Consumption in Large Format Inkjet Printing	$23,972
Deborah Fels	Information Technology Management	Video on demand for blind and low vision viewers	$22,000

Partnership Workshops Grants

Balasubramanian Venkatesh	Electrical Engineering	Energy Storage Working Group Workshop	$24,980

Idea to Innovation

Ebrahim Bagheri	Electrical Engineering	A semantics-enabled movie-space platform: market assessment	$10,000

Interaction Grants Program

Joon Chung	Aerospace Engineering	Introduction of MIMS (Mixed-reality Immersive Motion Simulator) facility at Ryerson University	$5,000
Lesley Campbell	Chemistry and Biology	Visit to Tweed Inc.'s facility to initiate research relationship	$1,135
Mehrab Mehrvar	Chemical Engineering	Industrial visit to Bishop Water Technologies Inc.	$700

Social Sciences and Humanities Research Council

Insight Grants

Alexandra Mazalek	RTA School of Media	Supporting Spatial Ability with Tangible and Embodied Interactions	$468,365
Jane B. Sprott	Criminal Justice & Criminology	Punishment Before Trial: Girls, Bail, and Conditions of Release	$64,436

Partnership Development Grants

Ojelanki Ngwenyama	Global Management Studies	Accelerating Digital Technology Adoption in Canadian Companies	$197,296
Donna Koller	Early Childhood Education	Mobilizing Knowledge: Partners for Social Inclusion for Children with Disabilities	$182,218
Bryan Evans	Politics and Public Administration	Policy Engagement at Multiple Levels of Governance: A Case Study of the Living Wage and Minimum Wage Policy	$170,962

Insight Development Grants

Sejal Patel	Early Childhood Education	School redesign and neighbourhood redevelopment: A study of educational success, families and equity	$74,944
Lynn Lavallee	Social Work	Telling a Different Story: Developing a Youth-Driven Theoretical Model for Working with an Urban Community	$74,817
Sheri Madigan	Psychology	Elucidating the role of parenting in child language development through meta-analytic and sibling comparison studies	$72,816
Kathleen Peets	Early Childhood Education	The Role of Discourse in Listening and Reading Comprehension Among Children with Language Impairment	$68,307
Jason Boyd	English	The Texting Wilde Project: Developing Computer-Assisted Methods for the Analysis of Life Writing	$67,755
Shavin Malhotra	Global Management Studies	Cognitive Biases in Strategic Decisions: The Case of International Acquisition Premiums	$65,550
Matthew Tiessen	RTA School of Media	Life in the Gamocracy	$52,638
Andrew O'Malley	English	Comic Books, Children's Culture, and the Crisis of Innocence, 1940-1954	$47,663
Colleen Derkatch	English	Rhetorics of Wellness: Discourse-Mapping in an Illness-Oriented Culture	$41,650
Tomaz Jardim	History	The Trials of Ilse Koch	$27,478

Standard Research Grants

Jeremy Shtern	RTA School of Media	The Interactor Commodity: Social Media, User Generated Content, Audiences and Advertising	$59,079

Connection Grants

Sepali Guruge	Nursing	Highlighting the role of resilience, leadership, and capacity-building among immigrant seniors in addressing elder abuse within immigrant communities	$50,000
Philip Walsh	Management & Entrepreneurship	Drive Electric Vehicles Web Application	$25,000
Wendy Cukier	Information Technology Management	Creative Catalyst: Driving Social Innovation through Art & Design	$25,000
Jason Nolan	Early Childhood Education	Supporting outreach to help autistic youth transition to higher education	$24,962
Kimberly Bates	Management & Entrepreneurship	Geotagging: Key to Institutional Entrepreneurship around Urban Retail Development	$24,932
Cecilia Rocha	School of Nutrition	Feeding Cities: Rural-Urban Connections and the Future of Family Farming	$24,050
Jennifer Martin	Child and Youth Care	Child Sexual Abuse Images Online: Confronting the Problem - Research, Policy, Practice	$16,840
Graham Hudson	Criminal Justice & Criminology	Business, Human Rights and Law in Transnational Context	$16,000

Partnership Grants

Irene Gammel	English	Advanced Digital and Professional Training (ADaPT) Research Zone	$19,895

Canadian Institutes of Health Research

Partnership for Health System Improvement

Elizabeth McCay	Nursing	Sustaining Recovery: Supporting the Transition from Specialized Services to Community-based Primary Care for At-Risk Youth Who Have Experienced Early Psychosis	$599,987
Celeste Alvaro	Architectural Science	Assessing the impact of healthcare facility design on health outcomes: Implications for strategic investments in design	$252,009

Operating Grant

Colleen Carney	Psychology	A Longitudinal Assessment of Cognitive Risk for Insomnia	$417,641
Naomi Koerner	Psychology	An Experimental Investigation of the Effects of Concrete Thinking on Worry, Problem-Solving and Cognitive Processing in Individuals with Generalized Anxiety Disorder	$200,160

Collaborative Health Research Projects (CHRP)

Mark Towler	Mechanical and Industrial Engineering	Transformative Bioglass Coatings for Surgical Applications	$320,161
Michael Kolios	Physics	Characterization of blood storage lesions using photoacoustic technologies	$242,595
Stephen Waldman	Chemical Engineering	Patient-specific cartilage implants: Development and Surgical Implantation	$151,389

New Investigator Award - Grant

Josephine Wong	Nursing	Mobilizing ethnoracial minority and newcomer communities to reduce HIV/STI stigma and health disparities	$300,000

Proof of Principle - Phase I

Victor Yang	Electrical Engineering	Integrated Surgical Lighting and Navigation System	$158,430

Planning and Dissemination Grant- Institute Community Suport

Madhura Mitu Sengupta	Politics and Public Administration	Access and Innovation: The Health Impact Fund	$25,000
Michelle Nelson	Nursing	Stroke Rehabilitation and Multimorbidity Research Think Tank	$20,827

Planning Grant

Donna Koller	Early Childhood Education	Patient Disclosure of Adverse Events in Paediatrics: Synthesis of Literature and Research Priorities	$24,924
Patrick Neumann	Mechanical and Industrial Engineering	Developing a Canadian Model of Innovation in Nursing Systems: Better Work & Better Care	$23,791
Kathryn Underwood	Early Childhood Education	Integrated developmental and intervention services for inclusive early childhood services systems	$23,323

Dissemination Events

Emily van der Meulen	Criminal Justice & Criminology	Prison Health Now: Protecting Prisoners from HIV and HCV through Prison-Based Needle and Syringe Programs	$19,675

Team Grant- LOI

Josephine Wong	Nursing	Reducing HIV vulnerabilities and Promoting Resilience among self-identified heterosexual African, Caribbean and Black Men in Ontario	$10,000

Cafe Scientifique

Morton Beiser	Psychology	Lending a Hand for Our Future: What Can We Do About the Mental Health of Children and Youth New to Canada and Who Should Be Doing It?	$2,945

CANADA RESEARCH CHAIR

Souraya Sidani	Nursing	Tier 1 Canada Research Chair in Patient-Centered Health Interventions: Design and Evaluation	$1,400,000
Alexandra Mazalek	RTA School of Media	Tier 2 Canada Research Chair in Digital Media and Innovation	$500,000

CANADA FOUNDATION FOR INNOVATION

Leaders Opportunity Fund

Victor Yang	Electrical Engineering	Joint Translational Optical Coherence Tomography (JTOCT) facility	$154,967
Sridhar Krishnan	Electrical Engineering	Biomedical Signal Analysis Research Laboratory	$99,013
Ying Jun (Joseph) Chow	Civil Engineering	Testbed for Cyber-Physical Urban Logistics Systems	$77,995

OTHER FEDERAL GOVERNMENT

AUTO21 Inc. - Connect Canada Internships

Alan Fung	Mechanical and Industrial Engineering	Energy assessment and cost benefit analysis for selected small and medium capacity industrial customers of Enbridge Gas Distribution Inc.	$50,000
Matthew Kyan	Electrical Engineering	Scene localisation and pose tracking for immersive mobile vistas	$30,000
Aziz Guergachi	Information Technology Management	Organizational Development	$20,000
Lian Zhao	Electrical Engineering	Battery Powered HVAC	$20,000
Raffi Karshafian	Physics	Sterilization of dental tools using ultrasound and ozonated water	$20,000
Mark Gorgolewski	Architectural Science	Establishing the Toronto 2030 District	$15,000
Russell Richman	Architectural Science	Optimization Methodology Development for VRF System	$15,000
Alagan Anpalagan	Electrical Engineering	Research and Development of Wireless Sensor Network for Water Leak Monitoring and Reporting	$10,000
Anton de Ruiter	Aerospace Engineering	Deep Space Spacecraft Motion Simulator	$10,000
David Naylor	Mechanical and Industrial Engineering	Computational Fluid Dynamics (CFD) Analysis of Building Integrated Photovoltaic/Thermal Systems	$10,000
Hua Lu	Mechanical and Industrial Engineering	Testing and analysis for advanced BGA assembly bending reliability	$10,000
Izabella Pruska-Oldenhof	Image Arts	HoloFact Scanner	$10,000
Jason Lisi	Graphic Communications Management	Development of Colour-Changing Indicator Label	$10,000
Ramani Ramakrishnan	Architectural Science	Evaluation of Pressure Drop of HVAC System Silencers	$10,000
Richard Grunberg	RTA School of Media	PESA XSTREAM LIVE VENUE STREAMING SYSTEM	$10,000
Richard Lachman	RTA School of Media	Web Browser Video Player for 360deg Content	$10,000

Seth Dworkin	Mechanical and Industrial Engineering	Developing a Smart Manifold system with Groundheat Solar Wind Corp	$10,000
Soosan Beheshti	Electrical Engineering	Mobile Solution to Collect and Distribute Consumer Data for Energy Management	$10,000
Xijia Gu	Electrical Engineering	Development of Fiber Optic Rotary sensors	$10,000
Cyndy Baskin	Social Work	Theme B (Societal Issues) Vehicular Injury in Aboriginal Communities: Understanding and Reducing the Impact of Vehicular Injury in First Nations, Inuit and Metis Communities	$9,000
Bin Wu	Electrical Engineering	Grid Tied Converter with Power Quality Improvement Features for Renewable Energy Sources	$5,000
Comondore Ravindran	Mechanical and Industrial Engineering	Study the grain refining efficioency of AnO in Mg-Al alloys	$5,000
Darko Joksimovic	Civil Engineering	Developing a Decision Support Framework for Evaluation of Pumped Hydro Energy Storage (PHES) in Ontario	$5,000
Songnian Li	Civil Engineering	Comparison of Solar Radiation Tools for Rooftops Solar Potential Analysis	$5,000

Grand Challenges Canada - Stars in Global Health

Scott Tsai	Mechanical and Industrial Engineering	Ultra low cost, simply operated, lab-on-a-chip detection of arsenic contamination in Bangladesh's well waters	$113,000

International Development Research Centre - Canadian Partnerships Program

Fiona Yeudall	School of Nutrition	Municipal Food Policy & Practice	$61,000
Sepali Guruge	Nursing	Strengthening Health Policy Response to Address Intimate Partner Violence in Sri Lanka	$59,680

Networks of Centres of Excellence - GRAND (Graphics, Animation and New Media Canada)

Deborah Fels	Information Technology Management	VibraFusionLab	$60,000
Frauke Zeller	Professional Communications	NEWS2	$3,200

Other Government Agencies

Marsha Mceachrane Mikhail	International Affairs	Department of Foreign Affairs and International Trade – DFAIT International Scholarship Program	Student Exchange Program 2013-2014 Competition	$65,000
David Day	Psychology	Public Safety Canada – Professional Services	Cost of Criminal Trajectories in Canada	$49,694
Marcello Papini	Mechanical and Industrial Engineering	Natural Resources Canada – Services Contract	Investigation of the Erosion Resistance of Coatings Produced at CanmetENERGY	$21,760
Janet Koprivnikar	Chemistry and Biology	Environment Canada – Service Contract	Examination of Leopard Frogs for the presence of Helminth parasites	$9,577

Julia Lu	Chemistry and Biology	Agriculture & Agri-Food Canada – Research	Further study and improve biological nitrogen fixation in corn by Gluconacetobacter diazotrophicus	$8,000
David Atkinson	Geography	Aboriginal Affairs and Northern Development Canada – Northern Scientific Training Grants Program	Ryerson University Northern Studies Committee (2014-15 Program)	$3,600

ONTARIO GOVERNMENT

Ontario Centres of Excellence Inc. - Campus Linked Accelerator Program

Office, VP Research & Innovation		Campus Linked Accelerator	$2,000,000

Ontario Centres of Excellence Inc. - Collaborate-to-Commercialize (C2C)

Rafik Loutfy	Mechanical and Industrial Engineering	Self Health Monitoring for TrackSafe	$149,997
Matthew Kyan	Electrical Engineering	Scene localisation and pose tracking for immersive mobile vistas	$50,000

Ontario Centres of Excellence Inc. - Market Readiness

Seth Dworkin	Mechanical and Industrial Engineering	Hybrid Geothermal Optimization Software Company	$50,000

Ontario Centres of Excellence Inc. - Technical Problem Solving

Khaled Sennah	Civil Engineering	Experimental Study on Post Installed GFRP Bar Strength at Bridge Barrier Wall Junction with Existing Deck Slabs	$86,000
Fengfeng (Jeff) Xi	Aerospace Engineering	Composite bushing for landing gears	$31,250
Lian Zhao	Electrical Engineering	Battery Powered HVAC	$25,001
Hua Lu	Mechanical and Industrial Engineering	Testing and analysis for advanced BGA assembly bending reliability	$24,999
Krishna Kumar	Aerospace Engineering	Sensors and Wireless Technology for Health Monitoring of Organic Verm Digesters	$24,999
Russell Richman	Architectural Science	Towards a Standardization of Building Envelope Performance Evaluation Terminology	$24,995
Raffi Karshafian	Physics	Ultrasound-Microbubble Therapy System for Cell Suspension Model	$24,975

Ontario Centres of Excellence Inc. - Voucher for Innovation and Productivity (VIP)

Ramani Ramakrishnan	Architectural Science	Computational Acoustic Modelling of Wind Tunnel Turning Vanes	$34,210
Bryan Koivisto	Chemistry and Biology	Next-Generation Light Sources for Solar Simulators	$25,000

Xijia Gu	Electrical Engineering	Development of Fiber Optic Rotary sensors	$20,000
Colin Ripley	Architectural Science	Interior Responsive Envolopes: The Stratus Project in the Clouds	$20,000
David Naylor	Mechanical and Industrial Engineering	Computational Fluid Dynamics (CFD) Analysis of Building IntegratedPhotovoltaic/Thermal Systems	$20,000
Jason Lisi	Graphic Communications Management	Development of Colour-Changing Indicator Label	$20,000
Lev Kirischian	Electrical Engineering	Validation of the Dynamically Reconfigurable Multi-stream Video-processors in Xilinx Virtex/Kintex-7 FPGA Platform	$20,000
Raffi Karshafian	Physics	Sterilization of dental tools using ultrasound and ozonated water	$20,000
Richard Grunberg	RTA School of Media	PESA XSTREAM LIVE VENUE STREAMING SYSTEM	$20,000
Richard Lachman	RTA School of Media	Web Browser Video Player for 360deg Content	$20,000

Ontario Ministry of Agriculture, Food and Rural Affairs - Partner Contribution

Lynda McCarthy	Chemistry and Biology	Land application of municipal biosolids: assessment of ecological impacts and characterization of priority ESOCs	$65,000

Ontario Ministry of Economic Development and Trade

Office of the VP, Research and Innovation		Advanced Digital and Professional Skills Training	$800,000
Office of the VP, Research and Innovation		Young Woman Social Entrepreneurship Program	$25,000

Ontario Ministry of Energy - Smart Grid Fund

Balasubramanian Venkatesh (Centre for Urban Energy)	Electrical Engineering	Schneider Electric Grid Laboratory	$500,000

Ontario Ministry of Research and Innovation - Early Researcher Award

Catherine Beauchemin	Physics	Using mathematical models to optimize Ontario's emergency antiviral stockpile in time for the next flu pandemic	$190,000
Julia Spaniol	Psychology	Behavioural and neuroimaging studies of decision making across the lifespan	$140,000
Naomi Koerner	Arts, Psychology	Development and Evaluation of Two New Interventions for Generalized Anxiety Disorder	$140,000
Robert Botelho	Chemistry and Biology	Functional and molecular characterization of lysosomes and tubular lysosomes in immune function	$140,000

Ontario Ministry of Research and Innovation - Ontario Research Fund

Victor Yang	Electrical Engineering	Joint Translational Optical Coherence Tomography (JTOCT) facility	$154,967
Sridhar Krishnan	Electrical Engineering	Biomedical Signal Analysis Research Laboratory	$99,013
Joseph Chow	Civil Engineering	Testbed for Cyber-Physical Urban Logistics Systems	$77,995

Ontario Ministry of Research and Innovation - Round 5 Ontario Post Doctoral Award

Office of the VP, Research and Innovation		Ontario Post Doctoral Program Round 5	$50,000

Ontario Ministry of the Environment - Research Grant

James Li	Civil Engineering	BMPs to reduce wind and water erosion and control sediment at construction sites.	$80,000
Rachel Dodds	Hospitality & Tourism Management	Sustainable Recreation: Towards a better understanding of the current behaviours of outdoor recreational and tourism-based businesses in achieving or promoting environmentally sustainable tourism in the Lake Simcoe watershed	$36,690

Ontario Ministry of Training, Colleges and Universities - On-Campus Recruitment

Office of the VP, Research and Innovation		Campus Connect	$1,173,000

Ontario Ministry of Transportation - Highway Infrastructure Innovation Funding Program

Arnold Yuan	Civil Engineering	Use of Video Image Data for Pavement Distress Evaluation of Low-Volume Highway Roads	$94,500
Bhagwant Persaud	Civil Engineering	Development of Collision Modification Factors for Use on Provincial Highways in Ontario.	$36,625
Khaled Sennah	Civil Engineering	Use of FRC in Barrier Walls	$35,000
Medhat Shehata	Civil Engineering	Towards Sustainable and Green Concrete Structures: A Study on Ways to Extend the Service Life of Concrete Structures Containing Reactive Aggregate, and their Potential Recycling after Demolition	$28,775

Ontario Ministry of Transportation - Research

Hossein Rahnama	RTA School of Media	Mobility Solutions for ITS-Road Weather Reporting Platform Deployment	$340,000
Khaled Sennah	Civil Engineering	Development and study of UHPC as a closure strip material in prefabricated bridge applications	$90,000

Ontario HIV Treatment Networks

Emily van der Meulen	Arts, Criminal Justice & Criminology	Researcher-in-Residence Award	Prison-Based Needle and Syringe Program Guidelines: Participatory Research with Prisoners and Prison Health Care Staff in Ontario	$75,000
Trevor Hart	Arts, Psychology	Applied HIV Research Chair	HIV Prevention for Gay and Bisexual Men	$750,000

Ontario Arts Council - Business Case Non-Competitive

Deborah Fels	Information Technology Management	Accessible art programming	$41,100

Ontario Brain Institute - Commercialization Fellowship

Office of the VP, Research and Innovation		OBI-OCE Entrepreneurship Project	$50,000

MUNICIPAL GOVERNMENT

Ramani Ramakrishnan	Architectural Science	Regional Municipality of Niagara - Collaborative Research and Development	Effects of the installation of wind turbines in the West Lincoln Township of Niagara Region	$40,000
Myer Siemiatycki	Politics and Public Administration	Office of the Ombudsman - Services Agreement	Systemic investigations on public services	$36,500
Lynda McCarthy	Chemistry and Biology	City of Toronto - Wastewater Treatment	Land application of municipal biosolids: assessment of ecological impacts and characterization of priority ESOCs	$30,000

NOT-FOR-PROFIT ORGANIZATIONS & FOUNDATIONS

Movember Foundation

Sepali Guruge	Nursing	Canadian Men's Health Network	$2,999,992

Canadian Partnership Against Cancer

Thomas Tenkate	Occupational and Public Health	A Sun Safety Program Initiative for Outdoor Workers	$1,199,912

Mitacs Inc. - Industrial Contribution and Federal and Provincial Matching Funds

Alan Fung	Mechanical and Industrial Engineering	Energy efficiency assessment and cost/benefit analysis for selected small and medium capacity industrial customers of Enbridge Gas Distribution Inc.	$80,000
Kaamran Raahemifar	Electrical Engineering	Development of an On-body Sensor Network using a combination of INS and USID systems and its application to ExoLegs	$80,000
Ling Guan	Electrical Engineering	Correction of Non-ideal Lighting Conditions for Facial Recognition in Alcohol Ignition Interlock Devices	$80,000
Farrokh Janabi-Sharifi	Mechanical and Industrial Engineering	Development of Residential HVAC and Air Conditioning Demand management and Control Systems - Modeling and Control Design	$70,000
Frank Russo	Psychology	Optimizing hearing aids for speech intelligibility, sound quality and emotional speech	$46,167
Javad Alirezaie	Electrical Engineering	Developing advanced techniques for denoising Low-dose CT Images	$30,000
Kaamran Raahemifar	Electrical Engineering	Energy Management and Control System for Off-Grid System	$30,000
Vincent Hui	Architectural Science	Arch -App	$30,000

Alan Fung	Mechanical and Industrial Engineering	Potential of solar thermal/PV generation for a district energy system and generating a community building electrical and thermal load profile	$15,000
Alan Fung	Mechanical and Industrial Engineering	Optimized operational strategy planning model for Smart Net Zero Community	$15,000
Alan Fung	Mechanical and Industrial Engineering	Modeling and Optimization of roof based BIPV/T with air source heat pump	$15,000
Alan Fung	Mechanical and Industrial Engineering	Studying the Effect of a Thermal Storage in a Combined Building Integrated PV/T and ASHP systems	$15,000
Alan Fung	Mechanical and Industrial Engineering	High-Resolution 3D Mapping and Modeling of Solar Neighbourhood Potential	$15,000
Alan Fung	Mechanical and Industrial Engineering	Analysis and Evaluation of Heathwood Green Home	$15,000
Andrew Millward	Geography	Interactive Discovery Walks: A Mobile Application for Exploring Toronto Parks and Natural Heritage Features	$15,000
Charles David	RTA School of Media	AWE Technology Development Project - The Virtual History of Fort York	$15,000
Claus Rinner	Geography	Using CityEngine for Parameterized 3D Modeling of Regional Growth Scenarios	$15,000
Darko Joksimovic	Civil Engineering	Integration of Low Impact Development stormwater practices into the development of smart community	$15,000
Darko Joksimovic	Civil Engineering	Modelling Guidance for Low Impact Development Practices	$15,000
Henry Parada	Social Work	The Community Learning Hub Knowledge Mobilization	$15,000
Joseph Chow	Civil Engineering	Dynamic Door-to- Transit Station – Shared E-Taxi Serving Smart Community	$15,000
Kaamran Raahemifar	Electrical Engineering	Integration of Technologies for Smart Control of Micro Grids	$15,000
Kelly McShane	Psychology	Effectiveness of a Compassion Fatigue Reduction Workshop in Reducing Compassion Fatigue at Mount Sinai Hospital	$15,000
Kimberly Bates	Management & Entrepreneurship	Accelerating Solar/LED Community Lighting	$15,000
Marco Polo	Architectural Science	Architecture and National Identity: The Centennial Projects 50 years on.	$15,000
Mark Gorgolewski	Architectural Science	Designing for Urban Agriculture in a smart community	$15,000
Miljana Horvat	Architectural Science	Towards Development of a Decision Making Tool for Owners, Designers and Municipalities: Surveying Current Domestic Water Conservation Technologies and Tools for Single Family Residential Dwellings	$15,000
Miljana Horvat	Architectural Science	A Ranking Method: The Top Integrated Energy Generation/Storage Technologies (Building and Community Scales)	$15,000
Philip Walsh	Management & Entrepreneurship	s2e - The Role of Public Participation in Identifying Stakeholder Synergies in Renewable EnergyProject Development - London, ON	$15,000
Siyuan He	Mechanical and Industrial Engineering	Development of high surface quality and large static displacement translating micromirror for MEMS FTIRS with application to alcohol interlock	$15,000

Wendy Cukier	Information Technology Management	Addressing Racism in Toronto	$15,000
Wey Leong	Mechanical and Industrial Engineering	Dual Phase Change Material (PCM) Integration and Optimization for Heating and Cooling Seasons	$15,000
Philip Walsh	Management & Entrepreneurship	Evaluation of Solid-Phase Micro Extraction Technology for Environmental Monitoring	$11,000
Shudong Yu	Mechanical and Industrial Engineering	Bridging the Gap - Health and Safety Engineering Student Teaching Modules	$10,909

Industrial Fellowship

Alan Fung	Mechanical and Industrial Engineering	Combined Building Integrated PV/Thermal (BIPV/T) Collector with Two-stage Variable Capacity Air Source Heat Pump for Net-Zero Energy Building Applications	$57,500
John Enright	Aerospace Engineering	Evolving a Sub-Arcsecond Star Tracker	$57,500

Strategic Fellowship

Mohammed Kianoush	Civil Engineering	Establishing the seismic performance factors for reinforced concrete pedestals in elevated liquid tanks	$20,000

Industrial Research & Development Internship

Farrokh Janabi-Sharifi	Mechanical and Industrial Engineering	Development of Residential HVAC and Air Conditioning Demand management andControl Systems - Modeling and Control Design	$10,000

Rx&D Health Research Foundation

Celeste Alvaro	Architectural Science	Assessing the impact of healthcare facility design on health outcomes: Implications for strategic investments in design	$252,009

John Templeton Foundation - Research Fellowship Program

Klaas Kraay	Philosophy	Theism: An Axiological Investigation	$199,900

Canadian Cancer Society - Innovation Grants

Michael Kolios	Physics	Detecting circulating tumour cells using photoacoustic ultrasound RF spectroscopy	$168,910

Foundation Open Society Institute - Promoting Regional Efforts

Louise Zimanyi	International Affairs	The Consultative Group on Early Childhood Care and Development - Proposal to the Open Society Foundations	$82,000

Other Not-For-Profit Organizations & Foundation Grants

Nick Bellissimo	School of Nutrition	Obesity Society - Egg Nutrition Center Research Grant	Role of Dietary Protein in a Familiar Breakfast Meal on Subjective Satiety, Food Intake and Thermic Effect of Food in Normal Weight and Overweight/Obese Children	$40,000
Miljana Horvat	Architectural Science	George Cedric Metcalf Charitable Foundation - Metcalf Green Prosperity Challenge	Smart urban planning: Improving energy balance in urban context through effective use of solar strategies	$31,000
Henry Parada	Social Work	Association of Universities and Colleges of Canada (AUCC) - University Partnership Program	Child Protection and Strategic Curriculum Replication: Dominican Republic	$28,250
Cecilia Rocha	School of Nutrition	Association of Universities and Colleges of Canada (AUCC) - University Partnership Program	Multiplying Tier 2 Results	$28,250
Joseph Chow	Civil Engineering	The Regents of The University of California - Service Delivery	California Statewide Freight Forecasting Model	$26,730
Alexandra Fiocco	Psychology	Mind and Life Institute - 1440 Awards for Real-World Contemplative Research	Bringing relief to caregivers: Evaluating the effects of mindfulness-based stress reduction on relational quality, psychological well-being and cognitive function in caregivers of patients with dementia	$21,500
Nina-Marie Lister	Urban & Regional Planning	Woodcock Foundation - Grant Program	ARC - Animal Road Crossing Exhibit	$20,000
Jasna Schwind	Nursing	Ontario Shores Centre for Mental Health Sciences - Research Grant	Transition Points in Practice: Person-centred Care as Integral to Care Delivery Innovation	$20,000
David Hunter	Philosophy	Canadian Journal of Philosophy	Editorial Research Stipend	$18,000
Sepali Guruge	Nursing	Wellesley Institute - Enabling Grant	Pathways to care and services for immigrant women who haveexperienced intimate partner violence (IPV)	$15,000
Claus Rinner	Geography	Centre for Addiction and Mental Health - Transformational Learning	By Students For Students: Crowd-Mapping Mental Health Services	$8,000
Richard Grunsberg	RTA School of Media	Shastri Indo-Canadian Institute - Partnership Seed Grant	Collaborative Global Media Production and Learning creating Societal understanding and transformation	$6,000
Jonathan Farrar	Accounting	Canadian Academic Accounting Association - Research Grant Program	The Influence of Interactional Fairness on Tax Compliance in Canada	$5,000

Janice Waddell	Nursing	Sigma Theta Tau International - Research Seed Grant	Understanding the Career Paths and Needs of Master's Prepared Nurses in Ontario: A Pilot Study	$1,000

RESEARCH CONTRACTS

Ontario Power Authority

Balasubramanian Venkatesh (Centre for Urban Energy)	Electrical Engineering	Fellows at the Centre for Urban Energy	$1,530,000
Balasubramanian Venkatesh (Centre for Urban Energy)	Electrical Engineering	Student Awards at the Centre for Urban Energy	$270,000

Bombardier Transportation Canada Inc. (Industrial Contribution to OCE C2C)

Rafik Loutfy	Mechanical and Industrial Engineering	Self Health Monitoring for TrackSafe	$115,001

Bombardier, Inc. - Connect Canada Internship (Industrial Portion)

Aziz Guergachi	Information Technology Management	Business Case: Master Services Agreement	$5,000
Aziz Guergachi	Information Technology Management	Technical Publications Business-Technology Evolution Project	$5,000
Aziz Guergachi	Information Technology Management	Business Planning - CRM Implementation	$5,000
Aziz Guergachi	Information Technology Management	Organizational Development	$5,000

PowerStream Inc.

Balasubramanian Venkatesh (Centre for Urban Energy)	Electrical Engineering	CUE Investigation of power distributing engineering and energy storage issues	$200,000

Warranty Life Inc. (Industrial Contribution to NSERC Collaborative Research and Development Grants)

Ebrahim Bagheri	Electrical Engineering	Intelligent Infrastructure for Large-Scale Product Knowledge Management	$230,000

Phonak AG

Frank Russo	Psychology	Hear the World Research Chair in Music, Emotion, and Hearing Technology	$154,000

Sigma Analysis and Management Ltd. (Industrial Contribution to NSERC Collaborative Research and Development Grants)

Marcus Escobar-Anel	Mathematics	Modeling a Fund of HedgeFunds by means of stochastic covariance processes.	$110,000

PBE Canada Inc. (Industrial Contribution to NSERC Collaborative Research and Development Grants)

Xavier Fernando	Electrical Engineering	Green, hybrid communication network for localization in underground mines	$100,000

The Hershey Company

Dérick Rousseau	Chemistry and Biology	Structuring filling fats with Pickering emulsions and oleogelation	$98,000

SimentIT Inc.

Ling Guan	Electrical Engineering	An Intelligent Cloud-based Mobile Augmented Reality Framework with Applications to Marketing and Advertising	$80,000

The Energy Research Corporation

Balasubramanian Venkatesh (Centre for Urban Energy)	Electrical Engineering	Microgrids and their Control and Operation	$75,031

Toronto Hydro-Electric System Limited – Connect Canada Internship (Industry Portion)

Alan Fung	Mechanical and Industrial Engineering	Performance Analysis of Roof Integrated PV/T system with Air Source Heat Pump	$5,000
Alan Fung	Mechanical and Industrial Engineering	Pilot Study of Energy Use and Comfort Feedback Response	$5,000
Bin Wu	Electrical Engineering	Grid Tied Converter with Power Quality Improvement Features for Renewable Energy Sources	$5,000
Comondore Ravindran	Mechanical and Industrial Engineering	Study the grain refining efficioency of AnO in Mg-Al alloys	$5,000
Darko Joksimovic	Civil Engineering	Developing a Decision Support Framework for Evaluation of Pumped Hydro Energy Storage (PHES) in Ontario	$5,000
Mark Gorgolewski	Architectural Science	Developing a multi-tool building performance protocol for 6 Canadian green buildings	$5,000
Mark Gorgolewski	Architectural Science	Establishing the Toronto 2030 District	$5,000
Mark Gorgolewski	Architectural Science	Investigation of the performance gap of a multi-unit residential building in Canada.	$5,000
Russell Richman	Architectural Science	Optimization Methodology Development for VRF System	$5,000
Songnian Li	Civil Engineering	Comparison of Solar Radiation Tools for Rooftops Solar Potential Analysis	$5,000

Other Industry Research Contracts

Zouheir Fawaz	Aerospace Engineering	Pratt & Whitney Canada Corp.	Biodiesel Materials Compatibility Testing	$36,495
Mark Gorgolewski	Architectural Science	Stantec Consulting Ltd.	Building performance evaluation of leading Canadian green buildings	$24,000
Jennifer Lapum	Nursing	Associated Medical Services Inc.	Arts-informed approaches to person-centred care: a creative education and knowledge translation initiative	$20,000
Jason Lisi	Graphic Communications Management	Lunanos Inc.	Colour-Changing Indicator Label	$14,000
Seth Dworkin	Mechanical and Industrial Engineering	Groundheat Solar Wind Corp.	A Smart Manifold for Ground Source Heat Pump Applications	$14,000
Mohammed Kianoush	Civil Engineering	American Concrete Institute	Evaluation of the Seismic Performance Factors and Pedestal Shear Strength in Elevated Water Storage Tanks	$10,000
Ramani Ramakrishnan	Architectural Science	Kinetics Noise Control	Evaluation of Pressure Drop of HVAC System Silencers	$7,500
Krishna Kumar	Aerospace Engineering	CSR+ Vermicast Industries Inc.	Sensors and Wireless Technology for Health Monitoring of Organic Verm Digesters	$6,251
Raffi Karshafian	Physics	MD Precision Inc.	Ultrasound-microbubble therapy system for cell suspension model	$6,250
Ali Miri	Computer Science	QNX Software Systems	Mobile Platform Security	$6,250
Russell Richman	Architectural Science	RBS Consulting Engineering Group Inc.	Towards a Standardization of Building Envelope Performance Evaluation Terminology	$6,250
Alan Fung	Mechanical and Industrial Engineering	Enbridge Gas Distribution Inc.	Energy assessment and cost-benefit analysis for selected small and medium capacity industrial customers of Enbridge Gas Distribution Inc.	$5,000
John Marshall	Chemistry and Biology	Green On Industries Inc.	Identity of micro organisms and enzymes that bio-degrade the surfactants, required to disperse heavypetroleum oil, in a model environment	$5,000
Ramani Ramakrishnan	Architectural Science	Aiolos Engineering Corporation	Computational Acoustic Modelling of Wind Tunnel Turning Vanes	$5,000

INTERNATIONAL GRANTS

Dietmar Cordes	Physics	National Institutes of Health - Research Contract	Improving the Detection of Activation in High Resolution fMRI using Multivariate	$344,331
Paul Soon Huat Poh	Architectural Science	Loughborough University - Teaching Development Grant	Bim-Hub; A learning hub for international problem-based learning	$9,650
Marsha Mceachrane Mikhail	International Affairs	Consulate General of France - Grant Agreement	Service Culturel	$5,510