# 2024 SMU Research Recognition Reception

October 18, 2024

#### **Hosted by:**

Adam Sarty (Associate VP Research/ Dean of Graduate Studies & Research) and the FGSR Research Office team



### **Research Ethics Board Members**

Name	Faculty	Department	Type of Member
Rhoda Adeyemi	Arts	International Master of Teaching English	Graduate Student
Mark Barr	Arts	English	Faculty
Michele Byers	Arts	Women & Gender Studies	Faculty
Jim Cameron	Science	Psychology	Faculty
Leanna Closson	Science	Psychology	Faculty
Leesa Hamilton	NSCAD	Textiles and Fashion	Faculty
John Boddie	N/A	N/A	Community
Myles Davidson	Science	Psychology	Graduate Student
Maryam Dilmaghani	Sobey School of Business	Economics	Faculty
Mathew Reichertz	NSCAD	Drawing Lab	Faculty
Nicolas Roulin	Science	Psychology	Faculty
Marcus Sibley	Arts	Criminology	Faculty
Mark Fleming	Science	Psychology	Faculty
Mary Sheppard	Science	Chemistry	Faculty
Min-Jung Kwak	Arts	Geography & Environmental Studies	Faculty
Tatjana Takseva	Arts	English	Faculty
Arla Day	Science	Psychology	Faculty
Hao Lu	Sobey School of Business	Management	Faculty
Luke MacDonald	Science	Engineering	Faculty
Darrell Varga	NSCAD	Art and History Contemporary Culture	Faculty
Ron Russell	Science	Biology	Faculty
Theodore Lownie	Science	Applied Science	Graduate Student
Orshy Torok	Graduate Studies & Research	Research Ethics	Staff
Megan Walsh	Sobey School of Business	Management	Faculty

### **Animal Care Committee**

Name	Department/Affiliation	Position	Term
Susan Bjornson	Biology	Committee Chair	Jan 2023 – Dec 2025
Jim Gillis	Bedford Highway Veterinary Hospital	Consulting Veterinarian	On-going
Caila Henderson	Faculty of Science	Animal Care Coordinator/Aquatic Facility Manager (ex-officio)	On-going
Anne Dalziel	Biology	SMU Faculty Member experienced in animal-based research	Jan 2023 – Jan 2025 (at term limit)
Michelle Patriquin	Biology	SMU Faculty Member whose research activities do not involve or depend on the use of animals.	Nov 2022 – Nov 2025 (renewable)
Kevin Shaughnessy	Biology	MSVU Faculty Member	Sept 2022 – Sept 2025 (renewable)
MacAulay Harvey	Chemistry	SMU Graduate Student	Sept 2024 – Sept 2025 (renewable)
Heather McKinnon Ramshaw	Resident of Halifax County	Community Member	Oct 2023 – Oct 2026 (renewable)



# Ivana Damjanov – Astronomy & Physics

Canada Research Chair in Astronomy and Astrophysics (*Tier II*), Natural Sciences and Engineering Research Council



# Marcin Sawicki – Astronomy & Physics

Canada Research Chair in Astronomy (*Tier I*), Natural Sciences and Engineering Research Council



# Christa Brosseau -Chemistry

Canada Research Chair in Sustainable Chemistry and Materials (*Tier II*), Natural Sciences and Engineering Research Council



## Mohammad Rahaman – Finance, Information Systems & Management Science

Canada Research Chair in International Finance and Competitiveness (*Tier II*), Social Sciences and Humanities Research Council



# Todd Ventura -Geology

Canada Research Chair in Organic Geochemistry and Marine Research (*Tier II*), Natural Sciences and Engineering Research Council



# Karly Kehoe – History

Canada Research Chair in Atlantic Canada Communities (*Tier II*), Social Sciences and Humanities Research Council





# Jonathan Fowler - Anthropology

*Terrestrial Recovery,* Henry M. Jackson Foundation for the Advancement of Military Medicine

Halifax Memory Maps Project 2023, Mitacs



# Diane Crocker - Criminology

Alternative Response to Intimate Partner Violence in Halifax Regional Municipality, Young Women's Christian Association of Halifax (YWCA)



# Alexandra Dodge - Criminology

Combatting Technology-Facilitated Sexual Violence: Supporting Young People in Schools, Social Relationships and on Social Media, Western University/Social Sciences and Humanities Research Council, Insight Grant



# Marcus Sibley - Criminology

Examining community safety and surveillance groups in Canadian cities, Social Sciences and Humanities Research Council, Insight Development Grant



# Luke Hathaway – English Language & Literature

Canada Council for the Arts, Concept-to-Realization Grant – to James Rolfe (composer) for development, workshop, and presentation of Caeneus: a new work of music theater (Luke Hathaway, librettist / co-producer)



# Teresa Heffernan – English Language & Literature

Al everywhere: The Mythical and Religious Roots of Algorithmic Faith, Social Sciences and Humanities Research Council, Insight Grant



# Goran Stanivukovic – English Language & Literature

Wonder and the Romance in Early Modern England, Social Sciences and Humanities Research Council, Insight Development Grant



# Mathew Novak – Geography & Environmental Studies

Collaborative Projects on Old Growth forest Geospatial databases, Department of Natural Resources and Renewables



#### Danika van Proosdij – Geography & Environmental Studies

Numerical Simulation of Tides and Storm Surges at Chignecto Isthmus During Post-Tropical Storm J Fiona, National Research Council Canada

Building Community Coastal Resilience in Nova Scotia with Green Shores for Homes, Nova Scotia Federation of Municipalities

Expanded Monitoring Program, Bathymetric Analysis and Habitat Monitoring Program Chiasson Office Barrier Beach, New Brunswick, Fisheries and Oceans

Making Room for Wetlands: St. Croix Edition, Fisheries and Oceans

Making Room for Wetlands: The Coastal Carbon Edition, Environment and Climate Change Canada



#### Danika van Proosdij – Geography & Environmental Studies

Sedimentological analysis, technical review, and coastal geomorphological expertise for coastal research, CBWES

Protecting Coastal Wetlands in Nova Scotia through Stewardship and Collaboration, Coastal Action

Green Shores for Homes 2023-2025 project support, Stewardship Centre

Green Shores for Homes 2023-2026, Stewardship Centre

Understanding Coastal Ecosystem Response to Nature-Based Climate Adaptation Methods in a Cold Climate, Mitacs

# Gavin Fridell – Global Development Studies

Sustainable Trade, Between Token and Substantive Change: Rethinking North American Trade, Social Sciences and Humanities Research Council, Insight Grant



# Blake Brown -History

A history of Canadian medical malpractice law, 1935-1980, Social Sciences and Humanities Research Council, Insight Grant



# Kirrily Freeman – History

Allied Art Preservation, Recovery, and Restitution: The MFA&A in History and Memory, Social Sciences and Humanities Research Council, Insight Grant

The International Decade for People of African Descent, Social Sciences and Humanities Research Council, Connection Grant



# Heather Green -History

Mining Danger: Industrial Disease, Accidents, and Pollution in Canada's Mines and Mining Communities, 1870-1990, Memorial University of Newfoundland/Social Sciences and Humanities Research Council, Insight Grant



# Karly Kehoe – History

One People, Two Islands: The historic entanglement of the islands of Eigg, Scotland, and Cape Breton, Nova Scotia, 1790-1830, Social Sciences and Humanities Research Council, Knowledge Synthesis Grant



# Timothy Stretton – History

Patriarchy, Contract and Coverture in England, 1500-1800, Social Sciences and Humanities Research Council, Insight Grant



# Peter Twohig – History

"As important as machinery": Unions, advocacy and the making of healthy workplaces, 1950-1985, Social Sciences and Humanities Research Council, Insight Development Grant



# Myles McCallum – Modern Languages & Classics

The Villa di Tito project: Re-examining Roman villas, Social Sciences and Humanities Research Council, Insight Grant



# Sveva Savelli – Modern Languages & Classics

Excavation and survey at Incoronata 'Greca': a study of the indigenous-Greek frontier on the Ionian Coast, McMaster University/Social Sciences and Humanities Research Council, Insight Grant



# Egor Tsedryk – Modern Languages & Classics

Slavic languages across grammars and models: Slavic heritage languages, trends and synergies in Slavic linguistics, and the artificial intelligence challenge, Social Sciences and Humanities Research Council, Connection Grant



# Paulo Ravecca - Political Science

Countering Disinformation About The 2SLGBTQI+ Community in Rural Canada: Investigating How Older Canadians Interact with the Anti-SOGI Movement in Alberta, British Columbia, and Nova Scotia, Canadian Heritage



# Margaret MacDonald - Study of Religion

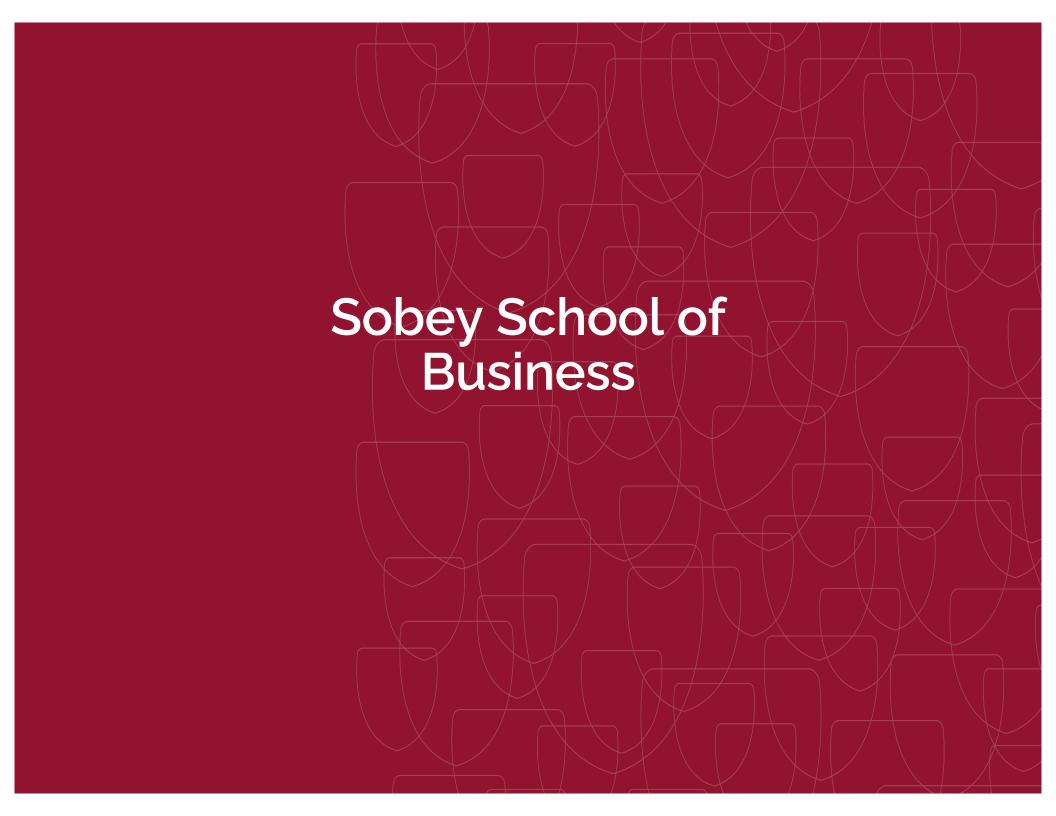
Expanding the family in Christianity and Islam: intersectional and decolonizing perspectives,
Social Sciences and Humanities Research
Council, Insight Development Grant



# Alec Soucy – Study of Religion

The Development and Impact of Thich Nhat Hanh, Social Sciences and Humanities Research Council, Insight Grant





# Matthew Boland - Accounting

*Taxes, Incentives, and Political Ideology,* Social Sciences and Humanities Research Council, Insight Development Grant

Are firms ideologically fickle? Social Sciences and Humanities Research Council, Insight Grant

Enhancing Wellness Schedule with Machine Learning, The National Research Council of Canada Industrial Research Assistance Program



## Mohamed Drira – Accounting

Diversity Impression Management and Corporate Social Responsibility: A Machine Learning Approach, Université du Québec à Montréal/Social Sciences and Humanities Research Council, Insight Grant



# Daphne Rixon - Accounting

ACT.coop: Outreach to the Canadian Co-operative Sector, Social Sciences and Humanities Research Council, Connection Grant



# Yigit Aydede – Economics

**Development Grant, AtlanticOER** 



## Maryam Dilmaghani – Economics

2SLGBTQ+ Poverty in Canada: Improving Livelihood and Social Wellbeing, York University/Social Sciences and Humanities Research Council, Partnership Grant

Using Microcredit to Financially Empower Sexual and Gender Minorities of Canada, Social Sciences and Humanities Research Council, Partnership Engage Grant



## Sonja Novkovic – Economics

**Cooperative Board Decision Making**, Conestoga College/Social Sciences and Humanities Research Council, Insight Grant

Governance of co-operative enterprises under pressure: A multilevel and holistic approach, Ku Leuven, Research Found-Flanders (FWO)

Impact of COVID-19 on the Co-operative Sector in Canada, Co-operative and Mutuals Canada



#### Tony Charles – Finance, Information Systems & Management Science

Sustainability of Fisheries, Coasts and Oceans - Integrated Systems Approaches, Natural Sciences and Engineering Research Council, Discovery Grant

**MEOPAR**, Dalhousie University/Natural Sciences and Engineering Research Council, Networks of Centres of Excellence

Vulnerability to Viability (V2V): Global Partnership for Building Strong Small-Scale Fisheries Communities, University of Waterloo/Social Sciences and Humanities Research Council, Partnership Grant



#### Tony Charles – Finance, Information Systems & Management Science

*Årramăt: Biodiversity, Conservation, and Indigenous Health & Well-being,* University of Alberta/Social Sciences and Humanities Research Council, New Frontiers in Research Funds

Scoping study with compilation and analysis of case studies; on improving small-scale fisheries' equatable access to resources, and related approaches and indicators for monitoring socioeconomic dimensions relevant to fisheries management, Food and Agriculture Organization of the United Nations

A discussion paper on OECMs from a community perspective, Food and Agriculture Organization of the United Nations

#### Hamdi Driss – Finance, Information Systems & Management Science

Mandatory Environmental Disclosure and the Cost of Capital: International Evidence, Social Sciences and Humanities Research Council, Insight Development Grant



#### Nabil El Meslmani – Finance, Information Systems & Management Science

Options Trading Around Accounting Restatements, Social Sciences and Humanities Research Council, Insight Development Grant



#### Mohammad Hendijani Zadeh – Finance, Information Systems & Management Science

The Effect of Audit Quality on Auditee's Financial Policies: Evidence from Auditee's Liquidity Policy, Payout Policies, and Reliance on Trade Credit Financing, Social Sciences and Humanities Research Council, Insight Development Grant



#### Davod Hosseini – Finance, Information Systems & Management Science

Reliability and Equity in Route Planning under Uncertainty and Risk, Natural Sciences and Engineering Research Council, Discovery Grant



#### Dawn Jutla – Finance, Information Systems & Management Science

Accounting and Financial process automation, Mitacs



#### Stephanie Kelley – Finance, Information Systems & Management Science

Developing a Checklist to Reduce Unethical Applications of Artificial Intelligence in the Nova Scotian Legal Community, Social Sciences and Humanities Research Council, Partnership Engage Grant

Alliance Advantage Early Career Voucher, Natural Sciences and Engineering Research Council



#### Rahman Khokhar – Finance, Information Systems & Management Science

Climate Change, Financial Risk, and Firm Behaviour, McMaster University/Social Sciences and Humanities Research Council, Insight Development Grant



#### Harvey Millar – Finance, Information Systems & Management Science

A Study of the Factors Impacting the Participation of Black Entrepreneurs in High-Growth-High-Value-Added Industry Sectors, Black Entrepreneurship Knowledge Hub, Carleton University



#### Mohammad Rahaman – Finance, Information Systems & Management Science

The Market for Private Credit and Environmental Disclosure Quality, Social Sciences and Humanities Research Council, Insight Grant



#### Majid Taghavi – Finance, Information Systems & Management Science

Healthcare resource planning for seniors and end-of-life patients, Natural Sciences and Engineering Research Council, Discovery Grant



## Hai Wang – Finance, Information Systems & Management Science

Predictive Business Analytics for Incomplete Data, Natural Sciences and Engineering Research Council, Discovery Grant



#### Michael Zhang – Finance, Information Systems & Management Science

Building a Strategy for Capacity and Resilience in Mental Health Organizations in Nova Scotia, Social Sciences and Humanities Research Council, Partnership Engage Grant

Leveraging Data Analytics for Enhanced Fund Services,
Mitacs



#### Claudia De Fuentes – Management

Impact assessment of government support for transformational innovation, Treasury Board Secretariat

Sustainable plastic through compostable bio-polymer material derived from seaweed, Mitacs

Understanding Customer Habits and the Need for A Digital Platform for Sustainable Exchange of Kids' Items, Mitacs

Investoready - Girls & Women, Mitacs

Ocean Straws, Mitacs

Understanding Gen Z Employee Challenges and Enhancing Workplace Culture through Skills-Based Volunteering, Mitacs

Atlantic Policy Research Initiative, Atlantic Canada Opportunities Agency



## Ellen Farrell – Management

Strengthening the support for BIPOC entrepreneurs in Canada, Mitacs



### John Fiset – Management

Development of a Deliberate Practice Scale and Model for Improving Focus and Commitment, Mitacs



## Chantal Hervieux - Management

Assisting Girls & Women Raise Venture Capital, Mitacs

Shifting the Paradigm: Achieving Equity in Executive Transitions for Emerging Leaders, Mitacs

*Inspiring housing stability through tailored programs and support*, Mitacs

Examining social innovation engagement models to promote social cohesion and equity via climate action, Mitacs



### Feng Liu – Management

Don't waste a crisis: CEO & board team strategizing in light of the Covid-19 pandemic, Social Sciences and Humanities Research Council, Insight Grant



## Xiaoyu Liu – Management

Will Good Names Go Wrong? Corporate Reputation, Idiosyncratic CSR Strategies and Negative Events, Social Sciences and Humanities Research Council, Insight Grant



## Catherine Loughlin - Management

Building Healthy Leadership Systems Starts with our Leaders, Social Sciences and Humanities Research Council, Insight Grant

Building Healthy Leadership Systems Starts with our Leaders, Social Sciences and Humanities Research Council, Sport Participation Research Initiative



### Hao Lu – Management

Why Do Canadian Firms Not Benefit from Corporate Social Performance? Social Sciences and Humanities Research Council, Insight Development Grant



### Bui Petersen – Management

Digital technology and work: A tool of domination and exploitation or a tool of opportunity and empowerment?

Social Sciences and Humanities Research Council,
Insight Development Grant



#### Vurain Tabvuma – Management

Becoming Included through Inclusion: Redesigning employee on-boarding to increase wellbeing and performance, Social Sciences and Humanities Research Council, Insight Grant

*Implementing the Trees Mobile App in Atlantic Canadian PSEs,* Mitacs



#### Mahdi Tajeddin -Management

Small-Scale Holder Farmers' Entrepreneurial Ecosystems in Tanzania (SFEET), Social Sciences and Humanities Research Council, Insight Development Grant



#### Hadi Eslami – Marketing

Investigating Canadian SME Innovation Disparities: A Multilevel Analysis, Social Sciences and Humanities Research Council, Insight Grant



### Gordon Fullerton – Marketing

Admin Systems Development, Mitacs

**Evolving Therapy with Technology**, Mitacs



#### Ethan Pancer – Marketing

Developing a cost-production model for beekeepers in Nova Scotia to grow Canada's agri-food exports and economic prosperity in rural communities, Social Sciences and Humanities Research Council, Partnership Engage Grant

Feeding the economic recovery: Using social media to predict resilience in Canada's food service sector,
Toronto Metropolitan University/Social Sciences and Humanities Research Council, Insight Grant

Understanding Consumer Responses to Innovation in the Age of Generative Artificial Intelligence, Social Sciences and Humanities Research Council, Insight Grant



## Tiffany Vu – Marketing

Beyond the bottom line: Toward a better understanding of when brands embrace a shared social responsibility mindset, Dalhousie University/ Social Sciences and Humanities Research Council, Insight Grant





## Gregory Christian – Astronomy & Physics

Direct and Indirect Studies of Astrophysical Reactions, Natural Sciences and Engineering Research Council, Discovery Grant, Subatomic Physics, Individual



### Ivana Damjanov – Astronomy & Physics

Mass and structural growth of quiescent galaxies in the cosmic web over the last 6 billion years of cosmic time,
Natural Sciences and Engineering Research Council, Discovery
Development Grant

The evolution and the interplay of the luminous and dark matter content of massive (compact) galaxies,
Natural Sciences and Engineering Research Council, Discovery Grant



### Luigi Gallo – Astronomy & Physics

The Ins and Outs of Black Hole Accretion, Natural Sciences and Engineering Research Council, Discovery Grant

*Toward the event horizon with XARM*, Canadian Space Agency



## Vincent Hénault-Brunet – Astronomy & Physics

Dynamically probing the dark side of globular clusters: from central black holes to the Milky Way halo, Natural Sciences and Engineering Research Council, Discovery Grant

CASTOR mission science development for Phase 0 Support Activities for NRC-HAA (Saint Mary's University-NRC VICTORIA), National Research Council Canada

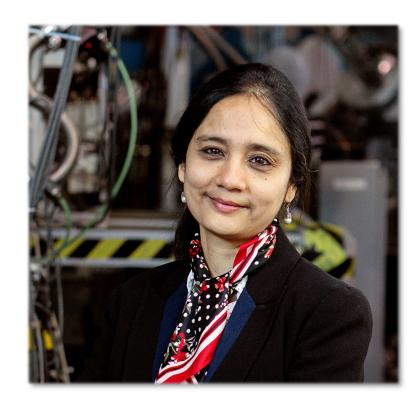


### Rituparna Kanungo – Astronomy & Physics

Characterization of highly charged ion beams and post acceleration of neutron rich Sn isotopes using an electron beam ion source, TRIUMF/Natural Sciences and Engineering Research Council, Discovery Grant, Subatomic Physics, Project

IRIS: Charged particle reaction spectroscopy at ISAC, Natural Sciences and Engineering Research Council, Discovery Grant, Subatomic Physics, Project

Towards a new global view of nuclear structure and nuclear matter through nuclei with large neutron to proton ratio, Natural Sciences and Engineering Research Council, Discovery Grant, Subatomic Physics, Individual



#### Marcin Sawicki – Astronomy & Physics

Exploring Cosmic Noon and Cosmic Dawn with JWST Guaranteed Time Observations, Natural Sciences and Engineering Research Council, Discovery Grant

CASTOR mission science development for Phase 0 Support Activities for NRC-HAA (Saint Mary's University-NRC VICTORIA), National Research Council Canada

Science Support for JWST's Canadian NIRISS Unbiased Cluster Survey (CANUCS)-JWST GTO Program, Canadian Space Agency

Completing the SMACS 0723 NIRISS WFSS EROs, Canadian Space Agency

Maximizing the Science Impact of NIRISS Pure Parallel Observations, Canadian Space Agency



### Robert Thacker – Astronomy & Physics

Toward more robust numerical and observational comparisons, Natural Sciences and Engineering Research Council, Discovery Grant



### Colleen Barber -Biology

European Starling (Sturnus vulgaris) Egg Collection to monitor contaminants in the Atlantic Region, Environment and Climate Change Canada



### Susan Bjornson -Biology

Factors that influence chronic disease in beneficial arthropods: The effect of stress and natural compounds, Natural Sciences and Engineering Research Council, Discovery Development Grant



### David Chiasson -Biology

*Improving symbiotic performance for enhanced plant nutrition,* Natural Sciences and Engineering Research Council, Discovery Grant



### Anne Dalziel – Biology

Mechanisms contributing to the evolution of salinity tolerance in euryhaline fish, Natural Sciences and Engineering Research Council, Discovery Grant



# Timothy Frasier - Biology

Understanding the strength and demographic consequences of inbreeding depression in the wild, and the subsequent implications for conservation, Natural Sciences and Engineering Research Council, Discovery Grant

Conservation genomics of the endangered North Atlantic right whale, Genome Atlantic and Research Nova Scotia



### Ellie Goud -Biology

Mining atmospheric CO2: Assessing the efficacy of novel carbon sequestration strategies in smelter damaged ecosystems to achieve net zero GHG emissions,
Nipissing University/Natural Sciences and Engineering
Research Council, Alliance Grant

Plant responses to multiple interacting stressors: ecological and evolutionary mechanisms, Natural Sciences and Engineering Research Council, Discovery Grant



### Karen Harper – Biology

Vegetation structure across forest edges in heterogenous landscapes, Natural Sciences and Engineering Research Council, Discovery Development Grant

Anthropogenic impacts on vascular plants and at-risk lichens in forested wetlands in Nova Scotia Project,
Department of Natural Resources and Renewables,
Habitat Conservation Fund

Green Jobs; Investigation of the ecology and conservation of plants lichens in Nova Scotia, Project Learning Tree Canada



### Sean Haughian -Biology

Cryptic Forest Lichen SAR Inventories: Survey and Reporting, Environment and Climate Change Canada

*Living Lab - Nova Scotia*, Nova Scotia Federation of Agriculture

Understanding Habitats and Locations of Threatened Lichens within Atlantic Canada Through the Creation of Species Distribution Models and their Model-derived Products, Mitacs



### Jeremy Lundholm -Biology

Plant biodiversity and spatial heterogeneity influences on vegetation restoration in coastal wetlands, Natural Sciences and Engineering Research Council, Discovery Grant



#### Genlou Sun -Biology

Untangling the molecular mechanisms underlying adaptive difference between autopolyploid and its diploid ancestor: A case study of Hordeum bulbosum species, Natural Sciences and Engineering Research Council, Discovery Grant

Disentangling evolutionary role of whole genome duplication on adaptability of autopolyploid to abiotic stress, a case study on salt stress, Natural Sciences and Engineering Research Council, Discovery Development Grant



### Kevin Vessey – Biology

BioMass Crop Production on Marginal Lands in Nova Scotia, NS Innovation Hub Inc.



### Laura Weir – Biology

The influence of ecological variation on mechanisms of sexual selection and mating system structure, Natural Sciences and Engineering Research Council, Discovery Grant



## **Christa Brosseau – Chemistry**

Innovative Plasmonic Platforms for Advanced Molecular Sensing, Natural Sciences and Engineering Research Council, Discovery Grant

ACESCentre: Atlantic Canada Environmental and Sustainable Chemistry Centre, Memorial University of Newfoundland/ Research Nova Scotia

Advancing an Ionic Thiourea Extractant (ITE): A
Sustainable Replacement for Cyanide in the Recovery of
Gold and Silver from Low-Grade Ore, Department of
Natural Resources and Renewables

Sample preparation and analysis, ClearDynamic



## **Christa Brosseau – Chemistry**

Investigating biomarkers that require an antibody modification, Myomar Molecular

Determination of compounds in birch bark extract using 2D-HPLC coupled with QTOF-MS methodology, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)

Advancement of a Precision Diagnostic Tool for Detecting Muscle Atrophy-Associated Small Molecules, Mitacs

### Jason Clyburne – Chemistry

Preparation, isolation, and characterization of fragile acid-base complexes including intermediates of potential biological relevance, Natural Sciences and Engineering Research Council, Discovery Grant

Preparation, characterization, and reactivity of small electrophilic cations, Natural Sciences and Engineering Research Council, Discovery Grant



## Jane Ferguson – Chemistry

Thermophysical Properties of Molten Salts, Natural Sciences and Engineering Research Council, Discovery Grant

Thermophysical Properties of Molten Salts, Natural Sciences and Engineering Research Council, Early Career Researcher (ECR) Supplement



### Jason Masuda – Chemistry

Stabilization of Unique Chemical Bonding Environments and Exploration of Small Molecule Reactivity, Natural Sciences and Engineering Research Council, Discovery Grant

Ylid functionalization of carbon suboxide, Mitacs



## Robert Singer – Chemistry

Advancing an Ionic Thiourea Extractant (ITE): A
Sustainable Replacement for Cyanide in the Recovery of
Gold and Silver from Low-Grade Ore, Department of Natural
Resources and Renewables

Understanding the composition and evolution of hydrocarbon-rich fluids preserved as macroscopic fluid inclusions in bitumen-quartz-carbonate veins: Albert Formation, Southern New Brunswick, New Brunswick Department of Natural Resources & Energy Development

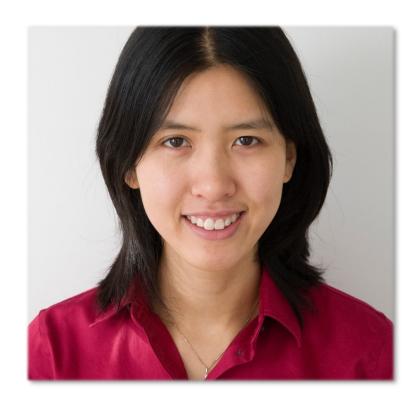


### Clarissa Sit – Chemistry

The chemical origins of biological interactions: an evolutionarily refined approach for natural products discovery, Natural Sciences and Engineering Research Council, Discovery Grant

*Training Program in BioActives*, Dalhousie University/ Natural Sciences and Engineering Research Council, Collaborative Research and Training Experience (CREATE)

Metabolomic analysis of medicinal plants, endophytes, and commercially available extracts, Mitacs



### Danielle Tokarz – Chemistry

Controlling the outcome of reactions in macromolecular systems: Measurement of structural dynamics during synthesis and degradation in biologically relevant polymers, Natural Sciences and Engineering Research Council, Discovery Grant

Investigating Otoconia Ultrastructure during Degeneration, Research Nova Scotia, New Health Investigator Grant

Researching, designing, and simulating a first-of-its-kind plastic recycling facility processing 1.2 million pounds of plastic pellets per year, Mitacs



### Adel Merabet – Engineering

Optimization, Management, and Supervision of Clustered Microgrids for Sustainable Energy in Smart Communities and Cities, Natural Sciences and Engineering Research Council, Discovery Grant

Towards a Circular, Sustainable, and Zero-Waste Construction Industry: Investigating Innovative and Efficient Solutions for Construction Composite Products Recycling with Technical, Environmental, and Economic Considerations, Mitacs



### Jason Rhinelander – Engineering

**Web Crawler**, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



# Samuel Veres, Dean of Science - Engineering

Development, control, and functional significance of variations in collagen fibril nanostructure, with application to the creation of novel biomaterials, Natural Sciences and Engineering Research Council, Discovery Grant



#### Erin Cameron – Environmental Science

**Soil invertebrates under global change**, Natural Sciences and Engineering Research Council, Discovery Grant

**Soil invertebrates under global change**, Natural Sciences and Engineering Research Council, Northern Research Supplement

Indigenous Knowledge of Berries in the Northwest Territories, Environment and Climate Change Canada

Shallow shotgun metagenomic eDNA biomonitoring of Atlantic Canada's grazed (agro) ecosystems, Genome Atlantic/Research Nova Scotia

Understanding and managing the spread of invasive jumping worms in New Brunswick, New Brunswick Wildlife Trust Fund

Global change research, ECO Canada



### Linda Campbell – Environment Science

Developing an in-situ risk management strategy for enhancing natural recovery of highly contaminated goldmine-tailing impacted wetlands, Natural Sciences and Engineering Research Council, Alliance Grant

Developing an in-situ risk management strategy for enhancing natural recovery of high contaminated gold mine tailing impacted wetlands, Atlantic Mining NS

Amphibian and reptile monitoring and bioaccumulation assessments in relation to historical gold mine tailings, Build Nova Scotia

Report on Accessible & Inclusive Service, Public Services and Procurement Canada



### Linda Campbell – Environment Science

Food Web Analysis -LURS, Fisheries and Oceans Canada

Red Swamp Crayfish Population Study, Fisheries and Oceans Canada

Crayfish Removal and Ecosystem Impact Study in Maritime Region, Fisheries and Oceans Canada

Geochemistry of historical gold mine tailings in wetland sediments & testing remediation amendment applications, Mitacs

#### Aldona Wiacek – Environmental Science

Integrated measurements of GHG emissions at an intermediate port, Natural Sciences and Engineering Research Council, Alliance Missions

Atmospheric composition measurements for air quality and climate studies, Natural Sciences and Engineering Research Council, Discovery Grant

The HAWC satellite mission: High-altitude Aerosols, Water vapour, and Clouds, Canada Foundation for Innovation (CFI)



#### Erin Adlakha – Geology

Linking high spatial resolution accessory mineral chemistry and geochronology to large-scale ore-forming hydrothermal processes in the crust, Natural Sciences and Engineering Research Council, Discovery Grant

Critical mineral deposits associated with metasomatic iron alkali calcic (MIAC) systems of the Cobequid-Chedabucto fault zone (CCFZ), Nova Scotia, Department of Natural Resources



#### Jacob Hanley – Geology

Intrusion-related critical metal deposits throughout the Appalachian orogen: constraining melt fertility and the magmatic-hydrothermal transition, Natural Sciences and Engineering Research Council, Discovery Grant

Integrating melt and fluid inclusion geochemistry with zircon geochemistry to evaluate end-member magmas, volatile exsolution and critical metals fertility in the Davis Lake Pluton, Port Mouton Pluton, and Mersey Point Ultramafic Dyke, Department of Natural Resources and Renewables



### Dawn Kellett -Geology

Faults and fluids in accretionary orogens, Natural Sciences and Engineering Research Council, Discovery Grant

Fault zone reactivation and structural inheritance in accretionary orogens, Mitacs



## Mitchell Kerr - Geology

Understanding the composition and evolution of hydrocarbon-rich fluids preserved as macroscopic fluid inclusions in bitumen-quartz-carbonate veins: Albert Formation, Southern New Brunswick, New Brunswick Department of Natural Resources & Energy Development



#### Todd Ventura – Geology

Multi-Molecular Characterization of Complex Matrices for the Detection of Geochemical Processes, Natural Sciences and Engineering Research Council, Discovery Grant

Triassic-Early Jurassic Central Atlantic and mid-Cretaceous Scotian Margin Geochemical, Organic, and Biostratigraphic Events – a test case for molecular sequence stratigraphy, Mitacs

Lipidomics and the Derisking of Deep Ocean Petroleum Exploration, Mitacs



### Shawna White – Geology

Understanding how tectonic inheritance controls the evolution of mountain belts, Natural Sciences and Engineering Research Council, Discovery Grant

**Determining Control and Timing of Gold Mineralization in the southern Long Range Mountains, west NL.**, Fishhawk Gold Corp



### Yasushi Akiyama – Mathematics & Computing Science

Creating an interactive user interface for Science Atlantic, Mitacs



### Manuela Girotti – Mathematics & Computing Science

Integrable Probability and Universality in Mathematical Physics and Machine Learning, Natural Sciences and Engineering Research Council, Discovery Grant



### Mengjun Hu – Mathematics & Computing Science

**Explainable three-way data analytics**, Natural Sciences and Engineering Research Council, Discovery Grant

**Explainable three-way data analytics**, Natural Sciences and Engineering Research Council, Early Career Researchers (ECR)



#### Somayeh Kafaie – Mathematics & Computing Science

Semantic Web Analysis over the Nova Scotia Open Data, Cape Breton University/ Natural Sciences and Engineering Research Council, Discovery Grant

**Development of Large Language Model for visitor engagement,** The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



## **Stavros Konstantinidis – Mathematics & Computing Science**

Representational, Algorithmic and Applied Aspects of Word Relations, Natural Sciences and Engineering Research Council, Discovery Grant



## Pawan Lingras – Mathematics & Computing Science

Generalized sequential data mining using enhanced object representations based on preliminary clustering profiles,
Natural Sciences and Engineering Research Council, Discovery Grant

Enhancing Unstructured Survey Analytics using Sentiment and Predictive NLP, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)

Enhancing Medical Data Analysis and Processing, Mitacs

Predictive Analytics for B2B SaaS Platform, Mitacs

*Prescriptive Machine Learning in Pediatric Cardiology,* Mitacs

Design and Deployment of a Generative AI Platform, Mitacs



## Pawan Lingras – Mathematics & Computing Science

Platform enhancement for government services using data analytics, Mitacs

Financial Portfolio Reconciliation using Deconstructed Deep Learning, Mitacs

Data summarization and visualization system for evidence-based decision making, Mitacs

Product Development to Scale Low Carbon Business Intelligence, Mitacs

IT Internship - Development to Support First Nations and Municipal Policing, Mitacs

Sentiment Analysis to Replace Rigid Surveys into Automated Adaptive Interviews, Mitacs

Artinus Cost-effective NLP solutions for digitization, translation, and insights of domain specific corpora, Mitacs

Evidence-driven strategies for successful schooling outcomes of learners of African descent in Nova Scotia, Mitacs

DevOps of Descriptive and Predictive Analytics for Efficient Energy Supply and Work and Asset Management, Mitacs

### Mitja Mastnak – Mathematics & Computing Science

Hopf algebras, combinatorics, and operator theory, Natural Sciences and Engineering Research Council, Discovery Grant



## Paul Muir – Mathematics & Computing Science

Numerical Software for the Adaptive Error Controlled Solution of Ordinary and Partial Differential Equations, Natural Sciences and Engineering Research Council, Discovery Grant



#### Jiju Poovvancheri – Mathematics & Computing Science

Towards Seamless Interaction and Navigation in Virtual Worlds using Multiple 3D Sensors, Natural Sciences and Engineering Research Council, Discovery Grant

Deep Learning based Real-time Object Recognition and Tracking for Immersive Training and Maintenance Applications, Mitacs



### Xichen Zhang – Mathematics & Computing Science

Privacy-Preserving Edge-Cloud Collaboration in Mobile Crowdsensing, Natural Sciences and Engineering Research Council, Discovery Grant

Privacy-Preserving Edge-Cloud Collaboration in Mobile Crowdsensing, Natural Sciences and Engineering Research Council, Early Career Researchers (ECR)



## Arla Day – Psychology

Beyond Disability Management and Towards Health, Mitacs



## Maryanne Fisher -Psychology

An analysis of physical aggression for conflict resolution: The Takanakuy of Peru, Social Sciences and Humanities Research Council, Insight Development Grant



## Mark Fleming – Psychology

The adaption and delivery of the Emera supervisor safety leadership development program for NSP, Nova Scotia Power

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### Debra Gilin – Psychology

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# Camilla Holmvall - Psychology

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#### Kevin Kelloway – Psychology

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# Dayna Lee-Baggley Psychology

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## Eden-Raye Lukacik – Psychology

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### Nicolas Roulin -Psychology

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## Steven Smith – Psychology

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## Skye Stephens – Psychology

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# Marguerite (Meg) Ternes - Psychology

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