### 2023 SMU Research Recognition Reception

October 6, 2023

#### 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
Mohammed Al-Hamdani	Science	Psychology	Faculty
John Boddie	n/a	n/a	Community
Michele Byers	Arts	Women & Gender Studies	Faculty
Jim Cameron	Science	Psychology	Faculty
Leanna Closson	Science	Psychology	Faculty
Rachael Collins	Arts	Criminology	Faculty
Diane Crocker	Arts	Criminology	Faculty
Myles Davidson	Science	Psychology	Graduate Student
Maryam Dilmaghani	Sobey School of Business	Economics	Faculty
Eric Henry	Arts	Anthropology	Faculty
John Fiset	Sobey School of Business	Management	Faculty
Maryanne Fisher	Science	Psychology	Faculty
Mark Fleming	Science	Psychology	Faculty
Kevin Kelloway	Science	Psychology	Faculty
Min-Jung Kwak	Arts	Geography & Environmental Studies	Faculty
Jamie Livingston	Arts	Criminology	Faculty
Theodore Lownie	Science	Applied Science	Graduate Student
Hao Lu	Sobey School of Business	Management	Faculty
Luke MacDonald	Science	Engineering	Faculty
April Mandrona	NSCAD	Art History & Contemporary Culture	Faculty
Ron Russell	Science	Biology	Faculty
Tatjana Takseva	Arts	English	Faculty
Orshy Torok	Graduate Studies & Research	Research Ethics	Staff
Megan Walsh	Sobey School of Business	Management	Faculty
Samantha Williams	Science	Psychology	Graduate Student
Claire Yurkovich	Arts	Women & Gender Studies	Graduate Student

#### 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
Emily Allen	Faculty of Science	Acting Animal Care Coordinator/Technician (ex-officio)	On-going
Marlene Ramos	Graduate Studies & Research	Research Grants Officer (ex-officio; non-voting)	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	Jan 2023 – Jan 2024
Krista Connell	Resident of Halifax County	Community Member	Mar 2021 – Mar 2024 (renewable)

## **Canada Research Chairs**

#### 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



# Faculty of Arts

#### Jonathan Fowler – Anthropology

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



#### 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



#### Luke Hathaway – English Language & Literature

*National Arts Centre Creation Fund, Investment Grant* – development of a new VR opera project: re:naissance opera (producer) for the Eurydice Fragments (Luke Hathaway, contributing librettist)

*Canada Council for the Arts, Concept-to-Realization Composite Grant* – to Benton Roark (composer) / Arkora (producer) for the development of two new opera projects,: The Sign of Jonas (Luke Hathaway, librettist) and Eurydice Fragments (Luke Hathaway, contributing librettist)

#### Canada Council for the Arts, Explore-and-Create Grant –

to James Rolfe (composer) for the creation of a new opera, Caeneus (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 Landscape Assessment of Forest Maturity and Forest Landscape Connectivity,* Department of Natural Resources and Renewables



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

*Effectiveness of Vegetated Foreshore Marshes and Managed Dyke Realignment for Risk Reduction,* National Research Council Canada

Application of sand engine and constructed marsh sills for risk reduction, National Research Council Canada

*PEI Shoreline Assessment and Ecosystem Services Tool for Nature-Based Climate Change and Adaptation,* Government of PEI- Environment, Energy, and Climate Action

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



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

*Making Room for Wetlands: The Coastal Carbon Edition,* Environment and Climate Change Canada, Nova Scotia Department of Agriculture, Nova Scotia Department of Environment & Climate Change - Green Fund

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

Report Series on NBS for Coastal Flood Risk Management, DHI Water and Environment Inc.

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

Green Shores for Homes 2021-2023 project support, Stewardship Centre

Implementing priority action in Priority Places and advancing Priority Sector (urban) in Atlantic Region: Piloting the Green Shores for Homes, Stewardship Centre

#### Gavin Fridell – Global Development Studies

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



#### Evie Tastsoglou – Global Development Studies

*Violence against women migrants and refugees: Analysing causes and effective policy response,* Canadian Institutes of Health Research

*Expert Report Concerning Conditions in Greece,* Battista Smith Migration Law Group



#### 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

*SMU Public Humanities and Heritage Field Placements,* Co-operative Education and Work Integrated Learning Canada (CEWIL)



#### Myles McCallum – Modern Languages & Classics

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



#### Timothy Stretton – History

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



#### Lyubov Zhyznomirska – Political Science

*The Experiences of War-Displaced Ukrainians with Settlement and Integration in Nova Scotia,* Social Sciences and Humanities Research Council, Partnership Engage Grant



#### Atsushi Narisada – Sociology

*Distributive Justice in Canada,* University of Toronto/Social Sciences and Humanities Research Council, Insight Grant



# Sobey School of Business

#### Matthew Boland – Accounting

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



#### Daphne Rixon – Accounting

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



#### Ming Liu – Accounting

*ESG Performance Pressure from Social Peers (CAAA-2022-003),* Canadian Academic Accounting Association



#### Maryam Dilmaghani -Economics

2SLGBTQ+ Poverty in Canada: Improving Livelihood and Social Wellbeing, 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

*Strategic Fundamental Research (SBO),* Research Foundation -Flanders (FWO) -Strategic Fundamental Research (SBO)

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

*How Can Unions Improve their Workplace Human Rights Practice?* Mitacs



#### Mark Raymond – Economics

*Exceptional Circumstances due to the effects of COVID-19*, Atlantic Canada Opportunity Agency

*Identifying Household Hazardous Waste (HHW) Management Best Practices*, Divert NS



#### 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

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



#### 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



## 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



### 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



## 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 Grant



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

*Connecting the ecosystem*, Mitacs



### 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



# Hai Wang – Finance, Information Systems & Management Science

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



# Claudia De Fuentes – Management

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

Cyber security threats in Database backups, Mitacs

*Cyber security threats due to data theft because of website cookies,* Mitacs



# Ellen Farrell – Management

Inclusive Innovation and Entrepreneurship Project, Mitacs

*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



# 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

Gender Equality Research, WAGE



# 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

Assisting Girls & Women Raise Venture Capital, Mitacs

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



# Ethan Pancer – Marketing

*Customizing technology for end users by helping to identify barriers and motivations in marketing campaigns,* Invest Nova Scotia

*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



# Meredith Drost – Arthur L. Irving Entrepreneurship Centre

*Business model evaluation and strategy advice*, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)

*Bilal – Smart Speaker Market Evaluation and Research*, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)

*Exploring opportunities to develop a data product or service that improves mobile operators experience*, Invest Nova Scotia



# Jason Turner – Arthur L. Irving Entrepreneurship Centre

*Marketing and Product Evaluation Research,* The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



# Faculty of Science

# 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

*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

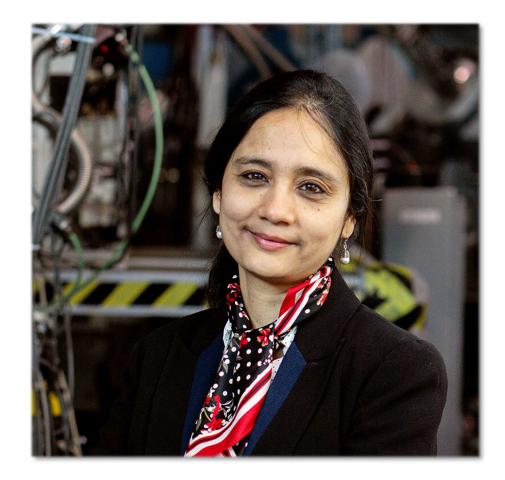


# Rituparna Kanungo – Astronomy & Physics

*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



## Robert Thacker – Astronomy & Physics

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



# Colleen Barber – Biology

*Chemical Management Plan (CMP) European Starling (Sturnus vulgaris) Egg Collection in the Atlantic Region,* Environment and Climate Change Canada



# David Chiasson -Biology

*Improving symbiotic performance for enhanced plant nutrition,* 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

*North Atlantic Right Whale Genetic Profiling and Database Maintenance,* Fisheries and Oceans

*Whole genome sequencing and analysis of sei whale and North Pacific right whales samples*, Fisheries and Oceans



# 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

*Impacts of clearcut logging and substrate acidification on atrisk lichens in Nova Scotia,* Department of Natural Resources and Renewables, Habitat Conservation Fund

Edge Response of Understorey Plants, Lichenivorous Gastropods and Their Grazing Impact on At-Risk Lichens in Mixedwood Swamps, Mitacs



## Sean Haughian – Biology

For the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) on the Blue Felt Lichen (Pectenia plumbea) in Canada, Environment Canada

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

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



## 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



## Kevin Vessey – Biology

Purpose Grown Biomass Crops: Efficient Production, Yield Modelling, and Real-world Verification, Biofuel Canada Network

*Develop a Low-Cost and High Production and High Production System for Sorghum and Biomass and Marginal Lands,* Biofuel Canada Network



# 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

Determination of the downstream impacts of cryopreservation of the sperm of endangered Inner Bay of Fundy Atlantic Salmon, Fisheries and Oceans



## 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, 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

Improving biomarker's lateral flow detection for accuracy and specificity of accurate software results, Invest Nova Scotia

*Design and Development of Raman Detecting Agents for Rapid Assays,* The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)

*Detection of Small Molecules using Aptamers as Molecular Probes,* The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



## 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



#### Jason Masuda – Chemistry

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



## 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



# 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

*Operational testing and integration of a two-phase crop vertical farm system*, Springboard Atlantic

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

*Assessing biofertilizer microbial activity and scientific market research,* The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



## Danielle Tokarz – Chemistry

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

*Extracting additional value from 3D Printer plastic waste*, Springboard Atlantic



### Adel Merabet – Engineering

*Designing, testing, and constructing a fully-functional, athome recycling machine prototype,* Mitacs

Feasibility and design analysis of a new user-centric product for making recycled 3D printing feedstock, Mitacs

*Overcoming technical barriers and optimizing critical elements of the FilamentPro before commercialization*, Invest Nova Scotia

*Exploring the Potential of Composite Recycling in Construction: An Investigation into Sustainable Practices*, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



## Jason Rhinelander – Engineering

*Enhancing business advisor by strategically integrating an AI model and robust financial data*, Invest Nova Scotia



## Samuel Veres – 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

*Indigenous Knowledge of Berries in the Northwest Territories,* ArcticNet

*Tracking and mitigating jumping worm invasions in New Brunswick,* The New Brunswick Wildlife Council

*Changes to a plant communities in the Northwest Territories, Canada,* Wildlife Conservation Society Canada

*Environmental limits of non-native earthworms in the Yukon,* Wildlife Conservation Society Canada

Student Internship, Colleges and Institutes Canada



#### Linda Campbell – Environment Science

Developing an in-situ risk management strategy for enhancing natural recovery of highly contaminated gold-mine-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

Food Web Analysis to Determine Role & Impact of Stocked Atlantic Salmon and Invasive Chain Pickerel on Sympatric Populations of Lake Utopia Rainbow Smelt, Fisheries and Oceans

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

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

*ESSDA dust project*, Nova Scotia Labour, Skills, and Immigration Youth Initiatives

*Mineral dust aerosols in Northern Canada: Sources and impacts on climate and air quality*, Canadian Space Agency



# 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 magmatichydrothermal transition, Natural Sciences and Engineering Research Council, Discovery Grant

*The application of melt inclusions to evaluate magma ore metal fertility, oxidation state, sulfur saturation and volatile contents in the South Mountain Batholith,* Nova Scotia Department of Energy and Mines

*Crust-Mantle Processes Responsible for VMS Endowment during the evolution of Archean Greenstone Belts: Volatile and metal chemistry of melt inclusions in accessory minerals in Archean VMS,* Laurentian University/Canada First Research Excellence Fund (NSERC), Metal Earth Grant

*Identification, analysis and testing of bentonites*, The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)



# Dawn Kellett – Geology

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



## Andrew MacRae – Geology

*Atlantic Early Jurassic Stratigraphic Correlation*, Offshore Energy Research Association



## 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

*Structural controls on zinc-lead mineralization at Prairie Creek*, The Government of the Northwest Territories



#### Yasushi Akiyama – Mathematics & Computing Science

Designing Student Success: Building a Mobile Application to Improve Student Retention and Persistence, Mitacs

Chef and customer onboarding optimization, Mitacs

Integrating formulas for food waste and recipe costs using past ingredient data, Invest Nova Scotia



#### Manuela Girotti – Mathematics & Computing Science

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



#### 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 sports analytics with machine learning,* The National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP)

Website Design & Implementation, DevOps Automation and Business Process Automation, Mitacs

*Design Automation and Optimization Using Artificial Intelligence*, Mitacs

SafePath User Interface Development, Mitacs

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



#### Pawan Lingras – Mathematics & Computing Science

Prototype Intelligent ERP System for SMEs, Mitacs

Financial Portfolio Reconciliation using Deconstructed Deep Learning, Mitacs

Deployment, Testing and Enhancement of a Web-based Machine Learning platform, Mitacs

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

Product Development to Scale Low Carbon Business Intelligence, Mitacs

Incremental and Soft Quantum Clustering, Mitacs

Platform enhancement for government services using data analytics, Mitacs

*Innovative Website and Web Application Development for Law Enforcement,* Mitacs

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

Research Infrastructure for Large-scale 3D Geometry Acquisition and Modeling, Research Nova Scotia



### Dayna Lee-Baggley Psychology

*Creating culturally sensitive, trauma informed, evidencebased tools with First Nation communities,* Employment and Social Development of Canada



# Debra Gillin – Psychology

*Psychologically safe and inclusive workplaces: Evidence based assessment and intervention*, Mitacs

Assess with the best: New product development and continuous improvement of the SuccessFinder psychometric assessment, Mitacs



# Arla Day – Psychology

Gender Equality Research, WAGE



### Mark Fleming – Psychology

Safety Culture Methods, Performance Measures, and Linkages with Safety, Transport Canada

Executive Coaching: Where, When, And How It Works? Designing A Framework To Evaluate Executive Coaching Effectiveness On Leaders' Occupational Health, Self-Efficacy, Learning, Performance, And Business Outcomes, Mitacs

Application of Short Form Methodologies in the Workplace: Testing Survey Structure, Delivery Methods and Frequency of Data Collection, Mitacs



## Camilla Holmvall – Psychology

*Examining how workplace incivility impacts leader well-being: The moderating role of leader gender,* Social Sciences and Humanities Research Council, Insight Grant



### Kevin Kelloway – Psychology

*When Dark Meets Dark: Experienced aggression and the Dark Tetrad,* Social Sciences and Humanities Research Council, Insight Grant

Analyzing and reporting team dialogue to enhance psychological safety, Mitacs

*Evaluating the effectiveness of a digital resilience training & developing the BESAFE at work scale*, Mitacs

Culture-Actualization Index, Mitacs

Summer Student Intern Project- SAFER- Safety Leadership for CEO's/Administrators in Nova Scotia Health and Community Service Sectors, Mitacs



## Nicolas Roulin – Psychology

*Innovations in Interviewing: Foundational Research Exploring Asynchronous Video Interviews,* Social Sciences and Humanities Research Council, Insight Grant

*Examining the Potential Pitfalls of Using ChatGPT in Situational Judgment Tests*, Mitacs



## Steven Smith – Psychology

*Understanding Mental Health Support Standards in Atlantic Canadian Colleges and Universities,* Social Sciences and Humanities Research Council, Partnership Engage Grant

Using a Mobile App to Support Former Youth in Care, Research Nova Scotia

Building a Mobile Application to identify Improve Searching for Living Arrangements, Mitacs

Building a Mobile Platform to Identify Factors that Impact Student Success and Mental Health Related to Their Living Arrangements, Mitacs

Purchasing habits of youth and young adults aged 15-34 with respect to non-cannabis vaping products, Mitacs

Designing Student Success: Building a Mobile Application to Improve Student Retention and Persistence, Mitacs

The Effects of the Virtual Environment on Cohort Training Models, Mitacs



# Skye Stephens – Psychology

Talking for Change, Centre for Addiction and Mental Health



### Marguerite (Meg) Ternes – Psychology

*Lie Detection in the criminal justice system: Exploring deception clues in field and laboratory studies,* Social Sciences and Humanities Research Council, Insight Grant



