



REPORT ON SCHOLARSHIP 2024



Treaty 6 Territory Land Acknowledgment

MacEwan University is located on Treaty Six Territory, the traditional gathering place for many Indigenous people. We honour and respect the history, languages, ceremonies and culture of the First Nations, Métis and Inuit who call this territory home. The First People's connection to the land teaches us about our inherent responsibility to protect and respect Mother Earth. With this acknowledgement, we honour the ancestors and children who have been buried here, missing and murdered Indigenous women and men, and the process of ongoing collective healing for all human beings. We are reminded that we are all treaty people and of the responsibility we have to one another.

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Message from the Associate Vice-President, Research

Dr. Craig Kuziemy



Inspired by our pursuit of curiosity, community engagement and the creation of new knowledge and creative works, I am proud to present MacEwan University's 2024 Report on Scholarship. The 2024 report features our first full year of progress since our Tactical Plan for Scholarship was approved in April 2023.

We continue to make phenomenal progress in implementing the scholarship components of our 2030 Strategic Vision *Teaching Greatness*. In the past year we launched our thematic areas of scholarship, initially focused on health and wellness in communities, energy and the environment, and persuasive and immersive technologies. We also created the Office of Research Services Connection series to bring together MacEwan faculty and students with a diverse array of community partners as part of developing our thematic areas. We strive to create an atmosphere where we aspire for boldness and big things while supporting our local communities as part of honouring our place in O-day'min.

Our scholarship continues to have meaningful impact in our classrooms and local communities as well as having national and international impacts.

As always, I am very grateful for the hard work and dedication of everyone who contributes to our continued growth and success in scholarship. I am always impressed by the breadth and depth of the cutting-edge scholarship across all disciplines being led by our faculty members. The growth of our student scholarship program gives me great hope for the future. And of course, we benefit so much from our engagement with community partners of all kinds. No one succeeds alone.

I invite everyone to read about our scholarly accomplishments over the past year. To stay informed about our progress, please visit our website at MacEwan.ca/Research and connect with us on social media. We have much to share with the world.

Faculty of Nursing

Student and Faculty Emotions Related to Assessment

Lisa McKendrick-Calder (Associate Professor, Nursing) is passionate about the Scholarship of Teaching and Learning (SoTL) and investigates factors affecting teaching and student engagement. Her previous research has explored the psychosocial wellness of faculty and students, focusing on emotions related to assessment, student mental health and inclusive education. Currently, she is examining the experiences of linguistically diverse nursing students in Canada.

McKendrick-Calder, along with collaborators from various institutions, Jennifer Hill (University of Gloucestershire, Geography), Susan Smith (Leeds Beckett), Julia Choate (Monash University, Faculty of Medicine), Lisa Cravens-Brown (Ohio State, Psychology) and Kathryn Berlin (Indiana State Perdue) conducted a multi-phase study on emotions related to assessment. This research aims to understand the emotional experiences of both students and educators regarding assessment and feedback. Key findings include:

- Students experience a wide range of emotions related to assessment phases and feedback, impacting their motivation and self-esteem.
- Educators experience mixed emotions during feedback interactions, with dialogic feedback fostering stronger student relationships but also challenging the instructors emotionally.

Future research will explore the emotional burdens on precariously employed educators and their impact on student support.

This research has directly influenced McKendrick-Calder's teaching practices and highlighted the benefits of international and interdisciplinary collaboration. The project revealed critical insights into the emotional dynamics of assessment and feedback, informing both teaching practices and further research directions, particularly concerning educators' emotional experiences and well-being. McKendrick-Calder sees this research as filling in a gap of lack of existing information when it comes to emotions from students and educators in relation to teaching and assessment.



Lisa McKendrick Calder
Associate Professor, Nursing

Advancing Health Equity and Relational Agency in the Care of Incarcerated Individuals Living with HIV

Dr. Morgan Wadams' (Assistant Professor, Nursing) research is deeply rooted in his clinical experience working in correctional facilities. His scholarly program examines the health inequities faced by individuals with a history of incarceration, with a focus on improving support systems and services for these populations. Dr. Wadams conducted doctoral research titled, *A Narrative Inquiry into the Experiences of Transitions into and out of Alberta Correctional Facilities for People Living with HIV*. This study, carried out from 2021 to 2022, involved in-depth, narrative inquiries with two men, Bruce and Kyle, to explore their experiences of transitioning between correctional facilities and community life. Funded by the Social Sciences and Humanities Research Council (SSHRC), this research was a collaborative effort involving in-person meetings with participants, supported by Wadams' supervisory committee, his PhD supervisor Vera Caine, a local AIDS service organization, a community health center, an Indigenous Knowledge Keeper and an Elder. Dr. Wadams' study addressed the ongoing challenges people living with HIV face during transitions related to incarceration. It emphasized the concept of relational agency, where the quality of relationships with care providers significantly impacts individuals' experiences and ability to navigate transitions. This research helps demonstrate the importance of trust and relational agency in managing transitions. Dr. Wadams continues to grow his research by exploring relational agency across different practice disciplines. His current research, funded by a MacEwan University SSHRC Institutional Grant (SIG), aims to refine the concept to enhance care for incarcerated and formerly incarcerated individuals.



Dr. Morgan Wadams
Assistant Professor, Nursing

Faculty of Arts and Science



Dr. Brian Franczak
Associate Professor, Mathematics and Statistics

Finding Meaningful Relationships in Complex Data

Funded by a Discovery Grant from the Natural Sciences and Engineering Research Council of Canada (NSERC), Dr. Brian Franczak's (Associate Professor, Mathematics and Statistics) research centers on developing finite mixture models for classification, which involves assigning labels to unlabeled data. His work integrates mathematical, statistical and computer science techniques, aiming to enhance students' skills in these areas and involve them in significant research. In collaboration with Paul McLaughlin (Former MacEwan University Student) and Dr. Adam Kashlak (University of Alberta) his most recent research introduced a novel family of parsimonious contaminated shifted asymmetric Laplace mixtures for high-dimensional data analysis. The models, which were developed using R software, perform both classification and outlier detection simultaneously. This research advances models that handle classification and outlier detection in high-dimensional, asymmetric data. It represents a pioneering approach in this area. The models demonstrated superior classification performance and sensitivity in simulations and real data analyses. Dr. Franczak plans to extend these models to handle missing data, addressing the limitation of current mixture modeling frameworks. Dr. Franczak finds the most fulfilling aspect has been providing students with research opportunities similar to those that benefited him. It also offers students insights into potential careers and further education in statistical research.



Dr. Dana Cobzas
Associate Professor, Computer Science

Brain Image Analysis at MacEwan

Dr. Dana Cobzas (Associate Professor, Computer Science) focuses on imaging, image analysis, computer vision and computer graphics, building on her background in mathematics and computer science. Dr. Cobzas' research bridges mathematical principles with practical applications in medical image analysis, motivated by the potential societal benefits. Her work integrates theoretical concepts with real-world medical challenges, and she is committed to educating students on the practical applications of mathematics and computing. Supported by the Natural Sciences and Engineering Research Council (NSERC) Discovery Grant program, Dr. Cobzas is currently working on two main medical imaging projects in collaboration with the Radiology Department at the University of Alberta. This includes developing advanced methods in Medical Image Segmentation; specifically for segmenting the hippocampus in high-resolution MRI data using deep learning. With over 90% accuracy, her research is being used by researchers at the Peter S. Allen MR Research Centre (MR Centre). Along with the above, Dr. Cobzas is working on techniques that explore hippocampal shape changes due to aging and neurological diseases using high-resolution MRI. Collaborating with international students and researchers, Dr. Cobzas aims to enhance understanding of healthy aging and disease progression, which could lead to personalized diagnoses and treatment evaluations. Dr. Cobzas values the connection with real projects, medical doctors and the privilege and opportunity of doing something potentially useful for today's society. As she continues to explore new research avenues and mentor emerging talents, Dr. Cobzas remains at the forefront of advancing science and improving healthcare through innovative solutions.



Dr. Tina Bott
Assistant Professor, Chemistry

A Weed By Any Other Name

Dr. Tina Bott's (Assistant Professor, Chemistry) research focuses on medicinal chemistry, particularly in discovering novel small molecules from natural sources, such as plants, for societal benefit. She is inspired by the complexity of compounds derived from natural biological systems, which are often difficult to access synthetically in the lab. Funded by a MacEwan University Project Grant and supported by the Mitacs Globalink Research Internship Program, Dr. Bott's current focus is the investigation of the medicinal properties of invasive plant species in Alberta. This work involves teaming up with MacEwan students and the City of Edmonton's pest management teams to identify and harvest plant materials before processing them to create extracts. Extracts are then screened for biological activity by various methods depending on the area they are investigating. One important area of Dr. Bott's research is a collaboration with Dr. Kimberley Harcombe (MacEwan University) addressing the urgent issue of antibiotic resistance, which contributes to millions of deaths annually and is expected to worsen. By exploring plant-derived compounds, the project aims to discover new antimicrobial agents, a crucial need given the stagnation in industry research on this front. Her team has identified several plants with promising properties which will hopefully lead to antimicrobial agents capable of combating resistance. Additionally, Dr. Bott and her team are developing a more efficient and sustainable screening method for the extracts called bioautography, which is expected to expedite the identification of promising compounds and make the process more accessible.





Dr. Jessica Romney
Associate Professor, Classics

You Are What and Where You Eat: Food, Space and Identity in Ancient Greece

Dr. Jessica Romney's (Associate Professor, Classics) research focuses on the construction and negotiation of collective identities in ancient Greece, examining how Greeks defined themselves socially, politically and ethnically. Her interest in this area is driven by a lifelong curiosity about identity formation and group dynamics, influenced by her experiences of moving frequently. Her first book explored these themes within the context of Greek symposia, and her current work expands on these ideas through the study of ancient Greek identities around social groups, political belonging, ethnicity and gender as expressed through food and geographic discourses. Dr. Romney's current project has been funded by a Social Sciences and Humanities Research Council (SSHRC) postdoctoral fellowship and travel and dissemination grants from the Universities of Calgary, Victoria, Dickinson College and MacEwan University. Her research investigates how ancient Greek collective identities were shaped by food practices (especially grain and wine) and geographical concepts from approximately 800-395 BCE. This project involves a wide range of evidence, including literary, historiographical and material sources. Dr. Romney employs a discursive approach to analyze how ancient texts reflect Greek identities, integrating various types of evidence to contextualize her findings. A key finding from the project is that ancient Greek identity discourses are adaptable and multifaceted. Unlike traditional studies that focus on a single type of identity, Dr. Romney's research reveals that concepts like "moderate appetite" and *mesos* (μέσος, "middle") serve as a marker for various identities. Having a moderate appetite, for example, signifies not only Greek identity but also appropriate political behavior and masculinity, in contrast to the immoderate appetite associated with non-Greeks and femininity. This shows that Greek identity discourses are reused and nuanced across different contexts, with overlapping features among various identities and groups. Dr. Romney aims to expand on this work by developing a course on ancient Mediterranean food and planning a conference on alcohol use in the ancient world with Dr. Matt Gibbs (Classics).

School of Business

Bridging the Energy Transition through Natural Gas: Opportunities for Canada and Global Energy Security

Dr. Subhadip Ghosh's (Associate Professor, Decision Sciences) research focuses on energy and environmental economics, particularly the effects of fossil fuels on climate change and the economic aspects of transitioning to renewable energy. He emphasizes the role of natural gas as a transitional fuel and uses game theory and econometric models to analyze this shift. His interest in climate change was sparked by a visit to the Sundarbans mangrove forest, which lies between India and Bangladesh, leading to recent publications on the energy challenges in those two countries.

His recently published research, with Dr. Rajarshi Majumder (Professor, University of Burdwan), explores India's energy challenges, highlighting its reliance on coal and the gap between natural gas production and demand. This study forecasts energy consumption through 2050 and recommends policies to increase domestic natural gas production and imports, alongside expanding renewable resources.

Dr. Ghosh's work offers insights for policymakers and highlights Canada's potential as a major LNG exporter, benefiting global energy security and Canada's economy. Through his research, along with Dr. Shahidul Islam (Professor, Economics), Dr. Ghosh has found that natural gas can be used as a temporary bridge fuel that can ease the transition to renewable energy and that Canada has an opportunity to become a significant LNG exporter, especially to the Asia-Pacific region, improving global carbon emission reduction efforts.

Funded by a Project Grant from the Office of Research Services, Dr. Ghosh's most recent ongoing research, with collaborators Dr. Shahidul Islam (Professor, Economics), Dr. X. Wang (Assistant Professor, Decision Sciences) and the Agricultural Financial Services Corporation (AFSC), addresses the effect of climate change on the agriculture in Alberta. His other ongoing research project, funded by a Seed Funding grant from the School of Business, examines the challenges and opportunities for electric vehicle adoption in Canada. These projects aim to inform policy, support sustainable practices in agriculture and transportation and help provide practical solutions on natural gas as a bridge fuel in the transition to renewable energy.



Dr. Subhadip Ghosh
Associate Professor, Decision Sciences

Leveraging People, Process and Emerging Technologies for Supply Chain Optimization

Dr. Parminder Singh Kang's (Associate Professor, Decision Sciences) research revolves around using advanced data analytics, machine learning and combinatorial optimization to solve complex issues in supply chain management and operations optimization. His interest lies in leveraging these cross-disciplinary techniques to improve efficiency, resilience and sustainability in supply chains, integrating technological advancements with human factors for holistic solutions. Funded by a MacEwan University Social Sciences and Humanities Research Council (SSHRC) Institutional Grant (SIG) in collaboration with Dr. Rickard Enstroem (Associate Professor, Decision Sciences), a Mitacs Global Research Award with Panjan University, a Mitacs Accelerate Grant and in collaboration with Apana Technologies Inc. Dr. Kang has been able to support his overall research goals and focus on core issues related to people, process and technology aspects of supply chain management. Dr. Kang is currently developing a demand forecasting framework for small and medium-sized enterprises (SMEs) using machine learning and data analytics. His project includes interviewing SMEs, analyzing data and applying ML algorithms to improve demand forecasting accuracy, especially for SMEs. SMEs face challenges with demand forecasting due to limited resources and access to knowledge related to data-driven decision-making frameworks. This research aims to enhance their supply chain efficiency and reduce costs. Preliminary results show improved forecasting accuracy, which is expected to lead to better inventory management and supply chain resilience.

Next steps of this work will focus on refining ML models and expanding the framework. Dr. Kang is also working on how businesses adapt to emerging technologies using web scraping and text mining. In collaboration with Dr. Enstroem, this work aims to develop the HI-TOP model to integrate technology with human dynamics in organizations. The aim is to provide a framework to align technological advancements with human factors, enhancing productivity and employee well-being. Some key results are that the HI-TOP model has been well-received and guiding effective alignment of tech and human resources. Dr. Kang's final project explores global supply chain challenges related to sustainability and resilience. This project involves analyzing data from SMEs in Alberta to develop strategies for more resilient and sustainable supply chains. It also addresses critical needs for robust and environmentally friendly supply chains by integrating circular economy practices and advanced data-driven decision-making capabilities. The key results from this project identified practices for resilience and sustainability, providing strategies for SMEs.



Dr. Parminder Singh Kang
Associate Professor, Decision Sciences

Faculty of Health and Community Studies

Examining the Long-Term Health Trajectory for Older Immigrants Through the Intersection of Aging and Immigration

Dr. Lun Li's (Assistant Professor, Social Work) research centers on the intersection of aging and immigration, particularly the health and wellbeing of older immigrants in Canada. His goal is to understand both risk and protective factors affecting their long-term health and to promote healthy aging in immigrant communities. This research has been funded by a Canadian Institutes of Health Research (CIHR) grant. Dr. Li's current project involves analyzing data from the Canadian Longitudinal Study on Aging (CLSA) to study the health and social wellbeing of older immigrants over a decade. Collaborating with Dr. Andrew Wister (Simon Fraser University), Dr. Yeonjung Lee (University of Calgary) and doctoral candidate Boah Kim (Simon Fraser University), the research examines health trajectories and identifies key factors influencing health changes in older immigrants. There is a growing population of older immigrants in Canada, yet there is limited research on their long-term health changes. This research addresses the need for updated data on the health of older immigrants, who often face greater health declines and barriers compared to Canadian-born seniors. This project is ongoing, with aims to uncover factors from social environments, interactions and cultural perspectives that impact the health and wellbeing of older immigrants. It will provide insights into the aging process from life course and life stage perspectives, emphasizing the role of social determinants of health. Dr. Li plans to collaborate with community organizations to support older immigrants through community-based programs that enhance their social resilience and health during aging.



Dr. Lun Li
Assistant Professor, Social Work

Urban Indigenous Identity Development in Survivors of the Child Welfare System

Dr. Kelsey Reed's (Associate Professor, Child and Youth Care) scholarly work centers on urban Indigenous identity development among survivors of the child welfare system. As an Indigenous scholar with a decade of experience working with Indigenous youth in residential care, Dr. Reed aims to examine the impact of current policies on these individuals and advocate for systemic change by amplifying Indigenous voices. Dr. Reed employed Indigenous research methodology, prioritizing cultural protocols and relational accountability, involving elders in the process, and conducting interviews with urban Indigenous youth who have navigated the child welfare system. Dr. Reed conducted interviews with survivors of the child welfare system over a period of several months to understand their experiences as urban Indigenous youth who have been through the child welfare system. This research provides insight and understanding to the overrepresentation of Indigenous youth in Alberta's child welfare system and helps highlight how existing policies adversely affect them.

Some key findings from Dr. Reed's research include:

- Existing policies and practices within the child welfare system are continuing to cause harm to Indigenous children, youth and families.
- Participants described the existing child welfare system as an extension of the Indian Residential Schools.
- Significant Indigenous relationships, grounded in Indigenous kinship, ceremony and culture, can spiritually reconnect Indigenous youth to their identity.

Dr. Reed aims to expand her research to focus on Indigenous youth transitioning out of the child welfare system, particularly regarding the high rates of homelessness among former youth in care in Edmonton. The most fulfilling aspect for Dr. Reed has been community advocacy for meaningful change.



Dr. Kelsey Reed
Associate Professor, Child and Youth Care

Faculty of Fine Arts and Communication



John McMillan
Assistant Professor, Music

Canadian Identity within Musical Storytelling

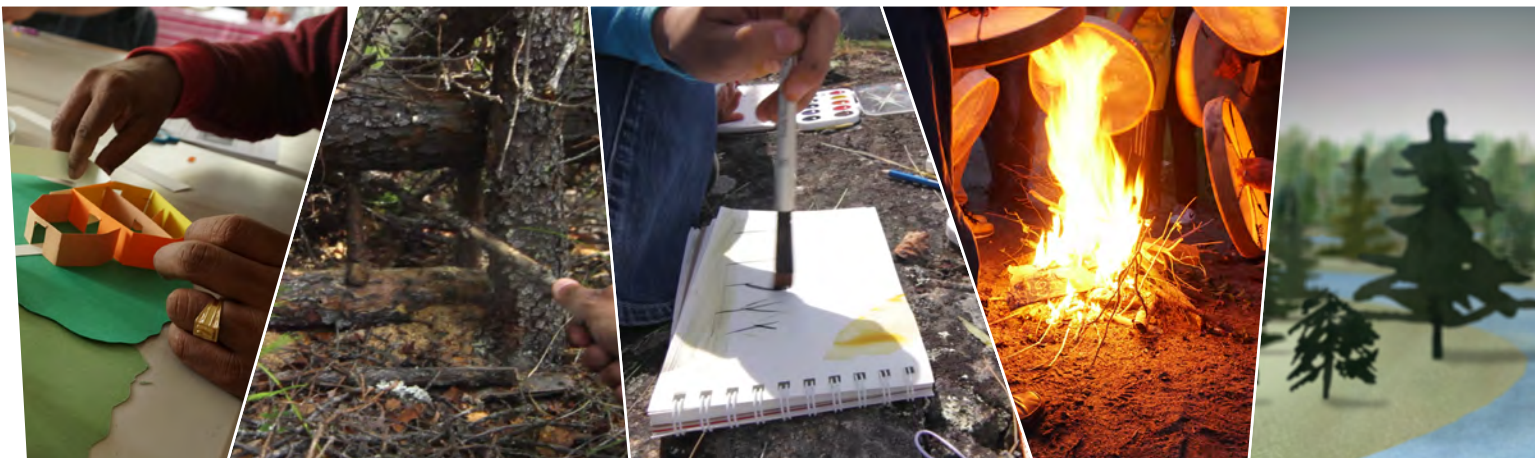
Professor John McMillan's (Assistant Professor, Music) scholarly work combines creative projects with PhD research. McMillan's PhD research distinguishes Canadian documentary scores by linking them to the development of Canadian patriotism and identity and addresses a gap in the discourse on Canadian musical contributions to documentary film. His primary creative output is composing music for documentary films, which he views as a way to interpret significant non-fictional subjects relevant to both Canadians and global audiences. One of his recent works includes being the composer for the film "Singing Back the Buffalo" along with Melody McKiver (Assistant Professor, University of Manitoba). Supported by a MacEwan University Project Grant, he also worked with Paul Johnston, who held the role of bassist and recording engineer (Associate Professor and Head of Recording at MacEwan University), and Dr. Tasha Hubbard, who was the film director for the film. This film is set to be featured on CBC's The Nature of Things. The project involved students for recording and orchestration and included 20 Indigenous youth observing the process in MacEwan's recording studio. McMillan's work in documentary film music provides a form of non-fiction musical storytelling that informs the public about Indigenous connections to Buffalo and current restoration efforts. McMillan's creative projects provide educational value, through various forms of distribution and he plans to explore experimental and modern non-fiction storytelling methods, including augmented and virtual reality.



Adolfo Ruiz
Associate Professor, Design

Communicating Cultural Knowledge Through Research Creation

Dr. Adolfo Ruiz's (Associate Professor, Design) scholarly work is centered on research-creation, a methodology that blends creative practice with qualitative inquiry and community collaboration. His research is driven by the aim of developing projects in partnership with community members, focusing on building trust and dialogue to produce meaningful outcomes. Dr. Ruiz's projects include the development of a board game designed to promote intercultural dialogue, animated films inspired by Tłı̨chǫ Dene oral history and initial prototypes for a land-based curriculum. His interest in storytelling and intercultural spaces stems from his formative experiences navigating Spanish and English-speaking environments, which fostered a deep curiosity about the complexities and translatability of intercultural interactions. Funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) and a Mitacs Accelerate Award, Dr. Ruiz is currently engaged in a curriculum development initiative with elders and educators from the Tłı̨chǫ Dene region, NWT. This project builds on collaborative efforts dating back to 2012, including the creation of animated films based on regional oral histories. The curriculum aims to merge land-based knowledge with art and design practices, aligning with the Tłı̨chǫ educational philosophy of being "strong like two people," which emphasizes integrating Dene and non-Dene knowledge. The ongoing efforts focus on creating a curriculum that supports the transfer of traditional knowledge to youth and incorporates both land-based teachings and modern educational tools. Dr. Ruiz plans to continue his collaboration with the Tłı̨chǫ community to refine and test the curriculum prototype in the near future. He finds great fulfillment in the relationships forged through these collaborative projects and in the opportunity to celebrate and engage with the Tłı̨chǫ culture.



Library Services



Dr. Galicia Solon Theresa Blackman
Educational Developer, Centre for Teaching
and Learning

Towards a Students as Partners Ethos at a Teaching Focused University

Dr. Galicia Blackman's (Educational Developer, Centre for Teaching and Learning) research began with a focus on incorporating student voices in curriculum development. Her educational research focus has been on students' experiences in dialogic learning contexts. Currently, as an educational developer, she supports faculty in involving students as partners in teaching, learning and research.

Dr. Blackman's latest project involved a three-part initiative starting with the use of content analysis to examine key features and principles of the Students as Partners (SaP) movement. After an initial analysis, Dr. Blackman took the results of successful SaP programs from across the globe and used the information to create a tailor-made program for MacEwan University. In collaboration with Dr. Jennifer Long (Associate Professor, Anthropology) and Student Leadership Coordinator Nooshin Walji she piloted the newly created program with students. This project addresses the need for a structured approach to the SaP movement, which emphasizes equity, inclusion and student engagement. It provides a framework that aligns with MacEwan's Strategic Vision and supports ethical and effective student partnerships. Results from this project led to the development of a guide approved by the Centre for Teaching and Learning and Student Affairs. This guide outlines the SaP program structure and provides resources for faculty interested in adopting partnership approaches. Dr. Blackman plans to support faculty in implementing partnership approaches in their work and to conduct a focus group with MacEwan faculty to discuss ethical practices in student partnerships.

Office of Research Services

Board of Governors Research Chairs

The 2024 Board of Governors Research Chair is Dr. Joshua Toth (Professor, English) whose research is advancing knowledge in his field and demonstrating significant global impact.

Dr. Toth's research interests include literary theory, the "ethical turn," racial ambiguity, American literature, and film and postmodernism. The bulk of his publications concern the "end" of postmodernism and the way in which the development of new narrative strategies in America parallel certain notable shifts in continental theory. However, while he continues to explore issues related to postmodernism's apparent "passing" (particularly the persistence of metafiction), his more recent work also focuses on representations of intrusively "strange" characters in American literature and film, and the way in which these representations expose a democratic order that both rejects and paradoxically requires the violence of exclusion. He has begun to approach both "problems" – the persistence of metafiction and the role of the stranger in American literature – via a distinctly Hegelian conception of plasticity.

"Congratulations to Dr. Toth," says Carolyn Graham, Chair of MacEwan University Board of Governors, "Strengthening the value MacEwan adds to our community through scholarship is a key part of our strategic vision, Teaching Greatness, and Dr. Toth's research accomplishments exemplify the trendsetting – and trendbreaking – thought leadership among MacEwan's faculty."



Dr. Joshua Toth
Professor, English

Chancellor's Research Chairs

MacEwan's 2024 Chancellor's Research Chairs are Dr. Melissa Hills (Associate Professor, Biological Sciences) and Dr. Trevor Hamilton (Professor, Psychology).

DR. MELISSA HILLS

Dr. Hills is committed to interdisciplinary work and collaborates extensively with other faculty members as she engages in the Scholarship of Teaching and Learning (SoTL) relating to her own teaching practices to improve student learning. She is also interested in Universal Design for Learning (UDL) in higher education, particularly in STEM (science, technology, engineering and mathematics), as an approach to creating more inclusive learning environments for students. Her current research projects explore how implementing flexibility and choice in course design can impact student learning.

In addition, Dr. Hills supports student-driven research and mentors undergraduate research projects in molecular biology using the model plant *Arabidopsis*. Her previous research has included biosafety of genetically modified crops, invasive plant biology and molecular regulation of plant development.

DR. TREVOR HAMILTON

Dr. Hamilton actively researches a variety of topics both in the zebrafish laboratory at MacEwan and in collaboration with other institutes. At the zebrafish laboratory, he heavily involves MacEwan students in his research. This happens through supervising honours and independent study students examining the effect of elevated carbon dioxide (projected for the future) on zebrafish movement, memory and anxiety. His research program, which has garnered significant external funding, also includes establishing novel and reliable tests of learning and memory in fish, namely the novel object recognition test and episodic-like memory tests. He is also interested in the effect of pharmacological substances on fish behaviour and has worked with students to examine patterns of drug administration and the nature of addiction.

"Recognizing Dr. Hamilton and Dr. Hills with this award reflects both their exceptional scholarly work and the leadership they show in their fields of expertise," says MacEwan University Chancellor, Dr. Tony Fields. "I am honoured, as chancellor, to offer congratulations to them both as MacEwan's newest Chancellor's Research Chairs."



Dr. Melissa Hills
Associate Professor, Biological Sciences

Distinguished Research Award

Each year, the Dr. Sherrill Brown Distinguished Research Award recognizes one MacEwan University faculty member who conducts exceptional scholarly work that has significantly contributed to society and the scholarly community – locally, nationally or internationally. The 2024 Distinguished Research Award recipient is Dr. Trevor Hamilton (Professor, Psychology).

Dr. Hamilton is an adjunct professor in the Neuroscience and Mental Health Institute at the University of Alberta and a visiting scholar at the Scripps Institution of Oceanography at the University of California San Diego. He received his PhD in neuroscience from the University of Alberta and a Bachelor of Science in psychology from McGill University. He teaches a variety of courses including applied neuropharmacology, and brain and behaviour.

Dr. Hamilton actively investigates a variety of topics both in MacEwan's zebrafish laboratory and in collaboration with other institutes. At the zebrafish laboratory, he heavily involves students in his research, supervising honours and independent study students examining the effect of elevated carbon dioxide on zebrafish movement, memory and anxiety. His research program, which has garnered significant external funding, also includes establishing novel and reliable tests of learning and memory in fish, namely the novel object recognition test and episodic-like memory tests. He is also interested in the effect of pharmacological substances on fish behaviour and has worked with students to examine patterns of drug administration and the nature of addiction.

"We're proud to recognize Dr. Hamilton with this research award for his many career contributions to multiple research areas, most notably studying fish to understand human health," says Dr. Craig Monk, Provost and Vice-President, Academic.

"Dr. Hamilton engages and guides students in research – something not always available to curious students in an undergraduate setting. He has a strong desire to expose students to the deep learning that comes with cutting-edge research, significantly elevating their educational experiences."



Dr. Trevor Hamilton
Professor, Psychology

Canada Research Chairs (CRC)

The Canada Research Chair (CRC) program was established by the Government of Canada to attract and retain world class researchers and to reinforce academic research and training excellence in Canadian post secondary institutions. Since 2019, MacEwan University has welcomed two CRC chairs: Dr. Marielle Papin (Assistant Professor, Political Science) and Dr. Kristopher Wells (Associate Professor, Child and Youth Care).

DR. MARIELLE PAPIN

Dr. Papin has been awarded a Tier 2 CRC in Urban Wellness (Urban Policy and Governance) for her research into the role of cities and other transnational actors in governance collaboration.

As part of her CRC award, Dr. Papin has also received John R. Evans Leaders Funding from the Canadian Foundation for Innovation (CFI), MacEwan's first CFI award. Dr. Papin is the director of the Research Institute for Urban Wellness.

With support from CRC and CFI, Dr. Papin will be able to expand her research, hire student research assistants and create a database of her findings to facilitate global connections and contribute to an international community of innovators and problem solvers in the field. Though the scope of the database will feature cities across North America, Latin America and the Caribbean, Dr. Papin is also researching right here in Edmonton. She's looking at the issue of urban wellness as encompassing health, environment, housing and systemic racism, as well as the urban policy and governance intervention that is being put in place to tackle those issues and ensure residents are able to live well in the city.

DR. KRISTOPHER WELLS

Dr. Wells was MacEwan's first Tier 2 CRC recipient (2019) for the Public Understanding of Sexual and Gender Minority Youth, and is the director of the Research Centre for Sexual and Gender Diversity. Dr. Wells focuses on three key areas to support the public understanding of sexual and gender minority youth: investigating and supporting inclusive and responsive policies, developing equitable and evidence informed practices and encouraging the full and equitable participation of LGBTQ2S+ youth in all aspects of our society. Dr. Wells is one of the driving forces behind the creation of many ground-breaking initiatives within the Edmonton community including PrideTape, Camp fYrefly, Edmonton Queer History Project and NoHomophobes.com.



Dr. Marielle Papin
Assistant Professor, Political Science
Canada Research Chair (Tier II)



Dr. Kristopher Wells
Associate Professor, Child and Youth Care
Canada Research Chair (Tier II)

Student Research Day



On April 19, 2024, MacEwan University held its annual Student Research Day event featuring research from MacEwan's undergraduate researchers from across all faculties and schools. This year was the University's largest event ever, with over 250 presentations and over 300 students. Examples of the topics students presented on included: 'Educators' Roles in the Culture of Reflective Practice', 'Research of Mental Health and OOO Theory as Presented through Video Art', 'Micro-Celebrities Affiliation in Social Media' and 'Behavioural Effects of 24-Hour 6PPD-quinone Exposure in a Zebrafish Model'. The event was opened by Dr. Annette Trimbee (President and Vice Chancellor), Dr. Craig Kuziemyk (Associate Vice President, Research) and Stephan Vasquez (Students' Association of MacEwan University, Vice President, Academic). Knowledge Keeper George Desjarlais shared an opening Indigenous prayer and testimonial on the importance of research.

Student Testimonials

"It was so much fun to present!"

"It was really fun, and we got to meet a lot of other students, see our former professors, and experience presenting in a situation like this!"

"I was impressed how smoothly everything ran!"



2023/24 Fiscal Year Funding Information

April 1, 2023-
March 31, 2024

External Funding

	Total
Alberta Innovates	\$229,880
Alberta Innovates – Strategic Networking & Development	\$5,700
Alberta Innovates – Summer Research Studentships	\$224,180
Canada Foundation for Innovation (CFI) – JELF Partnerships	\$74,665
Canada Research Chair (CRC)	\$600,000
CIHR Catalyst Grant – Analysis of CLSA Data	\$63,308
Government of Alberta	\$2,119,350
Government of Alberta – Child Services	\$1,983,750
Government of Alberta – Major Innovation Fund	\$33,600
Government of Alberta – Education	\$50,000
Government of Alberta – Jobs Economy and Northern Development	\$52,000
Government of Canada	\$25,288
Government of Canada – Heritage	\$12,500
Government of Canada – CIRNAC	\$7,188
Government of Canada – ESDC	\$5,600
Mitacs	\$152,000
Mitacs Business Strategy Internship	\$80,000
Mitacs Accelerate	\$60,000
Mitacs Globalink Research Awards	\$12,000
Natural Sciences and Engineering Research Council (NSERC) Funding	\$618,800
NSERC Discovery Grants	\$542,800
NSERC COVID-19 Extension with Funds	\$28,000
NSERC USRA Grants	\$48,000
Serg International (fTR)	\$9,500
Social Sciences and Humanities Research Council (SSHRC) Funding	\$389,214
SSHRC Insight Grants	\$137,710
SSHRC Insight Development Grants	\$236,604
SSHRC Partnership	\$14,900
Sturgeon County	\$2,000
Total Tri – Agency	\$1,071,322
Total non Tri – Agency	\$3,212,683
Total 2023/24 Fiscal Year External Funding	\$4,284,005

2023/24 Fiscal Year Funding Information

April 1, 2023-
March 31, 2024

Internal Funding

	Awarded	Total
Board of Governors Research Chair	1	\$5,000
Chancellor's Research Chair	2	\$10,000
Community Engaged Scholarship (CES) Grant	4	\$17,703
Dissemination Grant	43	\$84,174
Distinguished Research Award	1	\$7,500
Project Grant	11	\$70,823
Scholarship Support Grant (SIG)	6	\$29,715
SSHRC Institutional Grant	12	\$79,600
Strategic Research Grant	1	\$20,000
Thematic Area Grant	7	\$69,963
USRI Dissemination Grant	25	\$36,341
USRI Project Grant	16	\$40,702
Total 2023/24 Fiscal Year Internal Funding		\$471,521.00

Office of Research Services

City Centre Campus

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**For more information about scholarship happening at MacEwan University,
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