



Student Research Day Program 2023

April 20th

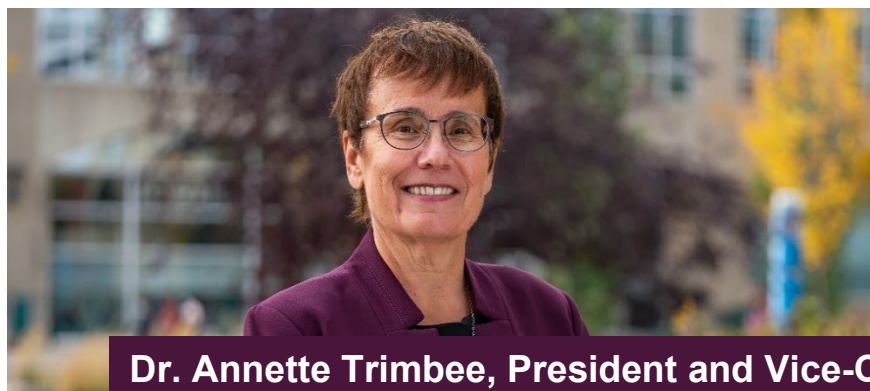




The land on which we are gathering in Treaty Six Territory is the traditional gathering place for many Indigenous people. We honour and respect the history, languages, ceremonies and culture of the First Nations, Métis and Inuit who call this territory home.

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.

Welcome Notes



**Dr. Annette Trimbee, President and Vice-Chancellor,
MacEwan University**

Welcome to Student Research Day! It is a pleasure to congratulate the more than 200 students sharing their work this year. I am blown away when I think about everything that you and your faculty mentors have invested in these projects. The academic, personal, and professional growth from these experiences is inspiring and a tremendous example of how passionate and motivated the student are at MacEwan.

Growth is something we are focused on at MacEwan. Our strategic vision for 2030, Teaching Greatness, is driven by it. Days like today allow us to celebrate what we mean by teaching greatness: meaningful connections between faculty and students, scholarly work that reflects incredible learning and innovation, challenging the status quo, and being leaders in our community.

Teaching Greatness is built around themes like “perpetual motion,” “trendsetting,” and “honouring our place in O-day’min.” When I look through this event program of student work to be shared today, I see those themes reflected back at me. I see professors dedicated to engaging with students and providing meaningful academic and research experiences. I see students generating new and exciting knowledge, embracing different ways of knowing and being, partnering with community, bringing people together, making art, examining literature, and challenging the way we think about things.

To me, the fact that Student Research Day is growing is another signpost that we are heading in the right direction. I look forward to seeing your work today thank all of you for the time, energy and passion you have invested in your future – and ours.



**Dr. Craig Monk, Provost and Vice-President,
Academic**

Congratulations to our undergraduate researchers on their participation in Student Research Day 2023. I am thrilled to see each year how many MacEwan students take on this challenge, having been welcomed by faculty members committed to furthering their scholarship. Engaging in research and creative activity is fundamental to the student experience at MacEwan, and I commend you for embracing the challenge to bring

months of hard work to life. To get here, you will have developed new skills in analysis, communication, critical thinking, problem solving, and teamwork. Our faculty, through their mentorship, cultivate further a thriving community of scholarship that fuels undergraduate education. While research and creative activity may begin for students in the classroom, studio, or lab, it does not end there. We know that student-engaged research is a catalyst for change, pushing the boundaries of our academic disciplines, answering complex questions, and finding solutions to society's most pressing needs. This annual event is an example of how MacEwan helps prepare tomorrow's leaders with the knowledge and experience they will take with them beyond graduation.



**Dr. Craig Kuziemy, Associate Vice-President,
Research, and Vice-Provost**

Welcome to Student Research Day 2023. Student research day is the capstone event in our annual celebration of MacEwan scholarship. This year we had a record number of student submissions. Student engaged scholarship is an important part of the exceptional undergraduate experience that we provide, and I am always proud and inspired by the commitment and engagement that our students put into

their scholarly activity. A hallmark of MacEwan Scholarship is the diversity of the research and creative activity that we do. Student research day will showcase everything from exploratory research that cracks the shell to understand key societal problems to research that validates existing theories and approaches to creative outputs that will enrich our lives. Community engaged scholarship is a big aspect of the scholarly work we do, and our community partners will feature prominently in a lot of the presentations you will see. In today's complex world the need for scholarly activity of all types has never been stronger. Thank you for taking the time to learn about how MacEwan scholarship is pushing boundaries and contributing to a better world for everyone.



Oral Presentation Schedule

ROOM NUMBER	9-201	9-202	9-211	9-215	9-216	9-217	9-218	Allard Hall Elder Jerry Wood Atrium
8:30 – 8:45 a.m.	Welcome & Opening Remarks Dr. Annette Trimbee, President & Vice-Chancellor, MacEwan University Dr. Craig Monk, Provost & Vice-President, Academic Dr. Craig Kuziemsky, Associate Vice-President, Research & Vice-Provost Elder Daphne Alexis Stephan Vasquez, Vice-President, Academic, Students' Association of MacEwan University							
	Psychology <i>Moderator: Dr. Sean Rogers</i>	Sociology <i>Moderators: Dr. JJ Wright & Dr. Michael Gulayets</i>	Interdisciplinary <i>Moderator: Dr. Emilene Reisdorfer</i>	School of Business <i>Moderator: Dr. Evandro Bocatto</i>	Physical Sciences <i>Moderator: Dr. Stefan Cartledge</i>	Biological Sciences <i>Moderators: Kathy Davies & Dr. Joshua Miller</i>	Child and Youth Care & Human Services and Early Learning <i>Moderator: Dr. Ozlem Cankaya</i>	
Session 1 9:00 – 10:30 a.m.	Kale Scatterty Andréa Johnson Melissa Nielsen Dezeræe Martens Vanessa Brickwood	Cailin Senger & Abe Aboughauche Alex Alphonse & Preeya Lall Rory Dumelie, Alison Toews, & Courage White Mackenzie Darby, Maksym Kohutiak, & Lorena Rafal Ethan Simmons, Ashu Kito, Kateryna Kuzmuk, & Kirpal Thind	Johnathan Bobinac Japkaran Saroya Inder Singh Celina Vipond & Cheyenne Greyeyes	Joshua Bell Patrick Jean Abhijeet Singh	Vy Tran Cedrick Ramos Helen Tiet	Amanda Kryjak Caleb Odegard Mannraj Pataria	Kiana Krueger Courtney Smith Keirsten Taylor Brooke Wanchulak	
10:30 – 10:45 a.m.	Break							
	Psychology <i>Moderator: Dr. Sean Rogers</i>	Sociology <i>Moderator: Dr. JJ Wright</i>	English <i>Moderator: Dr. P. Farvolden</i>	Humanities <i>Moderator: Dr. Cyrus Panjvani</i>	Physical Sciences <i>Moderator: Dr. Janice Kenney</i>	Biological Sciences <i>Moderators: Kathy Davies & Dr. Joshua Miller</i>		
Session 2 10:45 – 12:00 p.m.	Christina Tomaras Sophia Slade Holly Bosch Maron Demecillo Kamille Sandberg	Shahad Hassan Aaron Glenn Samantha Mullin, Camila Balboa, Neha Sharma, & Natalie Mamo Samantha Hermary	Symon Buchanan Justyn Chodzicki	Austin Herbert Amelia Altmiks	Haylee Hatton Brooklyn Falebrenza Vincent Johnston	Inder Singh Joe Waller		
11:00 a.m. – 1:00 p.m.	Lunch is available for student presenters. Pick up between 11 a.m. and 1 p.m. in Room 9-213							



ROOM NUMBER	9-201	9-202	9-211	9-215	9-216	9-217	9-218	Allard Hall Elder Jerry Wood Atrium
11:00 a.m. – 1:00 p.m.	Lunch is available for student presenters. Pick up between 11 a.m. and 1 p.m. in Room 9-213							
12:00 p.m. – 1:30 p.m.	Poster/Project/Creative Installation Viewing – Robbins Health Learning Centre, 2nd Floor Atrium							
	Psychology <i>Moderator: Dr. Sean Rogers</i>	Sociology <i>Moderator: Dr. JJ Wright</i>	English <i>Moderator: Dr. P. Fervolden</i>	Mathematics & Statistics <i>Moderator: John O'Connor</i>	Anthropology, Economics, and Political Science <i>Moderator: Dr. Leslie Dawson</i>	Biological Sciences <i>Moderators: Kathy Davies & Dr. Joshua Miller</i>	Communications & Music <i>Moderator: Dr. Trisha Sarker</i>	
Session 3 1:30 – 3:00 p.m.	Shannon Majeau Brayden Ritter Madison Karpiak Pamela Stuart Jacey Mitchell Celina Vipond & Haylee Hatton	Alexandra Gagnon Randi Sempala, Yaseen El-Hakim, & Emma Parker Ronak Rai Natalie Mamo	Emilie Glazier Morse Kairo Martens Madison Pilling	Sandy Jr Julian Joyce Wu Oscar Martinez Luna Aisling Pouti	Alexa Lauer Alexandrina Mironas Emma Steele	Benjamin Bekkema Cora Kaplan Brady Ryan	Remi Baker Heather Hutchinson & Elyse Colville Charise Eryka Delson	
3:00 p.m. – 3:15 p.m.	Break							
	Psychology <i>Moderator: Dr. Sean Rogers</i>			Studio Arts <i>Moderator: Robin McDonald</i>	Anthropology, Economics, and Political Science <i>Moderator: Dr. Brendan Boyd</i>	Computer Science <i>Moderator: Dr. Mohammed Elmorsy</i>	Design <i>Moderator: Dr. Isabelle Sperano</i>	
Session 4 3:15 – 4:30 p.m.	Alex Tiller Shelby Grahn Japkaran Saroya Alana Walker Tulsa Oddy			Elena Mercuri Maya Pereira Alethea Recla	Alexa Lauer Barry Atkin Isaac MacPherson	John Penaflo Mitchell Driedger, Dongseok Cho, & Sera Han Iain Smith & Dominic Dobosz	Kim Huynh Randi Sempala, Molly Boyd, & Diana Haymour Ekaterina Vasilyeva & Braden Bierkos	
4:30 p.m. – 5:30 p.m.	Poster/Project/Creative Installation Viewing – Robbins Health Learning Centre, 2nd Floor Atrium							Humanities Performance & Round Table Amanda Fuenmayor, Ashley Bernal, Mira McElhinney & Eric Flores Moreno 4:30-6:30 p.m.



12:00 p.m. – 1:30 p.m.		Poster/Project/Creative Installation Viewing Session 1			
Installation Number	Student(s)	Title	Installation Number	Student(s)	Title
1	Sydney Hua	Plastic Pollution Campaign Posters: The Art and Language of Persuasion	24	Robin Ma	Content Reinforcement of Cell and Membrane Transport between Physical Education and Arts and Science Students
2			25	Noah Martin	Content Reinforcement of Cell Membrane and Transport Improves Long-term Knowledge Retention in Physical Education Students
3	Sydney Hua & Susanna Woudstra	PREY: Aesop's Fables Selected & Visually Told Anew	26	Spencer Pon	Massage Therapy for Ankle Mobility and Spasticity in an Adult with Cerebral Palsy: A Case Report
4	Susanna Woudstra	Kepler's Blooms: 'erbs of the earth	27	Marium Sheikh	Subsistence Practices and Food Insecurity in the Arctic Circle - A Focus on the Inuit and Sami Community
5	Riya Dhunna	Effects on emergency department wait times due to Covid-19	28	Ini Amao	Investigating Black Women's Work Experiences in Canada: An Undergraduate Student's Perspective.
6	Sarah Ostapovich	Perceptions of Dairy Farms on the Environment: A Content Analysis of Comments on TikTok	29	Ivy Wu & Connor Smith	Heating Up the Market: A case analysis on Kaiso Hot Sauce
7	Alyssa Stratman	Sharenting and Exploitation: A Qualitative Content Analysis of Public Reactions to the Wren Eleanor Situation	31	Racquel Affleck	Witch Mother Remedy Kit
8	Kasandra Vallee	Student Experience and Reactions to Online Learning on Facebook: A Content Analysis of Remote Learning Issues during COVID-19	32	Kim Huynh	The Book Design of 'A Blow to the Head,' a Poetic Memoir
9	Naomi Wall	Masked Reactions: A Content Analysis of Reactions on Twitter to Masking Update by the Premier of Alberta	33	Liv Smreciu	DUETS: Transposing the Auditory into the Visual.
10	Michael Mannerow	Exploring Music Generation with Magenta	34	Kaitlyn Tupper	The Mabinogion: The First Branch, designed and edited by Kaitlyn Tupper
11	Alyceea Anderson	Manufacturing Antimicrobial Silver-Coated Wound Dressings: Chemistry Practicum with Exciton Technologies	35	Dustin Berndt-Setter	Challenging the Spartan 'Mirage' by Redefining the Greek Standard for Burials
12	Abby Beka	Characterization of Microplastics in industrial, highway, residential, and natural storm water ponds in Edmonton, Alberta, Canada	36	Joseph La Torre	Descartes & Medicine: Healing Teleology
13	Benjamin Bekkema	Synthesis of Diphenyl Hydrogels for Pharmaceutical Applications: Chemistry Practicum with CNRC-NRC	37	Justin Norton	Utilitarianism in Sparta
14	Sara Benny & Dawson Laycock	MacEwanCYU: Exploring STEM Outreach Opportunities within Community Engaged Research	38	Dominique Ross	Worship of Artemis in Ancient Sparta
15	Evan Bourassa	OER: Providing Students with an Interactive, Engaging Learning Experience	39	Jenn Crebas	Do narcissists act differently with their romantic partner in public vs. private settings?
16	Dylan Fillier	Synthesis and evaluation of molecular hydrogels	40	Monisola Badiru	An Acceptance and Commitment Therapy Approach to Social and Emotional Learning
17	Cedrick Ramos	Oil spill detection using a handheld fluorometer: Chemistry Practicum with CanmetENERGY	41	Monisola Badiru	Language Effects on Emotion Recognition in Hearing Children and Deaf Children with Cochlear Implants
18	Danielle Dias & Matthew Schiiler	Development of Dopamine-Coated Quartz Tuning Fork: Chemistry Practicum with Fourien Inc.	42	Emily Czobor	Examining how different sensory inputs impact motor learning
22	Loreena Nieuwenhout	Response of Migratory Bird Frequencies to Temperature in Central Alberta			



Installation Number	Student(s)	Title	Installation Number	Student(s)	Title
43	Mady Gillett	A procrastination solution for students	54	Jared Kostiuk	Combating Internalized Homophobia: Protective Factors and Their Effectiveness
44	Janet Guenter	The Myths and the Memories: Perceptions of Traumatic Memory and Victim Credibility	55	Claire Kryska	How different magnitudes of visual shift affect motor learning in prism adaptation
45	Matthew Harper	Hooked on a terpene: investigating the presence of withdrawal in zebrafish (<i>Danio rerio</i>) following cessation of repeated exposure to β -caryophyllene.	56	Karanvir Kundan	Hiding and Searching Behaviours in a 2D environment
46	Oana Hossu	Does Online Biofeedback Increase the Use of Stress Coping Strategies in Undergraduate Students?	57	Brielle Lamash	Calculating Risk: Sexual Behaviour as a Consequence of Personality, mating orientation, and alcohol consumption
47	James Hudson	The cannabis terpene bisabolol increased locomotion but had no affect on anxiety-like behaviour in zebrafish	58	Kale Scatterty	The Aversive Effects of Infrasound on Zebrafish in an Open Field Test
48	Erica Bown	A Comparison of Student Achievement Across Pedagogical Modalities	59	Kale Scatterty	Evaluating the Effects of Infrasound Frequencies on Human Stress and Anxiety Behaviours
49	Erica Bown	Does a Growth Mindset Intervention Reduce Perfectionism and Procrastination?	60	Samuel Larocque	Benefits of Using Complex Video Games to Improve Executive Function
50	Andréa Johnson	Examining the anxiolytic potential of Cannabis terpenes: The differential effects of alpha-pinene enantiomers on zebrafish anxiety-like behaviour and locomotion	61	Katherine Luzanac	OCD Correlates and Photographs as a Checking OCD Coping Mechanism
51	Nickki Kamprath	Eyes bridge the gap: how eye gaze-induced arousal biases distance perception.	62	Abbigale Massam	A psychophysiological examination of covert eye gaze
52	Madison Karpiak, Dana Haugen, Dakota Wilkin, & Katerina Rubachuk	Recognizing Risk Factors for the Perpetration of Campus Sexual Violence	63	Logan Moon	Do Personality Traits, Ageist Beliefs, and Knowledge of Dementia Influence Canadian Undergraduates Stigmatizing Attitudes Towards People With Dementia?
53	Noelle Kilbreath	What Does it Mean to be an Ally to the LGBTQ+ Community? Comparing Definitions of LGBTQ+ and non-LGBTQ+ Individuals	64	Branden Otte	Individual Differences in Inhibitory Control: The Associations Between the "Automatic Pilot," Executive Function, and Executive Attention



4:30 p.m. – 5:30 p.m.		Poster/Project/Creative Installation Viewing Session 2			
Installation Number	Student(s)	Title	Installation Number	Student(s)	Title
1	Benjamin Kraemer & Danielle McDow-York	Designing for the Future: A Window into Augmented Reality	19	Robyn Woodrow	Lignin depolymerization and methylation in batch
2	Benjamin Kraemer, Ekaterina Vasilyeva, & Marco Tse	Designing User Experience in Crossover Zones; Where ETS intersects with the world; A Case Study	20	Brynne Radford	Are there microplastics in the stomachs of ringed seals (<i>Pusa hispida</i>) from Arviat, Nunavut?
3	Ekaterina Vasilyeva & Braden Bierkos	Digital Interaction in a Shared Public Setting: An Exploration of West Edmonton Mall Map User Experience	22	Brooke Labine & Anne Munezero	Microplastic Ingestion in Arctic Zooplankton Species
5	Carmen Diaz	Impact of Content Reinforcement of Body Tissues on Knowledge Retention in Nursing Students	23	Jose Ignacio Ramos de la Torre	Development of New Ionic Exchange Methods: Chemistry Practicum with Sterling Chemicals Ltd
6	Karissa Goulding, Samantha Walker, & Helena Popiel	BMI and Labour: How does obesity in pregnancy affect intrapartum outcomes for pregnant patients?	24	Jaden Schultz	A Brief View of Mine Tailings Leaching and Geological Hydrogen Storage: A Chemistry Internship with CanmetENERGY
7	Kaitlyn Hoyer	Ethical Dilemmas and Considerations for Nurses During the MAID Process: A Literature Review	25	Meisha Scott	Investigating The Fate and Biodegradation of Resin and Asphaltenes in water
8	Ashley Kohler & Nicole Pylypchuk	Adverse Childhood Experiences (ACEs) as a Predictor of Homelessness in Mothers: A Narrative Review	26	Tasmina Sheikh	Development of Lactate Biosensor: Chemistry Practicum with NRC company
9	Lena Nguyen	Art Therapy as Self Care	27	Suzuanne Burwash	Album Cover Typography 2
10	Richa Patel	Physiological Knowledge Retention in Second-Year Bachelor of Science & Psychiatric Nursing Students	28	Barbie Cayanan	Film-to-Book Design
11	Prabal Sharma	Third-Year Nursing Student's Physiological Knowledge Retention	29	Sabine Hohne, Dana Valencia, & Nawaal Basha	Reimagining ETS Bus Stops
12	Ashley Stoltz	Community Gardens and Urban Agriculture: Healthy Environment, Healthy Citizens	30	Long Ly	Digital Exploration of Human Anatomy and Fashion
13	Kiara Ukrainetz	The Impact of Content Reinforcement on Anatomical Knowledge Retention of Cardiovascular and Lymphatic Systems in Nursing Students	31	Jennifer Onwudinjo	Competition Submission for the 'Pipe Dreams' Album
14	Christine Wincentaylo	Youth-engaged research in a pediatric mental health care trial	32	Jennifer Onwudinjo	Competition Submission for the 'Pipe Dreams' Album
15	Amber Zyla	Impact of Content Reinforcement of Muscular and Skeletal Systems on Knowledge Retention in Nursing Students	33	Daenya Hussein	Horoscope Wheel for the Book of the Year 2022/23 - Everyone Knows Your Mother is a Witch By Rivka Galchen
16	Avery Lund	Redefining detection limits of the baker-Nunn telescope	34	Daenya Hussein	Light photography concept for the album design of Pipe Dreams by Jim Walker and The MacEwan Generations Big Band
17	Zafar Mamadaliev	Synthesis and Evaluation of Switchable Hydrophilicity Solvents	35	Courtney Drayton & Carmen Pedersen	Falling Through the Cracks: Case Management of Clients Accessing Services in A Settlement Agency, Edmonton, Alberta
18	Robyn Woodrow	Observational Air Quality Monitoring in the City of Edmonton: Investigating the Patterns and Presence of Emissions in CO2 Domes	36	Nafisa Moallim & Precious Osadjere	Afrocentric Knowledge Within the Context of Social Work Education and Practice



Installation Number	Student(s)	Title
37	Eva Ociepka-Mengel & Samantha Heuft	From Global Practices to Global Mindedness: Utilizing Reflexivity and Cultural Relevance Towards a Global Indigenization of International Social Work
38	Cheryl Williams & Vicki Shaughnessy	BIPOC Community Contributions in Volunteerism and Civic Engagement
39	Ronak Rai	The Impact of Positive Animal Stimuli on Stress and Well-being.
40	Crystal Pavlis, Amy Petersen, Brandon Dare, Brandy Thiessen, Brielle Lamash, Jada Tomlinson, Jay McLeod, Karanvir Kundan, Madison Karpiak, Michael Kramer, & Trina Miksic	Puzzling Perceptions: Attraction, sociosexuality, and rivalry evaluations among women.
41	Crystal Pavlis	Pluralistic Mating Strategies: Examining sexual orientation with CNM, jealousy, sex drive, and sociosexuality.
42	Adia Redekopp	The Visual Categorization of Handwritten Letters
43	Natasha Robinson	Does This Look Like STALKING to You? Factors Associated with Identification of Stalking Behaviours
44	Nick Robinson	The Unsolved Mysteries of Applied Behaviour Analysis
45	Chella Mae Robles	Profiles of Perpetrators of Intimate Partner Sexual Violence, Their Sentencing Outcomes, and Risks in Recidivism
46	Joel Roy	Using ACT to Increase Class Engagement in University Students
47	Maria Luzardo Rubinstein	Singing the Stress Away: Karaoke As a Coping Tool
48	Darby Tarrant	Stressed and Stuck: How Can We Motivate Students to Use Effective Coping Strategies?
49	Darby Tarrant	Falling Through the Cracks: The Gaps in our Healthcare System
50	Dj Crossland	"Childhood Pet Ownership and The Strength of Sibling Relationships"

Installation Number	Student(s)	Title
51	Dj Crossland	Wake up Sheeple!: Personality traits and belief in pseudoscience
52	Brayden Ritter	A methodological exploration of drug dosage time in Zebrafish behavioural pharmacology research
53	Aly Shurvell	Sexpectations: Coercive Control Experiences in Sexual Minorities
54	Ryan Verbitsky	Neuropharmacological Effects of Acute Terpinolene Administration on Zebrafish Behaviour
55	Kevin Styba-Nelson	Examining Anxiety Sensitivity, Metacognitions, and Anxiety Symptoms
56	Arshdeep Vaid	Discrimination and Picking up Political Cues
57	Alycia Stewart	The Terpene (-)- α -pinene can Alter Locomotion in Zebrafish (<i>Danio rerio</i>)
58	Emily Woods	Parasocial Relationships and Materialism in the Media: The Moderating Role of Motivation
60	Man Wai (Krystal) Yik	Music Entertainment Effects on Attention in Children with Autism Spectrum Disorders
61	Alethea Recla	Chisamosa: The gossiper and the act of self-portraiture
62	Maya Pereira	Research of Baroque and Renaissance painting for the purpose of creating a painting of contemporary student life.
63	Chloe Catral	Examining parent-child play types, duration, and engagement with loose parts: How parental income, educational attainment, and children's age and cognitive functioning shape loose parts play
64	Tori Vail & Kiera Leblanc	Children's Rights: Focusing on How Consent and Inclusion Affect Participation

Office of Research Services

Room 7-257, 10700 – 104 Avenue

Edmonton, AB T5J 4S2

research@macewan.ca

MacEwan.ca/Research

For more information about scholarship happening at
MacEwan University, please contact the Office of Research Services at
research@MacEwan.ca

Please visit our website at www.MacEwan.ca/Research and connect with us on
Twitter, LinkedIn and Instagram.

The Office of Research Services is grateful for the support received from the Research Support Fund. The Research Support Fund is a Government of Canada program that assists Canadian post-secondary institutions with the expenses associated with managing research projects that have been funded by the three federal research granting agencies: Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) and Social Sciences and Humanities Research Council (SSHRC).