



ACADIA
UNIVERSITY



UNDERGRADUATE THESES

2026 CONVOCATION

Thursday, May 14 | Friday, May 15

BIOLOGY

Qaysar Albarghouthi

Dream Ads: Can Sonic Brands Presented during REM Sleep Influence Dream Content and Brand Perception?

Cali Breen

Exploring Potential Biomarkers of Multiple Sclerosis in An Eae Model in Zebrafish

Scotia Broome

*The Kessel Run Equivalent: Systemic Challenges of Alewife *Alosa pseudoharengus* Passage Through Box Culverts in the Minas Basin*

Grace Bulger

Exploring Disseminated Neoplasia and Transmissible Cancers in Nova Scotian Bivalves

Taylor Cahill

The Effect of Soil Silicic Acid Amendments on Strawberry Plants Grown Under Drought Conditions

Natalie Campbell

*Effect of Insulin-like Peptide 5 and Relaxin-3 on Brain-Derived Neurotrophic Factor Immunoreactivity in Brain-Injured Zebrafish, *Danio rerio**

Ophelia Carter

*Attraction of *Culex territans* Mosquitoes to Volatile Organic Compounds of Green Frogs Infected with Hepatozoon Blood Parasites*

Abbigail Danis

Understanding Flower Foraging Patterns of Pollinators in Nova Scotia

Jaclyn Delahunt

*Examining the Effects of Temperature and Moisture Availability on *Ixodes scapularis* and *Dermacentor variabilis* Activity and Position within a Microhabitat*

Grace Earle

*Characterization of Hepatozoon Blood Parasites from Maritime Garter Snakes, *Thamnophis sirtalis pallidulus*, in Nova Scotia*

Sophie Edgar

Identification of Adelgid-Induced Volatiles in Eastern Hemlock and White Pine

Mathieu Godbold-Smith

*Quantifying Effects of Light Wavelength on Attracting Leach's Storm-Petrels (*Hydobates leucorhous*)*

Louve Gouaillier

*Pinnae Anomalies in Northern Populations of Endangered Little Brown Bats (*Myotis lucifugus*)*

Alexander Haire

*Ancestry and Distribution of Landlocked Atlantic Salmon (*Salmo salar*) in Nova Scotia*

Leah MacLean

Evaluating the Efficacy of Blood Meal Analysis to Inform West Nile Virus Transmission Risk

Jenna MacLeod

The Role of Aldehyde Dehydrogenase Enzyme Expression Toward Chemotherapy Efficacy in Ovarian Cancer Cells

Madeline MacNeil

*Infection by Hepatozoon Blood Parasites Increases Cold Tolerance in the Frog-Biting Mosquito, *Culex territans**

Ciara McGinley

Investigating the Potential of Novel Mastoparan Derivatives for Selectively Targeting Leukemia Cells

Tegan McMahon

*The Effect of Short-Term Extreme Temperature Variations on Seed Germination and Seedling Vigour in *Achillea Millefolium* SSP. *Borealis*, *Apocynum Cannabinum*, *Solidago Semperverns*, and *Symphyotrichum Lateriflorum**

Jai Paliwal

Genome-Wide Association Studies for Ripening Time and Firmness in Apples

Alina Rutherford

Changing Vertical Substrate Color to Reduce Seabird Collisions Associated with Artificial Light

Jenni Simpson

Investigating the Selectivity and Anti-Cancer Properties of Mastoparan Derivatives Using Metastatic Triple-Negative Cancers as a Model

Eleanor Smith-Whetter

Shell Game: Examining the Effects of Bisphenol A And its 'Safe' Alternatives on Chick Embryonic Development

Pascale St. Peters

Assessing Seed Sterilization Treatments for In Vitro Contamination Control of Nova Scotia Halophytes

Morgan Trombley

Differential Gene Expression in the Inflammatory Pathways of Zebrafish (Danio rerio) Following Induction of Multiple Sclerosis Using an Eae Model

Samantha Tucker

Tomcod Are 'Chill' – Acid-Base Profiles and Metabolic Disturbance in Culvert-Passing Punamuj' Atlantic Tomcod Mirogadus tomcod in Minas Basin

Francesca Turner

The AChEs and Pains of Crabs in the Lunenburg Region: An Ecotoxicity Biomarker Study of the Lunenburg Coast Using Invasive European Green Crab, Carcinus Maenas

BUSINESS ADMINISTRATION**Sujit Acharya**

Mental Health of Student Immigrant Entrepreneur(s)

Ella Christie

How do Acadia University International Students Navigate Cross-Cultural Communication, as Defined by Hofstede's Cultural Dimensions?

Ashton Clarke

Understanding Fraud in the Non-Profit Health Sector: A Case Study of the IWK Expense Scandal

Ashley Gillis

Hidden Minds of Rural Girls: Guiding Their Futures an Exploration of Self-Perception and Perceived Futures

Bianca Helmig

Gender Equality in Sports: How Do We Move Forward in Women's Varsity Sports in Canada?

Ella Hickey

Exploring the Role of Canadian Law on Gender Equity in Sport

Stephni Madapatha

Disability, Workplace Discrimination and Harassment, and Transition to Employment: A Narrative Inquiry of Early Career Vulnerability among Disabled Student Employees

Madelynn Nelson

Pregnancy Discrimination in the Workforce: Analysis of Judicial Decisions

CHEMISTRY**William Deveau**

Progress Towards the Synthesis of 4,6-Diisopropyl-2-Phenylbenzene-1,3-Diol

Marisa Fewster

Addition Across Dienes and Analyzing Kinetic and Thermodynamic Control

Katie MacLean

Investigating the Effects of Tert-Butyl Alkyl Groups on the Photodehydration of 2-Hydroxybenzyl Alcohol Derivatives

Jake Pickett

*Optimization of Amine Carbon Dioxide
Scrubbing for Improved Product Recovery*

CLASSICS

Logan Butler

*Galactic Echoes: Comparing the Star Wars
Prequels to the Fall of the Roman Republic*

COMMUNITY DEVELOPMENT

Emily Diverty

*Exploring Social Cohesion in Public Markets: A
Comparative Case Analysis*

Lily Hull

*Exploring Place Attachment Through Self-Guided
Experiences – Understanding Individual
Connections to the Wolfville Dykelands*

Adam Veitch

*Sustainable Tourism Development and
Community Resilience in Newfoundland and
Labrador*

COMPUTER SCIENCE

Joyce Adeyi

*AI-Based Artwork Interpretation: A Comparative
Study of Classification and Generative Models*

Kylie DeViller

*From Seed to Algorithm: A Comparative Analysis
of Genome-wide Association Study and Random
Forest for Genomic Trait Prediction in Apple*

Claire Dinn

*Real-Time Internet of Things-based Compost
Monitoring and Analysis using CO₂ and
Temperature Dynamics*

Mohammad Haque

*A Smote-Based Approach for Minority Attack
Detection in Intrusion Detection Systems*

Ibrahim Harunur Rashid

*Deep Learning Approaches for Sensor Based
Human Activity Recognition*

Yash Raj

*Predicting Donation Capacity: A Machine
Learning Framework for Modernizing
Fundraising Ask Strings*

Brendan Toscano

*Machine Learning Evaluation of Generative AI
Debugging Feedback Plausibility for Introductory
Python Programming*

ECONOMICS

Thomas Bezanson

*A Real Option Analysis of the Gull Island
Hydroelectric Facility*

Paige Walsh

*Food Deserts in the Halifax Regional
Municipality and Socioeconomic Characteristics*

ENGLISH

Sara Farguson

Palamon's Tale

Remi "Polaris" Johnston

NVR Say Die

Nicholas Lundrigan

*The Man, The Myth, the Arthurian Legend:
Queering Gender in Medieval Adaptations of Sir
Lancelot*

Angel Percentie

Bush Medicine

Adam Shenouda

*William Blake's Revolutionary Resistance:
Applying Anti-Narrative Methodology and
Rhizoanalysis to Blake Scholarship*

Alexa Wilcox

*"Of all erthely women she loved hir beste":
Friendship Between Ladies and their
Handmaidens in Middle English Literature*

ENVIRONMENTAL AND SUSTAINABILITY STUDIES

Yas Jawad

*From Food Scarcity to Seeds of Solidarity: Food
Initiatives and Collective Care in Wolfville*

ENVIRONMENTAL GEOSCIENCE

Hayley Newell

*Mercury in Soil Horizons from Southwestern
Nova Scotia: Relationships with Vegetative
Bioindicators and Mineralogy*

ENVIRONMENTAL SCIENCE

Lucy Boyne

*Quantifying the Mercury to Calorie Ratios of
Aquatic Invertebrates from Two Lakes in
Kejimikujik National Park and National Historic
Site, Nova Scotia*

Sarah Doyle

*Trap Cultures and Spore Isolation of Arbuscular
Mycorrhizal Fungi from Bay of Fundy Salt
Marshes*

Hannah Hayes

*Ammonia Excretory Potential of the Jonah Crab
(*Cancer borealis*) During Acute Exposure to High
Environmental Ammonia*

Darcy Marino

*Variations in Compost Maturity Testing:
Implications for Canadian Agriculture*

Rowan Norrad

*Understanding the Effects of River Alkalinity
Enhancement on the Concentration of Dissolved
Metals in West River, Nova Scotia*

Evelyn Pole

*Arsenic Bioaccumulation in Alder Trees from
Gold Mine Tailings in Southwest Nova Scotia:
Implications for Environmental Risk*

Amanda Tracy

*Methodology Development for Microplastic
Extraction from Wild-Caught Bees*

GEOLOGY

Karen Brookman

*Timing and Kinematics of Deformation Relative
to Contact and Regional Metamorphism in the
Tor Bay Area, Nova Scotia, Canada*

Tiernan Davies

*Geology and Tectonic Setting of the Central
Jeffers Block, Cobequid Highlands, Nova Scotia,
Canada*

Chris Penner

*Evaluating the Role of Depth in Metamorphic
Decarbonation: Insights from the Sierra Nevada
Continental Arc*

HISTORY

Ava Copas

*Beneath the Roots: The Civilian Conservation
Corps and Franklin D. Roosevelt's Work in Parks
during the New Deal Era of Environmentalism*

Courtney Green

*Elizabeth I and Mary, Queen of Scots: The
Forgotten Personal Relationship*

Christa Hamilton

*Reaching Everyday People: Christian Ideas of
Female Chastity and the Old English Poem Judith*

Cameron Reyno

*Rebels and Rejects of the Reformation: Witch
Hunts, Peasants' Revolts, and Proto-capitalism*

KINESIOLOGY

Kathryn Bemrose

Moving with Un/Ease: Arts-based Insights into Adolescent Girls' Movement Experiences

Abigail Dancey

The Final Whistle: Exploring the Factors Influencing University Athletes' Retirement from Sport

William Dauphinee

A Retrospective Analysis of the Gaps in Concussion Reporting and Management Among Special Olympics Canada Athletes

Natasha McCarthy

Can Social Media be a Body-Positive Safe Space? How Young Adults Perceive the Relationship Between Physical-Activity, Body-Image, and What is Portrayed on Social Media

Keara Mombourquette

Understanding Loneliness and Social Isolation in Individuals with Cardiopulmonary Conditions Living Rurally

Grace Nielsen

Exploring Nova Scotian Swin Coaches' Perspectives and Practices around Dryland Training for Youth Competitive Swim Teams

LAW AND SOCIETY

Hannah Hesjedahl

From Cannabis Prohibition to Social Renegotiation: Constructing Gender in Canada and the US (2020-2025)

Brit Pulsifer

Barriers to Facilitating Court Ordered Intimate Partner Violence Programs in Nova Scotia

MATHEMATICS AND STATISTICS

Nimarjeet Bajwa

Failed Zero Forcing

Sophie Farina

Modeling Fish Movement through the Minas Passage

Taran Kanabar

Pension Plan Asset-Liability Dynamics with an Aging Population

Anna Lukeman

Graph Theoretic Aspects of the Grid Sum Puzzle

NUTRITION

Zach Adams

Enrichment of Dark Chocolate with Fermented Laver: Impact on Sensory Properties and Consumer Acceptance

PHILOSOPHY

Mallia Gibson

From Sincerity to Judgment: Reassessing the Moral and Legal Significance of Lying

POLITICS

Nikolas Cutcliffe Kymlicka

Parrots or Representatives: How Centralized Communication Affects Nova Scotia Backbenchers

Larque Law

Anna: Information Liberator or Big Tech Bootlicker?

PSYCHOLOGY

Isabel Acorn

Exploring Tabletop Role-Playing Games as a Medium for Identity Exploration: A Qualitative Investigation

Jonah Appleton

Validation of the Desire to Live Scale: Integrating Existential and Goal-Regulation Perspectives

Landon Augustine

Behavioural Effects of Prism Adaptation Across the Lifespan

Megan Bautista

What Words Do You Use? Gender/Sex Differences in Sexual and Anatomical Genital Terminology and Piloting an Inclusive Genital Anatomy Activity for Individuals with Vulvas

Alexander Cronhelm

Fine-Tuning Computational Models of Two-Alternative Forced Choice Learning

Tegan Daley

"Do I Belong Here?": Inclusion, Safety, and Sense of Belonging in a Rural Psychology Department

Alexandra Fournier

Parent Perspectives on Digital Sleep Aids and Their Impact on Sleep Parameters in Children

Sara Gagne

Does Desire to Live Mediate the Association between Self-Criticism and Depressive Symptoms?

Sophie Godin

Using Computational Modelling and Clustering to Explore Individual Category Learning Differences

Madison Hunt

Hope as a Mediator Between Psychological Flexibility and Flourishing in Aging Veterans

Mya Jabbour

Age-Related Differences in the P3b Component during Prism Adaptation

Ella McNally

Handwriting of Typing? How Writing Modality Shapes Recollection and Familiarity

Kaynaz Niazi

Enhanced Dream Incubation and Impact of Dream Awareness on Mental Wellness

Anderson Peters

The Feasibility Testing of a Low-cost Virtual Reality Rehabilitation System for a Chronic Stroke Survivor

Julia Reevey

Gendered Patterns of Affection-Sharing Behaviours and Their Association with Relational Well-Being Across Contexts

Jenica Saunders

Exploring the Impact of Concussion Status and Cannabis Use on Future Thinking Abilities

Shay Sewell

Do Positive Parenting Practices Influence the Relationship between Youths' Experiences of Life Stress and Well-Being? A Simulated Data Study

Charli Siler

Something to Talk About? Exploring the Dynamics of Disclosure and Non-disclosure of Cyber Intimate Partner Violence

Alexia Stroud-Caules

Exploring the Parenting Needs of Previously Incarcerated Fathers: A Needs Assessment to Inform Intervention Development

SOCIOLOGY

Katrina Hayes

Small-Scale Subsistence Agriculture: Connecting through Community to Combat Food Insecurity

Lexy McConnell

Shelves Were Empty. Panic Was in the Air: The Social and Emotional Drivers of Stockpiling Behaviours during the Formula Shortage in 2022-2023 in North America

WOMEN'S AND GENDER STUDIES

Zahide Çam

Feminist on the Gram: Exploring Digital Feminism on Student Union Leaders' Social Media