

eleventh annual



UNDERGRADUATE RESEARCH CONFERENCE

March 23+24, 2018 | Nipissing University, North Bay

Conference Program



TABLE OF CONTENTS

Letter from the Provost and Vice President Academic & Research	1
Keynote Address	2
Undergraduate Research Conference Committee	3
Acknowledgements	4
Program at a Glance	5-6
Program.....	7-14
Poster Presentations	7-8
Art Installations	8
Concurrent Panels	9-14
#1 Long Colonial Shadow: Race and History	9
#2 Chronic Cannabis Exposure Effects: Motives, Memories, Emotions, and Critical Periods	9
#3 Domestic Terrorism in the United States	9
#4 From Dallas to Drumpf: Politics and Governance in the U.S.....	10
#5 Exploring the American Past Through Music.....	10
#6 Science and Social Evaluation: The Nature of Our Encounters	10
#7 Roundtable on Experiential Learning Into that Darkness: Memory of the Holocaust in Poland	11
#8 This is Ourselves, Under Pressure: Human-Rights Journeys in Troubled Times.....	11
#9 NU 25: Celebrating Diversity in Research I	11
#10 Wonderlands: Place and Personality in the Literature of Identity	12
#11 The Struggle Against Empire: Nationalist Terrorism and Memory	12
#12 Matters of the Mind.....	12
#13 Gender and Sex: Critical Considerations	12
#14 The Art of Research.....	13
#15 Capitalism and (Post) Colonialism in Africa.....	13
#16 'Beyond Terrorist': Insurgency, Identity, Motive and Meaning.....	13
#17 Healthcare: Problems and Solutions	14
#18 NU 25: Celebrating Diversity in Research II	14
Closing Remarks/Award Presentations	14
Abstracts.....	15-41
Poster Presentations	15-23
Art Installations	24-25
Research Papers.....	26-42



Welcome to the 11th Annual Undergraduate Research Conference at Nipissing University

Research is to see what everybody else has seen, and to think what nobody else has thought.

- Albert Szent-Györgyi

Conferences have a special role in academia. They are events at which new ideas get presented and debated. We learn from each other; those doing research in the same discipline, and those who come to the same debate from a different (inter)disciplinary perspective. Conferences are opportunities to test the strength of an argument, and the evidence it is based on, through a presentation or in a workshop.

This particular conference is also about celebration of undergraduate research. Here at Nipissing we work to create opportunities for our students to participate in, and develop their own, research projects from early on in their academic career. Research, the exploration of possibility, is the heart of the teaching and learning relationship around which the very institution of university is constructed.

I want to express my appreciation for all the students who have prepared their work for presentation at this conference, the faculty who have mentored their students in this process, and all those who have contributed to the organization of this exciting event. I hope you will enjoy the presentations and the conversations, make enduring connections, and have fun on our campus.

You are welcome to Nipissing, and I look forward to your conversations about “what nobody else has thought”!

Have a great time,

A handwritten signature in blue ink, appearing to read 'Arja Vainio-Mattila', written in a cursive style.

Arja Vainio-Mattila

Provost, VP Academic and Research

eleventh annual ● ● ● ● ● ● ● ● ● ● ○ ○ ○ ○ ○
UNDERGRADUATE RESEARCH CONFERENCE

KEYNOTE ADDRESS



Keynote Speaker

Noah Richler
**Truth in Fiction:
Narrating Canada Today**

Friday March 23 | 6:00 – 8:00 pm

Stories are by nature political. How we tell stories, what is the point and purpose of our stories, is the preoccupation. For stories are battling things, competing for our attention and to influence us. Our foundation myths are especially interesting in this regard: stories we rely on to explain the country as it is, how it came into being, and how to behave in it. The evolution of our foundation myths is ongoing, and the old ones will no longer do. We are changing, our stories tell us. Understanding this change, though also what has been constant is key: the key to our moving forward, the key to maintaining the unusual experiment that is the territory we share.

eleventh annual ●●●●●●●●●●○○○○○
UNDERGRADUATE RESEARCH CONFERENCE



UGRC TEAM from left to right: Stephen Connor, Devyn Richards, Barbi Law, Triana Ortiz, Carolyne Ticky, Nathan Kozuskanich, Tzvetalin Vassilev

Two things make a conference like this possible: time and money.

For the latter, I would like to thank our new Provost and Vice President Academic and Research, Dr. Arja Vainio-Mattila, and Dr. Jim McAuliffe, Dean of Graduate Studies and Research. Both understand the value of research to the undergraduate experience here at Nipissing, and I appreciate the investment they have made in this year's conference.

For the former I thank this year's UGRRC Committee. I am proud of what we have been able to achieve this year, and I thank them for the many, many hours they dedicated to the conference. I am particularly indebted to our graduate students who put together all the nuts and bolts to make everything run smoothly. I am also very grateful to the many faculty members who volunteered to serve as judges and moderators. This conference is a community effort, so thank you to everyone from the administration, faculty, and staff who worked on making it a success.

Finally, thank you to the students for sharing your research with us. Congratulations to you all!

Nathan Kozuskanich
UGRC Committee Chair

ACKNOWLEDGMENTS

The UGRC Committee would like to thank the following people for their support:

Sean Bester
Laurel Bissonnette
Kelly Brown
Melissa Busschaert
Patricia Czaikowski
Mike DeGagné
Marg Foisy Iwanchun
Greg Foster
Len Gemache
Ryan Hehn
Terry Kirkby
Jim McAuliffe
Meagan McLellan
Fran O'Donnell
Andrea Perolin

Pavlina Radia
Paul Ritter
Donna Robinson
Dan St. Georges
Katrina Srigley
Martee Storms
Cheryl Sutton
Carol Szabicit
David Tabachnick
Pauline Teal
Murat Tuncali
Arja Vainio-Mattila
Rick Vanderlee
Kevin Vibe

Faculty Judges and Moderators

James Abbott
Adam Adler
John Allison
Chantal Anderson
Anahit Armenakyan
Steven Arnocky
Joe Boivin
David Borman
Natalya Brown
Amanda Burk
Darren Campbell
Nathan Colborne
Stephen Connor
Hilary Earl
Kathryn Ewers
Robin Gendron
Kirsten Greer
Chris Greco
Dave Hackett
Geoffrey Hartley
Logan Hoehn
April James
Jack Jones
Stephen Kariuki

Benjamin Kelly
Aaron Kociolek
Nathan Kozuskanich
Laurie Kruk
Jaymie Lathem
Liz Lott
Lesley Lovett-Doust
Nancy Maynes
Lindsey McMaster
Reehan Mirza
James Murton
Rosemary Nagy
Laurie Peachey
Gyllian Phillips
Sal Renshaw
Laura Rossi
Trevor Smith
Herminio Teixeira
Leslie Thielen-Wilson
Renee Valiquette
Tzvetalin Vassilev
Andrew Weeks
Eric Weichel
Dermot Wilson

Thank you to all the faculty who involved students in your research, encouraged them to apply to the conference, put together panels, and promoted free inquiry as an essential element of the university.

11th Annual Nipissing University Undergraduate Research Conference

Program at a Glance

Friday March 23, 2018

Time	Program	Location
15:00-18:00	Registration	Nipissing Foyer
18:00-18:30	Opening Remarks Arja Vainio-Mattila Provost, and Vice-President Academic and Research	Nipissing Theatre F213
	Introduction of Keynote Speaker David Tabachnick Professor, Political Science	
18:30-19:30	Keynote Address Noah Richler "Truth in Fiction: Narrating Canada Today"	Nipissing Theatre F213
19:30-20:00	Question Period Moderator: David Tabachnick	Nipissing Theatre F213
20:00-22:00	Poster Session	A250
	Art Installations	A250 Hallway
20:00-22:30	Reception (with cash bar)	NU Cafeteria A246

Saturday March 24, 2018

Time	Program	Location
7:30-12:00	Registration	NU Cafeteria A246 Hallway
8:30-9:00	Opening Remarks Nathan Kozuskanich UGRC Chair	NU Cafeteria A246
9:00-10:30	Concurrent Panels	
	#1 Long Colonial Shadow: Race and History	A224
	#2 Chronic Cannabis Exposure Effects: Motives, Memories, Emotions, and Critical Periods	A226
	#3 Domestic Terrorism in the United States	A252
	#4 From Dallas to Drumpf: Politics and Governance in the U.S.	A257
10:30-10:45	BREAK	NU Cafeteria A246
10:45-12:15	Concurrent Panels	
	#5 Exploring the American Past Through Music	A224
	#6 Science and Social Evaluation: The Nature of Our Encounters	A226
	#7 Roundtable on Experiential Learning	A252
	Into that Darkness: Memory of the Holocaust in Poland	
	#8 This is Ourselves, Under Pressure: Human-Rights Journeys in Troubled Times	A257
	#9 NU 25: Celebrating Diversity in Research I	A259

Program at a Glance (continued)

12:15-13:15	LUNCH (provided)	NU Cafeteria A246
13:15-14:45	Concurrent Panels #10 Wonderlands: Place and Personality in the Literature of Identity #11 The Struggle Against Empire: Nationalist Terrorism and Memory #12 Matters of the Mind #13 Gender and Sex: Critical Considerations	A224 A226 A252 A257
14:45-15:00	BREAK	NU Cafeteria A246
15:00-16:30	Concurrent Panels #14 Fine Arts #15 Capitalism and (Post) Colonialism in Africa #16 'Beyond Terrorist': Insurgency, Identity, Motive and Meaning #17 Healthcare: Problems and Solutions #18 NU 25: Celebrating Diversity in Research II	A224 A226 A252 A257 A259
16:30-17:30	Closing Ceremony Closing Talk Katrina Srigley Associate Professor, History Closing Remarks Jim McAuliffe Dean, School of Graduate Studies and Research Awards Mike DeGagné President and Vice Chancellor Nipissing University	NU Cafeteria A246

Friday March 23, 2018

15:00-18:00	Registration	Nipissing Foyer
-------------	--------------	-----------------

18:00-18:30	Opening Remarks	Nipissing Theatre F213
-------------	-----------------	------------------------

Arja Vainio-Mattila
Provost, and Vice-President Academic and Research

Introduction of Keynote Speaker

David Tabachnick
Professor, Political Science

18:30-19:30	Keynote Address - Noah Richler	Nipissing Theatre F213
-------------	--------------------------------	------------------------



Truth in Fiction: Narrating Canada Today

Stories are by nature political. How we tell stories, what is the point and purpose of our stories, is the preoccupation. For stories are battling things, competing for our attention and to influence us. Our foundation myths are especially interesting in this regard: stories we rely on to explain the country as it is, how it came into being, and how to behave in it. The evolution of our foundation myths is ongoing, and the old ones will no longer do. We are changing, our stories tell us. Understanding this change, though also what has been constant is key: the key to our moving forward, the key to maintaining the unusual experiment that is the territory we share.

19:30-20:00	Question Period	Nipissing Theatre F213
-------------	-----------------	------------------------

Moderator – David Tabachnick

20:00-22:00	Poster Session	A250 (across the hall from the NU Cafeteria)
-------------	----------------	--

Presenters:

Calvin Bailey	Computational Study of Optical-Plasmonic Response of Single and Two-Dimensional Arrays of Gold Nanorods for Ultrahigh Sensitive Nanothermal Sensor Application
Katherine Britton	The Effects of In Ovo Feeding Ovalbumin and Whey Protein on the Embryonic Development in Coturnix Japonica Embryos
Erin Cangiano	Explorations of the Long-Term Memory of Intact Planarians and of Planarians with Regenerating Heads
Elizabeth Cardenas	In Hospitalized Patient With Delirium, is the Use of Physical or Chemical Restraint a Better First Choice to Managing Delirium Symptoms as Opposed to Another Alternative?
Wes Chambers	The Repeatability of Muscle Activation Measures During Activities of Daily Living in Healthy Adults
Kathryn Collins	Mexico and Oportunidades: Closing the Gender Gap
James Donovan	Chronic Cannabis use and Working Memory Performance: Is Higher Cognition Associated with More Cannabis Problems?
Lauren Goodridge	Manipulation of the Social Environment Alters Activity and Body Morphology of Regenerating Dugesia Dorocephala
Niki Hutchinson	Bridging the Gap From Physical Activity Research to Practice: A Knowledge Translation Strategy for Nurses
Landon Larabie	The Effects of Corporate Taxation on Human Development

Rebekah Lindensmith	Learners' Experience in our Learner-led Nursing Research Club
Annagh Macie	The Effects of Age on Flexion-Relaxation Phenomenon Occurrence and Trunk Onset Angle
Kendra Maracle	Does Amygdala Habituation to Threatening Faces Underlie Sex Differences in Depression?
Nicole Marley	CAG Repeat Polymorphism of the Androgen Receptor Moderates the Effect of Testosterone on Aggression
Hailey Martin	NUSU Communication Platform Research Study
Caelan Mathers	Does Testosterone Modulate Men's Propensity Toward Sexual Aggression
Charlotte Miller	Longitudinal Investigation of the Relationship Between Status Stability and Testosterone Concentrations in Male Varsity Hockey Players
Kayvon Monjezi	Reactions of Red Foxes to Powerline Corridors of the North Bay, ON Area in Winter
Megan Phillips	Does Exposure to Pornography Increase Men's Dehumanization of Women and Inclination Toward Sexual Aggression?
Brittney Robinson	Effects of Testosterone on Men's Ratings of Attractiveness: Does Relationship Status Matter?
Ryan Schlosser	Acorus Calamus
Heather Schottlander	To Have or not to Have Naloxone Kits?
Kristina Simms	Toxicity of Windshield Wash on Water Fleas
Katie Talbot	In Vitro Regeneration of Phalaenopsis
Heather Thomas	Acquired Recognition in Glowlight Tetras (<i>Hemigrammus Erythrozonus</i>) of Multiple Predators When Exposed to a Cocktail of Predatory Cues
Mikayla Toyne	Monitoring Land Use Change in Cobourg, Ontario from 1987-2017 Using Landsat 5 and Landsat 8 Imagery
Jennifer Tropiano	Biological and Chemical Properties of Marigold
Ryan Trudel	Responses to Diet Alarm Cues and Food Stimuli in Sunfish (<i>Lepomis gibbosus</i>) From Low Environmental Calcium Lakes

20:00-22:00	Art Installations	A250 Hallway
--------------------	--------------------------	---------------------

Presenters:

Jasmine Brioux	<i>Lifelines</i>
Hannah Burke	<i>For Your Entertainment</i>
Diane Davies	<i>This is Not a Pomegranate</i>
Dayajyot Kaur	<i>Sprouting Nature</i>
Shay-Lee Keenan-Lowerison	<i>Open Me</i>
Jessa Laframboise	<i>Dress up with Miss. Ogyny</i>
Rebecca Watson	<i>Judgment Days</i> <i>Postpartum</i>

20:00-22:30	Reception (with cash bar)	NU Cafeteria A246
--------------------	----------------------------------	--------------------------

Saturday March 24, 2018

7:30-12:00	Registration	NU Cafeteria A246 Hallway
8:30-9:00	Opening Remarks	NU Cafeteria A246
	Nathan Kozuskanich UGRC Chair	
9:00-10:30	Concurrent Panels	
	#1 Long Colonial Shadow: Race and History	A224
Moderator:	Nathan Colborne (Religions and Cultures)	
Judge:	Rosemary Nagy (Gender Equality & Social Justice)	
Panellists:		
Hanping Xie	<i>From the Pure-Hearted to the Individualistic: the Development of Hip-hop and the Social-Political African American Culture, 1970-2010</i>	
Luke Charlton	<i>Urban Reserves: How They Work and North Bay/Nipissing First Nation Application</i>	
Carly Sherlock	<i>The Battle of Seven Oaks: The Debate over Metis Independence</i>	
	#2 Chronic Cannabis Exposure Effects: Motives, Memories, Emotions, and Critical Periods	A226
Moderator:	Darren Campbell (Psychology)	
Judge:	Logan Hoehn (Mathematics)	
Panellists:		
James Donovan	<i>The Blunt Truth: How Chronic Cannabis Use Impacts Spatial Memory Performance</i>	
Kaycee Strotmann	<i>A Buffer Effect Between Chronic Cannabis Use and Cannabis-Related Problems</i>	
Victoria Steadman	<i>Chronic Cannabis Use and Attentional Bias: Extended Attentional Capture</i>	
Brandon Reimer	<i>Chronic Cannabis Exposure Effects: Motives, Memories, Emotions, and Critical Periods</i>	
	#3 Domestic Terrorism in the United States	A252
Moderator:	Stephen Connor (History)	
Judge:	John Allison (Education)	
Panellists:		
Katie Fontaine	<i>Baptized in Flame: Robert Jay Mathews, The Order and White Supremacy in the United States</i>	
Morgan Lightle	<i>From Mourning to Memory at the Oklahoma City National Memorial</i>	
Rebecca Dubeau	<i>From Fringe to Front Page: The Rebranding of the Ku Klux Klan in 1920s America</i>	

#4 From Dallas to Drumpf: Politics and Governance in the U.S.	A257
--	-------------

Moderator: Nathan Kozuskanich (History)

Judge: Herminio Teixeira (Political Science)

Panellists:

Mackenzie Bass-Simpson *Making America Great Again: An Analysis of Hyper-Nationalism in Trump's America*

Bryan Stone *Can Heretics Produce Satire?*

Samantha Odrowaz-Sekely *The Many Faces of John F. Kennedy's Martyrdom*

10:30-10:45	BREAK	NU Cafeteria A246
--------------------	--------------	--------------------------

10:45-12:15	Concurrent Panels
--------------------	--------------------------

#5 Exploring the American Past Through Music	A224
---	-------------

Moderator: James Murton (History)

Judge: Adam Adler (Education)

Panellists:

Kourtnei Bickerstaffe *'True Hawaiian' An Exploration of Land, Commercialism, and Community in Hawaiian Music after 1959*

Connor Cobean *'And We's a Gwine to Fight': The Reasoning Behind African American Soldiers' Desire to Fight in the Civil War as seen in Civil War Sheet Music*

Sophie Lauzon *Disney Effect: Culture, Society, and History*

Maggie Gordon *'Dey Said We Wouldn't Fight:' Changing Representations of African-American Soldiers during the American Civil War as seen through Contemporary Civil War Songs*

#6 Science and Social Evaluation: The Nature of Our Encounters	A226
---	-------------

Moderator: Darren Campbell (Psychology)

Judge: Andrew Weeks (Psychology)

Panellists:

Adam McLandress *Categorizing Online Communication: Quantitative and Qualitative Analyses of Online Conversations at the Exchange Level*

Benjamin Bao *Neural Correlates of Social Reflection and the Moderating Effects of Emotional Valence: A Literature Review*

Brittney Robinson *Effects of Testosterone on Men's Ratings of Attractiveness: Does Relationship Status Matter?*

Kirstin Loates *Neural Correlates of Approachability Judgements for Novel and Familiar Faces*

#7 Roundtable on Experiential Learning Into that Darkness: Memory of the Holocaust in Poland		A252
Moderator:	Hilary Earl (History)	
Panellists:		
Ian Schell		
Rebecca Dubeau		
Morgan Lightle		
Jenn Gomolka		
Kaitlyn Walker		
Sean Bunjevcevic		
Gracen Nolan		
Maddy Aucoin		
Mark Smydo		
Nicholas Szabunio		
#8 This is Ourselves, Under Pressure: Human-Rights Journeys in Troubled Times		A257
Moderator:	Lindsey McMaster (English)	
Judge:	Renee Valiquette (Gender Equality & Social Justice)	
Panellists:		
Maxwell Peacock	<i>Policing a Corrupt Agenda</i>	
Sam Gauthier	<i>The Aftermath of Natural Disasters</i>	
Alexander Maycook	<i>Rebellious Heroes: Sportsmen Taking a Stand</i>	
#9 NU 25: Celebrating Diversity in Research I		A259
Moderator:	Tzvetalin Vassilev (Mathematics)	
Judge:	Nancy Maynes (Education)	
Panellists:		
Nyaridzai Munaki	<i>A Deeper Look into the Current Refugee Crisis</i>	
Rebekah Ederer	<i>Experts by Experience in Social Work Education</i>	
Benjamin Cook	<i>Solution to AMM Problem 12008</i>	
Muzammil Syed	<i>The Economic Burden of Diabetic Foot Ulcers in Toronto, Canada: A Population Based Study</i>	
12:15-13:15	LUNCH	NU Cafeteria A246

13:15-14:45	Concurrent Panels	
	#10 Wonderlands: Place and Personality in the Literature of Identity	A224
Moderator:	Laurie Kruk (English)	
Judge:	April James (Geography)	
Panellists:		
Jylle Carpenter-Boesch	<i>Spatialization and Defining the Self: Individual Identity Seeking as a Colonial, Sovereignty-Claiming Function</i>	
Annabelle Harvey	<i>The Natural Self: Nature as Healing in Cheryl Strayed's <u>Wild</u> and Howard Axelrod's <u>Point of Vanishing</u></i>	
Abbi Roose	<i>Representation and Treatment of Masculinity in Victorian Children's Literature</i>	
Kylie-Anne Grube	<i>'Forewarnings:' The Paradox of Progress in <u>The Coming Race</u></i>	
	#11 The Struggle Against Empire: Nationalist Terrorism and Memory	A226
Moderator:	Stephen Connor (History)	
Judge:	Todd Horton (Education)	
Panellists:		
Rachelle Laman	<i>Media Portrayal of Bobby Sands MP and the 1981 Irish Hunger Strike</i>	
Colin Campbell	<i>Operation Anthropoid and the Politics of Memory</i>	
Ryrie Dirksen	<i>The Impact of French Canadian Nationalism in 1930s Quebec</i>	
	#12 Matters of the Mind	A252
Moderator:	Aaron Kocielek (Physical and Health Education)	
Judge:	Steven Arnocky (Psychology)	
Panellists:		
Kayla Faught	<i>Living the Happy Life</i>	
Chris Fontaine	<i>Psychophysical Properties of Logos: What Binocular Suppression Reveals About the Perceptual Processing of Logos and Their Design</i>	
Dustin Hummel	<i>The Influences of Endogenous Hormones on Information Processing and Movement Corrections During Goal Directed Aiming</i>	
	#13 Gender and Sex: Critical Considerations	A257
Moderators:	Sal Renshaw (Gender Equality & Social Justice)	
Judge:	Leslie Thielen-Wilson (Gender Equality & Social Justice)	
Panellists:		
Alexander Daley	<i>Inequality and Disadvantage on a Systematic Basis: Transgender Individuals Surviving Through Sex Work in Canada</i>	
Leandra Pilon	<i>Attitudes and Practice of Abortion in Tehran, Iran: The Role of Religiosity</i>	
Tealia Carrière	<i>Barriers to Business for Young Female Entrepreneurs</i>	
Taylor Anderson	<i>Crime & Deviance: Historical Perspectives of the Criminal Sanctions of Women in Early Canada</i>	
14:45-15:00	BREAK	NU Cafeteria A246

15:00-16:30	Concurrent Panels	
	#14 The Art of Research	A224
Moderator:	Eric Weichel (Art History and Visual Studies)	
Judge:	Amanda Burk (Fine Art)	
Panellists:		
Diane Davies	<i>Cultural Hybridity in Edo Period Japan (1603-1868): Portuguese Representations Through Namban Screens and Yojin Sogakuzu Folding Panels</i>	
Jasmine Brioux	<i>The Madonna of Mercy in Renaissance Europe: Symbol of Protection, Source of Pride</i>	
Rebecca Watson	<i>Societal Views on Sexuality as Reflected in Visual Depictions of Diana and Callisto</i>	
Jessa Laframboise	<i>The Gender Divide: Carolee Scheenmaan, Feminist Art and the Canon</i>	
	#15 Capitalism and (Post) Colonialism in Africa	A226
Moderator:	Robin Gendron (History)	
Judge:	James Abbott (Geography)	
Panellists:		
Brianne Doyle	<i>Mapping Changes of Mangrove Extent in the Eastern Region of the Niger Delta Using Satellite-Based Sensors</i>	
Aria Marta Kornas	<i>Cocoa Economy: Sustainable Cocoa Farming and Community Development in Ghana</i>	
Barâa Arar	<i>'I Speak of You in the Past Tense, Still, You are Algerian: ' French Language Assimilation Policies as Cultural Colonialism and their Role in the Disintegration of National Identity</i>	
	#16 'Beyond Terrorist': Insurgency, Identity, Motive and Meaning	A252
Moderator:	Stephen Connor (History)	
Judge:	David Borman (Philosophy)	
Panellists:		
Emma Chartrand	<i>Beyond the Veil: Black Widows Analysis</i>	
Pano Kopanos	<i>A New Revolution: The Motivations of the Revolutionary Organization 17 November</i>	
Tasha Stephenson	<i>Portrayal of the Mujahedeen Warriors in the <u>New York Times</u></i>	

#17 Healthcare: Problems and Solutions	A257
---	-------------

Moderator:	Laurie Peachey (Nursing)
Judge:	Kathryn Ewers (Nursing)
Panellists:	
Rebekah Lindensmith	<i>Interventions for Improving the Maternal-Infant Relationships in Mothers with Postpartum Mood Disorders</i>
Lauren Smith	<i>34 Hours in the ER: The Death of Brian Sinclair</i>
Victoria Maich	<i>The Tuberculosis Experience: A Narrative Inquiry Self-Study</i>
Carolyn Wong	<i>Factors Influencing Patients with Heart Failure to Participate in Advance Care Planning: A Review of the Literature</i>

#18 NU 25: Celebrating Diversity in Research II	A259
--	-------------

Moderator:	Gyllie Phillips (English)
Judge:	Kirsten Greer (History and Geography)
Panellists:	
Kyla Cangiano	<i>Beyond the Dust: An Ethnographic Account of Burning Man</i>
Matthew Sullivan	<i>Prosody and Sympathy and Judgment in the Dramatic Monologue</i>
Jaclyn Mulder	<i>In a League of Its Own: The Establishment of Algonquin Park</i>
Isaac Bender	<i>Three-Dimensional Modelling and Photogrammetry: For Use in Cultural Heritage Preservation and Public Engagement</i>

16:30-17:30	Closing Ceremony	NU Cafeteria A246
--------------------	-------------------------	--------------------------

Closing Talk

Katrina Srigley, Associate Professor, Department of History

Closing Remarks

Jim McAuliffe, Dean, School of Graduate Studies and Research

Awards

Mike DeGagné, President and Vice Chancellor Nipissing University

ABSTRACTS

POSTER PRESENTATIONS

Bailey, Calvin

“Computational Study of Optical-Plasmonic Response of Single and Two-Dimensional Arrays of Gold Nanorods for Ultrahigh Sensitive Nanothermal Sensor Application”

Vanadium dioxide (VO₂) has semiconductor and metallic phases where the transition between the two phases occurs around a critical temperature. In this project, the extinction (absorption + scattering) profiles versus incident light wavelengths in the visible and infrared region of a single and a two-dimensional array of gold nanorods (AuNRs) on a substrate of VO₂ is investigated numerically. The results show that when the incident light is polarized along the short axis of the AuNRs, the extinction profile of the single and AuNRs arrays varies quite differently during the VO₂ phase change. These results are computed using a numerical framework based on the finite element method (FEM). The aim of this study is to provide useful insights for the development of suggested structures to design thermal sensors at the nanoscale through minuscule changes in temperature of the environment.

Britton, Katherine

“The Effects of In Ovo Feeding Ovalbumin and Whey Protein on the Embryonic Development in Coturnix Japonica Embryos”

In this research, we were interested in exploring the effects of in ovo feeding ovalbumin (a natural source of protein in the egg) and whey protein (a commercially available supplement) to developing quail embryos to determine whether the increased nutrient levels would enhance the development of the embryo. Eggs were randomly sorted into 8 treatment groups and injected on day 11 of incubation. Eggs were opened on day 14 (1-2 days before expected hatch) and measured (body weight, length, head/breast width). Following euthanasia, embryos were internally examined for sign of increased organ development (specifically digestive tract development). We anticipate that embryos treated with ovalbumin will have enhanced development over control groups, conversely we may see that whey protein has allowed for increased development over control groups. We may also find that in ovo feeding of these proteins had no effect on the development of the embryos.

Cangiano, Erin

“Explorations of the Long-Term Memory of Intact Planarians and of Planarians with Regenerating Heads”

Planarians are known for their remarkable regenerative abilities, which create possibilities for a range of studies. For example, adult planarians can be educated, then chopped into small portions which will each regenerate entire planarians; these can then be tested to determine if memories have been retained in the regenerated planarians. The ability to remember and avoid predators would be an ecologically relevant behaviour with an immediate positive payoff that would be rewarded strongly by natural selection. My objectives were to design an experimental protocol whereby planarians learn that a previously neutral fish odour represents a predator, determine how long this memory will last, and determine whether or not the memories will be conveyed to any of the fragments of planarians that have been chopped into pieces after regenerating. I hypothesize that each regenerated fragment of the planarians will retain the memory. Results will be discussed during the poster presentation.

Cardenas, Elizabeth

“In Hospitalized Patient With Delirium, is the Use of Physical or Chemical Restraint a Better First Choice to Managing Delirium Symptoms as Opposed to Another Alternative?”

Delirium has been defined as a temporary nerve dysfunction that reduces consciousness, inattention, decreased mental activity and disruption in the sleep-wake cycle. It has also been shown to increase mortality rate and loss of function in patients admitted into a hospital setting. Prevention and management of delirium has become an important role in providing the most effective care for patients. There are different methods in treating patients that have developed delirium such as restraints, chemical restraints and other alternatives. This systematic review inquires into whether the use of physical or chemical restraints is a better first choice for caring for elderly patients with delirium as opposed to other alternative methods.

Chambers, Wes

“The Repeatability of Muscle Activation Measures During Activities of Daily Living in Healthy Adults”

While previous literature has examined within-session repeatability of electromyographical (EMG) measures during trunk motions and isometric contractions [1,2], repeatability of measures for activities of daily living (ADLs) has not yet been evaluated. This secondary analysis will determine the number of trials necessary to obtain repeatable EMG measures from ADLs. Twenty participants (18-30 years) performed 5 trials of quiet standing, one-leg standing, walking, and lifting. Peak activation will be determined from EMG data for 8 muscles bilaterally; repeatability will be evaluated using intraclass correlation coefficients and standard errors of measurement. Based on previous work [2], as few as 2-3 trials may be sufficient for repeatable measurements. Findings will inform best-practices recommendations for biomechanical data collection during ADLs. References: [1] Dankaerts et al. J Electromyogr Kinesiol 2004;14:333-342. [2] Schinkel-Ivy et al. J Electromyogr Kinesiol 2015;25:232-238.

Collins, Kathryn

“Mexico and Oportunidades: Closing the Gender Gap”

The purpose of this research is to measure the effects of Mexico’s conditional cash transfer program (Oportunidades) on the status and poverty of women. Outcomes in Chiapas relative to those of Mexico are examined through gender specific data collected from the UNDP, World Bank, and Mexico’s National Council for the Evaluation of Social Development. Compared to men, Mexican women have demonstrated substantial progress in all human development indicators. Women of Chiapas have not experienced similar progress and exhibit little improvement in their social and economic well-being. This paper concludes that Chiapan women experience continued deprivation and generational poverty as a result of a culture deeply rooted in the subservient and domestic role of women.

Donovan, James

“Chronic Cannabis use and Working Memory Performance: Is Higher Cognition Associated with More Cannabis Problems?”

Some chronic cannabis users develop drug-related life-problems, while others do not. A relatively understudied hypothesis is that higher cognitive capacity may buffer users from developing cannabis-related negative consequences. We tested working memory capacity as a potential buffer in a sample of 37 chronic cannabis users. Participants provided background demographic information, their cannabis use frequency and duration, a working-memory, digit-span task, and a marijuana-related problems questionnaire. Participants were divided into high and low digit-span groups. Chronic cannabis use was related to developing serious problems with increased use. However, contrary to our hypothesis, participants in the high digit-span group had a stronger positive relationship between lifetime use and cannabis-related problems than those in the low digit-span group. Understanding how cognitive capacities operates with cannabis-use provides insight into the negative consequences of cannabis-use.

Goodridge, Lauren**“Manipulation of How the Social Environment Alters Activity and Body Morphology of Regenerating Dugesia Dorocephala”**

Planaria, *Dugesia dorocephala*, appear to be behaviourally sensitive to their social environment. The purpose of this study was to explore activity and body morphology of planaria as they regenerate a new head region while exposed to two different social environments: singly housed or grouped housed. This included worms in the singly housed condition and 10 worms in the grouped housed condition. Removal of the head region occurred on day one. Subsequently, the planaria were placed in either individual or grouped housing for 30 days. Video of the worms was captured every second day with water changes occurring on alternate days. Preliminary results suggest that planaria in grouped housing regenerate more quickly than those in isolated housing. The regeneration is accompanied by behavioural changes in the early stages of regeneration. These results may suggest that post-dissection head region regeneration is sensitive to the social conditions during regeneration in planaria.

Hutchinson, Niki**“Bridging the Gap From Physical Activity Research to Practice: A Knowledge Translation Strategy for Nurses”**

Nurses receive little formal training in physical activity, despite the role they could play providing physical activity counselling to patients. The objective was to examine effectiveness of an internet-based learning strategy for improving physical activity counselling practices. 39 nurses were randomly assigned to a learning modules group (LM) or control (CG). LM group completed a series of six internet-based learning modules over 12 weeks. Outcome measures included changes in physical activity counselling practices, as well as self-efficacy and perceived benefits and barriers to providing such practices. Analyses of Covariance indicated the LM group experienced improvement in self-efficacy ($p < .01$) and perceived benefits ($p < .05$) compared to the CG, and a trend of increase in inquiring about physical activity in patients in favour of the LM group ($p = .08$). The LM strategy has potential to be an economical resource for improving nurses' physical activity counselling practice.

Larabie, Landon**“The Effects of Corporate Taxation on Human Development”**

Does the level of corporate taxation within a country influence the level of human development? Two studies were conducted on a random samples of countries. One sample included developed economies, emerging economies, and African economies. The second sample included only African economies. Data was then collected on the levels of corporate tax rate and compared to Human Development Index criteria (GNI per capita, mean years of schooling, and life expectancy at birth), as well as poverty headcounts. From this information scatterplots were created and a regression analysis was conducted to determine correlation and the significance level of the results. The research has already been conducted and is exploratory to this point, however the results indicate that more research should be evaluated on a larger scale.

Lindensmith, Rebekah**“Learners’ Experience in our Learner-led Nursing Research Club”**

The Research and Nursing Theory (RANT) Club was developed by learners’ in the Scholar Practitioner Program (SPP) at Nipissing University. As the SPP is a condensed, second-entry nursing program that does not offer specific courses in research, this club was created for learners who wished increase their capacity for research and learn more about nursing theories. The purpose of this project is to look at what learners’ experiences are in the student-led research club, and the impact it may have had on knowledge acquisition over the past year. A narrative inquiry approach is used to analyze student experiences in the RANT club. Key outcomes based on student narratives are gaining a more comprehensive knowledge of paper writing, the application of theory to practice, and publication requirements; learning about ethics in research by learners getting their TCPS2 certificates; and enhancing public speaking skills through a class presentation.

Macie, Annagh**“The Effects of Age on Flexion-Relaxation Phenomenon Occurrence and Trunk Onset Angle”**

The flexion-relaxation phenomenon (FRP) is the reduction in lumbar erector spinae activation near full trunk flexion. FRP is usually present in healthy individuals, and absent in individuals with chronic low back pain (LBP). Previous research has focused on younger individuals, with insufficient research on older adults. This secondary analysis of previously-collected data will compare FRP occurrence and kinematic characteristics between healthy younger (18-30 years) and older (60+ years) individuals. Participants performed five full trunk flexion trials while erector spinae, hamstring and gastrocnemius activation was measured using electromyography, and whole body motion was measured using motion capture. FRP occurrence for each muscle, as well as the trunk angles at FRP onset, will be compared between age groups and muscles. Findings will inform LBP assessment and treatment, with relevance to health care professionals.

Maracle, Kendra**“Does Amygdala Habituation to Threatening Faces Underlie Sex Differences in Depression?”**

Depression is a debilitating disorder that affects many people worldwide. In Canada, the rates of depression observed are higher among women than men. The mechanisms underlying the sex difference in depression may provide valuable insight into some of the causes of depression. A large sample of healthy men and women (n = 1261) performed a neuroimaging task requiring perception of threat-related facial expressions. A self-report depression scale was also administered to participants. Results indicated that women self-reported higher rates of depression and also demonstrated less amygdala habituation during the fMRI paradigm. However, amygdala habituation did not mediate the sex difference in depression. Future analyses will examine the extent to which amygdala habituation predicts participants’ subsequent depression scores measured over a four-year period.

Marley, Nicole**“CAG Repeat Polymorphism of the Androgen Receptor Moderates the Effect of Testosterone on Aggression”**

Correlational and experimental work suggests a weak, but positive association between testosterone and human aggression. Notably, few studies have investigated the role of the androgen receptor in modulating the effect of testosterone on aggression. This pharmacological challenge experiment (n = 308) aims to examine whether variability in the number of CAG repeats in the androgen receptor gene moderates the effect of exogenous testosterone on aggression. Results indicated that testosterone's effects on aggression were moderated by the CAG repeat polymorphism, whereby testosterone rapidly increased aggressive behaviour, but only in men with fewer CAG repeats within the androgen receptor gene. These findings provide a possible explanation for the controversial relationship between testosterone and aggression, suggesting that variability in the androgen receptor gene may determine who is most vulnerable to the effects of testosterone on aggressive behaviour.

Martin, Hailey**“NUSU Communication Platform Research Study”**

Nipissing University Student Union (NUSU) is a student led-organization that represents and advocates for the students of Nipissing University. Currently NUSU is present on Facebook, Instagram, Twitter, Snapchat, NUSU smart phone application, and Pinterest. The purpose of this study is to answer the following research question: how beneficial are NUSU's communication social media platforms for the students of Nipissing University? This study discusses and evaluates the results collected through a self-administered questionnaire completed by Nipissing University students. Students were invited to share their perception regarding the usefulness of each of their current six platforms. The results helped deliver recommendations for NUSU on how they can increase their student engagement, increase NUSU brand awareness and improve their social media platform activities.

Mathers, Caelan**“Does Testosterone Modulate Men's Propensity Toward Sexual Aggression”**

There is evidence suggesting that testosterone regulates aggression; however, there has been limited focus on testosterone's role in regulating sexual aggression. Using a placebo-controlled, cross-over design, men (n=120) received a single dose of intranasal testosterone on one day and placebo on a second day (counterbalanced). Sexually aggressive behaviour was assessed using a novel virtual dating paradigm. Although we found no main effect of testosterone, results revealed an unexpected order effect whereby men who received testosterone on the first day of testing, and placebo on the second day of testing were more sexually aggressive relative to men who received placebo on the first day and testosterone on the second. In addition, we found that men scoring high in trait dominance and/or who had an unrestricted sociosexual orientation engaged in higher rates of sexual aggression as assessed using our virtual dating measure.

Miller, Charlotte**“Longitudinal Investigation of the Relationship Between Status Stability and Testosterone Concentrations in Male Varsity Hockey Players”**

Previous research in animal models indicates that the link between testosterone and aggressive behaviour is found only during times of social instability. Research also suggests that during times of social instability, dominant males show greater increases in testosterone compared to subordinate males. Although there is clear evidence for the role of status hierarchy stability in modulating testosterone levels in animal models, few studies have investigated these effects in humans. In this longitudinal study, we examined the links between testosterone levels and status hierarchy stability within a male varsity hockey team. Status stability was assessed by examining reliability in players' rankings of each other. Testosterone will be assessed using enzyme-linked immunoassays. I hypothesize that testosterone levels will be highest during times of status instability, especially among men who rate themselves as relatively high social status (i.e., dominant men). Results will be discussed.

Monjezi, Kayvon**Reactions of Red Foxes to Powerline Corridors of the Area of North Bay, Ontario in Winter**

Red foxes have the widest distribution of terrestrial carnivores in the world and have a significant presence throughout Ontario. The North Bay area is criss-crossed by extensive hydro corridors that subdivide the landscape into large patches. Since these vast man-made disturbances are relatively recent, an understanding of their ecological impact is incomplete. I hypothesize that red foxes may be affected by the corridors through an increase in exposure to larger canids, which may cause foxes to alter their behaviours and feeding habits. For this study, the presence of red foxes was compared within the corridors as well as along adjacent ecotones and forested areas, through the use of linear snow-tracking surveys. Trail cameras were also used to observe what time of day foxes are most active and fox scats found in the field were brought back to the lab for dietary analysis. Results will be discussed at the poster presentations.

Phillips, Megan**“Does Exposure to Pornography Increase Men's Dehumanization of Women and Inclination Toward Sexual Aggression?”**

Sexual aggression is a major societal concern, especially in the university setting where 1 in 3 women report being victims of sexual assault. Our research examined the situational and psychological factors that may give rise to sexual aggression. I present the results of two studies (n=222) that investigated the extent to which exposure to pornography increased dehumanization towards women, and whether such dehumanization translated into one's propensity toward sexual aggression. Men were randomly assigned to view either a TED talk (control condition) or a sexually explicit video. They also viewed a video of a woman answering questions about herself and listened to an audiotape of a non-consensual sexual interaction. Results suggested that exposure to pornography increased dehumanization, but did not increase one's propensity toward sexual aggression. These results contribute to our understanding of the role of pornography exposure on men's social perception of women.

Robinson, Brittney**“Effects of Testosterone on Men’s Ratings of Attractiveness: Does Relationship Status Matter?”**

Recent evidence in the monogamous California mouse indicates that testosterone increases mating effort among single males, but decreases mating effort among paired males. Here, using a within-subject, placebo-controlled, pharmacological challenge experiment (n = 92), we examine whether testosterone has similar divergent effects in human males, as indexed through their ratings of attractiveness of women. Although preliminary analyses did not show these divergent effects, post-hoc analyses revealed a more complex three-way interaction (drug x relationship status x attractiveness of stimulus face). Specifically, testosterone increased the perceived attractiveness of less attractive women in single men, while it increased the perceived attractiveness of more attractive women in paired men. Therefore, testosterone may modulate the perceived attractiveness of women, dependent on both the male’s relationship status, and the attractiveness of the woman being evaluated.

Schlosser, Ryan**“Acorus Calamus”**

The project looks into the pharmacological uses of Acorus calamus and several studies proving these functions. The research looks into the various components that allow for the wide array of uses of the plant. All in all, the purpose of the project is to display medicinal purposes of sweet flag.

Schottlander, Heather**“To Have or not to Have Naloxone Kits?”**

Until recently, the of majority of Naloxone (Narcan) or opioid substance abuse programs has been focused on individualized treatment plans versus a focus on harm reduction strategies involving the community at large. The purpose of this literature review was to answer the PICOT (Population, Intervention, Comparison, Outcome, Time) question: For persons who abuse opioids, how does the availability of community accessible Naloxone antidote kits effect health outcomes? Search limitations included peer reviewed, full text articles between 2014-2017. Key findings showed that British Columbia is the leader in usage and research on this topic and that there is a decrease of mortality when naloxone kits are used in the community. The implications for nursing practice indicate that nurses could play a key role in educating the public about the need for and use of naloxone kits as a harm reduction strategy.

Simms, Kristina**“Toxicity of Windshield Wash on Water Fleas”**

Daphnia magna (water fleas) were used to find the acute toxicity of windshield wash and applying results to the freshwater aquatic systems. This is a common substance that is often used in everyday life and there is an importance in the understanding of how one’s everyday life affects the environment. Daphnia were exposed to windshield wash in different concentrations and tests were conducted for 48 hours. The daphnia were observed for mortality and LC50 (lethal concentration for 50% mortality) and was recorded at 12, 24 and 48 hours. There are the additional effects of other strains to the ecosystem, such as pollution, salt and UV-B exposure, which would cause a higher risk of methanol having a lethal effect on the aquatic biota. To conclude, the toxic effects of the windshield wash on aquatic biota should be taken under consideration and monitored by runoff from roadways and parking lots.

Talbot, Katie**“In-Vitro Regeneration of Phalaenopsis “**

Orchids are a highly desired plant, especially in the consumer market. However, orchids are difficult to propagate both vegetatively and as seeds. In laboratory settings, orchids and other plants can be successfully propagated within sterile environments such as test tubes. The focus of this project is to develop a procedure to regenerate an orchid, specifically Phalaenopsis. An apical meristem was sterilized for regeneration as this part of the plant contains undifferentiated cells. Portions of the prepared apical meristem were then transferred to a sterile environment with a growing medium supplemented with nutrients, kinetin, and naphthaleneacetic acid. When appropriate, growth obtained will be subcultured to a new sterile growing environment with the same growing medium to ensure the nutrients required for optimal growth remains sufficient. If successful, a healthy and whole Phalaenopsis should be obtained through in-vitro regeneration.

Thomas, Heather**“Acquired Recognition in Glowlight Tetras (*Hemigrammus Erythrozonus*) of Multiple Predators When Exposed to a Cocktail of Predatory Cues”**

This study was done to test a glowlight tetras' ability to learn five previously unknown fish odours. Based on previous studies, glowlight tetras have shown the ability to be conditioned to and recognize three predator odours. To do this, tetras were conditioned to a control or cichlid odour for 24 hours. This was done to ensure that they have the ability to learn at least one odour. The next part was to see if they could learn and decipher five other odours. They were conditioned to the cue cocktail or the control for 24 hours. After this period, they were tested for a reduction in activity once they had been injected with one of the five odours, or the control. Significantly, the first trial found that they have the ability to learn odour. The second set of trials with the five cues, there was significance between the control and the goldfish odour. The remaining odours had no significance. The cause of this is likely due to sensory overload as they can learn to recognize three predator odours but not five.

Toyne, Mikayla**“Monitoring Land Use Change in Cobourg, Ontario from 1987-2017 Using Landsat 5 and Landsat 8 Imagery”**

The purpose of the remote sensing change detection project is to monitor land use change in Cobourg (Ontario) from 1987-2017 using Landsat 5 and Landsat 8 imagery. The objectives of the project are as follows. 1) Acquire and process remotely sensed data of the study area from 1987 and 2017. 2) Apply a change detection algorithm to determine if a significant change in land use, loss or gain, is present. 3) If there are changes, apply a change detection algorithm to map changes and determine if there is a pattern in land use change. Anticipated conclusions include a change in urban, vegetation and water land uses within Cobourg (Ontario) and the identification of specific areas of land use change such as:

- 1) Vegetation to urban
- 2) Vegetation to water
- 3) Urban to vegetation
- 4) Urban to water
- 5) Water to urban
- 6) Water to vegetation
- 7) No change

Tropiano, Jennifer**“Biological and Chemical Properties of Marigold”**

There is a folklore belief that planting marigolds around a garden may help protect it from pests. Literature articles I have read so far seem to support this and its continued use for pest management. The basis of my thesis research is to prove or disprove this hypothesis. I am analyzing the chemical and biological properties of marigold (*Tagetes patula*) for specific compounds in the hope that I can identify some compounds that may contribute to some of the theorized repellent properties. However much of the research tests the repellent properties as insecticidal or indirectly to the insects, which is bad science in my opinion. Only one article has pointed out that the marigolds may not be repelling the insects but rather attracting predators of those pests. So I am directly testing extracts from marigolds directly on ants (*Pogonomyrmex occidentalis*) for the supposed repellent properties through a maze.

Trudel, Ryan**“Responses to Diet Alarm Cues and Food Stimuli in Sunfish (*Lepomis Gibbosus*) From Low Environmental Calcium Lakes”**

This study examines the impact of depleted natural calcium in lakes due to environmental stressors on the olfactory system of pumpkinseed sunfish. There is minimal research in this field which explores the possible effects low-level calcium has on fish surviving in natural environments. The ability to detect chemical food stimuli, diet cues from conspecific fed predators, and visual food stimuli is examined in pumpkinseed sunfish from Plastic Lake, a naturally low calcium lake. This was performed using two choice tests in both elevated and natural ambient calcium with stimuli injected in the tub from either side and recording the behavioural responses to chemical food stimuli (krill solution), diet cues (sunfish fed pike odour) and visual food stimuli (dog food and freeze dried krill). Findings from this study suggest there is no significant difference in detecting odourants in varying calcium levels from Plastic Lake in pumpkinseed sunfish.

ART INSTALLATIONS

Brioux, Jasmine

“Lifelines”

This is an assignment that I worked on in my printmaking class last semester. I was interested in exploring the relationships that people have with the supportive individuals in their lives, and the influence that these relationships have on their identities. It is certainly a personal project, as it is reflective of my own relationships with close family members. The piece is a blanket that incorporates both screen printed imagery and simple sewing. My goal was to use pattern and colour to convey a message about the individuals I decided to depict. The diverse patterns and colours I chose to include behind the portraits represent the uniqueness of each family member. Nonetheless, they all come together in the heart. These individuals have helped shape me into the person I am today, and I wanted this screen-printing piece to pay tribute to the positive impact they have had on my life.

Burke, Hannah

“For Your Entertainment”

This project is a large painting that utilized screen printing to focus on the open and over sexualisation of female homosexuality. The sexualisation of female homosexuality has become a cultural phenomenon and a fetish for many people and this project criticizes this anomaly by blatantly displaying the contrast of the sexualisation of the female figure and the hateful words hidden behind her. The overall soft and cutesy style that was used throughout the painting distracts viewers from the alarming hate hidden in the painting. This mimics society overlooking and often ignoring the existence of hate directed toward LGBTQ women instead choosing to sexualize female sexuality.

Davies, Diane

“This is Not a Pomegranate”

The diptych piece is about gender equality in a sexual context. The balance between sexual partners results in equal, enthusiastic gratification. This piece also deals heavily with sexual consent, and STD destigmatization and awareness. This is a feminist piece as the pomegranate represents the vagina. I hope this work provokes thoughtful conversation and reflection. This piece was a tool to heal, and hopefully it can be seen in a similar light for those who look upon it.

Kaur, Dayajyot

“Sprouting Nature”

The beauty and self-sustainability of nature never fails to amaze human-kind. Many people devote their whole lives and careers to protecting nature and its wonders. There are whole departments, companies and policies dedicated to preserving its breath-taking diversity. Interestingly, no one landscape in one country is the same as another. Each region differs in terms of housing different flowers, different animals and different ecosystems. The medium of art used to create this piece is quilling. Quilling is a fairly new paper art-form and primarily used to further showcase the constantly evolving nature of Nature. Piece inspired by a Yulia Brodskaya piece.

Keenan-Lowerison, Shay-Lee

“Open Me”

A performance based piece that shows the visualization and the literal encumbrance of a individual enduring a mental illness. This performance shows an individual's day while carrying around the burden of this box. When the box is opened it exposes the individual's hands cradling and comforting a brain. The walls enclosing the brain are only penetrated by the individual themselves or by the viewer who decides to open the box. This represents the mental act of letting a bystander see inside the individual's mind. This leaves the individual at a vulnerable state as they share their mental illness and the insecurities that accompany with the viewer for a moment. The reflective innards of the box cast not only on the individual's mind (brain) but the viewer for a brief moment. The concept of mental illness is depicted as a physical and mental strain of the individual while simultaneously submersing the viewer in the mental illness for a moment.

Laframboise, Jessa

“Dress Up With Miss. Ogyne”

With this work I am creating a version of a paper doll that critiques the negative ways in which this activity invites participants to manipulate someone else's appearance. While traditionally a paper doll is meant to be used by people, in this scenario the doll is not inviting the opportunity to be controlled. Its life size features are intended to deter the participant as it would be like dressing and manipulating a real human form. The paper doll attempts to break the male gaze by staring at the viewer; her confidence and unwavering stare gives her a power that is not absent from her presentation. Through the use of text, the title, the clothing that will surround the paper doll the idea of power is further supported. Overall the goal is that viewers will be able to critically consider the idea of a paper doll and in turn how women in society they often are similarly treated like paper.

Watson, Rebecca

“Judgement Days”

Having grown up as a closeted bisexual woman in a very strict Christian community, I had a consistent feeling of fear and scrutiny; the hateful rhetoric about the supposed sins and unholiness of homosexual relationships caused me to keep my sexuality hidden away. This 13x19 photography piece was an effort to convert those emotions to something tangible and something that could communicate the sense of vulnerability I felt under the judgement of religion, shown through the Jesus candle dripping hot wax over the figures, but also showing the warmth and protection that comes from being able to love who you love which is shown by the two women in their embrace. While my feelings and experiences are deeply personal, this piece is one that could resonate with anyone in the LGBTQ+ community who has felt oppressed by their own or other religious communities. The hopeful indication as shown through the figures is that through love and acceptance we can heal and triumph over this judgement.

“Postpartum”

Postpartum depression is not often something we as a society speak of. There is an expectation from mothers to be nothing but overjoyed by the birth of their child, and there is extreme judgement when they feel anything but that. Through silkscreening and spray painting, I wanted to create the psychological atmosphere of my own mother as she faced postpartum depression. The way she holds her child communicates that though she is battling this mental illness, that does not detract from the love she feels for them. This is my response to society's ignorance of what so many mothers, much like my own, are going through behind closed doors. It is not a side of motherhood that is acknowledged, so I responded by blowing it up and depicting it in a way the viewer cannot help but acknowledge and hopefully through that act of acknowledgement we can break the stigma.

RESEARCH PAPERS

Anderson, Taylor

“Crime & Deviance: Historical Perspectives of the Criminal Sanctions of Women in Early Canada”

The purpose of this paper is to examine the historical perspectives of criminal sanctions on women in early Canada, while researching theories as to why a difference between criminal sanctions of men and women occurred in the 18th and 19th century. As a result of two case studies consisting of the first and last women hung in Canada and an extensive literature review, several theories surfaced. Evidence suggests that gender roles and expectations, the patriarchal family structure, the segregation of private and public spheres, informal and formal social controls, the cult of domesticity and the notion of a female criminal underwrite the big issue. It appears that the contractual morality of each gender was the most significant contributor to the lack of formal sanctioning of women in early Canada, with specific regards to execution by hanging. The paper then concludes with a discussion on the ways in which society’s perspective of women and their roles progressed into the 20th century.

Arar, Barâa

“‘I speak of you in the past tense, still, you are Algerian’ French Language Assimilation Policies as Cultural Colonialism and their Role in the Disintegration of National Identity”

My paper argues the French colonial regime’s (1830-1954) language assimilation policies were an act of cultural violence that stifled the use of the Arabic language, which served to destabilize and dissolve a sense of belonging to a traditional Algerian community. After a systematic attack on the Arabic language, in a post-colonial context, Arabic became a tool in memory work in the development of a pre-contact Algerian collective identity. I present a thorough description of the philosophical framework in which French language assimilation policies were founded. With theories on language and identity, I reveal the harm on selfhood and nationhood that these policies caused. Lastly, I demonstrate the way Arabic literature and storytelling is a tool in post-independence nation building. My concluding remarks will explain the relation and importance of storytelling in a Canadian context, understood as a post-colonial setting.

Aucoin, Maddy

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Bao, Zhongjie

“Neural Correlates of Social Reflection And the Moderating Effects of Emotional Valence: A Literature Review”

Negative (guilt, shame) and positive (empathy, compassion) emotions often strongly contribute to people’s perceived social evaluations. In contrast to basic emotions such as fear or happiness, social emotions depend on social inferences about what others are thinking and feeling. Human neuroimaging studies report that social emotions are associated frequently with activation in brain regions such as the temporal parietal junction (TPJ), the dorsal anterior cingulate cortex (ACC), the midline cortical structures, and basic emotional processing centers. Some of these neuroimaging responses may reflect a common social and neural mechanism underlying social emotional perceptions. Other responses likely reflect distinct, valence-specific social and neural mechanisms. In this presentation, we will review the human neuroimaging literature on positive and negative social emotions. We will focus our discussion on the shared and unique neural correlates for the different types of social emotions.

Bass-Simpson, Mackenzie

“Making America Great Again: An Analysis of Hyper-Nationalism in Trump’s America”

As Donald Trump’s recent rise to power shows the world the nasty side of patriotism, Robert Bellah’s theory regarding American civil religion is more relevant than ever. American civil religion argues that daily American practices are embedded with quasi-religious acts of patriotism. Following analysis, it is clear that American tradition revolves around the worshipping of American history. Primarily, current political and social dynamics within America show that the United States Constitution is treated like scripture. Not only does it influence their morals and daily practices, it also shapes political regime. The hesitation to change the Constitution in regards to gun control, despite the many lives taken by gun violence annually, is evidence in itself of the Constitution’s sacred status. An analysis of American national symbols, ritual, and overall sacredness, provide a clear understanding of how American civil religion is in action during Trump’s presidency.

Bender, Isaac

“Three-Dimensional Modelling and Photogrammetry: For Use in Cultural Heritage Preservation and Public Engagement”

Three-dimensional (3D) modelling has become increasingly accessible for researchers and conservationists through the availability of unmanned aerial vehicles (UAVs) and mobile phone cameras that employ photogrammetry to build simple but accurate 3D recreations. Utilising these techniques allows archaeologists and laypeople to have a powerful tool for recreation in the event of vandalism or should repatriation be necessary due external effects such as urban development

Bickerstaffe, Kourtnei

“‘True Hawaiian:’ An Exploration of Land, Commercialism, and Community in Hawaiian Music after 1959”

Since the beginning of American interest in the Hawaiian Islands in the early 1800s there has been a constant tension over land between Native Hawaiian powers and American businessmen. This tension came to a climax in 1898 with the Annexation of Hawaii and again in 1959 when Hawaii became an official American State. This essay focuses on ten songs from both Native Hawaiian artists and “haoles” or foreigners during the period directly after statehood known as the Hawaiian Music Revolution and how this tradition continues into the present era. Music in this period generally served one of two purposes: to use the paradise image of Hawaii as a product to be consumed, or as a way to restore Hawaiian identity within native culture.

Brioux, Jasmine

“The Madonna of Mercy in Renaissance Europe: Symbol of Protection, Source of Pride”

This is an essay that I submitted as a final paper for my Renaissance Art History course last semester. I was interested in exploring diverse representations of the Madonna of Mercy, or the Madonna della Misericordia, throughout art history. This symbol was extremely popular during the Renaissance, and was depicted time and time again by a wide range of artists; I wanted to understand the reasons behind this. First, I researched and investigated the use of the symbol in a variety of paintings and sculptures, and eventually decided to narrow in on three artists working in three different locations. In the paper, I argue that the Madonna of Mercy was a prominent symbol because she was used in order to evoke pride among local and national groups of people. I explore the importance of the Madonna of Mercy in Renaissance Sienna, Sansepolcro, and Seville.

Bunjevcevic, Sean

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Campbell, Colin**“Operation Anthropoid and the Politics of Memory”**

The purpose of this paper is to look at the complex historiographical debate that surrounds the assassination of Reinhard Heydrich, or as it was dubbed the the British, Operation Anthropoid. This single event has become one of the most debated in modern Czech history, and to a lesser extent, one of the more controversial aspects of the Second World War. The event stands out as it is the only government-planned and carried out assassination of a member of the Third Reich's upper echelon. However, historians have sought to use the event since the end of the war to try and explain Czech history post 1945. In essence the history of this event has been turned into a political weapon. This paper will look at the general course and trends of the historiography of this event and its interpretations. The main goal is to understand the motives behind why this event has become so continuously debated and even weaponized.

Cangiano, Kyla**“Beyond the Dust: An Ethnographic Account of Burning Man”**

This paper analyzes interconnected processes involved in the creation of both place and identity. Through an ethnographic account of Burning Man, I examine engagements between participants and the environment in the process of dwelling within this space. In many ways the harsh environment of the desert, referred to as the playa, shapes the community and individual participants, yet in the same breath these participants shape the playa into what is known as Black Rock City. The landscape created here is an integrated movement in which neither environment nor the individual can be removed, but are rather intrinsically connected in this life-process. The temporary metropolis of Burning Man lasts for one week, after which participants leave the playa with no physical trace of their presence. Due to the event's temporary quality I consider how participants, with the knowledge of Burning Man's guaranteed end, experience community, meaning and place.

Carpenter-Boesch, Jyllele**“Spatialization and Defining the Self: Individual Identity Seeking as a Colonial, Sovereignty-Claiming Function”**

Wild: From Lost to Found on the Pacific Crest Trail is a memoir by Cheryl Strayed about how after a drug addiction, a recent divorce and her mother's death she constructs a new identity by using space. Spatialization enables her to transition from a drug-addicted, impoverished, sexually “loose” individual to the epitome of power and agency: a white colonial male. By using wild space to claim individual authority, Strayed participates in a colonial narrative which authorizes the dominant discourse of white colonizers possessing an inherent right to land. My paper examines the way that Strayed assumes the identity of a white, colonial male by enacting power over land, constructing the racialized other, tying identity to space and embodying masculinity.

Carrière, Tealia**“Barriers to Business for Young Female Entrepreneurs”**

The aim of this honours thesis is to determine the barriers that affect young entrepreneurs, specifically women when conducting entrepreneurial business. With that, it will also review the opportunities that are available to address this issue and whether they have had an effect in removing these barriers. By conducting a minimum of 100 surveys and 5 interviews, I hope to learn what entrepreneurs, specifically female, need in order to thrive in our community and whether the current programming available helps them in their businesses. I hope that through this research, North Bay can better aid our entrepreneurs and help in furthering their success by taking down the identified barriers. I will present the results to local organizations promoting and encouraging change in our entrepreneurial landscape.

Charlton, Luke

“Urban Reserves: How They Work and North Bay / Nipissing First Nation Application”

An urban reserve in Canada is simply a First Nation reserve that is located within or next to a large municipality. While some urban reserves only exist because a city has expanded around a First Nation reserve forcing them to become urban reserves, others have been strategically created to allow economic opportunity. In this paper we will look at why First Nation reserves are beneficial to develop, and how this can be applied here in North Bay with Nipissing First Nation.

Chartrand, Emma

“Beyond the Veil: Black Widows Analysis”

This project will analyze the role that the Chechen rebel fighters (known as Black Widows) have as terrorists and how media has manipulated and simplified their role as females involved in violent actions to reduce focus on the political and social issues leading these women into vulnerable conditions and self-sacrifice. In analyzing media reports, the use of specific terms and conditions used to describe these women as well as their political circumstances will be recognized for casting a certain image on the group. These reports will be contrasted with conditions of Chechnya and the evolution of female's engaged with terrorism by a reporter in Chechnya and that of a Russian Government official among others. These works will be used to identify false depictions by media as well as the real social, political, and/or economic reasons women are increasingly involved in violent campaigns and self-sacrifice.

Cobean, Connor

“‘And we’s a gwine to fight:’ The Reasoning Behind African-American Soldiers’ Desire to Fight in the Civil War as seen in Civil War Sheet Music”

The American Civil War was a time that encouraged many American men to enter battle. These men included numerous African-Americans, despite it being a white man’s war. This paper analyzes how white propaganda, in the form of sheet music, exemplifies the desires expressed by African-American men in their desire to fight. The desire not to return to slavery and to enjoy the freedom of which they had had just a small taste was one of the main forces in explaining why they chose to fight. Apart from this, the idea of fighting was regarded with a sense of duty directed to their savior, Abraham Lincoln. Final reasoning comes in how African-Americans did not want to be told to fight. The sheet music explores how white individuals perceived their black counterparts’ desire to fight in the war.

Cook, Benjamin

“Solution to AMM Problem 12008”

I present my ongoing work on solving problem 12008 from American Mathematical Monthly issue 124, December 2017. The problem is as follows:

You hold in your hand a deck of n cards, numbered 1 to n from top to bottom. Shuffle them as follows: Put the top card in the deck on the bottom, and the second card on the table. Repeat this until all the cards are on the table.

There are four parts to the problem: For which deck of size n does the card labelled 1 end up at the top of the deck on the table after 1 shuffle? 2 shuffles? 3 shuffles? For which n does this shuffle amount to a permutation consisting of a single cycle?

Daley, Alexander

“Inequality and Disadvantage on a Systematic Basis: Transgender Individuals Surviving Through Sex Work in Canada”

This paper will identify the systematic oppression and discrimination faced by transgender sex workers in our capitalist-based society. Although this is not a very common area of research, statistics back up the significant amount of violence and other inequalities that challenge these folks just on the basis of their profession. Transgender sex workers are lead to this due to inequalities in unemployment and education, in the same society that promotes that we are equitable. These folks are often silenced or ignored due to their gender identity or expression. This often becomes more challenging when others are aware that the transgender individual is a sex worker, as they are often discriminated against on the basis of their profession, especially when trying to access social services.

Davies, Diane

“Cultural Hybridity in Edo Period Japan (1603-1868): Portuguese Representations Through Namban Screens and Yojin Sogakuzu Folding Panels”

These Namban screenings are stylistically Japanese in their renderings, however, the subject matter is a hybrid of European and Japanese features. Both Yojin sogakuzu and Namban works are influential in understanding the rich cultural identity woven between both East and West. This essay is intended to express the critical value of cultural hybridity between the Portuguese foreigners and Japanese natives throughout the Edo period in Japan as seen through both the works of Yojin sogakuzu folding panels and Namban screenings.

Dirksen, Ryrie

“The Impact of French Canadian Nationalism in 1930s Quebec”

In the province of Quebec, French Canadian nationalism made a revival in response to the conditions of the 1930s. My research question is as follows: what was the impact of French Canadian nationalism in 1930s Québec? French Canadian nationalism impacted Quebec in the 1930s through the identification of French Canadians as a race, the reflection of conditions through French Canadian culture, a return to traditional strategies in the face of industrialization, Quebec's view of Canada's capitalist system, and discussions over how Canada as a whole should view international affairs. This paper draws on secondary sources that focus on different areas of Quebec's society and development as well as primary sources of quotes from French Canadian nationalists. The predominance of French Canadian nationalism in Quebec society was used to promote unity, social well-being, and hope among French Canadians in the 1930s, a time that was difficult to say the least.

Donovan, James

“The Blunt Truth: How Chronic Cannabis use Impacts Spatial Memory Performance”

This study investigates how spatial working memory (SWM) performance is impacted by chronic cannabis use and its individual components of working memory and spatial processing. Seventy participants (42 Cannabis-users / 27 Non-users) provided personal background demographic information and detailed information about their current and past cannabis use. They also completed the digit span-working memory task, a mental rotation task to assess spatial processing, and the CORSI SWM task. We hypothesize that heavy cannabis users will perform more poorly than non-users on the working memory task. However, based on our previous studies, CORSI task performance may be spared among chronic cannabis users. The current findings may offer insight into the mixed relations typically reported between cannabis use and SWM. If, as expected, SWM and its cognitive components show distinct empirical associations with cannabis use, this will raise novel questions related to chronic cannabis effects.

Doyle, Brianne

“Mapping Changes of Mangrove Extent in the Eastern Region of the Niger Delta Using Satellite-Based Sensors”

My research will explore the use of optical and synthetic aperture radar (SAR) remote sensing techniques to monitor historical changes in mangrove forests in the Eastern region of the Niger Delta which is prone to oil degradation. The research will consist of obtaining and pre-processing optical and SAR digital imagery to include geometric and radiometric corrections. Then an unsupervised classification scheme will be applied to map the data. The results will be analyzed in reference to point data from an open source oil spill-monitoring database to identify relationships between the mangrove extent and oil spills. It is anticipated that sensors will be able to identify historical changes in mangrove extent but may not reflect the data from the open source database since its data may underestimate oil spill quantities.

Dubeau, Rebecca

“From Fringe to Front Page: The Rebranding of the Ku Klux Klan in 1920s America”

This project specifically focuses on the Ku Klux Klan’s transition from fringe terrorist organization to front-page news with a large following, through klansmen membership or simply the organization’s outlying supporters. The methodology is centred around the analysis of language in renowned American newspapers in traditionally non-Ku Klux Klan cities (predominantly in northern states that were known to be “abolitionist states”) which reported the news of the Klan’s March in Washington on August 8, 1925.

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Ederer, Rebekah

“Experts by Experience in Social Work Education”

‘Experts by experience’, or service users, have been involved in social work education in the UK and EU for almost twenty years. In Canada, participatory approaches to social work education, or social pedagogy, are uncommon. The aim of this study was to investigate models of participation by service users in social work education, and the impact it has on student educational outcomes, and on service users. Methods included a scoping review of the literature, and semi-structured interviews with educators and service users (N=18). Although models tended to vary, service users worked alongside faculty in student selection, teaching and assessment, program planning and evaluation. Academic resistance was not uncommon given diverse understandings of what constituted ‘knowledge’ and expertise in higher education. University commitment was also argued as essential in relation to support and sustaining this contribution to social work education.

Faught, Kayla

“Living the Happy Life”

Everybody has unique feelings and thoughts, and yet everyone has the same purpose: to live a fulfilling and happy life. The purpose of this paper is to educate the population about happiness and life-satisfaction. This paper will explore the connection between the mind, the body, and the environment, and more specifically, how these three factors can impact overall happiness and life satisfaction. Using academic journals and scholarly recourses I have compiled several studies to show that the mind, the body, and the environment can influence a person’s overall happiness.

Fontaine, Katie

“Baptized in Flame: Robert Jay Mathews, The Order and White Supremacy in the United States”

In the annals of white supremacist history remains the figure of Robert Jay Mathews, leader of the racist far-right group, the Order. Mathew would die engulfed in flames in a shoot-out against the Federal Bureau of Investigation. Personified as the Christ-like martyr, Mathews would clearly outline his intents in his ‘Declaration of War’. In his ‘Declaration,’ Mathews would declare the sovereignty of the Aryan race in America and pronounce war on the government.

This paper seeks to understand the significance of Robert Jay Mathews to the white supremacist movement, in life and death. How did the memorialization of Mathews change the character of white supremacy in America? This paper will use a mix of both academic and non-traditional sources, pulling on his cultish following presence on the internet, using newsletters, websites and video blogs. This paper seeks to discern how Mathews extended legacy effects the modern white supremacist movement in the United States.

Fontaine, Chris

“Psychophysical Properties of Logos: What Binocular Suppression Reveals About the Perceptual Processing of Logos and Their Design”

We will study the perceptual features (e.g., contrast or spatial frequency) of brand logos that will attract attention in a cluttered display. We modified a number of sports logos along specific dimensions to present in a binocular suppression task. In this task, a masking stimulus is presented in one eye and a logo gradually appears in the other eye. Under these conditions, the mask initially dominates perception until enough of the logo stimulus is visible to overcome this binocular suppression and be identified. Participants are required to identify the location of the logo relative to a central cross. We expect to find that certain perceptual features of logos will allow them to break free from binocular suppression earlier than other features. Designers can potentially use this information to design brand logos that are more likely to capture attention in a cluttered visual display.

Gauthier, Sam

“The Aftermath of Natural Disasters”

Research reveals that crises caused by natural disasters can sometimes be the perfect nesting ground for political actors and corporations to take advantage of vulnerable communities and use their fears as means of gaining power. In this paper, there will be a brief discussion two well known climate-related disasters and the troubling aftermath that occurred in both situations. More importantly, this paper will provide recommendations that should be applied to fortify our democratic freedoms in times of need.

Gomolka, Jenn

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Gordon, Maggie

“‘Dey said we wouldn’t fight:’ Changing Representations of African-American Soldiers During the American Civil War as Seen Through Contemporary Civil War Songs”

This paper analyzes Civil War-era songs and argues that racial stereotypes of black soldiers changed over the course of the war. Although the abolitionist movement of the North sought to end slavery, the music of the North shows that deeply ingrained racial stereotypes of African-American racial inferiority endured long after the Emancipation Proclamation. It was not until after the war and the passing of the 13th Amendment that music celebrating African-American freedom and contributions to the war effort emerged. This change in attitude ultimately came about because African-American men, through their role as Union soldiers, altered the stereotypical narrative by proving themselves to be valuable contributors to the Union’s victory and worthy of being viewed as quasi-equals. The songs from the Civil War era track the slow change in attitude from viewing African-American soldiers as laughable to taking pride in the African-American contributions to the war effort.

Grube, Kylie-Anne

“Forewarnings: The Paradox of Progress in *The Coming Race*”

In the realization of philosophical visions of the ne plus ultra, the furthest attainable achievement, Bulwer’s science fiction utopia reveals the limitations of progress, which prohibits achievement and creative expression, ultimately leading to human degeneration. I argue that Bulwer satirizes the concept of utopia as the Vril-ya race is most closely aligned with the utopic definition, “no place”, rather than “good place”. To demonstrate this, I outline the biological and social evolution of the Vril-ya civilization and analyze the paradoxical nature of this progress, in which the realization of a perfect termination point, is revealed to be a degenerative condition. I propose *The Coming Race* advocates for the abandonment of lofty utopic ideals and instead celebrates man’s anxious diffidence of self that propels our ambition: emotions on both ends of the spectrum, even those stimulated by suffering and conflict, are necessary for a meaningful human experience.

Harvey, Annabelle

“The Natural Self: Nature as Healing in Cheryl Strayed’s *Wild* and Howard Axelrod’s *The Point of Vanishing*”

Cheryl Strayed’s *Wild* and Harold Axelrod’s *The Point of Vanishing* are two unique memoirs that offer a personal insight on the journeys of self-discovery when a person is immersed in the mental and physical challenges of living in nature and in solitude. Both of these memoirs reveal how solitude in nature not only heals in reconstructing the self, but also allows the person to return to the social world with a better perspective on the importance of human relationships. Drawing on George Kelly’s personal construct theory, my paper looks at the way the immediate process of healing and change will support the idea of nature as a recuperative force. Though both Cheryl and Howard’s journeys begin in solitude, the desire to finish their journeys in community helps track the growth of the self that indicates the importance of the self as part of the relationships they are in, whether it be in nature or in human society.

Hummel, Dustin

“The Influences of Endogenous Hormones on Information Processing and Movement Corrections During Goal-Directed Aiming”

The impact of testosterone (T) and cortisol on sensory-motor processing in both males and females will be examined. Thirty-four male participants and thirty-four female participants will complete an endogenous movement planning task. During a rapid aiming task, males are expected to have poor online control, but efficiently plan for the movement in advance. Males should make greater movement assumptions based on pre-movement information and take more risk as evidenced by greater endpoint variability. Specifically, there will be more evidence of a larger emphasis on prior planning which will, in turn, sacrifice accuracy. In contrast, females are expected to engage in more online corrective processes and thereby place a higher emphasis on accuracy. However, this will come at the cost of an increase in movement time. This evidence indicates that sex specific endogenous hormones impact both prior planning and upper limb goal directed movements.

Kopanos, Pano

“A New Revolution: The Motivations of the Revolutionary Organization 17 November”

This project examines the motivations of the Revolutionary Organization 17 November, a Marxist terrorist group that was active in Greece from 1975 following the Metapolitefsito 2002 with the arrest of Dimitris Kofoudinas. Why did 17N resort to terrorism and what motivated them to persist for so long? It is important to remember the politically turbulent past of the modern Greek state in order to fully understand the motivations of one of Europe's last Marxist terrorist groups. Since gaining its independence against the Ottomans, the Greeks have been fighting political division since the end of World War two and the Greek Civil War. The military junta that took power in 1967 further deepened these political divides so that when the junta collapsed in 1974, the resulting democratization of Greece was seen as ineffectual.

Kornas, Aria Marta

“Cocoa Economy: Sustainable Cocoa Farming and Community Development in Ghana”

In my research, I attempt to explore the cocoa-chocolate value chain and tell a story of cocoa farmers and their communities, the challenges they face, and ways local economic development initiatives turn poverty-ridden Western African regions into strong, resilient, self-sufficient economies. First, I begin with an overview of cocoa production and its importance for Ghanaian economy. Then, I explore the issues on both the demand and supply side that pose a threat to the sustainability of cocoa farming in Ghana. Specifically, I focus on the place and importance of women cocoa farmers and delve into the gender dynamics preventing women from being equal participants in the sector. In the last section of the research, I introduce two main ways to further sustainable economic development and fight economic and social inequality: cooperative movement and the Fairtrade certification.

Laframboise, Jessa

“The Gender Divide: Carolee Scheenmaan, Feminist Art, and the Canon”

This art history paper examines the gender inequality that exists in western art, and argues that there is an aesthetic to the feminist agenda which cannot be correlated with the traditional canon of art history. The paper outlines the ways in which women have been represented in art almost exclusively by male artists, by specifically discussing how women have been sexualized and idealized. This issue has created a divide between the ways men and women have been seen in both visual culture and society. The paper provides an understanding of feminist art, and specifically feminist art which prioritizes female sexuality that has been fueled by the sexualisation of female imagery throughout history. The artists I focus on are Carolee Schneemann from the late 20th century and Casey Jenkins from the 21st century. I do this as a way to provide a transgenerational focus of feminist art which explores female sexuality and the body, and rebels against the representation of women in the past.

Laman, Rachelle**“Media Portrayal of Bobby Sands MP and the 1981 Irish Hunger Strike”**

After the revival of the IRA as the Provisional Irish Republican Army during the Troubles, the PIRA enacted multiple forms of resistance and terrorist acts. When Thatcher took away political prisoner status, the Irish were irate. After the Blanket strike failed to convince Thatcher to change her policies, Bobby Sands and nine others went on a hunger strike in Long Kesh prison, in March 1981. After multiple attempts at negotiation over the course of sixty-six days, Bobby Sands MP died. How did the British and Irish media portray the Hunger Strike and Bobby Sands, MP? How did the media’s portrayal over the course the Hunger Strike change? To answer these questions, two British and two Irish newspapers will be examined over the course of the hunger strike. Bobby Sands used his body as leverage to force Thatcher’s hand. After multiple attempts to negotiate with Thatcher’s British government, Sands and the PIRA used a hunger strike as a moral terrorist act.

Lauzon, Sophie**“Disney Effect: Culture, Society, and History”**

This research paper explores the history of racism in the United States by analyzing the lyrics of Disney songs. The Disney Corporation had existed for multiple generations and has become an integral part of American culture, thus making it a good source to study American attitudes. Although some Disney songs seem quite innocuous, hidden in the catchy lyrics many people have come to know are racial views that are no longer acceptable in modern society. By looking at different portrayals of race within Disney music we can also follow the evolution of racial thinking in the United States.

Lightle, Morgan**“From Mourning to Memory at the Oklahoma City National Memorial”**

This project examines the Oklahoma City National Memorial and how it has transitioned from a site of mourning to a site of memory. That transition will be explored in the mourning and memorialization that began immediately after the bombing of the Alfred P. Murrah Federal Building on April 19, 1995, the creation of the OCNM that was dedicated and opened on February 19, 2001, and how it continues into the present. Using the memorial itself, memorializing initiatives, and newspaper articles, this project will question how does the OCNM allow public mourning and recovery from tragedy? How does the OCNM shape public memory of the Oklahoma City bombing? And how do practices of mourning and memorialization shape collective American identity and views of terrorism? More significantly, this project will confront how individuals fit themselves and their history into a larger American narrative and the influence it has in shaping how Americans think of their identity and responsibilities.

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Lindensmith, Rebekah**"Interventions for Improving the Maternal-Infant Relationships in Mothers with Postpartum Mood Disorders"**

Women may experience changes in their mental health postpartum, such as postpartum depression (PPD). While PPD affects women's health, it can also impact their infants, affecting maternal-infant relationships. The purpose of this literature review is to determine effective strategies for improving the maternal-infant relationship for mothers with postpartum mood disorders. A literature review was conducted searching 3 databases. 19 articles were selected for review. Results: infant massage was observed to benefit maternal-infant relationships, while psychotherapy and education had mixed results. Pharmacological interventions and family involvement were not observed to improve maternal-infant relationships. Practitioners should be aware of the importance of including interventions targeted at improving the maternal-infant relationship for women with postpartum mood disorders. This review prevents strategies that can be utilized.

Loates, Kirstin**"Neural Correlates of Approachability Judgements for Novel and Familiar Faces"**

Social interaction depends on a first decision to approach those around us. Various neural systems are engaged during these approachability assessments. Moreover, novel faces activate the amygdala, while familiar faces activate the posterior cingulate cortex (PCC). We manipulated the novelty or familiarity of faces during approachability judgments and people's associated brain responses.

Twenty-five participants (14 female) received fMRI scans while evaluating the approachability of novel and familiar faces. The 36 faces used as stimuli reflected either a neutral or mildly positive expression. Prior to the fMRI task, participants passively viewed a sub-set of 18 facial stimuli as a form of mere exposure familiarization. We hypothesize greater amygdala activation to novel faces and greater posterior cingulate cortex (PCC) activation to familiar faces. These findings may represent differences in long-term memory encoding.

Maich, Victoria**"The Tuberculosis Experience: A Narrative Inquiry Self-Study"**

This study explores the question, how am I experiencing the experience of individuals living with tuberculosis (TB)? This question aims to analyze the multifaceted experience of living with TB. Clandinin and Connelly's (2000) narrative inquiry self-study was conducted. The reflections of my clinical experiences working with clients with TB composed the field texts in this inquiry. These texts were analyzed using the three dimensional space framework to construct narrative accounts of my experiences, through which resonant narrative threads emerged. The resonant narrative threads included suffering throughout the illness trajectory (related to isolation, stigma, culture) and the social determinants of health as intertwined with this suffering. The study concludes with recommendations for reconstructing my experience for future interactions with clients living with TB, which can be extrapolated to offer suggestions for healthcare providers.

Maycook, Alexander**"Rebellious Heroes: Sportsmen Taking a Stand"**

This paper looks at politics and sport, and it examines how rebellions against political regimes often occur at major sporting events when athletes stand up for their beliefs. This is especially true of the Olympic Games, a global competitive sporting and athletic festival, but also a place where political stances come into play.

McLandress, Adam

“Categorizing Online Communication: Quantitative and Qualitative Analyses of Online Conversations at the Exchange Level”

Online communication has evolved as dominant form of conversing in today’s world. Interest, similarity, responsiveness, and self-disclosure are important factors in the acquaintanceship process and influence successful conversational outcomes. No research has evaluated if these factors influence conversational outcomes at an exchange level. Twelve online conversations were constructed (half were constructed as negative/half were constructed as positive) with approximately twelve exchanges each. Thirty-five participants evaluated one partner’s exchanges for each conversation. Participants rated these for interest, similarity, responsiveness, and self-disclosure in an online survey format. Exchanges were also classified as either clear or ambiguous for the four dimensions for a normative rating. Once ratings were established, we analyzed profile plots of the conversation exchanges for paired partner A/B to analyze synchronies & asynchronies. Results underway to be ready for UGRC and applications to be discussed.

Mulder, Jaclyn

“In a League of Its Own: The Establishment of Algonquin Park”

Everyone has that friend who went camping in Algonquin Park and stumbled upon a clearing. Not a tree lined meadow filled with frolicking deer, patches of sunlight and butterflies flitting from daisy to dandelion and back, but one filled with industrial forestry equipment, felled trees, and stacks, upon stacks of logs. This clearing is not for tourism, not for recreation, and not for environmental conservation. Its purpose is to sustainably exploit the resources available. In the wake of the industrial revolution, parks were established, presumably as a way to bridge the gap between wildlife and civilization. Algonquin Park was one such park to come out of this era. What was the reason for its establishment? Was it tourism and recreation? Or was it the conservation of wildlife and the preservation of the natural resource industry?

Munaki, Nyaridzai

“A Deeper Look into the Current Refugee Crisis”

The current view on war as seen by the EU is that “...war and conflict are seen not in terms of the suffering they cause, but purely as drivers of migration” (para. 5) wrote Frances Webber in his article “Europe’s Unknown War” (2017). In making this statement Webber demonstrates how this type of thinking is fueling the deportations of refugees back to their home countries which in many cases are still unsafe for their return. In the case of war torn countries such as Afghanistan, sending refugees back is equivalent to signing their death sentences. At the same time that I believe security to be important, I also believe that humanitarianism should also be a priority. Are richer countries doing all they can or are they leaving others to deal with this crisis?

Nolan, Gracen

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Odrowaz-Sekely, Samantha**“The Many Faces of John F. Kennedy’s Martyrdom”**

Public opinion polls consistently show John F. Kennedy to be among the highest ranked president, despite the widespread criticism he faced during his presidency. However, following his shocking assassination, Kennedy transformed into something of a martyr. This paper argues that his enduring positive image was the product of different groups using his assassination to bolster their respective causes. First, I examine how the Democratic Party, divided at the time of his death, used the assassination to secure political power. Next, the paper examines the Civil Rights Movement. While initially dissatisfied with Kennedy’s hesitance towards the issue, civil rights activists rewrote Kennedy as a champion of progressiveness in order to further their cause. Lastly, this paper argues that the city of Dallas, where the assassination occurred, helped transform Kennedy into a martyr through a series of highly public memorials done to prevent international hatred being directed towards the city.

Peacock, Maxwell**“Policing a Corrupt Agenda”**

This essay explores the fundamental duties of law enforcement within a democratic state specifically highlighting the enforcement of racially and politically-motivated laws. Through an examination of historical and present-day examples of enforcement of racist law in both the United States and South Africa, this paper seeks to highlight instances in which the notion of serving and protecting the people perverts itself into the service and protection of the state and its agenda. It focuses particularly on the societal role of police officers and seeks to highlight them as agents of the state rather than protectors of the people.

Pilon, Leandra**“Attitudes and Practice of Abortion in Tehran, Iran: The Role of Religiosity”**

Given the illegality of abortion in Iran, knowledge of attitudes towards the latter remains limited. Therefore, the purpose of this research is to examine Iranian women’s attitudes towards abortion, primarily in relation to their religious beliefs, attitudes and behavior. This study uses data from the 2009 Tehran Surveys of Fertility and a sample of 2,934 married women of reproductive age in Tehran, Iran. It examines two groups of independent variables, the first group includes three determinants of abortion: religiosity, measuring probability of abortion, fertility desire, and effective contraceptive use before and after last birth. Two dependent variables are used in this study, the first being attitudes towards abortion and the second being the practice of abortion. We anticipate to find and to highlight the probable link between religiosity, fertility desire and contraceptive use with attitudes and practices of abortion in Tehran, Iran.

Reimer, Brandon**“Chronic Cannabis Exposure Effects: Motives, Memories, Emotions, and Critical Periods”**

The legalization of marijuana for recreational use appears to be a spreading political phenomenon. While the effects of THC on the behaviour and physiology of adults has been established, little is known about how chronic THC exposure influences the brain at other stages of life. Adolescence is a critical period of behavioural and neuronal development with many brain structures not becoming fully developed until early adulthood. The endocannabinoid system, which has a modulatory effect on many facets of brain functioning including the stress response, is the main system affected by THC exposure. With many teens potentially using marijuana as a stress reliever, the present study investigates the behavioural and neuronal effects of chronic THC exposure and stress in adolescence. Early results support our hypothesis that adolescent rats exposed to THC and undergoing stress will experience behavioural dysregulation and alterations to their neuronal physiology in several key brain areas.

Robinson, Brittney**“Effects of Testosterone on Men’s Ratings of Attractiveness: Does Relationship Status Matter?”**

Recent evidence in the monogamous California mouse indicates that testosterone increases mating effort among single males, but decreases mating effort among paired males. Here, using a within-subject, placebo-controlled, pharmacological challenge experiment (n = 92), we examine whether testosterone has similar divergent effects in human males, as indexed through their ratings of attractiveness of women. Although preliminary analyses did not show these divergent effects, post-hoc analyses revealed a more complex three-way interaction (drug x relationship status x attractiveness of stimulus face). Specifically, testosterone increased the perceived attractiveness of less attractive women in single men, while it increased the perceived attractiveness of more attractive women in paired men. Therefore, testosterone may modulate the perceived attractiveness of women, dependent on both the male’s relationship status, and the attractiveness of the woman being evaluated.

Roose, Abbi**“Representation and Treatment of Masculinity in Victorian Children’s Literature”**

Victorian literature, like all literature, may be interpreted as a reflection of the culture in which it was written. Though fictional, the texts reveal the climate of the society in which they were composed in terms of their norms, values, and social standards. Specifically looking at James Matthew Barrie’s *Peter Pan or The Boy who Never Grew Up*, and John Ruskin’s *The King of Golden River*, my paper argues that children’s literature from the Victorian period tends to reject masculinity in several forms, such as in the figures of the paterfamilias, the imperial man, and the “desert saint.” I argue that Victorian children’s literature, in fact, celebrates the feminine as natural and inherent.

Schell, Ian

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Sherlock, Carly**“The Battle of Seven Oaks: The Debate Over Metis Independence”**

This paper considers the formation of the Metis in Canada by analyzing the influence of the Battle of Seven Oaks (1816), a moment of violent confrontation within the western fur trade. It challenges historian Gerhard J. Ens by arguing that the battle did not lead to the emergence of the Metis as a distinct group, as the Metis were already viewed as different within fur-trade society prior to 1811, by others and by themselves. This is shown through an analysis of letters sent from Thomas Douglas, Fifth Earl of Selkirk from the Hudson’s Bay Company and Colonel William McGillivray from the Northwest Company to the Royal Commissioner investigating the incident, and a variety of secondary sources discussing the discrimination of Metis peoples. This paper was originally done as an assignment in HIST 2016 with Dr. Murton.

Smith, Lauren**“34 Hours in the ER: The Death of Brian Sinclair”**

Myself and three other nursing students are working on a case study as part of our ethics course (Professional Foundations - NURS 2047). We have been researching the death of Brian Sinclair, a 45-year-old Indigenous man who died in a Winnipeg emergency department waiting for a catheter change. Sinclair was never triaged and waited 34 hours before he was eventually found dead by a security guard. We are using an Ethical Decision-Making Framework to explore topics such as systemic racism, understaffing of nurses, lack of communication between health care professionals, and inadequate health care policies. The inquest into Brian Sinclair’s death addressed many issues that may have contributed to his individual death. However, it lacked investigation into the unique health needs of Indigenous peoples and the larger issue of racism within the Canadian healthcare system. We are examining this case using various ethical principles and developing a recommended course of action.

Smydo, Mark

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Steadman, Victoria

“Chronic Cannabis Use and Attentional Bias: Extended Attentional Capture”

A significant proportion of chronic cannabis users experience occupational, social, and psychological problems thought to reflect, in part, cannabis-related attentional biases. Using the emotional attentional blink (EAB), we tested users’ and non-users’ attentional biases and how cannabis exposure correlates with these biases. Forty-eight regular cannabis users and 51 non-users completed demographic, psychological, and cannabis-use reports and two EAB target-detection experiments. Distractor (cannabis, emotional, or neutral) images were presented 200 ms, 500 ms, or 800 ms before a target. Chronic cannabis users exhibited exaggerated, immediate and extended attentional bias compared to non-users. The intensity of cannabis-use (grams per week) correlated with more errors at the extended attentional bias durations. Our results represent unique evidence of temporally extended attentional biases, consistent with attentional disengagement deficits associated with chronic cannabis use.

Stephenson, Tasha

“Portrayal of the Mujahideen Warriors in the *New York Times*”

Within Islam, the Mujahideen are considered to be warriors who participated in Jihad. Throughout the centuries, this title has evolved to carry different social implications depending on historical context. This essay will primarily be focusing on the usage of the term in 1979 Afghanistan, and understand the application of the word within and American context. In 1979, Afghanistan had invited the Soviet Union into their country to help establish a communist government. Their presence was considered to be a threat to Afghan culture and the Mujahideen became warriors who advocated for their cultural interests against the communist Soviet Union. This project will examine publications by the New York Times that mention Mujahideen activity in Afghanistan in 1979. Through analysis of their publications, this essay will track the American perspective of Mujahideen not as the terrorists that they have come to be known, but as an ideological anti-communist warrior to be used against the Soviet Union.

Stone, Bryan

“Can Heretics Produce Satire?”

Can heretics produce satire? Heretics are commonly known as persons who hold an opinion at odds with what is generally accepted. Fox News has marketed itself as the official opposition to the imposing ‘left wing media’, and it is this fact they blame for failing at satire. Yet it is not a heretical nature that is stopping the political right from producing satire. Satire will be shown to be a practice of ridiculing the absurd and illogical and it is this fact of satire rather than the heretical nature of Fox News that put an end to Fox’s attempt at satire, ‘the half hour news hour’. More broadly, the political right has struggled to produce satire because satire has evolved, and being a “common sense conservative” is not adequate in the information age. To answer my initial question: yes heretics can produce satire, but it has to be educational.

Strotmann, Kaycee**“A Buffer Effect Between Chronic Cannabis Use and Cannabis-Related Problems?”**

This study explores the variety consequences related to chronic cannabis use among young adults. In particular, we are investigating if motives and cognitive capacity serve as potential buffers for developing cannabis-related problems. When studying these effects, we will consider age of onset and intensity of use as important factors. A total of N= 43 participants completed a series of cognitive tasks and a self-report questionnaire addressing motivations and cannabis-related problems. Specifically, the cognitive tasks measure executive functioning and working memory via the Trail-Making Task (TMT) and Clock-test. The expected results of this study are that chronic cannabis users with poor cognitive capacity and negative motivations for use will experience more cannabis-related problems compared to their counterparts. The results of this study will help develop our understanding as to why some chronic cannabis users experience cannabis-related problems and some do not.

Sullivan, Matthew**“Prosody and Sympathy and Judgement in the Dramatic Monologue”**

In his influential study on the genre of the dramatic monologue, *The Poetry of Experience*, Robert Langbaum argues that at the centre of appreciating dramatic monologues is a tension between sympathy and moral judgement towards the speaker, with the former a step ahead of the latter. While Langbaum’s argument rests more heavily on the more general context or themes or characters of the poems, this paper goes a step further to argue that sympathy over judgement is engineered by dramatic monologues down to the most minute level of prosody. In order to illustrate how deeply ingrained this tension is to the genre of the dramatic monologue, it examines different prosodic effects in four poems: the punctuation and syllable stress of Robert Browning’s “Confessions,” Alfred Tennyson’s “Ulysses” and “Oenone,” and the phonemic content of Algernon Swinburne’s “The Garden of Proserpine.”

Syed, Muzammil**“The Economic Burden of Diabetic Foot Ulcers in Toronto, Canada: A Population-Based Study”**

The aim of this project is to re-evaluate the economic burden of diabetic foot ulcers in Toronto. No prior study has been conducted that has investigated this exact question. GEMINI, a database based out of St. Michael hospital that electronically collects information from 7 different hospitals, will be used to collect variables (ICD-10 codes) regarding comorbidities, outcomes, and the patient groups. Means with standard deviations for continuous variables and frequencies with proportions for categorical variables will be calculated. A basic cost analysis will be conducted, as well as a multivariable logistic regression analysis to examine the association between baseline characteristics and the secondary outcomes. Significance will be set at $p < 0.05$. We anticipate to find that DFUs will be a significant burden on the Canadian healthcare system. The findings from this study will result in a lot of policy changes.

Szabunio, Nicholas

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Walker, Kaitlyn

“Into That Darkness: Memory of the Holocaust in Poland” roundtable discussion participant.

Watson, Rebecca**“Societal Views on Sexuality as Reflected in Visual Depictions of Diana and Callisto”**

This paper considers the sparse and problematic representation of female romantic and sexual attraction towards other women throughout art history by analyzing 16th-17th century European paintings of the mythological episode of Diana and Callisto. I argue that while paintings on the subject by male artists such as François Boucher may be considered to be lesbian representation, due to societal conditions such as the oppression and illegality of homosexuality the scenes are by male artists and sexualized for the view of a male audience rather than an ode to homosexual love. Using one of the original sources of the myth as presented in Ovid’s *Metamorphoses* which is one of treachery and sexual assault, I compare six paintings which either conceal in favour of sexualization of lesbianism or portray the myth as sinister as it was written. I conclude that these few representations of homosexual women are not ones that promote respect or diversity, but rather sexualization and subjugation.

Wong, Carolyn**“Factors Influencing Patients with Heart Failure to Participate in Advance Care Planning: A Review of the Literature”**

Heart failure (HF) is one of the most prevalent illnesses in Canada and worldwide, and is the leading cause of hospitalization and death. However, due to advanced therapies, a larger proportion of patients now reach end-stage disease. Patients at end of life (EOL) often experience highly distressing symptoms, and poor quality of life while undergoing invasive medical treatments. The high degree of prognostic uncertainty suggests that patients with HF should engage in advance care planning (ACP) early in their illness to ensure that EOL care is based on patient’s values and wishes. However, despite the heavy burdens of HF and the proven benefits of ACP, such as improved quality of life, patients with HF rarely engage in ACP. Moreover, there is a lack of clear understanding of the factors that influence ACP. As such, to inform future ACP interventions this review aimed to describe the current evidence related factors influencing ACP engagement.

Xie, Hanping**“From the Pure-Hearted to the Individualistic: The Development of Hip-hop and the Social-Political African American Culture, 1970-2010”**

Hip-hop traditionally has been associated with the social and political crisis regarding African Americans. This genre, before the 21st century, mirrored the lives of the “segregated folks” and contributed to, from some aspects, the black-Civil Rights Movement and social protest. Decades later, hip-hop became the generator of profit and self-promotion for some of its performers. This study compares the two generations, the “Golden-age”(from the 70s to the 90s) of hip-hop and the 21st century, to emphasize that hip-hop culture has turned to “its back.” It will also trace cultural and social roots of hip-hop, including examining the contributions of some earlier hip-hoppers such as Grand Master Flash, Public Enemy, and the N.W.A. to the development of the genre. Then the argument will narrowly build on Nas’ “frustration” and complaints to the present rappers in his album, “Hip Hop Is Dead”(2006).



100 College Drive, Box 5002, North Bay, ON P1B 8L7

tel: (705) 474-3450 • tty: (877) 688-5507 • nuinfo@nipissingu.ca • www.nipissingu.ca