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**Niagara University**  
**Undergraduate Research Conference**



**Friday, April 28, 2017**

**St. Vincent's Hall and Upper Level Gallagher Center**

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# **AGENDA**

*Hospitality Room for Participants and Faculty Sponsors*

*(Coffee and Donuts)*

*8:30 AM – 12:00 PM*

*St. Vincent's Hall, Room 310*

*Panel Presentations*

*9:00 AM – 1:00 PM*

*St. Vincent's Hall*

*(Schedule Follows)*

*Lunch for Participants and Faculty Sponsors*

*11:30 AM – 3:00 PM*

*Upper Level Gallagher Center Gym*

*Poster Presentations*

*1:00 PM – 3:00 PM*

*Upper Level Gallagher Center Gym*

*I want to extend a warm welcome to the 2017 NU Undergraduate Research Conference sponsored by the University Honors Program. Niagara University's dedication to research and academic excellence will be on full display during today's conference. I encourage you to attend as many of the panel and poster presentations as you can in order to show your support for the young scholars in our midst and to learn about the exciting research taking place here at Niagara. I am confident that the presentations will be informative and educational.*

*I want to thank Mrs. Jennifer Ebbole, Administrative Coordinator for the Honors Program, who has done most of the behind-the-scenes work necessary to make this conference a reality. Without her, there would be no conference. Finally, I want to thank all the participants and their sponsors for their hard work. The University Honors Program wishes them all the best in their future research and endeavors.*

*Dr. Michael Barnwell*

*Director, University Honors Program*

# **PANEL PRESENTATIONS**

**9:00 AM – 12:00 PM      ST. VINCENT'S HALL 407**

**9:00 AM**

**History:** *Dr. Stefanie Wichart*  
*Rael Dolan*  
**"THE BRITISH MANDATE IN IRAQ"**

**9:30 AM**

**History:** *Dr. Mustafa Gokcek*  
*Lucas Kesten*  
**"DAMASCUS: CROSSROAD OF EAST AND WEST"**

**10:00 AM**

**History:** *Dr. Mustafa Gokcek*  
*Laura Kish*  
**"DO ALL ROADS LEAD TO SAMARKAND?"**

**10:30 AM**

**History:** *Dr. Mustafa Gokcek*  
*Alexander Daddone*  
**"KASHGAR: A MUSLIM CITY IN CHINA"**

**11:00 AM**

**History:** *Dr. Mustafa Gokcek*  
*Adam Penale*  
**"TIMBUKTU: A LOST CENTER OF EDUCATION AND TRADE"**

**11:30 AM**

**History:** *Dr. Mustafa Gokcek*  
*Miles Michienzi*  
**"BULGAR: THE CONNECTION BETWEEN THE VIKINGS AND THE MUSLIM CALIPHATE"**

**9:00 AM – 1:00 PM**

**ST. VINCENT'S HALL 306**

**9:00 AM**

**Mathematics:** Dr. Amanda Mangum

Brianna Zeitz

**"SIMULATING NHL SHOOTOUTS"**

**9:30 AM**

**Mathematics:** Dr. Marlo Brown

Allyssa Wadsworth

**"DELAYED AGAIN? A STATISTICAL ANALYSIS OF FLIGHT DELAYS THROUGH THE BUFFALO NIAGARA INTERNATIONAL AIRPORT."**

**10:00 AM**

**Theatre Studies:** Professor Doug Zschiegner

Sabrina Kahwaty

**"ADVANCED PLAYWRITING"**

**11:15 AM**

**Gerontology:** Dr. Susan Mason

Sophia Smith

**"INCREASING SENIOR POPULATIONS IN THE U.S. AND CANADA"**

**11:45 AM**

**Gerontology:** Dr. Susan Mason

Sophia Smith

**"HOW THE MEDIA PORTRAYS AGING"**

**12:15 PM**

**Gerontology:** Dr. Susan Mason

Hannah Williamson

**"NURSING HOMES AND HEALTHCARE"**

**9:00 AM – 1:00 PM**

**ST. VINCENT'S HALL 301**

**9:00 AM**

**Communication Studies:** Dr. Carrie Teresa

Maegan Jones,

**"BROTHERS AND SISTERS, Y'ALL ALRIGHT? AN EXTENSIVE LOOK AT THE MEDIA PORTRAYAL OF BLACK AMERICANS WITH MENTAL ILLNESS"**

**9:30 AM**

**Management / Communication Studies / Tourism Management:**

Dr. Lisa Williams and Dr. Mark Barner and Dr. Youngsoo Choi

Katelyn Ruskowski

**"THE SEASONALITY OF TOURISM IN NIAGARA FALLS"**

**10:00 AM**

**Tourism Destination Management:** Dr. Kurt Stahura

Kelly Fitzpatrick

**"VOLUNTEERS. PRICELESS. BUT AT WHAT COST?"**

**10:30 AM**

**Hotel Panning, Development & Operations:** Dr. Chang Huh

Aino Paernaenen

**"HOTEL GUESTS' HOTEL BOOKING BEHAVIOR: MEMBERS VS. NON MEMBERS OF HOTEL LOYALTY PROGRAMS"**

**11:00 AM**

**Psychology:** Dr. Timothy Osberg

Miranda Lauher

**"CHOOSING ANIMAL HOUSE: REASONS FOR CHOOSING A COLLEGE, COLLEGE ALCOHOL BELIEFS, AND DRINKING AMONG INCOMING FRESHMAN"**

**11:30 AM**

**Psychology:** Dr. Timothy Osberg

Courtney Doxbeck

**"THE POWER OF BELIEF: COLLEGE ALCOHOL EXPLAIN PREGAMING BEHAVIORS AMONG INCOMING FRESHMEN"**

**12:00 PM**

**Psychology:** Dr. Timothy Osberg

Danae Knowles

**"THE EFFECT OF PERCEIVED PARENTAL BELIEFS ON COLLEGE AGE DRINKING BEHAVIOR"**

**12:30 PM**

**Psychology:** Dr. Timothy Osberg

Kelly Zaky

**"INCREMENTAL VALIDITY OF SOCIAL INTERACTION ANXIETY IN EXPLAINING DRINKING IN FRESHMAN WOMEN"**

**10:15 AM – 1:00 PM**

**ST. VINCENT'S HALL 201**

**10:15 AM**

**English:** Dr. Phillip Collington  
Claire Hull

**"FAIRY FAVOURS AND MISUSED POWER: FREE WILL AND AUTONOMY IN SHAKESPEARE'S  
A MIDSUMMER NIGHT'S DREAM AND AS YOU LIKE IT"**

**10:45 AM**

**English:** Dr. Phillip Collington  
Cara Mergner

**"BETTER OFF ABSENT"**

**11:15 AM**

**English:** Dr. Phillip Collington  
Jacob Strozyk

**"NO BAD DEED GOES UNREWARDED: YOUTHFUL ACTIONS IN SHAKESPEARE'S COMEDIES"**

**11:45 AM**

**Biochemistry:** Dr. Mark Gallo  
Matthew Rice

**"INVESTIGATING THE NUCLEOPHILIC SUBSTRATE SPECIFICITY OF AEROBACTIN SYNTHETASE  
IUCA FROM A HYPERVIRULENT PATHOTYPE OF KLEBSIELLA PNEUMONIAE"**

**12:15 PM**

**Biology:** Dr. Robert Greene  
Ashley Jarkowski

**"EVALUATION OF APOPTOSIS GENE EXPRESSION IN CAL-27 AND HELA CELL LINES TREATED  
WITH BERRY EXTRACT"**

**11:15 AM – 1:00 PM**

**ST. VINCENT'S HALL 315**

**11:15 AM**

**Philosophy:** Dr. Alexander Bertland  
Lee Rynski

**"MILITARY TRAINING AND MYTHIC THOUGHT"**

**12:15 PM**

**Political Science / International Studies:** Dr. Jamie Pimlott and Dr. Robert Kane and Dr. Christopher Lee  
Ryan Pascall

**"GLOBAL GOVERNANCE, PERCEPTIONS OF INTERESTS, AND CONFLICT"**

# **POSTER PRESENTATIONS**

**Biology:** Dr. Mark Gallo

*Christopher Campomizzi, Rafay Tariq*

**"ANALYSIS OF THE PVC OPERON"**

**Biology:** Dr. Robert Greene

*Christian Domin*

**"MEASURING APOPTOSIS IN HELA CANCER CELLS AFTER TREATMENT WITH CURCUMIN"**

**Biology:** Dr. Mark Gallo

*Alexandria Goodsell, John Klem*

**"pGLO PLASMID LOSS IN E. Coli"**

**Biology:** Dr. Mark Gallo

*Rene Hoover, Jamie Woodley, Marija Cvetanovska*

**"EFFECTS OF PLASTIC POLYMER COMPOSITION ON EARLY MICROBIAL ASSOCIATION IN A FRESHWATER ENVIRONMENT"**

**Biology:** Dr. Mark Gallo

*Shanique Service*

**"NEUROTRANSMITTERS AND THEIR EFFECT ON THE ABILITY OF ENTEROBACTERIACEAE TO COMMUNICATE WITH EACH OTHER"**

**Microbiology:** Dr. Mark Gallo

*Mia Byrd, Aaron Weaver, Adam Siedlecki*

**"ISOLATION OF GLYCOSYL HYDROLASES TOWARDS GOAL OF UNIVERSAL BLOOD"**

**Microbiology:** Dr. Mark Gallo

*Janelle Fancher, Allison Emborsky, Issac Cowan*

**"ISOLATION OF BACTERIOPHAGE IN STAPHYLOCOCCI"**

**Microbiology:** Dr. Mark Gallo

*Emily Forrester, Rachisan Djake*

**"PREVALENCE OF METHICILLIN RESISTANCE GENE VARIANTS IN A DAIRY HERD IN WESTERN NEW YORK"**

**Microbiology:** Dr. Mark Gallo

Megan Helf, Anthony Strollo

**“CHARACTERIZATION OF NON-RIBOSOMAL PEPTIDE SYNTHASES FROM STAPHYLOCOCCI”**

**Analytical Chemistry:** Dr. Robyn E. Goacher

Ciara Pitman, James Marton

**“ANALYSIS OF ACID DIGESTION OF SUGARS FROM THE BREAKDOWN OF WOOD USING MULTIPLE ANALYTICAL METHODS”**

**Biochemistry:** Dr. Christopher S. Stoj

Nicholas Burdett, Alyssa Ryan, Matthew Michienz

**“CATALYTIC AND AUTO-OXIDATION OF IRON”**

**Biochemistry:** Dr. Mary McCourt and Dr. Lawrence Mielnicki

Jamie Catalano

**“FORMULATION OF INSULIN FOR ORAL DOSING”**

**Biochemistry:** Dr. Mary McCourt and Dr. Lawrence Mielnicki

Janine Cubello

**“CHOLESTOSOMETM ENCAPSULATION OF THE NATURAL ANTIOXIDANT CATALASE”**

**Biochemistry:** Dr. Luis Sanchez

Rebecca Ford

**“PREPARATION OF L- AND D-VINYLGLYCINE-BASED BUILDING BLOCKS FOR THE SYNTHESIS OF MEDICALLY RELEVANT COMPLEX MOLECULES”**

**Biochemistry / Chemistry:** Dr. Robyn E. Goacher

Kelli Burkholder

**“DISTRIBUTED PHARMACEUTICAL ANALYSIS LABORATORY (DPAL) – METFORMIN ANALYZED VIA HPLC”**

**Chemistry:** Dr. Robyn E. Goacher

Laura Brunelle

**“ABSORBANCE VS. FLUORESCENCE: WHAT’S THE BEST SPECTROMETER AT NU?”**

**Chemistry:** Dr. Luis Sanchez

Steele Burgeson

**“DEVELOPING A BIARYL OXIDATIVE COUPLING-BASED ROUTE TO THE ANTI-TUMOR NATURAL PRODUCTS TMC-95”**



**Chemistry:** Dr. Robyn E. Goacher

Brianne Hain

**“DETERMINING DIFFERENCES IN BIRCH AND SPRUCE VIA FTIR”**

**Chemistry:** Dr. Robyn E. Goacher

Kylie Kiah, Steele Burgeson, Chris Fritschi

**“ANALYSIS AND IDENTIFICATION OF RECYCLABLE PLASTICS BY TGA AND DSC”**

**Chemistry:** Dr. Robyn E. Goacher

Howard Lehman

**“DIFFICULTIES DEVELOPING A SUITABLE METHOD FOR SUGAR DETECTION USING HPLC-UV”**

**Chemistry:** Dr. Robyn E. Goacher

Kevin Lucas

**“VARIABILITY AMONG OPTIONS TO HEAT 96-WELL PLATES”**

**Chemistry:** Dr. Luis Sanchez

LeAnn Richert

**“A SHAPIRO ELIMINATION/EPOXIDATION-BASED STRATEGY FOR THE SYNTHESIS OF CAGE MOLECULE BUILDING BLOCKS”**

**Chemistry:** Dr. Luis Sanchez

Emily Steiner

**“STUDIES TOWARD THE SYNTHESIS OF ENT-ARTEMISIN, A POTENTIAL ANTI-MALARIAL COMPOUND”**

**Chemistry:** Dr. Robyn E. Goacher

Christopher Swagler, Laura Brunelle, LeAnn Richert

**“METHOD DEVELOPMENT USING HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY – MASS SPECTROMETRY (HPLC-MS) FOR GLUCOSE AND XYLOSE ANALYSIS IN THE PRESENCE OF A SINAPIC ACID”**

**Medicinal Chemistry / Biochemistry / Pharmaceutical Sciences:** Dr. Mary McCourt

Thao Huynh

**“ENCAPSULATION AND DELIVERY OF TRASTUZUMAB INTO HUMAN BREAST CANCER CELLS USING CHOLESTOSOMES™”**

**Organic Chemistry:** Dr. Luis Sanchez

Christopher Fritschi

**“DEVELOPING A SYNTHETIC ROUTE TO CARAMBOXIN, A RARE BIOACTIVE NON-PEPTIDIC AMINO ACID”**

**Organic Synthesis:** *Dr. Luis Sanchez and Professor Stephanie Scharmach*

*Zachary Mariani*

**“TUNING CHEMOSELECTIVITY TOWARD AN AFFORDABLE SYNTHESIS OF AURANTIOCLAVINE”**

**Communication Studies:** *Dr. Carrie Teresa*

*Gina Notaro*

**“TITLE IX RIGHTS OF STUDENTS AT NIAGARA UNIVERSITY”**

**Computer and Information Sciences:** *Dr. Yonghong Tong*

*Hoang Huy Nguyen*

**“TAP HERE”**

**Computer and Information Sciences:** *Dr. Yonghong Tong*

*Sansriti Ranjan*

**“MENTAL HEALTH CARE”**

**Computer and Information Sciences:** *Dr. Yonghong Tong*

*Logan Sergent*

**“SURGE, BRAIN GAME”**

**Computer and Information Sciences:** *Dr. Yonghong Tong*

*Jeff Weber*

**“PET PORTAL”**

**Computer and Information Sciences:** *Dr. Yonghong Tong*

*Connor Wolfe*

**“NIAGARA UNIVERSITY STUDENT RESOURCE”**

**Developmental Disabilities:** *Dr. Todd Schoepflin*

*Marcus Maddox*

**“MEDIA DEPICTION OF MENTAL ILLNESS”**

**Gerontology:** *Dr. Susan Mason*

*Sophia Smith*

**“OBITUARY RESEARCH- CORRELATIONS FOUND RELATING TO LONGEVITY”**

**Gerontology:** Dr. Susan Mason

Hannah Williamson

**“POTENTIALLY INNAPROPRIATE MEDICATIONS FOR OLDER ADULTS”**

Gerontology / Public Health: Dr. Susan Mason

Dru McKissic

**“ELDER ABUSE: NEGLECT”**

**Public Health:** Dr. Deborah A. Leonard

Tiffany Arrington, Nevie Beal, Julia Brown

**“THE RELATIONSHIP BETWEEN EDUCATION AND EMPLOYMENT IN NIAGARA FALLS”**

**Public Health:** Dr. Deborah A. Leonard

Deanna Catalano, Natalie Marinelli, Shangyne Samuels

**“A PROPOSED INTERVENTION TO DECREASE SMOKING IN THE NIAGARA FALLS COMMUNITY”**

**Public Health:** Dr. Deborah A. Leonard

Terri Deloretto, Riley Meechan, Alexandra Thomas

**“PACT360 CAN MAKE A 360”**

**Public Health:** Dr. Deborah A. Leonard

Mark DeSimone, Garang Doar, Allan Stanton

**“THE SWEEP EASY CAMPAIGN”**

**Public Health:** Dr. Deborah A. Leonard

Emily Forrester, Abigail Salter, Brooke Zeller

**“IMPROVING THE QUALITY OF LIFE THROUGH LITERACY”**

**Public Health:** Dr. Deborah A. Leonard

Triscia Ghirdharie, Colin Leith, Cassiday Okon, Victoria Erikson

**“HEALTHY FROM MY HEAD TOMATOES”**

**Public Health:** Dr. Deborah A. Leonard

Dru McKissic, Jada Carrol, Thea Rosati-Hohensee

**“FRESH FALLS”**

**International Studies:** Dr. David Reilly

Diego Monsalve

**“THE EFFECTS OF FREE TRADE ON EMPLOYMENT”**

**International Studies:** Dr. David Reilly

Mulinda Wamaka Twea

**“SOCIAL PROTECTION IN MALAWI”**

**Mathematics:** Dr. Chad Mangum

Zachary Dorobiala

**“OUT-DEGREES IN A SQUARED GRAPH”**

**Political Science:** Dr. David Reilly

James Burns

**“POLITICAL SOCIALIZATION IN MODERN SOCIETY”**

**Political Science:** Dr. Jamile Pimlott & Dr. Christopher Lee

Gina Contardi

**“IMMIGRATION AND PUBLIC OPINION”**

**Political Science:** Dr. David Reilly

Max Jacobson

**“IMMIGRATION AND HATE CRIMES”**

**Political Science:** Dr. Christopher Lee

Colin Leith

**“RESOURCE SCARCITY VS. POLITICAL INSTABILITY”**

**Political Science:** Dr. David Reilly

Nick Mansour

**“A ROAD MAP TO SUCCESS FOR THIRD PARTY CANDIDATES”**

**Political Science:** Dr. David Reilly

Cory Piper

**“THE ROLE OF PARTY ID ON ECONOMIC OUTPUT AND UNEMPLOYMENT”**

**Political Science:** Dr. David Reilly

Aundrea Rogers

**“DON'T HATE ME BECAUSE I AM A WOMAN: THE USE OF NEGATIVE ADS IN THE 2010 CONGRESSIONAL ELECTION”**

**Political Science:** Dr. Jamie Pimlott

Aaron Sagun, , ,

**“POLITICAL IDEOLOGY IN CONNECTION TO THE AUTOMOTIVE WORLD”**

**Political Science:** Dr. David Reilly

Sabrina Sworts

**“DOES POLICE BRUTALITY OF POLICE LEAD TO POLICE BRUTALITY”**

**Political Science / International Studies:** Dr. Jamie Pimlott and Dr. Robert Kane and Dr. Christopher Lee

Ryan Pascall

**“GLOBAL GOVERNANCE, PERCEPTIONS OF INTERESTS, AND CONFLICT”**

**Political Science / International Studies:** Dr. Christopher Lee

Kevin Barry

**“GLOBALIZATION AND THE RISE OF POPULISM”**

**Political Science / International Studies:** Dr. Christopher Lee

Nevie Beal

**“CRIMES AGAINST WOMEN AND MENTAL HEALTH”**

**Political Science / International Studies:** Dr. Christopher Lee

Michael Buck

**“AN EXAMINATION OF THE SUPREME COURT'S REVERSAL OF CONGRESSIONAL ACTS”**

**Political Science / International Studies:** Dr. David Reilly

Mark Dryfhout

**“THE ART OF PEACE”**

**Political Science / International Studies:** Dr. Christopher Lee

Rebecca Fuerschbach

**“REDUCTION OF THE ACADEMIC STRESS LEVELS OF COLLEGE STUDENTS”**

**Political Science / International Studies: Dr. Christopher Lee**

*Joel Gonzalez*

**“HOW CAN THE US AND UNSC STOP NORTH LOREAN NUCLEAR PROLIFERATION”**

**Political Science / International Studies: Dr. Christopher Lee**

*Trejahn Hunter*

**“ENVIRONMENTAL POLUTTION OFFENSES”**

**Political Science / International Studies: Dr. Christopher Lee**

*Jeanette Jayne*

**“MEDIA AND SEXUAL HARASSMENT”**

**Political Science / International Studies: Dr. Christopher Lee**

*Kimberly Keysa*

**“THE JOURNEY TO PEACE IN COLOMBIA”**

**Political Science / International Studies: Dr. Christopher Lee**

*Emily Leffler*

**“MINORITY VOTING TRENDS IN THE RECENT HISTORY OF THE UNITED STATES”**

**Political Science / International Studies: Dr. Christopher Lee**

*Madison May*

**Political Science / International Studies: Dr. Christopher Lee**

*Ipek Saracoglu*

**“CHILD BRIDE”**

**Political Science / International Studies: Dr. Christopher Lee**

*Maine Walker*

**“STRANGERS IN A STRAGE LAND”**

**Political Science / Pre-Law: Dr. Peter J. Baxter**

*David Paul*

**“THE COMMERCE CLAUSE AND ITS INTERPRETATION IN STATE LAW”**

**Psychology:** Dr. Timothy Osberg

Miranda Lauher

**“CHOOSING ANIMAL HOUSE: REASONS FOR CHOOSING A COLLEGE, COLLEGE ALCOHOL BELIEFS, AND DRINKING AMONG INCOMING FRESHMAN”**

**Psychology:** Dr. Timothy Osberg

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**“THE POWER OF BELIEF: COLLEGE ALCOHOL EXPLAIN PREGAMING BEHAVIORS AMONG INCOMING FRESHMEN”**

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**“THE EFFECT OF PERCEIVED PARENTAL BELIEFS ON COLLEGE AGE DRINKING BEHAVIOR”**

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**“INCREMENTAL VALIDITY OF SOCIAL INTERACTION ANXIETY IN EXPLAINING DRINKING IN FRESHMAN WOMEN”**

**Psychology:** Dr. Donna Thompson

Lisa Bartolomei-Kelly, Dottie Sisler, Seyma Esiroglu, Abbie Hibsich

**“THEN AND NOW: GENERATIONAL CHANGES IN CULTURAL STEREOTYPES ABOUT GENDER”**

**Psychology:** Dr. Donna Thompson

Haley DeGroot, Olivia Rizzacosa

**“OPERANT CONDITIONING IN GOLDFISH”**

**Psychology:** Dr. Donna Thompson

Abbie Hibsich, Seyma Esiroglu, Dottie Sisler, Lisa Bartolomei-Kelly

**“STEREOTYPICAL BELIEFS ABOUT CHILD CLASSROOM BEHAVIOR”**

**Psychology:** Professor Milen Radell

Krista Hogg

**“CONDITIONED PLACE PREFERENCE IN A VIRTUAL ENVIRONMENT”**

**Psychology:** Dr. Susan Mason

Alana Knaebe

**“THE INCREASING PREVALENCE OF DEVELOPMENTAL AND INTELLECTUAL DISABILITIES IN CHILDREN”**

**Psychology:** *Dr. Donna Thompson*

*James Winkelman*

**“TESTING VISUAL ACUITY IN GOLDFISH”**

**Womens Studies / Law & Jurisprudence / Sociology:** *Professor Hope Russell*

*Sarah Volmy*

**“OVERCOMING THE LEGAL LADDER: WOMEN’S EXPERIENCE IN THE LEGAL FIELD IN WESTERN NEW YORK”**

**Marketing / Communication Studies:** *Professor John Overbeck*

*Rachel Ruszkowski*

**“FIFTY SHADES OF SUCCESS: EXPLORING THE FIFTY SHADES OF GREY PHENOMENON”**

**Supply Chain Management:** *Dr. James Kling*

*Emma Fermier*

**“THE EFFECTS OF ECOMMERCE ON RETAIL INVENTORY: HOW ECOMMERCE HAS IMPACTED INVENTORY MANAGEMENT IN U.S. RETAIL INDUSTRIES”**