



University of
New Hampshire

Spring 2017



Undergraduate Research Conference

A UNIVERSITY-WIDE CELEBRATION OF RESEARCH, SCHOLARSHIP
AND CREATIVITY

A welcome to participants and attendees



MARK W. HUDDLESTON



NANCY TARGETT

WELCOME to the 18TH annual Undergraduate Research Conference, one of UNH's most exciting traditions and a showcase for the outstanding research, scholarship and creative activities of our students and their faculty mentors.

The URC exemplifies UNH's 150-year legacy of providing students with great opportunities and building research partnerships that improve the quality of life here in the Granite State and around the world.

Launched as a university-wide effort in 2000, the URC has grown steadily to become one of the largest and most diverse gatherings of undergraduate researchers in the nation. More than 1,800 students will share their findings at our Durham and Manchester campuses, with projects representing academic achievements in every college and school.

Whether your visit includes a poster session, an oral presentation or a creative demonstration, you will be impressed with the participants' knowledge and understanding. Thank you for supporting our students and New Hampshire's flagship public research university.

Best regards,

A handwritten signature in black ink, appearing to read "Mark W. Huddleston".

MARK W. HUDDLESTON, PRESIDENT

A handwritten signature in black ink, appearing to read "Nancy M. Targett".

NANCY TARGETT

PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS

A Welcome from the Hamel Center for Undergraduate Research

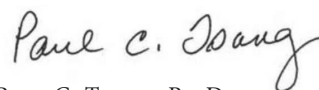
WELCOME to the annual celebration of academic excellence at the University of New Hampshire! The URC embodies UNH's mission to offer students a discovery-based education by encouraging inquiry, exploration, and deeper immersion in their fields of study. This year, more than 1,800 students—mentored by over 400 faculty members and other research advisers—will present their research and scholarship at URC events, which include symposia, panel and poster sessions, performances, and prize competitions. Student presenters represent disciplines from across the academic spectrum, reflecting the breadth and depth of undergraduate research and scholarship at UNH.

At the Hamel Center for Undergraduate Research—celebrating 30 years at UNH this spring—our core mission is to provide resources and financial support for the research, scholarly, and creative projects of UNH students. Our additional role as the administrative home of the URC enables us to broaden our commitment to supporting, nurturing, and showcasing all stages of the research process. We are excited to build upon the growth and success of previous years and to further promote and expand the opportunities for undergraduate research at UNH.

In every research process, the final stage is the communication of findings to the wider public, and the URC enables students to share the results of their scholarship with fellow students, faculty, staff, family members, federal and state agency personnel, business and industry representatives, and members of our local community. For many students, the URC is their first opportunity to showcase their work to such a broad audience. The URC is thus vital in giving students practice in speaking in public,

communicating complex ideas to a general audience, sharing ideas with colleagues in their fields, and developing a deeper understanding of their subject areas. Such experience prepares students to pursue graduate study and to establish and be successful in meaningful careers.

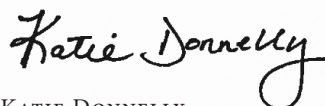
Finally, we want to recognize the many members of the UNH community whose dedication and enthusiasm are critical to making the URC possible. You will find their names in the acknowledgements at the back of the book. The partnerships between—and shared investment of—students, faculty, staff, and administrators not only ensure the success of the URC but also demonstrate the strength of the UNH community. Thank you for joining our community as we celebrate our students' remarkable scholarship!



PAUL C. TSANG, PH.D.
Director, Hamel Center for Undergraduate Research
Professor of Molecular, Cellular, and Biomedical Sciences



MOLLY DOYLE, PH.D.
Administrative Director,
Hamel Center for Undergraduate Research



KATIE DONNELLY
URC Coordinator,
Hamel Center for Undergraduate Research

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All events are free and open to the public.

*Accessibility accommodation requests may be directed to
Katie Donnelly at (603) 862-5494.*

URC 2017 Calendar

All events are free and open to the public.
(Building numbers are bold and in parenthesis.)

TUESDAY, APRIL 18

10 a.m.–2 p.m.

UNH Manchester URC Oral Presentations

Pandora Mill, Room 201

WEDNESDAY, APRIL 19

11 a.m.–1 p.m.

Thompson School of Applied Science Student Showcase

Cole Hall, Stacey's (8)

Noon–2 p.m.

The Naked Arts—Creativity Exposed! (Act I)

Paul Creative Arts Center,
Hennessy Theatre (4)

1:30–4 p.m.

Interdisciplinary Science and Engineering (ISE) Symposium

Whittemore Center Arena (6)

3–5 p.m.

UNH Manchester URC Computing Technology Poster Presentations

Pandora Mill, 1st Floor

3–5 p.m.

UNH Manchester URC Poster Presentations

Pandora Mill, Room 201 and
Student Commons

THURSDAY, APRIL 20

9 a.m.–3:30 p.m.

Paul College of Business and Economics URC

Paul College (9) and
Holloway Commons (1)

11 a.m.–1 p.m.

UNH Manchester URC Cinema Arts Day

Pandora Mill, Room 456

Noon–2 p.m.

Paul College of Business and
Economics University-Wide
Paul J. Holloway Prize Innovation-to-
Market Competition
Charles & Miriam Nelson Poster Round
Paul College (9)

12:15 a.m.–2 p.m.

History Department URC

Memorial Union Building,
Rooms 334, 336, 338 (2)

12:40 p.m.–2 p.m.

The Naked Arts—Creativity Exposed! (Act II)

Paul Creative Arts Center, Room A218 (4)

FRIDAY, APRIL 21

8:45 a.m.–4 p.m.

Languages, Literatures, & Cultures Department URC

Murkland Hall, Rooms 115 and 202 (3)

9–9:30 a.m.

All Colleges Undergraduate Research Symposium Welcome Breakfast

Memorial Union Building,
Granite State Room (2)

9:30 a.m.–1:25 p.m.

All Colleges Undergraduate Research Symposium

Memorial Union Building,
Granite State Room and various rooms (2)

9 a.m.–4 p.m.

UNH Manchester URC Engineering Technology Senior Project Presentations

Pandora Mill, Room 201 and 1st Floor

12:15–1 p.m.

The Naked Arts—Creativity Exposed! (Act III)

Memorial Union Building,
Strafford Room (2)

1–4 p.m. and 4–8 p.m.

Paul College of Business and
Economics University-Wide
Paul J. Holloway Prize Innovation-to-
Market Competition
Bud Albin Challenge Round
Paul College (9) and Alpha Loft

1:30–4 p.m.

College of Health and Human Services
(CHHS) Grimes Award Competition
Petee Hall, Rooms G10 and 106 (7)

1:30–5 p.m.

Psychology Department

George M. Haslerud URC

McConnell Hall, Room 220 (10)

1:30–4 p.m.

Honors English URC

Murkland Hall, Room G02 (3)

4–7 p.m.

Philosophy Department URC

Murkland Hall, Room G17 (3)

8–10 p.m.

Student Composers' Concert

Paul Creative Arts Center,
Bratton Recital Hall (4)

SATURDAY, APRIL 22

8:15 a.m.–12:45 p.m.

College of Life Sciences and Agriculture (COLSA) URC

Memorial Union Building,
Granite State Room and Theatre II (2)

SATURDAY, APRIL 29

9 a.m.–2 p.m.

Paul College First-Year Innovation and Research Experience (FIRE) URC

Paul College (9)

FRIDAY, MAY 5

3–4:30 p.m.

Chemistry Department Poster Exhibition

Parsons Hall, Southwest Lobby (5)

TUESDAY, MAY 9

8:15 a.m.–4 p.m.

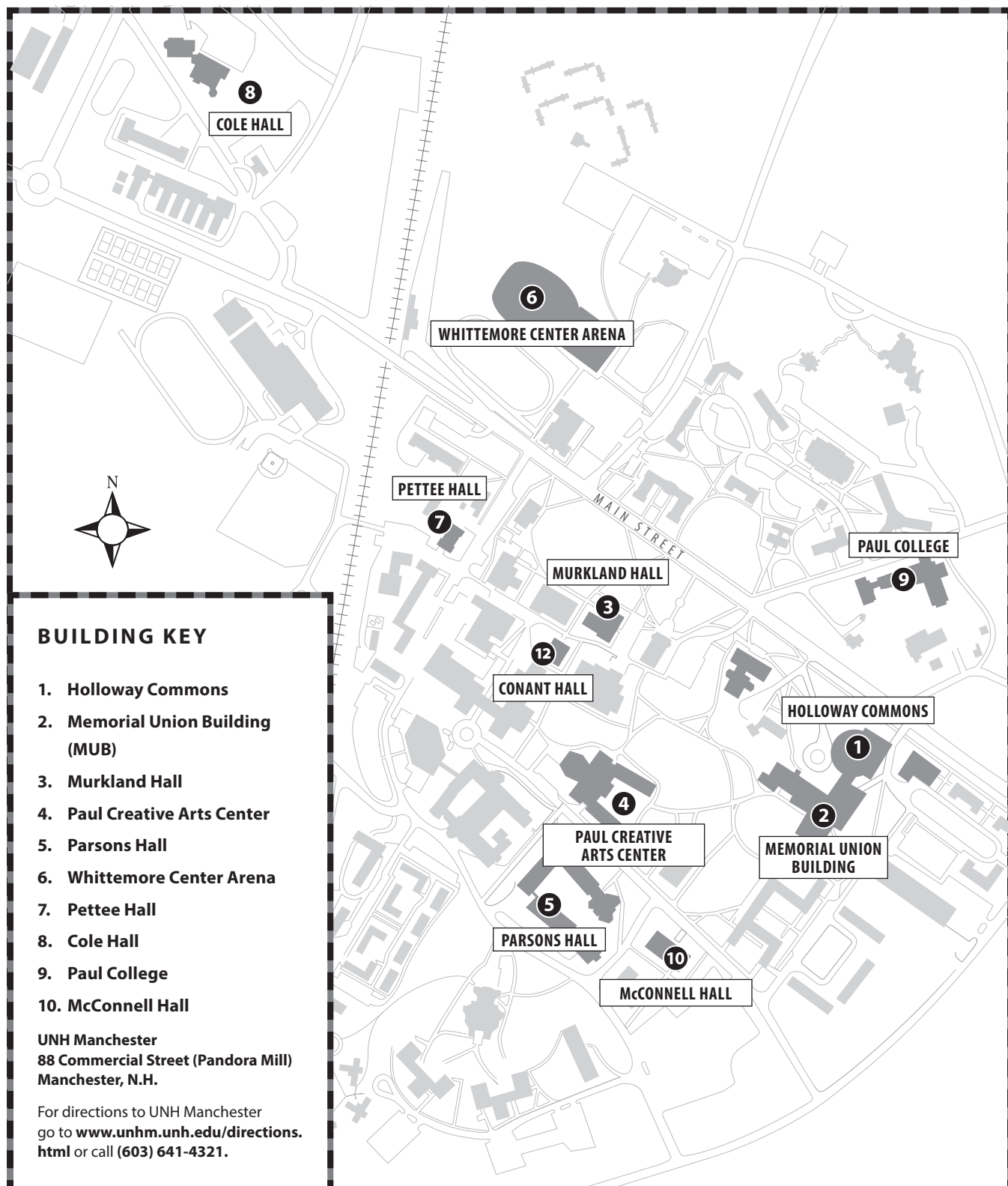
Ann Manchester Kelley Nursing Inquiry Day

Memorial Union Building,
Granite State Room (2)

1–5:30 p.m.

Paul College of Business and
Economics University-Wide
Paul J. Holloway Prize Innovation-to-
Market Championship Round
Paul College (9)

URC 2017 Campus Map



UNH Manchester Undergraduate Research Conference

Oral Presentations

Tuesday, April 18
10 a.m.–2 p.m.
Pandora Mill, Room 201
88 Commercial St., Manchester

The UNHM URC Oral Presentations feature formal scholarly presentations and/or multimedia presentations reflecting the students' research interests.

Ashley Belbin
 Biological Sciences
Sequencing and Medicine
 Adviser: Patricia Halpin

Meagen Fuller
Cole Riel
 Communication Arts
HB 438: The Relationship between Labor Unions and the New Hampshire Legislature
 Adviser: Stephen Pimpare

Taylor Gilliam
Nathan Whitehead
 Politics and Society
SB 98: Eliminating the Statute of Limitations on Sexual Assault
 Adviser: Stephen Pimpare

Victoria Gouveia
Patricia Melillo
Allison Payne
 Politics and Society
SB 66: Fetal Homicide Law
 Adviser: Stephen Pimpare

Timothy Labonville
 Biological Sciences
Concussion and Traumatic Brain Injury Neural Imaging Techniques
 Advisers: Kyle MacLea, Daniel Seichepine

Johnathan Lemitelamy
 General Studies
A Song Worth Singing
 Advisers: Stephanie Kirylch

Ryan Sanborn
 History and Politics and Society
The International Institute of New England: Our Mission, Our Clients, and Community Impact
 Adviser: Stephen Pimpare

Kyli Van Curen
 Communication Arts
Jamanae White
Kayla Wood
 Politics and Society
HB 587: Relative to Conversion Therapy Seeking to Change a Person's Sexual Orientation
 Adviser: Stephen Pimpare

Thompson School of Applied Science Student Showcase

Wednesday, April 19
11 a.m.–1 p.m.
Cole Hall (Stacey's)

At this event, Thompson School of Applied Science students translate academic instruction into practical presentations. Selected students showcase their expertise in such diverse areas as food services management and forest and horticultural technology.

Elizabeth Barbera
 Community Leadership
A Talent Show for All
 Advisers: Robert Arnold, Timothy Barretto

Aidan Benner
 Integrated Agriculture Management
Growing through Adversity: Nurturing Education in At-Risk Communities through Hydroponics Food Production
 Adviser: Andrew Conroy

Summer Boudreau
 Integrated Agriculture Management
Helping Homeowners Turn Their Backyard into a Profitable and Sustainable Agricultural System
 Adviser: Andrew Conroy

Tyler Brodie
 Integrated Agriculture Management
Holistic Farm Management: A Plan to Produce Nutrient Dense Food Utilizing Livestock and The Albrecht Method of Soil Nutrient Balancing
 Adviser: Andrew Conroy

Tyler Comte
 Integrated Agriculture Management
The Root Seller Farm Succession: Becoming Part-Owner through Dynamic Strategies to Expand Crop, Maple, and Timber Cultivation
 Adviser: Andrew Conroy

Amelia Curtis
 Integrated Agriculture Management
Animal Integration at Turtle Run Farm: Utilizing Poultry and Swine for Ecological Management of Orchard and Forest Understories
 Adviser: Andrew Conroy

Daniel Gregson
 Integrated Agriculture Management
Sustainable Beef Production in New England: Mapping a Full Farm Plan for Grazing, Nutrient Management, Business and Marketing
 Adviser: Andrew Conroy

Brianna Hanson
Mariah Litka
 Horticultural Technology
Greenhouse Grown Cut Flower Production and Marketing
 Adviser: Jonathan Ebba

Brian Hunter
 Community Leadership
The Passion in Music: Bringing Back Music Therapy to Raymond High School
 Adviser: Timothy Barretto

Julian Linero
 Community Leadership
2017 Capstone Seminar
 Adviser: Timothy Barretto

Tabitha McElroy
 Community Leadership
Community Leadership Capstone Project
 Adviser: Timothy Barretto

Morgan McGuire
Community Leadership
Fantasia
Adviser: Timothy Barretto

Mackenzie Welch
Community Leadership
Community Leadership Closing Ceremony
Adviser: Timothy Barretto

The Naked Arts— Creativity Exposed

Act I

Wednesday, April 19
Noon–2 p.m.
Paul Creative Arts Center,
Hennessy Theatre

This event exposes the inner creative process of artists working in various disciplines. Presenters will describe the process, research, and other creative aspects undertaken to bring an artistic creation from initial inspiration to the stage or gallery. This may include a performance or excerpts from their work to illustrate their creative scholarship.

William Downing
Music
Comparative Analysis of Two Middle-Period Works by Gyorgy Ligeti
Adviser: Ryan Vigil

Amanda Giglio
Theatre: Dance
A Directorial and Dramaturgical Approach to Stephen Sondheim's "Assassins"
Adviser: John Berst

Liam Tanner
Theatre
The Knight Hospitaller: An Exploration of Late 12th Century Military Equipment and Costume
Adviser: Szu-Feng Chen

Rachel White
Theatre: Dance
When I Look at the Night Sky
Adviser: Gay Nardone

Teagan Yutrzenka
Art History
The Mystery, the Intrigue, the Lewis Chessmen
Adviser: Trevor Verrot

Interdisciplinary Science & Engineering (ISE) Symposium

Poster Presentations

Wednesday, April 19
9 a.m.–Noon Judging
1:30–2:30 p.m. Awards Ceremony
2:30–4 p.m. Open House
Whittemore Center Arena

The ISE Symposium welcomes and encourages scientific presentations from undergraduate students in all colleges and departments. The event features undergraduate research that contributes to or benefits from an interdisciplinary science and engineering perspective.

Biology

Group Leader: Wilfred Wollheim

Jasmin Buteau
Marine, Estuarine and Freshwater Biology
*Characterizing an Unknown Blue Whale (*Balaenoptera musculus*) Population in the South Atlantic Ocean through Acoustic Analysis of Song*
Adviser: Jennifer Miksis-Olds

Andrew Butts
Biology
Tara Cieszka
Zoology
*Predator Induced Plasticity in the Model Organism, *Ambystoma mexicanum*, the Mexican Axolotl*
Adviser: Jessica Bolker

Lauren Dingle
Environmental Conservation Studies
Aleea Grazul
Carolyn Piche
Biomedical Science
Emily Landry
Wildlife and Conservation Biology
Carmella St. Pierre
Biology
ALS - Aerosols -DHMC
Advisers: James Haney, Patricia Jarema

Meghan Gillespie
Emily Vulgamore
Biology
*Measuring Somatic Mutation in the Nematode, *Caenorhabditis elegans**
Adviser: John Collins

Alison Jeffrey
Biomedical Science
*The Relationship of Life Stage to Daily Social Patterns of Captive African Elephants (*Loxodonta africana*) and the Correlation of Handler Perceptions of Elephant Personality to Demonstrated Social Behaviors*
Advisers: Vanessa Grunkemeyer, Clare Padfield, Debbie Young

Shuhan Long
Biomedical Science
Transitioning from Sun-Grown System to Shade-Grown System of Coffee: A Bioeconomic Model
Adviser: Shady Atallah

Allison Nash
Neuroscience and Behavior
*The Distribution and Possible Roles of the Neuropeptide SCP in *Melibe leonina**
Adviser: Winsor Watson

Jared O'Brien
Earth Sciences
Barosafe: Increasing the Survivability of Bycatch that Experience Barotrauma in the Recreational Fisheries
Adviser: Erik Chapman

Rachel Sabol
Biology
Bicistronic Regulation of the CERS1/GDF1 Transcript
Adviser: Brian Barth

Chemical Engineering/ Bioengineering

Group Leader: Kang Wu

Mariah Arral

Chemical Engineering
*Optimization of a NG-Hydroxy-L-Arginine
Electrochemical Sensor*
Adviser: Jeffrey Halpern

Michael Beck

Chemical Engineering
*RPIMapPr: A Novel Approach to
Predicting Interfacing Protein Residues in
RNA-Protein Complexes*
Adviser: Harish Vashisth

Liam Corless

Chemical Engineering
*Revealing the Role of Sodium-Gold
Clusters in Preferential Carbon Monoxide
Oxidation in Hydrogen (PROX)*
Adviser: Nan Yi

Justin Cournoyer

Chemical Engineering
*Copper-Titanium Dioxide: Synthesis,
Characterization, and CO Oxidation*
Adviser: Nan Yi

Sofia Diaco

Chemical Engineering
*Bioremediation of Lead Using Spore
Surface Displayed Proteins*
Adviser: Kang Wu

Sabrina Marnoto

Chemical Engineering
*Detection of Beta Carotene Using
Electrochemical Impedance Spectroscopy*
Adviser: Jeffrey Halpern

Lorenzo Milani

Chemical Engineering
*Nickel-Gallium Layered Double
Hydroxides: Synthesis and
Characterization*
Adviser: Nan Yi

Altai Perry

Chemical Engineering
*Nitrogen and Carbon Stable Isotope
Composition Informs Metabolic Routing in
Blarina brevicauda Tissues*
Adviser: Erik Hobbie

Jiacheng Wan

Chemical Engineering
*Tunable Systems for Protein Display on
Bacterial Spore Surface*
Adviser: Kang Wu

Madison Wood

Chemical Engineering
*Synthesis and Characterization of Copper
and Cesium Modified Heteropoly Acids*
Adviser: Nan Yi

Chemistry

Group Leader: Roy Planalp

Graham Beaton

Chemistry
*Synthesis and Characterization of
Porphyrin Containing Nanoparticles to
Model Heme Proteins*
Adviser: Samuel Pazicni

Robert Biro

Chemistry
*Precise Spacing of Pendant Vinyl
Crosslinking Functionality along a
Polymer Chain*
Adviser: John Tsavalas

Erin Braker

Chemistry
*Synthesis of a Hydrogel for the Protection
of Phosphorene*
Adviser: Christine Caputo

Jennifer Chouinard

Chemistry
*Exploring the Synthesis and Internal Cross-
Linking Abilities of Single Polymer Chains
via Diels-Alder Reactions*
Adviser: Erik Berda

Matthew Currier

Chemistry
*Investigation into the Synthetic
Route and Characterization of
2,3-Dimethylmaleimide Functionalized
Monomer for Photo-Cross-Linking*
Adviser: Samuel Pazicni

Madison Dombrowski

Chemistry
*Synthesis of a Bifunctionalized Bipyridine
Ligand for Iron Coordination and
Chain-Transfer Polymerizations*
Adviser: Samuel Pazicni

Bryanna Dowcett

Chemistry
*Synthesis and Evaluation of Carbapenem
beta-lactams Containing Bulky
Hydrophobic C-6 Side Chains as Potential
Inhibitors of Carbapenemases*
Adviser: Marc Boudreau

Cynthia Gerber

Chemistry
*Isolation and Characterization of
Microplastics Used in Soaps and Cosmetics*
Adviser: Margaret Greenslade

Jackson Kaspari

Chemical Engineering
*The Effect of Evaporating Dicarboxylic
Acids on Aerosol Size*
Adviser: Margaret Greenslade

Brent Lawson

Chemistry and Physics
*Dicarboxylic Acid Shell on an Inert Aerosol
Core: A Variable Controlled Hygroscopicity
Investigation with Unexpected Results*
Adviser: Margaret Greenslade

Anthony Lemieux

Chemistry
*Light Induced Dehalogenation of
Halobenzene Using Carbon Quantum Dots*
Adviser: Christine Caputo

Joseph Mancinelli

Chemistry
*Synthesis of P-Xylene Diisocyanide and
Subsequent Polymerization to Form Poly
(2,4-pyrrole-alt-p-phenylene)*
Adviser: Erik Berda

Kassie Picard

Chemistry
*Exploration of the Synthesis of Silatranes
and the Contest for Nitrogen's Lone Pair*
Adviser: Arthur Greenberg

Ian Smith

Chemistry
*Development of New Fluorescent
Materials: Putting Quantum Dots to Work*
Adviser: Christine Caputo

Claudia Willis

Chemistry
*Synthesis of Single-Chain Nanoparticles
via Atom-Transfer Radical Coupling*
Adviser: Erik Berda

Colman Wimsatt

Chemistry

Synthesis of Single-Chain Nanoparticles to Model [FeFe] Hydrogenase

Adviser: Samuel Pazicni

Civil Engineering-Dry Infrastructure

Group Leader: Anthony Puntin

Evan Appleton

Sabrina Ayrton

Jane Leven

Serena Pape

Civil Engineering

Embankment of Soft Clay Design

Adviser: Jean Benoit

Christopher Chiaramonte

Jacob Davis

Bryan Dube

Minhtam Nguyen

Civil Engineering

Michael Dunkley

Liam Houghton

Gerson Lai

Mechanical Engineering

*Interactive Water Themed Element for Six**Flags New England*

Advisers: Erin Bell, Christopher White

Ken Chow

Connor Golden

Nolan Jacques

Matthew Kiritsey

Sean Philbrick

Troy Reinold

Civil Engineering

Tunnel under Gulf Road

Adviser: Jean Benoit

Jason Connaughton

Andrew Kahr

Benjamin McCarthy

Dzijeme Ntumi

Civil Engineering

Kimberly Hamel

Environmental Engineering

Blue Sky Mall (Cargo Container Project)

Adviser: Robert Henry

Ryan Conroy

Taylor Kirk

Civil Engineering

Modeling Rock Mechanics with 3D Printed Geomaterials

Advisers: Majid Ghayoomi,

John Gianforte

Daniel Dadmun

Mitchell Dutton

Anthony Moglia

Varavut Suwanchinda

Richard Zaharek

Civil Engineering

Cargo Container Mall - Dover, NH

Adviser: Robert Henry

Monica Decicco

Shaun McKenna

Justin O'Blenes

Lindsey Rago

Brendan Sleight

Civil Engineering

The Synergy Project

Adviser: Robert Henry

Demetri Decoulos

Benjamin Kapnis

Nicholas Kondek

Joshua White

Civil Engineering

Nelson Reconstruction Project

Adviser: Jo Daniel

Oluwafemi Ekundayo

Andrew Martin

Duncan McGeehan

Civil Engineering

*Automated Concrete Bridge Curb**Cracking Survey*

Advisers: Raymond Cook, Eshan Dave,

Andrew Hall, Elizabeth Klemann

Ashley Filion

Eric Petersson

Civil Engineering

Jia Xian Siew

Environmental Engineering

Applying Sustainable Infrastructure Rating Systems to Transportation Planning and Design

Advisers: Eshan Dave, Weiwei Mo

Emily Frazzoni

Ryan Murphy

Aaron Wolfson-Slepian

Civil Engineering

Albacore Visitor Center Expansion

Adviser: Anthony Puntin

Tyler Gagnon

Anthony LoPresti

Ryan Malcolm

Wyatt Wolverton

Civil Engineering

*Parking Lot Resurrection - ContiTech**Thermopol*

Adviser: Anthony Puntin

John Hird

Trent Lofaro

Bryan Sutherland

Civil Engineering

UNH Steel Bridge Team

Advisers: Erin Bell, Raymond Cook

Thomas Holter-Sorensen

Matthew McGinnis

Johan Pellumbi

Rachael Simms

Michael Vittiglio

Civil Engineering

Indian River Suspension Bridge

Adviser: Raymond Cook

Paul Lovely

Civil Engineering

High-Strength, Light-Weight Concrete in Residential Design

Adviser: Charles Goodspeed

Weiru Tao

Yaohan Wang

Civil Engineering

Traditional Strain Gauge vs. DIC (Digital Image Correlation)

Adviser: Erin Bell

Lei Zhang

Civil Engineering

Concrete Cold Weather Design

Adviser: Charles Goodspeed

Civil Engineering-Research

Group Leader: Majid Ghayoomi

Kirsten Bailey**Joanna Lewis****John Little****Jesse Ross**

Environmental Engineering

*Snare Performance for Submerged Oil**Detection and Monitoring*

Adviser: Steve Lehmann

Katherine Bemis**Zachary Jarosz****Adam Murphy****Taylor St. Peter****Gregory Stragnell**

Civil Engineering

*Atlanta Botanical Garden Walkway**Collapse Forensic Analysis*

Advisers: Zachary Chabot, Raymond Cook

Katie Haslett

Civil Engineering

*Exploration of Temperature and Loading**Rate Interdependency for Fracture**Properties of Asphalt Mixtures*

Advisers: Jo Daniel, Eshan Dave

Joanna Lewis**Paige Taber**

Environmental Engineering

*Constant Flow in a Drip**Chlorination System*

Adviser: M. Robin Collins

Kimberly Perkins

Civil Engineering

*Modeling a Pavement System to Measure**Pore Water Pressure in Subgrade Soil*

Advisers: Eshan Dave, Majid Ghayoomi

Civil Engineering-Wet Infrastructure

Group Leader: M. Robin Collins

Nathan Bujwid**Huancheng Zhang**

Civil Engineering

John Collins**Jillian Crowley****Chao Du****Shawn Murphy**

Environmental Engineering

UNH Pilot Drinking Water Facility

Adviser: M. Robin Collins

Aidan Cleaves

Civil Engineering

Daniel Sievers**Chandan Singh****Lucas Withers**

Environmental Engineering

Four Hills Landfill Expansion

Advisers: Lisa Damiano, Kevin Gardner,

Eric Steinhauer

Kendra Dow**Thomas Gerhard****Trina Lafata**

Environmental Engineering

*Derektor Robinhood Marine Center**Stormwater Management Design*

Adviser: Nancy Kinner

Paige Howard

Environmental Engineering

Jack Reitz**Jessica Wilson**

Civil Engineering

Leighton Way Pump Station Renewal

Advisers: Thomas Ballesterio,

Bill Boulanger, Gretchen Young

Daniel Jacobson**Kasey Kenyon****Jessica McNeill****Amanda Szymanski****Paige Taber**

Environmental Engineering

*Star Island: Sustainable Water**Heating Project*

Adviser: James Malley

Tanner Kent**Pia Marciano**

Civil Engineering

Nathan Edwards**Sarah Ehrmentraut****Amy LeBel**

Environmental Engineering

*Waste Reduction Engineering Decision**Platform*

Adviser: James Malley

Casey Melrose**David Thibault**

Environmental Engineering

Julia Camacho**Liam McGrath**

Civil Engineering

*Exploring Dam Removal Alternatives for**Newmarket's Macallen Dam*

Adviser: Kevin Gardner

Jacob Riehl

Environmental Engineering

Morgan Ellman**Jacqueline Hozza**

Civil Engineering

Georgetown Culverts Flow Analysis

Advisers: Joel Ballesterio, Nancy Kinner

Nathan Seed

Civil Engineering

Noah Goldstein**Ian Howard**

Environmental Engineering

*Chestnut Street Combined Sewer**Separation*

Adviser: James Malley

Computer Science-Applications

Group Leader: Collette Powers

Joshua Andrews**Gina Bueno**

Information Technology

Anthro-Perspectives Blog

Advisers: Marieka Brouwer Burg,

Sara Withers

Matthew Arroyo
Sebastian Coraccio
Charles McNaughton
Auderien Monareh
David SanAntonio
Tiffany Winn
 Computer Science
K-12 Data Collection Portal
 Advisers: Brian Shepperd, Scott Valcourt

Kelsey Aten
Nikita Yerram
 Computer Science
Marshall Thompson
Samuel Young
 Information Technology
Every Cloud Needs a Secure Lining
 Adviser: Kenneth Graf

Theodore Belanger
Jeffrey Guichard
Karl Hamnqvist
 Computer Science
PV Inspections
 Adviser: Whitney Weller

Daniel Briggs
Nicholas Guidoboni
David Lademan
Rayvoughn Millings
Christopher Plankey
Bibek Thapa
 Information Technology
Curtailed Operations Dashboard
 Adviser: Scott Valcourt

Brandon Bryant
Alexander Caruso
George Ruseski
Eric Warner
 Computer Science
Vocal Visualization
 Adviser: Kevin Short

Ryan Ducharme
Luyao Zhang
 Information Technology
DNSSEC
 Adviser: Scott Kitterman

Mitchell Fillion
Kylie Patton
 Information Technology
Peer Review Dashboard
 Adviser: Collette Powers

Nicholas Goodman
 Computer Science
UNH Programming Assistance
Center Automation
 Advisers: Andras Fekete, Arvind Narayan

Joseph Janiak
 Information Technology
See, Sign, Say
 Adviser: Deb Hamlin

Benjamin Mager
William Pugh
Yiming Yin
 Information Technology
Peter Guarino
 Computer Science
Living Bridge Project
 Advisers: Erin Bell, Collette Powers

Jasdeep Singh
 Information Technology
Zachary Mailhot
 Computer Science
Food Recall Application
 Adviser: Matt Tonelli

Computer Science-Research

Group Leader: Philip Hatcher

Kristen Anderson
Andrew Ciesielski
 Information Technology
Public Data Breaches for the Fortune 1000
between 2005-2016
 Adviser: Stephen Patton

Aaron Blais
Cody Shaw
 Computer Science
Network-Based Precise Time
Synchronization
 Adviser: Radim Bartos

Warren Edgar
Irene Hardjono
 Computer Science
An Evaluation of gRPC
 Adviser: Philip Hatcher

Patrick Fleming
Andrew Johnson
Trevor Maddaus
Andrew Mitchell
Michael Schoerner
 Computer Science
IOT
 Adviser: Scott Valcourt

Shane Kochvi
 Computer Science
An Assessment of the Relative
Performances of Real-Time Search
Algorithms: Local Search Space Learning
A (LSS-LRTA*) and Real-Time Adaptive*
A (RTAA*)*
 Adviser: Wheeler Ruml

Devon McAvoy
Daniel Spencer
 Computer Science
Evaluating the Go Programming Language
 Adviser: Philip Hatcher

Christopher Oelerich
Olva Timorri
 Computer Science
Assistive Robotics
 Adviser: Momotaz Begum

Earth Sciences/Environmental Science

Group Leader: Anne Lightbody

Margaret Beck
 Earth Sciences
Tracking Organic Carbon Transport from
the Stordalen Mire to Lake Tornetrask,
Sweden
 Advisers: Joel Johnson, Ruth Varner,
 Carmody McCalley, Michael Palace,
 Wallace Bothner

David Bertolami
 Environmental Sciences
Analysis of Dissolved Methane in the Old
Durham Reservoir
 Adviser: Ruth Varner

John Ciaburri

Environmental Sciences
Examining Impacts of Runoff into CT Lakes on Surface Chlorophyll-a Concentrations
 Adviser: Anne Lightbody

Kyle Hacker

Environmental Sciences
Dissolved Gas Concentrations in Two Reservoir Systems
 Adviser: Wilfred Wollheim

Mikhail Jackson

Earth Sciences
Identification of Volcanics within the Bar Harbor Sedimentary Sequence
 Adviser: Jo Laird

Mary Jalbert

Earth Sciences
Paleomagnetic Analysis of Sedimentary Samples
 Adviser: William Clyde

Amber Kittle

Sustainable Agriculture and Food Systems
Effects of Garlic Mustard Invasion and Additional Abiotic Stressors on Fine Root Biomass of Native Tree Species
 Adviser: Serita Frey

Cody Lanpher

Casey McGrath
 Environmental Sciences
The Biodiversity and Hydrology of the Aroaro Stream Catchment, Coromandel Peninsula, New Zealand
 Adviser: Anne Lightbody

Matthew L'Heureux

Environmental and Resource Economics
Prioritizing Sustainability Initiatives for Small Businesses
 Adviser: Vanessa Levesque

Kyle Loughlin

Earth Sciences
The Crystallization and Assimilation Processes of the Mt. Pawtuckaway Ring Dyke Complex
 Adviser: Jo Laird

William Orfei

Geology
Metamorphism and Deformation of Pelitic Rocks along the Flint Hill Fault Zone in Southern New Hampshire
 Adviser: Jo Laird

Sarah Patry

Earth Sciences
Calculating Snow Water Equivalence with an Automated Snow Scale in Southeastern New Hampshire
 Adviser: Elizabeth Burakowski

Katherine Rocci

Earth Sciences
Seasonal Changes in the Isotopic Composition and Concentration of CH₄ at a Sub-Arctic Mire in Abisko, Sweden
 Adviser: Ruth Varner

Anna Simpson

Earth Sciences
Flooding and Inundation Modeling in the Great Bay Estuary
 Adviser: Thomas Lippmann

Brandon VanDeWalle

Earth Sciences
Blue Ocean Society for Marine Conservation Summer Internship
 Adviser: Dianna Schulte

Electrical & Computer Engineering-Hardware Design

Group Leader: Kent Chamberlin

David Albertini

Cameron Davison
 Computer Engineering
Chunyang Li

Electrical Engineering
Modification and Refinement of the Intermittent Swim Stress Test System
 Advisers: Richard Messner, Robert Drugan, Nathaniel Stafford

William Clark II

Reed Vandergraaf
Connor Wynn
 Electrical Engineering
Directional EMP
 Adviser: Kent Chamberlin

Daniel Cusolito

Joshua Eisfeller
 Electrical Engineering
Ayokunle Olorunfemi
 Computer Engineering
The Living Bridge: Power Converter Interface and PV Powered Navigational Lighting
 Adviser: Michael Carter

Sean Kramer

Electrical Engineering
Mitigating Control Flow Attacks in Embedded Systems with a Hardware-Based Approach
 Adviser: Qiaoyan Yu

Robert Meade

Computer Engineering
Glenn Ballard
 Computer Science
Sleep Right
 Adviser: Wayne Smith

Maria Panacopoulos

Electrical Engineering
ISINGLASS Ground Instrumentation Xybyon Control Box
 Adviser: Michael Carter

Ronald Totten

Computer Engineering
Determination of Concentration in Sucrose Solutions Using an Interdigital Capacitor Probe
 Adviser: Edward Song

Timothy Waryas

Electrical Engineering
Lucid (TACs)
 Adviser: Wayne Smith

Alex Wright

Computer Engineering and Physics

John Dokoupil**Daniel Gray**

Michael Kazamias
 Computer Engineering
Antenna Measurement and Mapping with an Unmanned Aerial Vehicle
 Adviser: Richard Messner

Electrical & Computer Engineering-Software/System Design

Group Leader: Kent Chamberlin

Lars Bolduc

Electrical Engineering

Embedded Solution for Automotive GPS Tracking

Adviser: W. Thomas Miller

Michael Crotty

Nicholas Voisine

Computer Engineering

Maxwell McNally

Ryan Moskos

Electrical Engineering

Autonomous Mapping Robot

Adviser: Se Young Yoon

Cameron Devine

Computer Engineering

Detecting and Modeling Traffic Using Bluetooth

Adviser: Nicholas Kirsch

Eric Duross

Mackenzie Meyers

Charles Rickarby

Computer Engineering

Autonomous Vehicle Design Using UNH Driving Simulator

Adviser: W. Thomas Miller

Hayden Haynes

Nicholas Laves

Electrical Engineering

DSP Based Synthesizer

Adviser: Michael Carter

Joshua Larsen

Electrical Engineering

DSP Parametric Audio Equalizer

Adviser: Michael Carter

Jordan Smith

Electrical Engineering

Active Acoustic Noise Cancellation

Adviser: W. Thomas Miller

Shawn Venti

Computer Engineering

Erik Carlson

Computer Science

Natural Gesture Authentication Network

Adviser: Andrew Kun

Paveen Virameteekul

Computer Engineering

Develop Hololens Application by Using

Concept of Holoportation

Adviser: Andrew Kun

Mechanical Engineering-Competition Teams

Group Leader: John Gianforte

Seth Andreasson

Kenneth Arico

Mechanical Engineering

Joshua Amero

Computer Engineering

Alexander Cook

Computer Science

UNH ET-NavSwarm

Adviser: May-Win Thein

Jeffrey Bajor

Samuel Carbonneau

Matthew Ciocys

Ryan Gancarz

Aleksander Holm

Conor Langille

Camden Medeiros

Mechanical Engineering

Joseph Lemenager

Finance and Management

Mini Baja SAE

Adviser: Barbaros Celikkol

Adam Benincasa

Brandon Clark

Thomas Giarratano

Jacob Morgan

Travis Paola

Kyle Poodiack

Mechanical Engineering

UNH AeroCats

Adviser: Alireza Ebadi

Francesca Bolton

Mathew Chadwick

Ivan Galic

Simon Hunter

Seth Jerszyk

Lance Lentini

Drew Mills

David Monasky

John Parrillo

Joel Russell

Jose Salmeron

Keegan Sullivan

Keller Waldron

Mechanical Engineering

UNH Precision Racing

Adviser: Todd Gross

Connor Borne

Daniel Conley

Kyle Desrochers

Clayton Garland

Shane Murphy

Brett Pike

Michael Smith

Mechanical Engineering

Justin Gardiner

Computer Science

Lunacats

Adviser: May-Win Thein

Michael Casey

Morgan Clendennin

Jeromey Green

Michael Joncas

Sean McGuire

Mechanical Engineering

Extreme Chunkin Senior Design Team

Advisers: Barbaros Celikkol, Steve Seigars

Mechanical Engineering-Industrial

Group Leader: John Gianforte

Ellen Barth

Henry Blount

Michael Locke

Nathan Manning

Mechanical Engineering

Christopher Chin

Computer Science

Manufacturing Automation

Advisers: Momotaz Begum, Brad Kinsey,

Se Young Yoon

Nicholas Chagnon

Mechanical Engineering
Determining Intrinsic Residual Stress in 3-D Woven Composites with Electronic Speckle Pattern Interferometry
 Adviser: Todd Gross

Randy Colburn

Sydney Kay
Colin Spillane
Spencer Triglione
Emma Underwood
 Mechanical Engineering
Data-Center Cooling Analysis Using CFD Modeling Techniques and Experimental Investigation of Perforated Tiles
 Advisers: Paul Bemis, Ivaylo Nedyalkov

Joshua Dyer

Luke Morenz
 Mechanical Engineering
Sig Sauer Linear Measurement System
 Adviser: Marko Knezevic

Carlos Graniello

Simon Popecki
 Mechanical Engineering
Method of Non-Contact Machining by Means of Electrochemical Turning
 Advisers: John Bundza, Ioannis Korkolis, Tim Noronha

Mingchen Mao

Mechanical Engineering
Non-Contact Motion Sensor
 Adviser: Barry Fussell

Kul Niroula

Mohammad Omer Saleem
 Mechanical Engineering
NH Ball Bearings
 Advisers: Brad Kinsey, Ioannis Korkolis

Mechanical Engineering-Research**Group Leader: John Gianforte**

Anthony Allen
Nicholas Dubicki
Jack Myhaver
 Mechanical Engineering
Thermal Conductivity Measurement of Granular Mixtures
 Adviser: Todd Gross

Joseph Beckwith
 Mechanical Engineering
Tensegrity Modeling of Biological Systems
 Adviser: Yaning Li

Kevin Cole
 Mechanical Engineering
Investigating the Effects of Surface Roughness on Bi-Directional Hydrofoils
 Adviser: Ivaylo Nedyalkov

Alec Cunningham
Adam Lovell
 Mechanical Engineering
Cyclist Aerodynamic Analysis in Cross Wind
 Adviser: Ivaylo Nedyalkov

Joseph Durant
Robert Lozowski-Aliberti
 Mechanical Engineering
The Electrochemical Etching of Microscale Features in Copper
 Adviser: James Krzanowski

Liam Grenier
Charles Klewicki
 Mechanical Engineering
Optimization of Marathon Runner Performance
 Advisers: Joseph Klewicki, Christopher White

Gavin Hess
 Mechanical Engineering
1m Scale Research Wind Turbine Rotor
 Adviser: Martin Wosnik

Jacques Jalbert
Jacqueline McNally
 Mechanical Engineering
Continuous Tension-Compression Testing Machine
 Adviser: Ioannis Korkolis

Shengguang Jin

Mechanical Engineering
Analyzing Mechanical Properties of Auxetic Honeycomb Cellular Structure
 Adviser: Yaning Li

Cassandra MacKinnon

Mechanical Engineering
Determination of Coupling Coefficients in Magnetic Pulse Systems
 Adviser: Brad Kinsey

Richard Nash

Mechanical Engineering
Bonding Dissimilar Substrates through the Use of Mechanical Interlocking Surface Features
 Adviser: Yaning Li

Kevin Shea

Mechanical Engineering
Static Inducer
 Adviser: Michael Harrison

James Skinner

Mechanical Engineering
Evaluation of Compact Heat Exchangers with OpenFOAM
 Adviser: Ivaylo Nedyalkov

Ocean Engineering**Group Leader: James Szmyt**

Nathan Bredow
Daniel Cohen
Aaron Cordova
Brian Ellis
Kara Graney
Brandon Wong
 Mechanical Engineering
UNH Remotely Operated Vehicle
 Adviser: May-Win Thein

Kaelin Chancey
Gunnar Ericsson
Ryan Tingley
Sarah Torgesen
 Mechanical Engineering
The Living Bridge Project: Environmental and Tidal Energy Resource Instrumentation at Memorial Bridge in Portsmouth
 Advisers: Ian Gagnon, Martin Wosnik

Naomie Clark

Alexander Clemons

Paul Gesel

Graham Pirie

Mary Sareault

Langdon Tarbell

Mechanical Engineering

Peter Abdu

Electrical Engineering

The Poseidon Project: Portable SONAR

Device for Ocean Floor Mapping

Adviser: Thomas Weber

Jamison Couture

Alexander Larson

Cole Matthews

Mechanical Engineering

Design and Analysis of Wingtip Devices for

Marine Applications

Advisers: Ivaylo Nedyalkov,

Martin Wosnik

Anna Devitto

Ecogastronomy and Sustainable

Agriculture and Food Systems

Melanie Nute

Environmental Engineering

Ethan Pirie

Sylvia Romero

Drue Seksinsky

Justin Stickney

Mechanical Engineering

Project OASIS: Optimizing Aquaponic

Systems to Improve Sustainability

Advisers: Todd Guerdat, Ivaylo Nedyalkov

Collin Gagnon

Steven Hurley

Robert Mitchell

Alexander Roemer

Mechanical Engineering

Jeffrey Hensel

Xavier McNulty

Computer Science

Autonomous Surface Vehicle (ASV)

Adviser: May-Win Thein

Chelsea Kimball

Aaron Russell

Mechanical Engineering

Wave Energy Conversion Buoy

Advisers: Kenneth Baldwin,

M. Robinson Swift

Physics/Mathematics

**Group Leaders: F. William Hersman
and Orly Buchbinder**

Patrick Blanchette

Mathematics

How Students Use Analogies in Math

Adviser: Samuel Pazicni

Eric Bower

Physics

*Data Analysis of IBEX-Lo Energy Steps 1,
2, 3 and 4 of Neutral Interstellar He*

Adviser: Eberhard Moebius

Hannah Bush

Mathematics Education

*The Relationship between Race, Gender,
and Self-Efficacy in Undergraduate STEM
and Non-STEM Majors*

Adviser: Orly Buchbinder

Emma Clarke

Physics

Studying Cosmic-Ray Neutrons

Adviser: James Ryan

Cameron Flynn

Physics

*The Effects of Surface Adsorbates on
Graphene and Two-Dimensional MoS₂*

Adviser: Shawna Hollen

Tessa Gorte

Physics

*Analyzing Sea Level Rise Due to Melting of
Antarctic Ice and Dispersion of Sea Water
from Mass Redistribution*

Advisers: David Mattingly,

Cameron Wake

Patrick Hampson

Physics

*Eddy Flux Data Analysis of Four Durham
Area Ecosystems*

Advisers: David Mattingly,

Andrew Ouimette

Nicholas Lajoie

Physics and German

*The Assembly and Modification of a 3-D
Printer for a KEL-F Target Stick*

Advisers: Elena Long, Karl Slifer

Thomas Manion

Physics

*Coronal Mass Ejections: The Relation of
Shocks during Solar Cycles*

Adviser: Noe Lugaz

Gunnar Nichols

Mathematics

*Analysis of Patterns Observed Related to
the Euler-Mascheroni Constant*

Adviser: David Feldman

Wyman Smith

Engineering Physics

InstantEye GPS Waypoint

Navigation System

Adviser: Marc Lessard

Teacher Science and Engineering

Group Leader: Stephen Hale

John Blackwell

Andrew Pereira

Michelle Ramiz

Katherine Young

*3-Axis Magnetometer Construction
and Data Collection for Space Weather
Monitoring*

Adviser: Charles Smith

John Blackwell

Louis Broad

Gary Duranko

Scott Goelzer

Richard Levergood

Cathleen Little

Carol Young

*Space Weather Underground: A
Collaboration between UNH and Local
High Schools*

Adviser: Charles Smith

Kacie Ferraro

*Designing a Model for Predicting Fatigue
Cracking in Asphalt Pavement*

Advisers: Jo Daniel, Eshan Dave

Julia Fitzgibbons**Caroline Hayes****Erin Janas****Richard Levergood****Elizabeth Niven****Alena Pursel****Samantha Schofield***Managing Data from a SAM III**Magnetometer Using an Arduino**Microcontroller, GPS, XBee and SD Cards*

Adviser: Charles Smith

Elizabeth Murphy*Characterizing New Hampshire Climate*

Adviser: Mary Stampone

Stephen Pascucci*A 24-Hour Study of Mercury in Wetland**Flora of Sallie's Fen*

Advisers: Maria Fahnestock, Ruth Varner

Donald Wason*Investigating Linkages between Iron,**Manganese and Arsenic Contents in**Bedrock-Hosted Groundwater Drinking**Supplies in New Hampshire*

Advisers: Julie Bryce, Maria Fahnestock

UNH Manchester URC Computing Technology Projects

Poster Presentations

Wednesday, April 19**3–5 p.m.****Pandora Mill, 1st Floor****88 Commercial St., Manchester****Brian Barnes**

Computer Information Systems

128 Technology Internship

Adviser: Hong Jin

Brian Barnes

Computer Information Systems

Ian Daly**Niles Daly**

Computer Science

Virtual Machines

Adviser: Earl Labatt Jr

Jeremy Beal

Computer Information Systems

A Morning Breeze with Pi

Adviser: Raymond Wallace

Jeremy Beal**Sharayah Corcoran****Jeffrey Gancarz**

Computer Information Systems

Huong Ha

Computer Science and Entrepreneurship

Capstone Speech Project: Tools

Adviser: Michael Jonas

Daniel Beitel**Zachary Dudek****Isaac Marsh**

Computer Information Systems

Computer Hardware History

Adviser: Earl Labatt Jr

Nicholas Bielinski**Zachary Dudek****Jacob Sprague**

Computer Information Systems

Cody Roberge

Electrical Engineering Technology

Capstone Project: Experimentation

Adviser: Michael Jonas

Marcus Botticello

Computer Science and Entrepreneurship

*Biofeedback Methods Using Arduino and**Raspberry Pi Platforms*

Adviser: Raymond Wallace

Jonah Bras

Computer Science

Raspbian Magic Mirror

Adviser: Raymond Wallace

Jonathan Cleary

Computer Information Systems

Vitali Taranto**Gregory Tinkham**

Computer Science and Entrepreneurship

Alexander Turner

Electrical Engineering Technology

Capstone Speech Project: Modeling

Adviser: Michael Jonas

Jonathan Cleary

Computer Information Systems

Internship: Ping4 Inc

Adviser: Hong Jin

Donald Combs

Information Technology

EnCept - and - EnceptMe Project

Advisers: Mihaela Sabin,

Raymond Wallace

Julian Consoli**Andrew George****Bonnie Smith****Mark Tollick**

Computer Information Systems

Capstone Speech Project: Systems

Adviser: Michael Jonas

Sharayah Corcoran

Computer Information Systems

*Help Desk Ticketing System: Expanding**Familiarization and Implementing**Improvements*

Adviser: Hong Jin

Wesley Couturier

Computer Science and Entrepreneurship

*Awato Internship: The Difference between**Authentication and Authorization*

Adviser: Hong Jin

Travis Deschenes

Computer Information Systems

Home Inventory System Pi

Adviser: Raymond Wallace

Zachary Dudek**Yashna Giri****Ryan Warrick**

Computer Information Systems

Joshua Quigley**William Rivera**

Information Technology

MeAndYou: Reconnecting with the Past

Adviser: Michael Jonas

Faruk Durakovic

Computer Science and Entrepreneurship

Faruk's Internship Experience

Adviser: Hong Jin

Brian Dustin**Shawn Snook**

Mechanical Engineering Technology

Application Presentation

Adviser: Mihaela Sabin

Matthew Fintonis

Electrical Engineering Technology

Maryjean Emerson**Dylan Lindstrom****Jeffrey Gancarz**

Computer Information Systems

Internship Experience: Software Development

Adviser: Hong Jin

Jeffrey Gancarz

Computer Information Systems

*Raspberry Pi Based User**Programmable Timer*

Adviser: Raymond Wallace

Yashna Giri

Computer Information Systems

MSD Internship: IT Services

Adviser: Hong Jin

Yashna Giri**Jaden Henry**

Computer Information Systems

Camden Marble

Business and Computer Information Systems

The Evolution of Cloud Services as Provided by IaaS

Adviser: Earl Labatt Jr

Huong Ha**Nicholas Klardie**

Computer Science and Entrepreneurship

Ryan Oldfield

Computer Science

Social Media: Socializing Asocial Media

Adviser: Earl Labatt Jr

Jaden Henry**John Vey**

Computer Information Systems

MeAndYou: Database Dating

Adviser: Michael Jonas

Edward Hieber

Computer Information Systems

Raspberry Pi Based Home Security System

Adviser: Raymond Wallace

William Jones**Macuei Mathiang**

Computer Information Systems

James Schumacher**Alexander Turner****Samuel Workman**

Electrical Engineering Technology

MeAndYou: Matchmaking Engine

Adviser: Michael Jonas

Aashirya Kaushik**Wesley Krol****Gregory Tinkham**

Computer Science and Entrepreneurship

Dilpreet Singh

Computer Information Systems

Hardware Effects on Software

Adviser: Earl Labatt Jr

Justin Kroh**Tri Nguyen**

Computer Information Systems

Patrick McElhiney

Information Technology

Cloud Computing

Adviser: Earl Labatt Jr

Dylan Lindstrom

Computer Information Systems

Internship Experience—Web Design and Development

Adviser: Hong Jin

Camden Marble

Business and Computer Information Systems

Cloud Infrastructure as a Service (IaaS) with Raspberry Pi

Adviser: Hong Jin

Claudia Maynard

Biological Sciences

*UNH Manchester Offers Youth Program**Curated for English Language Learners**and Program Analysis Suggests a**Significant Educational Impact on**Students' Perspective Concerning**STEM-Related Topics*

Adviser: Mihaela Sabin

Mary O'Brien

Computer Science and Entrepreneurship

COMP 430 Poster Presentation

Adviser: Raymond Wallace

Daniel Rubin

Computer Information Systems

Magic Mirror Plus

Adviser: Raymond Wallace

Rosali Salemi

Computer Information Systems

Career Launch: My Experience as a Web Development Intern

Adviser: Hong Jin

Jacob Sprague

Computer Information Systems

Manchester School District Website Update and Migration

Adviser: Hong Jin

Vitali Taranto

Computer Science and Entrepreneurship

EPIC Data Analysis Using R and SPSS

Adviser: Hong Jin

John Vey

Computer Information Systems

Capstone Speech Project: Data

Adviser: Michael Jonas

Joshua Young

Computer Science and Entrepreneurship

*Changing How a Web Development**Company Does Responsive Testing*

Adviser: Hong Jin

UNH Manchester Undergraduate Research Conference

Poster Presentations

Wednesday, April 19**3–5 p.m.****Pandora Mill, Room 201 and****Student Commons****88 Commercial St., Manchester**

The UNHM URC Poster Presentations showcase students' independent research and internship projects, service learning activities and civic engagement projects in the learning lab of the city of Manchester.

Emma Amenkowicz**Barbara Ste. Croix**

Biological Sciences

*Physiological Assessment during the**Anx-DOX Task: A Pilot Study of**Electrodermal Activity*

Adviser: Nicholas Mian

Harrison Beck

Biology
Phlebotomy
 Adviser: Kyle MacLea

Joseph Boulanger

Psychology
The Effects of Mask Coherence, Target Depth, and Motion-Aftereffect on Motion-Induced Blindness
 Adviser: John Sparrow

Marc Brennan

Biotechnology
Genome Sequencing of Marine Bacterium Oceanimonas doudoroffii
 Adviser: Kyle MacLea

Myranda Brodsky

Biological Sciences
Phlebotomy Exploration
 Adviser: Kyle MacLea

Katelynn Brooks

Vanessa Russell
 Biological Sciences
The Mangroves of Belize
 Adviser: Patricia Halpin

Erica Chapman

Biological Sciences
Water Quality and Impacts on Human Health
 Adviser: Kyle MacLea

Kerri Cobb

Biology
Lauren Iannazzi
 Biological Sciences
Coral Reef Ecosystem of Placencia, Belize
 Adviser: Patricia Halpin

Kerri Cobb

Biology
Physician Assistant Job Shadow Experience
 Adviser: Christine Andrews

Kerri Cobb

Biology
What Is in Our Food?
 Adviser: Stephen Pimpare

Nicole Collette

Jasmine Lee
 Biotechnology
Emily Rezzarday
 Biological Sciences
The Broad-Leafed Forest of Belmopan, Belize
 Adviser: Patricia Halpin

Amanda Cozzens

Biological Sciences
QA Audit and Inspection Intern at Lonza
 Adviser: Autumn Arsenaault

Justin Cummings

Communication Arts and Politics and Society

Shreya Vijay

Psychology

Nathan Whitehead

Politics and Society
Quality of School Lunches in the New Hampshire Education System
 Adviser: Stephen Pimpare

Hannah Curran

Neuroscience and Behavior
Jillian McCalvey
 Undeclared
Locavore Eating in the Greater Manchester Area
 Adviser: Stephen Pimpare

Grace Dean

History
Women's Mill Labor in Antebellum New England
 Adviser: Robert Macieski

Elizabeth Diaz

Psychology
The Children's Behavioral Health Initiative
 Adviser: Nicholas Mian

Jennifer Drago

Biological Sciences
A Historical Apex Predator: Canis lupus
 Adviser: Stephen Pugh

Jennifer Drago

Biological Sciences
A Study of Human Impact on Biodiversity
 Adviser: Stephen Pugh

Tarah Dudley

Biotechnology
A Novel Way to Treat Congestive Heart Failure
 Adviser: Robert Duane

William Duval

Politics and Society
Accounts of Vietnam
 Adviser: Robert Macieski

Valerie Fernandez

Biology
Alyssa Fitzgerald
 Undeclared
Robert Hunt
 Mechanical Engineering Technology
The Impact of Industrial Farming on World Health
 Adviser: Stephen Pimpare

Allyson Feugill

Psychology
Psychology Internship at Easter Seals
 Adviser: Nicholas Mian

Alicia Finney

Biology
Madelinne Powers
 Biotechnology
Katherine Roblee
 Business
Nutritional Access in New Hampshire Public Schools
 Adviser: Stephen Pimpare

Kyle Foden

Alexander Rego
 Politics and Society
A Large Supermarket's Effect on a Town
 Adviser: Stephen Pimpare

Abigail Goen

Biological Sciences
Duchenne Muscular Dystrophy
 Adviser: Sarah Prescott

Jonathan Gonsalves

Biological Sciences
Volunteering in Planning Activities for the Health and Wellness of Kids and Their Families
 Adviser: Patricia Halpin

Victoria Gouveia

Politics and Society
Advocating for Fetal Homicide Laws within New Hampshire
 Adviser: Stephen Pimpare

Victoria Gouveia

Politics and Society
When Did Emergency Management Emerge as a Budget Item and How and When Have Cities Implemented (or Not Implemented) Emergency Management Policies?
 Adviser: Stephen Pimpare

Nicole Gray

Politics and Society

Emergency Response Plans for the Public

Adviser: Stephen Pimpare

Ashley Hall

Undeclared

Rebecca Sinclair

Sign Language Interpretation

Food Shopping Demographics

Adviser: Stephen Pimpare

Peter Hood

Humanities

Baby Boomers and Suburbia

Adviser: Robert Macieski

Amelia Keane

Biological Sciences

*Public Health Legislation in the 2017 New**Hampshire General Court Session*

Adviser: Stephen Pugh

Timothy Labonville

Biological Sciences

*Concussion and Traumatic Brain Injury**Neural Imaging Techniques*

Advisers: Kyle MacLea, Daniel Seichepine

Michael Lang

History

*The Amoskeag Manufacturing Company:**Pre-Civil War*

Adviser: Robert Macieski

Jasmine Lee**Kyle Vynorius**

Biotechnology

*Isolation of Soil Microbes for**Genomic Analysis*

Adviser: Kyle MacLea

Jasmine Lee

Biotechnology

*My Role at Health Care for the**Homeless Program*

Adviser: Patricia Halpin

Nicole Maio

Biological Sciences

*Small Intestinal Bacterial Overgrowth**and Testing for It: My Work with**Aerodiagnostics*

Adviser: Patricia Halpin

Jacob Maynard

History

Marshall Plan and the Berlin Airlift

Adviser: Robert Macieski

Patricia Melillo

Politics and Society

*Comparing State Legislatures**Paid vs. Unpaid*

Adviser: Stephen Pimpare

Andrew Merelman

Biotechnology

*Utilization of Paramedics in New**Hampshire Emergency Departments*

Adviser: Kyle MacLea

Brianna Montebianchi

Biological Sciences

Medical Job Shadow

Adviser: Christine Andrews

Madisson Oliwa

Biological Sciences

Elliot Hospital Internship

Adviser: Patricia Halpin

Stephen Ormond

Biological Sciences

*Creation of Food Micro Laboratory at the**Londonberry Freezer Warehouse*

Adviser: Kyle MacLea

Elizabeth Pellerin**Juan Posada****Anthony Santiesteban**

Biological Sciences

*The Biodiversity of Birds in**Punta Gorda, Belize*

Adviser: Stephen Pugh

Elizabeth Pellerin

Biological Sciences

*The Many Roles of a Medical Assistant in a**Healthcare Facility*

Adviser: Stephen Pugh

Jesse Pinard

Biotechnology

*Quality Control at the Manchester Water**Works Water Treatment Plant*

Adviser: Patricia Halpin

Cassie Plummer

Biological Sciences

*Comparability Assessment of the Max Q**and Jitterbug Incubators*

Adviser: Patricia Halpin

Juan Posada

Biological Sciences

*My Internship at Langley Hospital,**Langley AFB*

Adviser: Stephen Pugh

Helen Proksch

Biological Sciences

*Position and Orientation of Plumose**Anemone (Metridium senile) at the Cribs**on Appledore Island*

Adviser: James Coyer

Vanessa Russell

Biological Sciences

*Distribution of Peromyscus leucopus and**Peromyscus maniculatus in Northern and**Western New Hampshire*

Adviser: Stephen Pugh

Anesa Salkunic

Psychology

*How Does Childhood Obesity Lead to**Adult Obesity?*

Adviser: Stephen Pimpare

Nicholas Sammartino

History

The Assassination of JFK

Adviser: Robert Macieski

Samantha Sarofian

Biological Sciences

*Diagnosing Lymphoma: All Hands**On Deck*

Adviser: Patricia Halpin

Claudia Soltys

Biological Sciences

*The Differences and Similarities between**a Doctor and a Physician's Assistant in a**Family Practice*

Adviser: Kyle MacLea

Meagan St. Clair

Biological Sciences

*The Role of an Inventory Specialist at**CVS Pharmacy*

Adviser: Patricia Halpin

Cory Szaro

History

*Impact of the Korean War on the Racial**Integration of the U.S. Military*

Adviser: Robert Macieski

Ryan Tanner

Political Science

Public Policy Rollout

Adviser: Stephen Pimpare

Ariel Trachtenberg

Biological Sciences

Genome Sequence of the Salt Water

Bacterium Oceanospirillum linum ATCC 11336

Adviser: Kyle MacLea

Laura Tuttle

Psychology

Layperson Knowledge of Hospice/

Palliative Care Services and Enrollment Requirements

Adviser: Alison Paglia

Carolyn Walley

Business

U.S. Civil Rights Movement

Adviser: Robert Macieski

Kayla Wood

Politics and Society

Food Insecurity in New Hampshire and

Solutions through Mobile Food Pantries

Adviser: Stephen Pimpare

Peter T. Paul College of Business and Economics Undergraduate Research Conference

Oral Presentations

Thursday, April 20

9 a.m.–3:30 p.m.

Peter T. Paul College Building and Holloway Commons

Through original research and valuable guidance from mentors, this event helps Paul College students gain deeper academic knowledge as well as professional experience. This URC event includes poster presentations, oral presentations, and feedback from University and business leaders.

Holloway Commons

9 a.m.–12:30 p.m.

Marketing Workshop Presentations

Adviser and Moderator:

Peter Masucci

Kassandra Aguirre

Marketing and Theatre: Dance

Blake Cornellier

Marketing

Jessica Costello

Anthropology and Marketing

Michael Lucas

Entrepreneurial Studies and Marketing

Catherine Wolstromer

Finance and Marketing

Echo Thrift Shop: Design and Development of a Marketing Campaign to Raise Awareness of and Visits to this Durham, NH, Not-for-Profit Retail Store

Emily Amlaw

Alexis Bouchard

Zoe DeGeorge

Jake Laurent

Marketing

Rebecca Atkinson

Accounting and Marketing

Jordan Howard-Collins

Information Systems Management and Marketing

Nicholas Tempesta

Finance and Marketing

Nicholas White

Management and Marketing

L. L. Bean, Project #2 - Winter Adventures: Research and Design of a Marketing Campaign to Promote the Sale of Winter Apparel and Accessories

Johanna Arguin

Allison D'Amico

Daniel Dion

Andrea Levy

Christian Roberts

Marketing

Nicholas Coviello

International Business and

Economics and Marketing

Emily Fuller

Marissa McCoo

Management and Marketing

Adam Hale

Entrepreneurial Studies and Marketing

Paul College Career Services: Research

and Development of Marketing Programs

Aimed at Increasing Awareness of and

Use of the Services Provided by This Paul

College Department

Ashley Avery

Ellen Christiana

Brian Trefry

Marketing

Paige Gould

Business Administration, International

Business and Economics and Marketing

Rachel Lennon

Information Systems Management and

Marketing

Anthony Marino

Entrepreneurial Studies and Marketing

Marcus Ross

Management and Marketing

L. L. Bean, Project #3 - Boats and Totes:

Development of Marketing Programs to

Increase Interest in and Sales of These

Classic Bean Products

May Phyu Aye
Spencer Leman
 Entrepreneurial Studies and Marketing
Garrett Colantino
Alexa Joyal
Paul Panetta
Sydney Strout
 Marketing
Francesca Genello
 Environmental Conservation Studies and Marketing
Troy Gilfix
 Information Systems Management and Marketing
Austin Hicks
 Management and Marketing
Lisa Salley
 Hospitality Management and Marketing
Rokon International: Research and Development of a Marketing Campaign Targeting a Specific New Market Segment for This Rochester, NH, Manufacturer of Off-Road Motorcycles
Laura Barrett
 Finance and Marketing
Shannon Cleary
John LaFreniere
Rilei Tong
Adrian Wong
 Marketing
Caitlin Connare
 Marketing and Psychology
Maxwell DesMarais
 Finance and Marketing
Olivia Gonzales
 Hospitality Management and Marketing
Sarah Murphy
Sean Reinhard
Karina Smith
Rebecca Woodes
 Management and Marketing
Jonathan Nartiff
 International Business and Economics and Marketing
U.S. State Department: Research and Development of a Marketing Campaign Designed to Counter Violent Extremism

Alyson Beaulieu
Brendan O'Brien
Alexa Papadellis
 Marketing
Alexandra Brewer
Brett Labnon
 Management and Marketing
Margaret Doherty
Daniel McKenna
 Hospitality Management and Marketing
Susan Dudka
 Management, Marketing and Psychology
L. L. Bean, Project #1 - First of Fall: Research and Development of Marketing Programs to Increase Awareness of and Sales of Fall Apparel and Accessories

Meredith Beir
Jane Funk
Sebastian Lis
 Marketing
Michael DeMarco
Marissa Newlove
 International Business and Economics and Marketing
Gabrielle Lamontagne
 French and Marketing
Jordan Law
Matthew Vlahos
 Management and Marketing
Julia Pelosi
 Marketing and Russian
Revision Military, Project #2 - Social Media Marketing via Instagram: Research and Development of an Instagram Marketing Campaign to Raise Awareness of the Company and Its Product Lines

Paige Benik
 Economics and Marketing
Caroline Curtis
 Management and Marketing
Theodore Jerdee
Ian Kelley
Michelle Paulsen
Shane Perron
Taylor Rober
Aaron Wallack
 Marketing
Drew Sullivan
 Finance and Marketing
Woodman Museum: Research and Development of Marketing Programs Aimed at Increasing Awareness of and Visits to This Dover, NH, Museum of Natural History and Americana

Michael Breen
Kylee McLaughlin
 Finance and Marketing
Stephen Domenick
 Economics and Marketing
Lindsay Galvin
 Information Systems Management and Marketing
Alexandra Matusевич
Brittany McLaughlin
 Management and Marketing
Riley Pritchett
Jessica Swartz
 Marketing
Shane Whitehouse
 Accounting and Marketing
Revision Military, Project #3 - Innovation and Crowdsourcing: Research into New Markets and New Methods of Distribution for the Company's Product Lines

Marena Brock
 Entrepreneurial Studies and Marketing
William Clay
Owen Hilton
Jordan Lavallee
 Management and Marketing
Amanda Elmassih
Grant Flewelling
 Finance and Marketing
Summer Youth Programs at UNH: Research and Design of a Marketing Campaign to Promote This University Sponsored Set of Summer Camps and Programs Targeting Youths in Grades K-12

Jessica Brooks

Jack Wyman

Marketing

Meredith Faxon

International Business and
Economics and Marketing

Alexandra Flagler

Business Administration, Information
Systems Management and Marketing

Amanda Ghattas

Hospitality Management and Marketing

George Soderberg

Management and Marketing

Casey Studley

Finance and Marketing

Michael Thomson

Information Systems Management and
Marketing

*Revision Military, Project #1 - Innovation
and Crowdsourcing: Research and Design
of a "Hackathon" Event to Promote
Development of New Products and
Marketing Communication Methods for
This Manufacturing Company*

Lauren Bushey

Communication and Marketing

Amanda Daniels

Carson Fleno

Brendan Jaworski

Bradley Martinez

Marketing

Anthony Finocchiaro

Management and Marketing

Hanna Scholberg

Hospitality Management and Marketing

*L. L. Bean, Project #4 - Bean Boots:
Research and Design of a Marketing
Campaign to Promote and Expand the Sale
of the Iconic Bean Boot Product Line*

Zachary Canto

Austin Cote

Entrepreneurial Studies and Marketing

Cassidy Cefalo

Matthew Kelly

Ashley Kinsella

Scout Pierce

Marketing

Emma Kantola

Richard Ouch

English and Marketing

Erin Kelly

Management and Marketing

*Spruce Creek Provisions: Design and
Development of Marketing Programs to
Increase Awareness of and Visits to This
Kittery, Maine, Retailer of Craft Beers and
Specialty Wines*

Dalton Crossan

Jenna Davis

Marketing

James Ewing

Emma White

Entrepreneurial Studies and Marketing

Kendall Sebastian

Marketing and Spanish

Nathan Yanuszewski

Information Systems Management and
Marketing

*UNH Center for International Education
and Global Engagement (CIEGE):
Research and Development of Marketing
Programs to Increase Participation in
Study Abroad*

Sasha DeJong

Kyle Gauvin

Joseph Smith

Molly Smith

Nicole Stephen

Marketing

Katie Liston

Finance and Marketing

*Project Kuchengedza Zviwanikawa
(PKZ) in Zimbabwe: Development and
Implementation of a Series of Marketing
Programs to Raise Awareness of and
Support for This Non-Governmental
Organization Based in Zimbabwe, Africa*

Timothy Foley

Danielle Lewis

Management and Marketing

Ryan Holloran

Marketing

Annalise McCall

Information Systems Management and
Marketing

Jarrett Neckameyer

Entrepreneurial Studies and Marketing

Sydney Padgett

Hospitality Management and Marketing

*Three Chimneys Inn: Research and
Development of Marketing Programs
Aimed at Increasing Awareness of and
Bookings at This Historic Durham, NH,
Inn and Tavern*

Paul College, Room 125

9:40–11 a.m.

Mel Rines Angel Investment Fund

Advisers: Laura Hill, Jeffrey Sohl

Brendan Beale

Accounting and Finance

Julianne Calef

Ryan Casey

Sarah Keiran

Accounting

Samuel Collins

Economics BA

Tyler Cornellier

Finance and Information Systems
Management

Zachary Dresser

Sean Hickey

Jennifer Lueke

Michael McCarthy

Keelan McCoole

Devin McMahon

Brennan Ross

Ryan Williams

Business Administration

Harrington Duval

Political Science

Devereux Evans

Accounting and Finance

Tristan Evarts

Chemical Engineering and
Computer Science

Matthew Kiley
Economics BA and Finance
David Linton
Entrepreneurial Studies
Axel Ragnarsson
Nicholas Stuart
Entrepreneurial Studies and Finance
Andrew Ware
Economics BS and Philosophy
Peter White
Economics BS

Holloway Commons
2–3:30 p.m.

Atkins Investment Group

Advisers: Stephen Ciccone,
Ahmed Etebari

Charles Andes
Cameron Bean
Jose Bowen
Scott Brockelbank
Charles Cappetta
William Cavanaugh
Maxwell Craig
Robert Doretti
Jeremy Dorrell
Andre Filadelfo
Zachery Fitzgerald
Claire Hawkes
Christine Lee
Aaron LeLacheur
Cullen Moore
Michael O'Donnell
Luke Palmer
George Pantelis
Anthony Santosuosso
Nicholas Savoia
Jon Tamposi
Patrick Thompson
Kelsey Ulaskiewicz
Austin Wildes
Finance
Nicholas Bagley
Logan Hoffman
Finn Johnson
Bradford Kelley
Charles White
Peter White
Chandler Wishart
Economics BS
Nicholas Bouchard
Accounting

Tyler Cornellier
Finance and Information Systems
Management
Eliot Coulter
Applied Mathematics
John Evans
Business Administration
Matthew French
Nicholas Simo
International Business and Economics
Alexys Gilcreast
Accounting and Psychology
Nicholas Muldrow
David Veilleux
Information Systems Management
Paul Valhoul
Accounting and Finance

Peter T. Paul College of Business and Economics Undergraduate Research Conference

Poster Presentations

Thursday, April 20
11 a.m.–3:30 p.m.
Peter T. Paul College Building

Through original research and valuable guidance from mentors, this event helps Paul College students gain deeper academic knowledge as well as professional experience. This URC event includes poster presentations, oral presentations, and feedback from University and business leaders.

Paul College Courtyard
11 a.m.–1 p.m.

Bachelor of Arts in Economics **Poster Presentations**

Adviser: Robert Mohr

Kendall Barnett
Economics BA
The Cost Effects of the Affordable Care Act

Hunter Berke
Economics BA
An Analysis of Self-Checkout Technology and Productivity
Zachary Bosen
Economics and Mechanical Engineering
A Policy Analysis of International Trade

Emily Buchholz
Economics BA
The High Cost of Energy and the Northern Pass Project

Samuel Collins
Economics BA
Combating Pharmaceutical Drug Cost Increases

Garette Craig
Economics BA
Effect of Climate Change on the Ski Industry

Jerickson Fedrick
Economics BA
Couples' Choice: The LGBT Movement and the Workplace

John Giraldo
Economics BA
Economics of Gun Importation and Control Laws

Niccolo Hilgendorf
Economics BA
An Economic Analysis of Solar Energy in Durham, NH

Kristen Hillery
Economics BA
The Market Effect of Supply-Side Opioid Policy

Andrew Ibechem
Economics
The Economic and Medicinal Benefits of Marijuana

James Kennedy
Economics BA
Has Medicaid Expansion Worked?

Matthew Kiley
Economics BA and Finance
The Economics of Bitcoin

Julie LeBlanc

Economics BA

Electricity Trade between Canada and New England States

Mackenzie Maher

Economics BA

Does Raising the Minimum Wage Help the Poor? An Economic Analysis of Minimum Wage Policy

Tara Martel

The Minimum Wage and Its Impact on Teens and Young Adults in NH

Eva Normandin

Economics BA

Income Segregation in Greater Boston

Travis Noton

Economics BA and Psychology

Bank Capital Requirements

William Reckmeyer

Economics and Business Administration

Innovation, Employment, and Advanced Education through Changes in the Defense Budgets

Michael Shanahan

Economics BA and Information

Systems Management Off-Campus Housing and Its Impact on Student Performance and Local Communities

Samantha Sirmaian

Economics BA

Financial Crisis and the Mortgage Market

Shawn Stephens

Economics BA

Marijuana Prohibition vs. Legalization: A Cost-Benefit Analysis

Emily Weidman

Economics BA

How a Minimum Wage Increase Affects Low-Wage Workers in New Hampshire and Maine

Thomas Young

Economics BA

A Deeper Look into the Benefits of the Northern Pass

Yiting Zhang

Economics BA and Finance

Waiting Time in the Emergency Room

Paul College Great Hall

11 a.m.–1 p.m.

**Bachelor of Science in Economics
Poster Presentations**

Adviser: Aziz Saglam

Marta Avots

Business Administration, Finance and International Business and Economics

Understanding Income Inequality:

Antitrust Laws and Industry

Concentration in the U.S.

Nicholas Bagley

Economics BS

Pay and Performance in Major League Baseball

Matthew Bracci

Economics BS

Why States Adopt Renewable Portfolio Standards

Jonathan Brice

Economics BS

Reliability of Gemstone Ratings

Travis Broadhurst

Economics BS

Halting Immigration and Mass Deportations: Economic Implications

Joseph Brown

Economics BS

Military Expenditures and Economic Growth

Ian Carpenter

Economics BS

Economic Impact of the Music Industry

Jonathan Dean

Economics BS

Financial Incentives and Student Achievements

Charles Dwyer

Economics BS

College Loans and the Returns to Schooling

Finn Johnson

Economics BS

The Impact of Foreign Exchange Volatility on the Macroeconomy

Michael Karpel

Economics BS

Economic Impact of a Professional Sports Franchise on the Local Economy

Bradford Kelley

Economics BS

Low Interest Rate Environment and the U.S. Economy

Ian Kulac

Applied Mathematics and Economics BS

Stock Price Prediction Using Artificial Neural Networks

Elyse Law

Economics

Fracking: Benefits and Costs

Lauren Mattucci

Economics BS

Catastrophe Insurance and Economic Mobility Post-Natural Disaster

Conor McFarland

Economics BS

The Scarcity of Affordable Housing in New England

William McNerny

Economics BS

College GPA and Post-Graduation Success

Jacob McLinden

Economics BS

Public Social Expenditure and Income Inequality

Zachary O'Neil

Economics BS

The Effect of IMF Programs on Economic Growth

Evan O'Reilly

Economics BS

Economic Effects of Casino Gaming in New Hampshire

Nicholas Pascucci

Economics BS

Are Low Oil Prices Good for the Economy?

Aaron Scheinman

Economics BS

U.S. Tax Enforcement Regime: Socially Efficient?

Kyle Wiley

Economics BS

Is Universal Basic Income (UBI) Economically Feasible?

Harrison Voloshin

Economics BS

How Important Are All-Stars to Win a Championship?

**Paul College Great Hall
1:30–3 p.m.**

**Ecogastronomy Poster
Presentations**

Evan Barreto

Sustainable Agriculture and Food Systems
The Food We Want at the Places We Love: Local Sourcing Methods for NH Seacoast Restaurants
Adviser: Daniel Winans

Brianna Bowlan

Ecogastronomy and Nutrition
Wine Corks: A Sustainable Energy Source for the Future
Advisers: Nelson Barber, Daniel Winans

Caroline Connors

Ecogastronomy and Nutrition
Farm to Picnic Table Catering: A Business Proposal
Advisers: Joanne Curran-Celentano, Daniel Winans

Vanessa Croteau

Akaylah Glidden

Megan Phelan

Ecogastronomy and Nutrition
A Systems Approach to Curbing Food Waste at the Waysmeet Cornucopia Food Pantry
Advisers: Larry Brickner-Wood, Kevin Pietro, Daniel Winans

Martha Dalrymple

Ecogastronomy and Family Studies
Growing up with Your Food: How a Hands-On Relationship with Food Fosters a Healthy Lifestyle
Advisers: Erin Sharp, Daniel Winans

Anna Devitto

Ecogastronomy and Sustainable Agriculture and Food Systems

Amelia Kief

Communication and Ecogastronomy
Recipes for the Local Eater, Inspired by the New England Food Vision
Adviser: Daniel Winans

Anna Devitto

Ecogastronomy and Sustainable Agriculture and Food Systems
Amelia Kief
Communication and Ecogastronomy
Developing and Costing Recipes for the New England Food Vision
Adviser: Daniel Winans

Katarina Gallogly

Ecogastronomy and Entrepreneurial Studies

Amina Hughes

Ecogastronomy, International Affairs and Kinesiology
The MUB Market: Establishing a Farmer's Market for the UNH Community
Adviser: Daniel Winans

Katherine Guaragno

Ecogastronomy and Nutrition
Katie's Cooking for College Students
Advisers: Ronald Boucher, Daniel Winans

Mackenzie Gunn

Ecogastronomy and Marine, Estuarine and Freshwater Biology
Stress Mitigation of Striped Bass during Transportation
Advisers: David Berlinsky, Daniel Winans

Ashley Hardy

Ecogastronomy and Nutrition
Assessing Diabetes Self-Management Education Outreach Strategies in New Hampshire
Advisers: Joanne Burke, Daniel Winans

Anastasia Kouros

Biology and Ecogastronomy
Giagia's Recipes: A Taste of Greek Culture and History
Adviser: Daniel Winans

Paula Krenicki

Ecogastronomy and Tourism Planning and Development
Sweet and Simple Vegan Recipes and Practices
Adviser: Daniel Winans

Karyn Lomeli

Ecogastronomy and Nutrition
Ferment for Fun: The Methods and Motives of Fermenting Food
Adviser: Daniel Winans

Valerie Nesom

Ecogastronomy and Plant Biology
A Step Further in Recipes for a New England Food Vision
Advisers: Joanne Burke, Daniel Winans

Jessica Newnan

Ecogastronomy and Sustainable Agriculture and Food Systems
More Than Food: An Analysis of Multidimensional Relationships in Our Food System
Advisers: Alberto Manalo, Daniel Winans

Kevie Rodrigue

Ecogastronomy and Nutrition
Bringing Fresh Food Back to the Cony High School Community
Advisers: Maggie Begis, Brenda Weis, Daniel Winans

Molly Schneider-Ferrari

Ecogastronomy and Nutrition
Farm to Hospital: Bringing Local Food into Wentworth Douglass Hospital
Adviser: Daniel Winans

**Paul College Great Hall
1:30–3:30 p.m.**

**Multidisciplinary Poster
Presentations**

Rebecca Atkinson

Accounting Marketing

Kelsey Ulaskiewicz

Finance

Sustainability and Corporate Social Responsibility: Their Ever Changing Roles with Respect to Society, Business, and Performance

Adviser: David Hasseldine

Andrew Doppstadt

Finance

State Budgets and Their Impact on University Funding

Adviser: David Hasseldine

Devereux Evans

Accounting and Finance

Financial Reporting Quality and Valuation Methods for Private Companies

Advisers: Jeffrey Sohl, Le Xu

Paige Gould

Business Administration, International Business and Economics and Marketing
Let's Get Ethical: The Influence of Corporate Responsibility on Consumers
Adviser: Bruce Pfeiffer

Jordan Howard-Collins

Information Systems Management and Marketing

Nicole Meyers

Finance and Management
freeUP: Productivity Made Possible
Advisers: Vanessa Druskat, Kholekile Gwebu

Sarah Keiran

Accounting
Gender Roles in Public Accounting and the Absence of Women in a Male Dominated Profession
Adviser: Linda Ragland

Kayla Kennedy

Business Administration

Margaret McVeigh

Elizabeth Ng

Timothy Prior

Information Systems Management
Global Aquaculture Alliance
Adviser: Russell Miles

Gregory Marinaccio

Accounting
The Effect of Taking Accounting Courses in High School to Choosing Accounting as a Major
Adviser: John Nash

Cassidy Morgan

Hospitality Management
Franchising as It Relates to the Hospitality Industry
Adviser: El-Hachemi Aliouche

Phuoc Thien Anh Nguyen

Economics
Assessing an Impact of Microfinance on Women's Empowerment in Vietnam: How to Build an Indicator
Adviser: Michael Swack

Karina Popkova

Finance and Information Systems Management
Artificial Intelligence and Machine Learning
Adviser: Kholekile Gwebu

Daniel Rivet

Finance and Management
The Study of Leadership and Innovation within Organizations
Adviser: Andrew Earle

Qianwen Rong

Accounting
Ethics in Accounting
Adviser: David Hasseldine

Aaron Scheinman

Economics BS
An Exploration of the Efficiency of the Marketplace for Parking at the University of New Hampshire
Adviser: Ju-Chin Huang

Benjamin Sumner

Economics BA
How Do Risk Attitudes Differ between Illegal Alcohol and Marijuana Users?
Adviser: Robert Tischer

Sarah Tobias

Hospitality Management
Wine Selection Behavior for Various Target Markets
Adviser: Nelson Barber

Yanwen Wang

Accounting
Internal Control and Non-Accelerated Fillers
Adviser: Le Xu

Taylor Witkiewicz

Accounting and Finance
The Study of Corporate Tax Transparency
Adviser: David Hasseldine

Kaleigh Zukowski

Accounting, Business Administration and Information Systems Management
Behavioral Aspects of Wearable Technology
Adviser: Inchan Kim

UNH Manchester URC Cinema Arts Day

Thursday, April 20

11 a.m.–1 p.m.

Pandora Mill, Room 456

88 Commercial St., Manchester

The UNHM Communication Arts program has a production track in which students complete introductory and advanced course work in video production, scriptwriting, audio production, film aesthetics, and documentary production. The student films and scripts illustrate student work at different stages in the curriculum.

Katelynn Brooks

Vanessa Russell

Biological Sciences
The Mangroves of Belize
Adviser: Patricia Halpin

Kerri Cobb

Biology

Lauren Iannazzi

Biological Sciences
Coral Reef Ecosystem of Placencia, Belize
Adviser: Patricia Halpin

Nicole Collette

Jasmine Lee

Biotechnology

Emily Rezzarday

Biological Sciences
The Broad-Leafed Forest of Belmopan, Belize
Adviser: Patricia Halpin

Trenton Gobel

Undeclared

Pretty Good: A Short Film about Females in Skateboarding, as Presented by Micaela Wilson, a Former Semi-Professional Skateboarder

Adviser: Anthony Tenczar

Christopher Hale**Hunter MacDowell**

Communication Arts

Scrambled Eggs

Adviser: Anthony Tenczar

Samantha Mackenzie**Kallie Tabor**

Communication Arts

Yes, Another Food Documentary

Adviser: Stephen Pimpare

Elizabeth Pellerin**Juan Posada****Anthony Santiesteban**

Biological Sciences

*The Biodiversity of Birds in**Punta Gorda, Belize*

Adviser: Stephen Pugh

Christopher Perez

Communication Arts

Nicholas Lavallee: Comedian

Adviser: Anthony Tenczar

Cole Riel**Kyle Sanborn**

Communication Arts

Scout Lewis

Adviser: Anthony Tenczar

Cole Riel

Communication Arts

Scout Lewis/Violet Crux

Adviser: Anthony Tenczar

Kyle Sanborn

Communication Arts

iPod Retro

Adviser: Anthony Tenczar

Cameron Wright

Communication Arts

Mindfulness

Adviser: Anthony Tenczar

Peter T. Paul College of Business and Economics

Paul J. Holloway Innovation-to-Market Prize Competition

Charles & Miriam Nelson Poster Competition

Thursday, April 20**12–2:00 p.m.****Peter T. Paul College Building**

This poster competition gives all teams entered in the Holloway Prize Innovation-to-Market Competition an opportunity to showcase their research into entrepreneurship. Teams have three minutes to present their business idea, followed by three minutes of Q&A with the judges.

History Department Undergraduate Research Conference

Thursday, April 20**12:15–2 p.m.****Memorial Union Building****Rooms 334, 336, 338**

The History Department hosts several panels of undergraduate history majors who present research projects from their academic classes, research seminars, independent research projects, and Honors theses. The History Undergraduate Research Conference provides History students with the opportunity to share their work with fellow students, professors, and families.

MUB, Room 336

New Histories of American Capitalism and Civil Rights

Moderator: Kathleen McGuire

Andrew Abrams

History

*Scots, Trots, and Big Money: The**Professionalization of Soccer in**Shawsheen Village*

Adviser: Jessica Lepler

Gabrielle MacIver

History

*Using Agricultural Schools to Promote a**Changing Economy: The New Hampshire College**of Agriculture and the Mechanical Arts*

Adviser: Jessica Lepler

Crystal Napoli

History and Justice Studies

Apologizing to Jim Crow

Adviser: Jeffrey Bolster

Graham Peterson

History

Afrofuturism in the Post-Civil Rights Era

Adviser: Jeffrey Bolster

MUB, Room 334

The American Presidency in Historical Perspective:

John F. Kennedy

Adviser: Ellen Fitzpatrick

Moderator: David Steelman

Michael Caldwell

History

*"The Boy in Short Pants": Presidential**Education and the Vienna Summit of 1961***Scott Myers**

History

*Kennedy's Television Romance and the 1960**Presidential Election***Courtney O'Brien**

History

*Red Marks: JFK and Education Reform in a**Cold War Context***Kaitlyn O'Brien**

History

JFK's Limited Test Ban Treaty

MUB, Room 338

Vitriol, Violence, and Diplomacy: From the Roman Republic to the Islamic State

Moderator: Gerard Morin

Charles-Nicholas Beard

German and History
King Richard II of England and the German Hansa
Adviser: David Bachrach

Bethany Fraser

History
Tactical and Strategic Military Intelligence in the Late Roman Republic and Early Empire
Adviser: Michael Leese

Mia Sacks

Art History and History
Green Vitriol (FeSO₄·7H₂O) in Elizabethan and Stuart England: Chemistry and Politics
Adviser: Jan Golinski

Michaela Todd

History and International Affairs
The Islamic State's Media War on the West
Adviser: Ethel Wolper

The Naked Arts—Creativity Exposed

Act II

Thursday, April 20

12:40–2 p.m.

Paul Creative Arts Center, A218

This event exposes the inner creative process of artists working in various disciplines. Presenters will describe the process, research, and other creative aspects undertaken to bring an artistic creation from initial inspiration to the stage or gallery. This may include a performance or excerpts from their work to illustrate their creative scholarship.

Marjorie Boyer

Theatre: Dance
Witchcraft
Adviser: Mekeel McBride

Marjorie Boyer

Theatre: Dance
Wounded Turned into Light: Theatre as an Allegory for the Self
Adviser: David Richman

Sarahanne Kent

Psychology
When Irish Eyes Are Smiling
Adviser: Thomas Payne

Stephanie Khairallah

English/Journalism
Generosity
Adviser: Mekeel McBride

Adam Nastasia

Computer Science
Explorations with a Custom RGBD Camera System
Advisers: Julee Holcombe, Wheeler Ruml

Languages, Literatures, & Cultures (LLC) Department Undergraduate Research Conference

Friday, April 21

8:45 a.m.–4 p.m.

Murkland Hall, Rooms 115 and 202

The Department of Languages, Literatures, and Cultures (LLC) hosts an undergraduate research conference comprised of oral presentations, poster presentations, a foreign language award ceremony, and a reception.

Marina Avery

Spanish and Zoology
Post-Dictatorship and Trauma in Chilean Theater and Artisanal Work
Adviser: Scott Weintraub

Gloria Bibbo

Communication and Spanish
Cultural Competence in Context and in the Classroom
Adviser: Holly Cashman

Margaret Brush

Linguistics and Spanish
Tactics of Political Mobilization in Las Madres de la Plaza de Mayo and the Women's March on Washington: Feminism on the Move
Adviser: Scott Weintraub

Lorena Cruz

International Affairs and Spanish
Spanish ≠ Arabic
Adviser: John Chaston

Kevin Marc Dioneda

Biochemistry, Molecular and Cellular Biology
Miguel de Lurca and the Exploration of the Spanish Philippines: An Untold Story
Adviser: Jorge Abril Sanchez

Morgan Erickson

Spanish
Code-Switching in the Classroom Setting: Skills and Strategies
Adviser: Holly Cashman

Taryn Johnson

Communication and Spanish
The Value of Study Abroad for Language Proficiency and Intercultural Competence
Adviser: Holly Cashman

Katherine Vaughn

Spanish
A Qualitative Exploration of French Language Instruction in the Elementary School Setting
Adviser: Holly Cashman

All Colleges Undergraduate Research Symposium

Welcome Breakfast

Friday, April 21
9–9:30 a.m.

Memorial Union Building
Granite State Room

This informal gathering gives students, faculty and attendees an opportunity to visit with the UNH Provost and each other, before experiencing the large university-wide event that follows—the All Colleges Undergraduate Research Symposium.

All Colleges Undergraduate Research Symposium

Poster Presentations, Session A

Friday, April 21
9:30–10:40 a.m.

Memorial Union Building
Granite State Room

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

Sarah Balmilero

Psychology

The Relationship between Demographic Factors and Teacher's Intentions and Efficacy to Intervene in Student Relationship Abuse and Sexual Assault
Adviser: Katie Edwards

Julia Boisselle

Mary Hammar

Courtney Pusz

Nutrition

Genevieve Gray

Biology

Beyond Dining and Recreation Services:

How Does the Greater UNH Campus

Support a Healthy Lifestyle?

Advisers: Laura Brown, Tanya Horacek,

Jesse Morrell

Julia Boisselle

Mary Hammar

Courtney Pusz

Nutrition

Evaluation of UNH's Dining Facilities

and Campus Eateries: Does the Food

Environment Contribute to Healthy Eating?

Advisers: Laura Brown, Tonya Horacek,

Jesse Morrell

Colleen Brothers

Environmental Sciences

The Importance of Environmental

Regulations: The Experience of an

Environmental Consulting Intern

Adviser: Thomas Lippmann

Christine Bunyon

Gavin Cook

Jonathon Gaare

Environmental Conservation Studies

Amanda Cugno

Wildlife and Conservation Biology

A Study on Hochstetter's Frog (Leiopelma

hochstetteri) Populations in Predator

Controlled and Uncontrolled Catchments

in the Waitakere Ranges, New Zealand

Adviser: Chris Longson

Marisa Butler

Nutrition

Profiling the Health, Wellness, and

Nutrition of Collegiate Dancers

Adviser: Jesse Morrell

Emily Carbonara

Health Management and Policy

Youth Suicide Prevention in New

Hampshire

Adviser: Semra Aytur

Sau Leung Cheung

Occupational Therapy

Knowledge and Perception of Flight

Attendants on In-Flight Needs of Air

Travelers with Physical Disabilities

Adviser: Sajay Arthanat

Christopher Cleary

Kinesiology

The Effects of the Knee Flexor Muscles'

Size and Strength on Physical Function in

Older Adults

Adviser: Summer Cook

Haylee Colannino

Carly Orlacchio

Elizabeth Suschana

Nutrition

Let the BOD POD Be the Teacher:

An Advanced Understanding of Body

Composition Testing

Adviser: Kevin Pietro

Shannon Coughlin

Communication Sciences and Disorders

Collaborative Practices among

Professionals in Special Education

Workplaces

Adviser: Allan Smith

John Cox

Earth Sciences

Cell Counts of the Research Cruise EN584

aboard the R/V Endeavor

Adviser: Kai Ziervogel

Yvonne Cristy

Psychology

High School Dating and Sexual Violence

Prevention Program Feasibility and

Fidelity: A Qualitative Approach

Advisers: Katie Edwards,

Stephanie Sessarego

Casey Dwyer

Jessica Peterson

Justice Studies and Psychology

Popularity as a Mediator between

Empathy, Selfishness and Bullying

Adviser: Ellen Cohn

Mikaela Frechette

Kinesiology

Physical Function, Health, and Wellbeing

in Older Adults

Adviser: Summer Cook

Livia Gosselin

Occupational Therapy

Developing an Evaluation to Measure

Usability of Computer Access Devices for

Individuals with Disabilities

Adviser: Sajay Arthanat

Anna Haber

Genetics

Profiling the Effect of Drought and Salt Tolerance on Polyamine Biosynthesis in Rice

Adviser: Subhash Minocha

Morgan James

Communication Sciences and Disorders

Principles of Neural Plasticity and Motor Programming in Apraxia of Speech

Adviser: Donald Robin

Abigail Karparis

Environmental Conservation Studies

Kimberly Lavoie

Wildlife and Conservation Biology

A New Zealand Case Study: The Effects of Mammalian Pest Eradication on Endemic Weta Diversity and Abundance

Adviser: Ria Brejaart

Alyssa Kolbert

Psychology

Parental Monitoring and the Effects of the Prevalence of Bullying

Adviser: Ellen Cohn

Sean Kramer

Electrical Engineering

Preventing Control-Flow Attacks to an Engine Control Unit

Adviser: Qiaoyan Yu

Michelle Lacroix

Communication Sciences and Disorders

Gender Differences in Parents' Assessment of Language Development

Adviser: Allan Smith

Samuel Lewis

Occupational Therapy

Social Participation and Academic Engagement of an Elementary School Student Using an Augmentative Alternative Communication Device

Adviser: Lou Ann Griswold

Andrew McElroy

History

Berlin 1961

Adviser: Robert Macieski

Alyson Messina

Occupational Therapy

A Survey to Explore Usability and Cost Benefits of Assistive Technology in the Workplace

Adviser: Sajay Arthanat

Emily Mierswa

Anthropology

Longevity of Salt: Archaeological Past and Contemporary Trends of the World's Fifth Element

Adviser: Marieka Brouwer Burg

Shannon Nadeau

Occupational Therapy

The Impact of Patient Coping during Inpatient Rehabilitation on the Long Term Recovery of Patients with Cardiac-Related Illnesses

Adviser: Vidyalakshmi Sundar

Rachel Platt

Communication Sciences and Disorders

Formant Transitions in Young Adults with a History of Childhood Apraxia of Speech

Adviser: Allan Smith

Tasya Rakasiwi

Biomedical Science

TB and Its Slow but Growing Awareness

Advisers: Christopher Benton,

Judy Stevens

Amy Rixon

Occupational Therapy

Developmental Trends and Item Analysis of the Sensory Processing 3-Dimensions Scale

Adviser: Shelley Mulligan

Lacey Ryder

Communication Sciences and Disorders and Women's Studies

Social-Pragmatic Communication in Women with Autism Spectrum Disorder

Adviser: Allan Smith

Kitty Savage

Biomedical Science

The Effect of Neurogranin Manipulation on Immediate Early Gene Expression

Adviser: Arturo Andrade

Katherine Shelhamer

Anthropology

Cultural and Environmental Dynamics of the Maya: Investigating Settlements and Wetland Resource Use

Adviser: Eleanor Harrison-Buck

Josephine Tarbell

Anthropology and Classics

Ethno-Medical Illustration: 'Wind' in U.S. Yoga and Ancient Indian Medicine

Adviser: Casey Golomski

Angela Tirabassi

Occupational Therapy

The Influence of the Environment on the Quality of Social Interaction among Children during Play

Adviser: Lou Ann Griswold

Peyton Waddicor

Biomedical Science

Role of Cav2.2 Splice Isoforms in Norepinephrine Release

Adviser: Arturo Andrade

Nicholas Wakeman

Biochemistry, Molecular and Cellular Biology

Linking Students' Math Self-Efficacy in Biology to Sources of Mean Self-Efficacy

Advisers: Melissa Aikens, Sarah Andrews

Kristen White

Communication Sciences and Disorders and Psychology

An Independent Examination of a New Language Sampling Technique

Adviser: Allan Smith

Samantha Wohlmacher

Communication Sciences and Disorders

Characterizing Food Selectivity in Children on the Autism Spectrum

Adviser: Rae Sonnenmeier

Kassie Zukowski

Communication Sciences and Disorders

An Analysis of the Northwestern University-Children's Perception of Speech (NU-CHIPS) Assessment Tool

Adviser: Allan Smith

MUB, Granite State Room**Advanced Technical Writing****Adviser:** Molly Campbell**Liam Bird**Business Administration
*Low Income Investing***Ashley Clary**Business Administration and Information
Systems Management
*Business Ethics***Nicola Elardo**Environmental Engineering
*Juggling for Kids: Website***Rachel Hayward**International Business and Economics
*The Positive Impacts of Social Media in the
College Classroom***Emma Kantola**English and Marketing
*Teaching Students How to Reduce Their
Environmental Impact via Food Choices***Olivia LePage**English
*Advantages and Disadvantages of
Social Media***Jordan Miller**Information Systems Management
*Cyber Security vs. Personal Privacy: A
Website***Miranda Miller**Information Systems Management
*Teaching Students College Life Balance: A
Website***Francis Mullin**English/Journalism
*Effective Use of Social Media as a News
Platform***Marissa Olivotti**Neuroscience and Behavior
*Teaching Students Technical Writing and
Design Website***Michael Perkins**Civil Engineering
*The Effects of Skydiver Training and Fun
Jumping on Everyday Life***Adam Riker**Kinesiology
*Space***Hannah Rogers**English
*Expanding Research and Knowledge for
Endometriosis***Megan Verfaillie**Environmental Engineering
*Labor Trafficking in the Jewelry
Supply Chain*

**All Colleges
Undergraduate Research
Symposium**

Oral Presentations, Session A**Friday, April 21****9:30–10:40 a.m.****Memorial Union Building**

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

MUB, Room 332**Cities, Markets, and
Development: China, Latin
America, and Europe****Moderator:** Jennifer Purrenhage**Maren Crabill**Environmental Conservation Studies and
International Affairs
*Is There a Relationship between Water
Scarcity in Daily Life and Environmental
Concern in Madrid, Spain?*
Adviser: Molly Wallace**Katherine Dalrymple**Business Administration and
International Affairs
*Cerda's Past, Present, and Future
for Barcelona*
Adviser: Thomas Safford**Elizabeth Gill**International Affairs and Sustainable
Agriculture and Food Systems
*Seed Transitions: A Case Study in
Costa Rica*
Adviser: Thomas Safford**John Hutton**International Affairs and Linguistics
*Ethnic Groups, Education, and State Power
in the PRC*
Adviser: Thomas Safford**Samantha Powers**International Affairs and Recreation
Management and Policy
*Is Tourism a Driver of Development?:
A Case Study of Catalonia, Spain*
Adviser: Thomas Safford**Samuel Warach**Business Administration and
International Affairs
*To What Extent Do NGOs and
International Universities Contribute to
Society via Social Entrepreneurship?*
Adviser: Thomas Safford

MUB, Room 321**Communication Honors and
Comm-entary****Moderator:** Kevin Healey**Nicole Downing**Communication
*Corporate Ethics and Authenticity:
Gaining Consumer Buying One Virtue
at a Time*
Adviser: Kevin Healey**Natalie Gaynor**Communication
*The Internet and Social Media: A New
Space for Activism and Social Movements*
Adviser: Nora Draper

Ellen Gibbs

Communication

Rushing towards a Religion

Adviser: Kevin Healey

Katherine Sutherby

Communication

Hillary Clinton's Identity Politics for the Masses: The Appropriation of Branded Femvertising Strategies in a Political Campaign

Adviser: Jennifer Borda

MUB, Room 302**Confronting Fear and Exploitation around the World**

Moderator: Lionel Ingram

Patrick Baga

Political Science

Political Developments and Historical Memory in Latin America

Adviser: Mary Malone

Michael DiGiammarino

Political Science

The Failure of the Chinese Universal Health Care System

Adviser: Lawrence Reardon

Virginia Harmon

International Affairs, Political Science and Spanish

Trickle-Down Xenophobia: Historic Fears Pervade in Contemporary Spain

Adviser: Elizabeth Carter

Trevor Herrick

Political Science

Fighting for Income Equality

Adviser: Lawrence Reardon

Kim Ip

History and Political Science

An Examination of Child Labor Practices in China: Trade Schools or Slave Schools

Adviser: Lawrence Reardon

Abbygale Martinen

Kinesiology and Political Science

Cuba, the United States, and Baseball: Why Baseball Diplomacy Failed to Bring the Two States Together

Adviser: Lionel Ingram

MUB, Room 233**Dating and Sexual Violence Prevention from Adolescence to Young Adulthood**Advisers: Katie Edwards,
Katherine Lee
Moderator: Katherine Lee**Bridget Furlong**Recreation Management and
Policy and Women's Studies*Adolescents' Action Plans in Anticipated Situations of Dating and Sexual Violence: A Qualitative Analysis***Kaleigh Santos**

Psychology

*Situational Factors Surrounding Incidents of Intimate Partner Aggression***Erinn Vittum**

Philosophy and Psychology

*Helping Behavior in Middle School Youth: A Descriptive Study***Jeffrey Wilson**

Psychology

*Understanding Perceptions of Social Media Networks: Implications for Prevention***MUB, Room 330****External Interventions and Contested States in the Middle East, China, and Europe**

Moderator: Jeannie Sowers

Milto AndonellisInternational Affairs and Political Science
External Countries' Meddling in the Arab Spring

Adviser: Thomas Safford

Matthew GodutoInternational Affairs and Political Science
Analyzing the Causes and Consequences of Germany's Intervention in Afghanistan

Adviser: Jeannie Sowers

Michael RayHistory and International Affairs
Jordan: Maintaining Stability in an Unstable World

Adviser: Thomas Safford

Alexander SullivanInternational Affairs and Political Science
Media Censorship in China: An In-Depth Look at What the Chinese Can and Cannot Say, and Why That Is

Adviser: Thomas Safford

MUB, Room 203**Feminism in Action: Women's Studies Internship Program**Adviser and Moderator:
Faina Bukher**Emma Chinman**Social Work and Women's Studies
*Community Service and Learning***Kacey Dutton**

Occupational Therapy

*Women's Studies Program Social Media and Promotion***Chelsea Evankow**Biology and Women's Studies
*Lymes Youth Service Bureau***Gabrielle Greaves**English and Women's Studies
*Post-Landfill Action Network***Hannah Mathieu**Computer Science and Women's Studies
*Women's Studies Program Office***Kelsey Nicholson**History and Women's Studies
*The Freedom Cafe***MUB, Room 336****From Misogyny to Philogyny: Women's Lives Investigated**

Adviser and Moderator: Peter Welch

Nicole Benjamin

Neuroscience and Behavior

*The Effect of Ageism on Women's Lives***Katherine Gleason**

Social Work

*The Size of a Women's Worth***Hamida Hassan**Social Work and Women's Studies
Hitched

Britta McCarthy

Political Science
Women in the Kitchen

Zoe Parsons

Communication
Ecofeminism: Women, Feminism, and Ecology

Hayley Poff

Psychology
Media and Consumer Culture: Their Effects on Women's Body Image

MUB, Room 334

Gender, Discrimination, and Violence in Comparative Perspective

Moderator: Dilsa Deniz

Grace Dietz

Anthropology and International Affairs
Islamophobia in the American Media
Adviser: Dilsa Deniz

Ashley Gonzalez

International Affairs and Sociology
Feminist Organizations in France and Their Perception of the Headscarf Debate
Adviser: Jeannie Sowers

Christopher Grinley

German, International Affairs and Political Science
Gender in Syria: Comparing Gender Roles and the Treatment of Women across ISIS, Rojava, the Assad Regime, and the Opposition
Adviser: Dilsa Deniz

Stephanie Morales

English/Journalism and International Affairs
The Impact of the Berlusconi Administration on Gender Equity in Italy
Adviser: Dilsa Deniz

Catherine Svendsen

History and International Affairs
A Country Torn Apart: France's Factors of Discrimination against Muslim Women in France
Adviser: Thomas Safford

Sarah Unruh

International Affairs and Sociology
Politically-Motivated Sexual Violence Wielded in the Egyptian Revolution: Outcomes and Advances
Adviser: Jeannie Sowers

MUB, Room 207**Local Culture I**

Adviser and Moderator: Sara Withers

Christopher Capozzo

Anthropology
Following the Storm: The Aftercare of Sexual Assault Survivors on College Campuses

Nicholas Davini

Anthropology
Opportunity vs. Reality: Navitas and the Successful American College Experience

Taylor Gallagher

Anthropology
The University of New Hampshire's Water Usage Protocol in Times of Drought and Its Impact on the Surrounding Communities

Kayla Krueger

Anthropology
The Impact of Heroin Addiction on the Community in New Hampshire

MUB, Room 338

Multidisciplinary Session I: Studies in Environmental, Exercise, and Social Sciences

Moderator: Sajay Arthanat

Alexander Chase

Sociology
Unpacking the Factors That Influence How High School Students Commute to School
Adviser: Cliff Brown

Megan English

Environmental Conservation Studies
Collaborating for Climate Adaptation Planning: A Case Study of the New Hampshire Coastal Adaptation Workgroup (NHCAW)
Adviser: Catherine Ashcraft

Lily Harris

Environmental and Resource Economics
Perception and Purchasing of Local Agricultural Products by Restaurants in the Seacoast Area
Adviser: John Halstead

Margarethe Hauschildt

Kinesiology
The Effect of Foam Rolling on Delayed Onset Muscle Soreness and Muscular Performance Decrements
Adviser: Summer Cook

Katherine Rocci

Earth Sciences
Seasonal Changes in Isotopic Composition and Concentration of CH₄ at Sub-Arctic Mire in Abisko, Sweden
Adviser: Ruth Varner

MUB, Room 237**The Conundrum of Global Trade**

Adviser: Lawrence Reardon

Moderator: Eric White

Andrew Abrams

History
New Right Same as the Old: The Development of Protectionism in the Front National

Dominick Gianduso

Political Science and Sociology
WTO Non-Compliance: Shortcomings of the Dispute Settlement Process

Morgan Hebert

Political Science
The Illicit Economy: Understanding the Economic Origins of Drug Cartel Activity

Melissa Norton

Justice Studies and Political Science
Blood Diamonds: A War's Best Friend

Jesse Vaughan

Environmental Conservation Studies
Why Isn't the World Bank Financing Renewable Energy in the Developing World?

Tianjia Yan

International Affairs and Political Science
The Growing Phenomenon of Chinese Traveling Abroad

All Colleges Undergraduate Research Symposium

Poster Presentations, Session B

Friday, April 21
10:50 a.m.–Noon
Memorial Union Building
Granite State Room

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

Sherlee Alvarez

Biochemistry, Molecular and Cellular Biology

Understanding the Role of Replication Protein A 1E in the Immune Response of Arabidopsis thaliana against a Microbial Pathogen

Adviser: Kevin Culligan

Jennifer Annand

Health Management and Policy

A Qualitative Analysis of Barriers and Enablers to Sports Participation among Youth with Disabilities

Adviser: Semra Aytur

Lauren Barker

Nursing

Self Care of T2DM Patients with Chronic Wounds in Ghana

Adviser: Gene Harkless

Jamie Barton

Hannah Root

Biology

Angela Sarni

Mechanical Engineering

Megan Savoie

Marine, Estuarine and Freshwater Biology Submersible Oceanic Aquaculture of Kelp (SOAK)

Advisers: Michael Chambers, M. Robinson Swift

Yamilex Bencosme

Sociology and Women's Studies

On Our Way to Ending Sexualized Violence: Engaging Bystanders and Building Awareness

Adviser: Victoria Banyard

Julia Boisselle

Mary Hammar

Courtney Pusz

Nutrition

Evaluation of UNH's Recreation Services: A Key Component of a Healthy Campus Environment

Advisers: Laura Brown, Tanya Horacek, Jesse Morrell

Celine Boutin

Nursing

Stress Levels and Their Relationship to Coping Mechanisms and Personality Traits in Nursing Students

Adviser: Rosemary Taylor

Haylee Colannino

Carly Orlacchio

Elizabeth Suschana

Nutrition

Let the BOD POD Be the Teacher: An Advanced Understanding of Body Composition Testing

Adviser: Kevin Pietro

Annabelle Collins

Psychology

Orthorexia Nervosa: An Unhealthy Obsession with Eating Healthy

Adviser: Rebecca Warner

Rachel Colstad

Deryn Fishman

Psychology

Samantha Park

Biomedical Science

Domestic Violence and Sexual Assault Prevention: An Evaluation of Community Leader Awareness

Advisers: Victoria Banyard, Elizabeth Moschella, Andrew Rizzo

Cailin Conley

Health Management and Policy

Using Social Vulnerability Assessment to Support Emergency Preparedness and Promote Community Resilience

Adviser: Semra Aytur

Liam Corless

Chemical Engineering

Revealing the Role of Sodium-Gold Clusters in Preferential Carbon Monoxide Oxidation in Hydrogen (PROX)

Adviser: Nan Yi

Marissa DeCaro

Communication Sciences and Disorders

Examination of the Relationship between Resting State Neural Oscillations and Lexical Semantic Retrieval in Mild Traumatic Brain Injury

Adviser: Robert Ross

Nicholas deDiego

Genetics

Genetic Interactions of Protein Phosphatase 2A Subunits in Roots during Salt Stress

Adviser: Estelle Hrabak

Jake Donahue

Michael Goulet

Biomedical Science

Sarah Piet

Biochemistry, Molecular and Cellular Biology

Regulation of the Angiogenic Inducer, CNN1, in the Bovine Corpus Luteum: A Preliminary Study

Adviser: Paul Tsang

Elizabeth Faircloth

Biology

Is the Expression of Tissue-Degrading Enzymes in the Skeletal Muscle of Spiny Dogfish Correlated to Capture Stress?

Adviser: Paul Tsang

Christine Feudo

Kinesiology

Effects of Cardiolocomotor Entrainment on Running Economy

Adviser: Timothy Quinn

Danielle Flanagan**Jacqueline Melius****Shannon Moley**

Psychology

Associations between Experienced Trauma and Mental Health for Women in Recovery: Implications for Sober Living Facilities

Advisers: Katie Edwards, Katherine Lee

Joanna Foos

Nursing

The Effects of Alcohol Prep Pads and Blood Drop Number on Capillary Blood Glucose Results

Adviser: Susan Fetzer

Jane Garofalo

Health Management and Policy

Exploring Campus Policies at UNH via the Healthy POINTS Audit

Advisers: Laura Brown, Tanya Horacek, Jesse Morrell

Alexa Gilmore

Nursing

Women's Experiences in the CenteringPregnancy™ Program

Adviser: Joyce Cappiello

Jennifer Goodwin

Psychology

Music Preference in Leopard Spotted Geckos

Adviser: Jan Tornick

Myrilla Hartkopf

Environmental Conservation Studies

Evaluating the Effects of Rotational Grazing Soil Microbial Activity

Advisers: Alexandra Contosta, Andrew Grandy, Scott Greenwood

Alyssa Henry

Health Management and Policy

Using Photovoice to Ensure a Right to Health: Eliciting Patient Perspectives to Support Patient-Provider Communication Improvements

Adviser: Semra Aytur

Abby Jackson

Psychology

Hannah Perry

Justice Studies and Psychology

Gender Differences of Bystander Intervention within a Community Sample

Advisers: Victoria Banyard, Katie Edwards, Andrew Rizzo

Shuhan Long

Biomedical Science

Transitioning from Sun-Grown System to Shade-Grown System of Coffee: A Bioeconomic Model

Adviser: Shady Atallah

Julianna Minogue

Psychology

Do Dogs Respond Differently to Male and Female Visitors in a Shelter?

Adviser: Jan Tornick

Steven Moroni

Environmental Sciences

A Historic Understanding of Urbanized Tree Growth at UNH

Adviser: Mark Ducey

Sumeet Panesar**Zachary Tepper**

Neuroscience and Behavior

Characterization of Cholecystokinin-Expressing Neurons in Sensory Areas of Spinal Cord and Trigeminal Nucleus

Adviser: Arturo Andrade

Sumeet Panesar**Zachary Tepper**

Neuroscience and Behavior

Region-Specific Expression of Cholecystokinin in Endothelial Cells and Pericytes

Adviser: Arturo Andrade

Kaleigh Santos**Anna Skedros**

Psychology

Correlates between Women's Sense of Community and Their Recovery within a Trauma-Informed Sober Living Home

Adviser: Katie Edwards

Moussa Siri

Environmental Sciences

Effect of Land Use on Sediment Transport in Streams Draining Coastal Watersheds

Adviser: Wilfred Wollheim

Christen Soucy

Nursing

The Work of Mental Health Nurses in Australian Primary Care: A Descriptive Study

Adviser: Gene Harkless

Mary Kate Visnic

Nursing

Neutropenic Diet: Standardizing the Practice Using Evidence-Based Practice Methods

Adviser: Gene Harkless

Eleni Zotos

Nursing

Urinary Incontinence among Female High School Athletes: A Pilot Study

Adviser: Gene Harkless

MUB, Granite State Room**Advanced Technical Writing**

Adviser: Molly Campbell

Laura Blanchette

English

*Responsibly Choosing a Pet***Alexander Gentile**

English

*Everything You Need to Know about Choosing a Major***Todd Glynn**

Biology

*How to Lose Weight yet Gain Muscle: A Website***Victoria Hennessy**

Biomedical Science

*New Technology in Prosthetic and Bionic Limbs***Brittany Mezzancella**

Biomedical Science

*Pet Insurance***Cassidy Yates**

Environmental Engineering

Website Design Featuring Environmental Justice

All Colleges Undergraduate Research Symposium

Oral Presentations, Session B

Friday, April 21
10:50 am–Noon
Memorial Union Building

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MUB, Room 237

Activism, Identity, and the Media in Europe and the U.S.

Moderator: Tom Stafford

Claire FitzMorris

International Affairs, Linguistics and Spanish
Perception of Islam in Spain
 Adviser: Dilsa Deniz

Virginia Harmon

International Affairs, Political Science and Spanish
Territorial Disputes on Europe's Southern Borders: A Comparative Evaluation of the Legitimacy of Spanish Claims to the Enclaves of Ceuta and Melilla and British Claims to Gibraltar
 Adviser: Thomas Safford

Amina Hughes

Ecogastronomy, International Affairs and Kinesiology
Foundations of Prejudices towards Immigrants and Refugees in France
 Adviser: Thomas Safford

Bailey Johnson

French and International Affairs
La Manif Collective: The Necessity of Protest in France
 Adviser: Thomas Safford

Jordan Mrvos

Communication and International Affairs
Nous Avons Commencé: A Social Constructionist Exploration of a Protest in Dijon, France
 Adviser: Thomas Safford

Michaela Todd

History and International Affairs
Self-Identification in Catalonia
 Adviser: Thomas Safford

MUB, Room 334

China's Compliance and Self-Interest

Adviser: Lawrence Reardon
 Moderator: Michael Cole

Jonathan Dunn

Political Science
WTO: Will China Comply?

Jacob McLinden

Economics BS
The Political Economics of Chinese Steel Dumping

Alexander Sullivan

International Affairs and Political Science
Blowing Bubbles: A Look at China's Supposed Housing Bubble

Tyler Young

Political Science
Analytical Case Study of the U.S-China Bilateral Trade Relations

MUB, Room 330

Health and Education in Comparative Perspective

Moderator: Smitha Lahiri

Anna Baker

Biomedical Science and International Affairs
Analysis of the Pharmaceutical Industry in the French Healthcare
 Adviser: Thomas Safford

Hannah Gilman

French and International Affairs
Why Are the French Healthier?
 Adviser: Thomas Safford

Jessica Racioppi

International Affairs and Spanish
The Evolution of Peace Education in the 20th Century
 Adviser: Jeannie Sowers

Elle Richards

International Affairs and Sociology
The Cultural Factors that Influence Elder Care in Spain in Comparison to the United States
 Adviser: Dilsa Deniz

Tianjia Yan

International Affairs and Political Science
Reforming National College Entrance Exams in China, Japan, and South Korea
 Adviser: Jeannie Sowers

MUB, Room 321

Interrogating Interactions: Papers in Language and Social Interaction

Moderator: Edward Reynolds

Matthew Fields

Communication
Conflict Talk Expanded
 Adviser: Edward Reynolds

Shannen Ketenci

Communication and International Affairs
The Body in Medical Interactions: The Use of Gaze in Constructing Biomedical and Psychosocial Models
 Adviser: Edward Reynolds

Kendra Swanson

Communication

Turn Taking Systems between Bartender and Server

Adviser: Edward Reynolds

Anna Tumber

Communication

The Exploration of Teaching Yoga

Adviser: Danielle Pillet-Shore

MUB, Room 302**Local Culture II**

Moderator: Svetlana Peshkova

Grace Dietz

Anthropology and International Affairs

*Native American Cultural Heritage in**New Hampshire*

Advisers: Svetlana Peshkova,

Denise Pouliot, Paul Pouliot

Elisabeth Iacono

History

The Lives of Objects: Ethical Treatment of Collections

Adviser: Sara Withers

Rachel Parr

Biomedical Science

*The Social Construct of Dreaming:**College Culture*

Adviser: Robin Sheriff

Katherine Shelhamer

Anthropology

*The Contemporary Campus: Assessing**University Response to Multicultural Issues*

Adviser: Sara Withers

MUB, Room 336**Multidisciplinary Session II:
Psychology, Neuroscience
and Behavior**

Moderator: Jesse Morrell

Stephanie Barlow

Neuroscience and Behavior

*Investigation of the Changes in Oscillatory Power during Rule Switching after Mild**Traumatic Brain Injury*

Adviser: Robert Ross

Emma DePierro

Alison Meurer

Psychology

Hanne Hansen

Amanda LeBel

Neuroscience and Behavior

*Using Motion-Induced Blindness to**Determine Contrast Response Asymmetries of ON and OFF Cells*

Advisers: Andrew Kitt, William Stine

Nicholas Duggan

Neuroscience and Behavior

John Hewitt

Nicholas Tabor

Psychology

Exploring Spatial Frequency Channels in Stereopsis

Advisers: Andrew Kitt, William Stine

Sarah Meier

Jonathan Neilio

Neuroscience and Behavior

Olivia Rebel

Psychology

Mapping Stereo Threshold by Spatial Frequency

Advisers: Andrew Kitt, William Stine

MUB, Room 207**Navigating Intersectional
Challenges in the Age of
Michelle Obama**

Adviser and Moderator:

Lyn Tjon Soei Len

Rebecca Barton

Communication and Women's Studies

*The Power of Time-Binds for WOC in the Workforce***Sage Gould**

Fine Arts

*The Importance of Intersectionality above Singular Identities***Jane Kayarian**

Social Work

*History in the Making: Gender and Race**Performance in the Age of Michelle Obama*

MUB, Room 203**Semester in the City:****Social Innovation Fellowships**

Adviser and Moderator: Faina Bukher

Hannah Bowen

Family Studies and Women's Studies

*Union Capital Boston***Emma Chinman**

Social Work and Women's Studies

*The Petey Greene Program***Gabrielle Greaves**

English and Women's Studies

*The Theater Offensive***Julia Marshall**

Psychology and Sociology

Let's Get Ready

**All Colleges
Undergraduate Research
Symposium****Oral Presentations, Session C****Friday, April 21****12:15–1:25 p.m.****Memorial Union Building**

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

MUB, Room 332***Change and World Politics*****Moderator:** Justin Troiano**Alex Bostic**

English/Journalism

*The Political and Economic Challenges**Facing Post-Fidel Cuba*

Adviser: Elizabeth Carter

Nolan Flagg

Justice Studies and Political Science

*A Robust Mandate: An Evaluation of**MINUSMA in Mali and the Effectiveness**of Chapter VII Authorized Peacekeeping*

Adviser: Alynna Lyon

Marissa Parker-Bair

Political Science

*Women in International Political**Leadership Roles*

Adviser: Alynna Lyon

Scott Shallow

Political Science

Russian Realism in the Age of Putin

Adviser: Alynna Lyon

Weicong Zeng

Political Science

*Kurds and the Balance of Power of the**Middle East*

Adviser: Alynna Lyon

MUB, Room 330***Federal and State Political Dynamics*****Moderator:** Tama Andrews**Bradley Fredette**

Political Science

The 2015 Canadian Federal Election

Adviser: Susan Siggelakis

Kimberly Grove

Political Science

A Governor's Line Item Veto Power

Adviser: Susan Siggelakis

Samantha Leiper

Political Science

*Veteran Care in New Hampshire: Analysis**of Interest Group Theory and Related**Influences*

Adviser: Tama Andrews

Sameer Panesar

Political Science

Medicaid and Federalism

Adviser: Tama Andrews

Danielle Pomeroy

Justice Studies and Political Science

*Gloucester's Angel Program: An Innovative**Way to Combat the Opioid Crisis*

Adviser: Mary Malone

MUB, Room 336***Hot Topics in Women and Gender Studies: Theory, Science, and Practice*****Adviser:** Katie Edwards**Moderator:** Katherine Lee**Hollie Foster**

Psychology, Russian and Women's Studies

*The Shade Tree, Las Vegas' Largest Shelter**for Victims of Domestic and Sexual Abuse***Giselle Hart**

Women's Studies

*Defense of Women's Studies***Cayden O'Dea**

Women's Studies

*Growing Up Trans***Lacey Ryder**

Communication Sciences and

Disorders and Women's Studies

*Reproductive Justice from a Native**American Feminist Perspective***MUB, Room 321*****Literature and Medicine*****Adviser and Moderator:****Sandhya Shetty****Maura Dooley**

Biomedical Science

*It's All Elementary: Dr. House and**Mr. Holmes***Jack Gorham**

Music

*Narrative Medicine: Applications and**Limits in Clinical Practice***Sarah Piet**

Biochemistry, Molecular and

Cellular Biology

*The Right to Die with Dignity***MUB, Room 338*****Multidisciplinary Session III: Studies in Science and Engineering*****Moderator:** Arturo Andrade**Lindsay Anibal**

Art Studio and Neuroscience and Behavior

*Open-Sand Pit Shelter Use by American**Lobsters (*Homarus americanus*)*

Adviser: Leslie Curren

Joseph Durant**Robert Lozowski-Aliberti**

Mechanical Engineering

*The Electrochemical Etching of Microscale**Features in Copper*

Adviser: James Krzanowski

Meghan Gillespie**Emily Vulgamore**

Biology

*Measuring Somatic Mutation in the**Nematode, *Caenorhabditis elegans**

Adviser: John Collins

Alexandria Hidrovo

Environmental Engineering

*Applying MP UV Disinfection with**Low Wavelength Monitoring to Achieve**Sustainable Public Health Protection*

Adviser: James Malley

Salimah Hussien

Bioengineering

*Light-Triggered Differentiation of Human**Neural Stem Cells to Neurons*

Adviser: Kyung Jae Jeong

Brittany Marshall

Mechanical Engineering

*Impact of Knee Extensor Strength on**Lower-Limb Kinematics and Kinetics**during Walking in Older Adults*

Adviser: Dain LaRoche

MUB, Room 237**Multidisciplinary Session IV:
Education, History, Music, and
Fiction Writing**

Moderator: Kate Gaudet

Harry Haytayan

History

*The Historical Condition of African
American Family Dynamics in America*

Adviser: Jeffrey Bolster

Andrew LaBelle

English

*Around Suddenly, Ungracefully Flying:
The Merits of the Fiction Writer in a New
Disinformation Age*

Adviser: Clark Knowles

Graham Peterson

History

*Metal Machine Music: The Worst Album
Ever Recorded*

Adviser: Daniel Beller-McKenna

John Sullivan

Music Education

*Musical Expressions of School Spirit at
UNH throughout the Years*

Adviser: Rose Pruiksmas

Danielle Tidd

English Teaching

*Students' Perceptions of Open-Topic
Research Assignments*

Adviser: Alecia Magnifico

MUB, Room 302**Representation and Rhetoric**

Moderator: Michael Jackson

Michael Fratarcangeli

Communication and Justice Studies

*False Accusation in West Memphis:
The Devil Made Them Do It?*

Adviser: Michael Jackson

Emma Giangregorio

Communication

*Gender Equality: The Fight Is Far
from Over*

Adviser: Michael Jackson

Robert Maynard

Communication and Linguistics

*Nolan and Interstellar: The Argument to
Save Tradition*

Advisers: Michelle Gibbons,

Michael Jackson

Jie Ning

Communication and Women's Studies

*Nudity and Body in Chinese Photographer
and Poet Renhang's Work*

Adviser: Michael Jackson

Kellie Reardon

Communication

*How Lay's "Do Us a Flavor" Campaign
Became More Than Just an Advertisement*

Adviser: Michael Jackson

MUB, Room 334**Women's Studies: The Fruit of
Struggle**

Adviser and Moderator:

Jane Stapleton

Shannon Bryant

Undeclared

*Laws Surrounding Sexual Assault: Then
vs. Now***Jamie Cormier**

Psychology

*Women and Science: A Glimpse into
the Past***Chelsea Evankow**

Biology and Women's Studies

*African American Women in Higher
Education at the University of New
Hampshire***UNH Manchester
URC Engineering
Technology Day****Senior Project Presentations****Friday, April 21****9 a.m.–4 p.m.****Pandora Mill****1st Floor and Room 201****88 Commercial St., Manchester**

The UNHM Engineering Technology Program presents its annual Senior Project Presentations day. This event is the culmination of an academic year effort where full-time seniors formally present their projects to peers, faculty members, representatives and technical advisers of sponsoring companies, and special guests.

James Caron

Mechanical Engineering

Blimp Ground Control

Adviser: Theodore Tavares

Ryan Chartier

Mechanical Engineering Technology

Jetboil Capstone Project

Adviser: Theodore Tavares

Daniel Crean

Electrical Engineering Technology

Water Methanol Injection Control System

Adviser: Christopher LeBlanc

Oliver Dale**Brian Dustin****William Genest****Devlin Melvin**

Mechanical Engineering Technology

UNH Manchester UAV

Adviser: Theodore Tavares

Matthew Dassatti

Mechanical Engineering Technology

Case Auto-Racking

Adviser: Theodore Tavares

Christopher Decato

Mechanical Engineering Technology

Blimp Ground Crew

Adviser: Theodore Tavares

Andrew Hoitt

Mechanical Engineering Technology
Lighter Than Air - UAV ET Blimp Project
 Adviser: Christopher LeBlanc

Andrew Hoitt**Robert Hunt****Donald Kilian****Richard Sena Reyes**

Mechanical Engineering Technology
ET Blimp Control
 Adviser: Christopher LeBlanc

James Jordan

Mechanical Engineering Technology
Boiler Improvement Evaluation via Exhaust Gas Analysis
 Adviser: Keith McBrien

Steven Kazakis

Mechanical Engineering Technology
UNH Cooperative Extension: Hydroponics
 Adviser: Sarah Grosvenor

Andrew Kelsall

Mechanical Engineering Technology
Analysis of the Oil Circulation System of the Magnum Compacts' Gear Case
 Adviser: Theodore Tavares

Donald Kilian

Mechanical Engineering Technology
UNH ET Blimp, Gondola and Fan Ducting
 Advisers: Christopher LeBlanc, Sean Tavares, Theodore Tavares

Kyle Legg

Electrical Engineering Technology
Design and Characterization of a Time-of-Flight Sensor
 Adviser: Christopher LeBlanc

Micheal Pinkham

Mechanical Engineering Technology
Blimp Ground Control Team
 Adviser: Theodore Tavares

Ronald Rousseau

Mechanical Engineering Technology
21' Blimp Deflation Emergency System
 Adviser: Theodore Tavares

James Schumacher

Electrical Engineering Technology
Viability of PocketSphinx for EXACOM
 Advisers: Michael Jonas, Christopher LeBlanc, Theodore Tavares

Shawn Snook**Christopher Tanner**

Mechanical Engineering and Technology
Velcro Machine R&D Internship
 Advisers: Michael Jonas, Christopher LeBlanc, Theodore Tavares

Alexander Turner

Electrical Engineering Technology
AFL App Store
 Advisers: Christopher LeBlanc, Theodore Tavares

Jonathan Vassiliades

Mechanical Engineering Technology
University of New Hampshire Precision Racing—FSAE Suspension Design
 Advisers: Todd Gross, Theodore Tavares

The Naked Arts— Creativity Exposed

Act III

Friday, April 21**12:15–1 p.m.****Memorial Union Building
Strafford Room**

This event exposes the inner creative process of artists working in various disciplines. Presenters will describe the process, research, and other creative aspects undertaken to bring an artistic creation from initial inspiration to the stage or gallery. This may include a performance or excerpts from their work to illustrate their creative scholarship.

Isabelle Beagen

Theatre: Dance

Elizabeth Feinschreiber**William Lombard**

Theatre

Simon Freitas

Social Work

Seven Boxes of Books: The Historical Past and Present through the Lens of Devised Theatre

Adviser: Amy Blessing

Frank Noah

Music

Music for Theatre

Adviser: Ryan Vigil

Peter T. Paul College of Business and Economics Paul J. Holloway Innovation-to-Market Prize Competition

Bud Albin Challenge Round

Friday, April 21**1–4 p.m.****Peter T. Paul College Building****4–8 p.m.****Alpha Loft**

This competition takes students out of the classroom and into the real world. Students are required to research and prepare strategies for commercializing new products and services, which they present to a panel of industry judges. Prizes are awarded for the most feasible and fundable approaches for starting, acquiring, or expanding a business venture.

College of Health and Human Services Grimes Award Competition

Friday, April 21
1:30–4 p.m.

Pettie Hall, Rooms G10 and 106

Jack and Marianna Grimes and family, all UNH graduates, endowed the funds for this celebration of excellence in undergraduate research. The oral presentation competition includes finalists who have been selected by CHHS faculty after rigorous scientific review of written proposals.

Lauren Barker

Nursing

Self-Reported Care Experiences of T2DM Patients with Chronic Wounds in Ghana: A Descriptive Study

Adviser: Gene Harkless

Stefanie Cheung

Occupational Therapy

Knowledge and Perceptions of Flight Attendants on In-Flight Needs of Air Travelers with Physical Disabilities

Adviser: Sajay Arthanat

Joanna Foos

Nursing

The Effect of Alcohol Prep Pads and Blood Drop Number on Capillary Blood Glucose Values

Adviser: Sue Fetzter

Livia Gosselin

Occupational Therapy

An Evaluation Tool to Measure Usability of Computer Access Assistive Technology for Individuals with Physical Disabilities

Adviser: Sajay Arthanat

Samuel Lewis

Occupational Therapy

Social Interaction and Participation in School Activities of an Elementary School Student Using an Augmentative Alternative Communication Device

Adviser: Lou Ann Griswold

Amy Rixon

Occupational Therapy

Development Trends and Item Analysis of the Sensory Processing 3-Dimensions Scale

Adviser: Shelley Mulligan

Shannon Nadeau

Occupational Therapy

The Effects of Occupational Therapy and Client Coping Mechanisms on the Recovery of Cardiac Patients in Inpatient Rehabilitation

Adviser: Vidya Sundar

Nora Scanlon

Kinesiology-Exercise Science

The Effect of Foam Rolling on Delayed Onset Muscle Soreness and Plasma Indicators of Muscle Damage

Adviser: Summer Cook

Christen Soucy

Nursing

The Work of Mental Health Nurses in Primary Care: A Descriptive Study

Adviser: Gene Harkless

Angela Tirabassi

Occupational Therapy

The Influence of the Environment on the Quality of Social Interaction among Children during Play

Adviser: Lou Ann Griswold

Psychology Department George M. Haslerud Undergraduate Research Conference

Friday, April 21
1:30–5 p.m.

McConnell Hall, Room 220

The George M. Haslerud URC, named for the late Professor Emeritus of Psychology, recognizes and celebrates undergraduate research conducted by Honors psychology students. Students present their original research projects before an audience of UNH faculty, staff, graduate students, fellow undergraduates, and friends and family.

Yvonne Cristy

Psychology

High School Dating and Sexual Violence Prevention Program Feasibility and Fidelity: A Qualitative Approach

Advisers: Katie Edwards, Stephanie Sessarego

Kaitlyn Sterns

Biomedical Science and Psychology

Medial Prefrontal Neurons Encode Information about Stimuli Signaling Reinforcement

Adviser: Robert Mair

Erinn Vittum

Philosophy and Psychology

Helping Behavior in Middle School Youth: A Descriptive Study

Advisers: Katie Edwards, Katherine Lee, Elizabeth Moschella

Honors English Undergraduate Research Conference

Friday, April 21

1:30–4 p.m.

Murkland Hall, Room G02

To complete Honors-in-English, students must conduct a semester-long research project, culminating in a 30-40 page senior thesis. The Honors English Undergraduate Research Conference provides these students and students in the linguistics program with the opportunity to share their work with their fellow students, professors, and families. The presentations include poetry, autobiographical writing, journalism, and scholarship on literary texts from several different centuries.

Morgan Plessner

English

Understanding Modern America through Contemporary Literary Interpretations of the Book of Revelation

Adviser: David Watters

Sophie Ruesswick

English Teaching

Teaching Literary Elements through the Lens of Short Story Mentor Texts

Adviser: Alecia Magnifico

Eliza Sneed

English/Journalism

The Youngest Child: A Collection of Personal Essays

Adviser: Jaed Coffin

Kelly Sorge

English and History

Women and Power in Shakespeare's Macbeth, As You Like It, and Titus Andronicus

Adviser: Diane Freedman

Moira Wright

Classics, English Literature and

Women's Studies

Amorphous Reality: The Power of Unreliable Narration in Nabokov's Lolita and Pale Fire

Adviser: Diane Freedman

Philosophy Department Undergraduate Research Conference

Friday, April 21

4–7 p.m.

Murkland Hall G17

The Philosophy URC is a mosaic of concise and meaningful student presentations, varying from such philosophical topics as applied ethics, language theory, and social justice. Standard presentations predominantly last fifteen minutes and are subsequently followed by a brief Q & A period.

Nils Babcock

Classics and Philosophy

Animalism in Aristotle

Adviser: Charlotte Witt

Michael Langelier

Mechanical Engineering and Philosophy

Should the Sale of Organs Be Legal?

Adviser: Nicholas Smith

Amanda Lathrop

Philosophy

Capitalism and Inequality: The Legacy of Slavery in the U.S.

Adviser: Nicholas Smith

Amanda LeBel

Neuroscience and Behavior

Heidegger and Westworld: A Look at Dasein and Artificial Intelligence

Adviser: Matthew Dowd

Andrew Ware

Economics BS and Philosophy

Distributional Implications of the Development of Artificial Intelligence for Global Policy

Advisers: Simon Beard, Nicholas Smith

Rory Wilson

Philosophy

Who We Are and How We Say It?

A Philosophical Exploration of

Transgender Identities and Pronouns

Adviser: Charlotte Witt

Student Composers' Concert

Friday, April 21

8–10 p.m.

Bratton Recital Hall

Paul Creative Arts Center

The UNH Student Composers' Concert is an annual event that features the music of undergraduate and graduate students of the Music Department. The music is newly composed, and is almost exclusively performed by fellow music students.

Troy Grimsley

Music Education

Rondo for Clarinet Sextet and Into the Unknown for Woodwind Quintet

Adviser: Andrew Boysen

Thomas Mottershead

Music

Three Rose Poems

Adviser: Ryan Vigil

Frank Noah

Music

Sonata for Oboe

Adviser: Michael Annicchiarico

COLSA Undergraduate Research Conference

Oral Presentations

Saturday, April 22
8:15–10:30 a.m.
Memorial Union Building,
Theatre II

Student presentations at the COLSA URC are based on research conducted in any of the departments within the College of Life Sciences and Agriculture.

Meghan Carr

Marine, Estuarine and Freshwater Biology
Entanglement of Grey (Halichoerus grypus) and Harbor Seals (Phoca vitulina) at Duck Island Ledges, ME
 Advisers: Andrea Bogomolni, James Coyer, Nadine Lysiak

Nina Coffey

Neuroscience and Behavior
Is There a Connection between Performance on Problem-Solving Tasks and Dominance Levels in Canis familiaris?
 Adviser: Leslie Curren

Cynthia Holler

Neuroscience and Behavior
The Influence of Medial Thalamus on the Response Properties of Neurons in Medial Prefrontal Cortex
 Advisers: Brett Gibson, Robert Mair

Alison Jeffrey

Biomedical Science
The Relationship of Life Stage to Daily Social Patterns of Captive African Elephants (Loxodonta africana) and the Correlation of Handler Perceptions of Elephant Personality to Demonstrated Social Behaviors
 Advisers: Vanessa Grunkemeyer, Clare Padfield, Debbie Young

Sean Lombard

Biomedical Science
Comparative Sociobiology and Ecology of a Small Carpenter Bee
 Adviser: Sandra Rehan

Kathryn Slebodnik

Environmental Sciences
Effects of Land-Use Change on Soil Nitrogen Retention at the University of New Hampshire Organic Dairy Research Farm
 Adviser: Alexandra Contosta

Emily VanGulick

Marine, Estuarine and Freshwater Biology
Neuroanatomical Mapping and RNA Expression and Localization in the Brain of a Basal Vertebrate, the Sea Lamprey (Petromyzon marinus)
 Adviser: Stacia Sower

Elisabeth Wise

Biochemistry, Molecular and Cellular Biology
Daily Distance Moved and Home Range Analysis of Female Cheetahs (Acinonyx jubatus) on Namibia's Commercial Farmland
 Advisers: Andrew Conroy, Laurie Marker

COLSA Undergraduate Research Conference

Poster Presentations

Saturday, April 22
10:45 a.m.–12:45 p.m.
Memorial Union Building,
Granite State Room

Student presentations at the COLSA URC are based on research conducted in any of the departments within the College of Life Sciences and Agriculture. Research ranges from field studies to molecular biology to genomics studies.

Adam Aasen

Neuroscience and Behavior
Comparison of Single Cell Response Types Encoding Movement Information in Prefrontal Cortex and Central Thalamus
 Adviser: Robert Mair

Casey Albano

Biology
Anna Dorrance
 Marine, Estuarine and Freshwater Biology
Cyanobacteria Toxins in Loon Feathers and Water
 Adviser: James Haney

Lindsay Anibal

Art Studio and Neuroscience and Behavior
Open-Sand Pit Shelter Use by American Lobsters (Homarus americanus)
 Adviser: Leslie Curren

Anna Baker

Biomedical Science and International Affairs
Cnidarian Behavior under Various Adenylate Cyclase Drug Regulating Conditions
 Adviser: David Plachetzki

Cameron Barnes

Zoology
Examining the Presence of Magnetoreception in the American Lobster (Homarus americanus)
 Adviser: Winsor Watson

Jamie Barton

Hannah Root

Biology
Angela Sarni
 Mechanical Engineering
Megan Savoie
 Marine, Estuarine and Freshwater Biology
Submersible Oceanic Aquaculture of Kelp (SOAK)
 Advisers: Michael Chambers, M. Robinson Swift

Kaitlyn Belknap

Biomedical Science
Understanding a Rare Pediatric Cancer Cluster along the New Hampshire Seacoast
 Adviser: Brian Barth

Kathryn Bennett

Environmental Sciences
How Would the University of New Hampshire's Nitrogen Footprint Change If We Achieved Other Sustainability Scenarios?
 Adviser: John Aber

Julia Boisselle
Mary Hammar

Courtney Pusz
Nutrition

Genevieve Gray
Biology

*Beyond Dining and Recreation Services:
How Does the Greater UNH Campus
Support a Healthy Lifestyle?*
Advisers: Laura Brown, Tanya Horacek,
Jesse Morrell

Julia Boisselle
Mary Hammar
Courtney Pusz
Nutrition

*Evaluation of UNH's Dining Facilities
and Campus Eateries: Does the Food
Environment Contribute to Healthy
Eating?*
Advisers: Laura Brown, Tanya Horacek,
Jesse Morrell

Julia Boisselle
Mary Hammar
Courtney Pusz
Nutrition

*Evaluation of UNH's Recreation Services:
A Key Component of a Healthy Campus
Environment*
Advisers: Laura Brown, Tanya Horacek,
Jesse Morrell

Samantha Bromley
Equine Studies

*Effect of Niacin and Beta-Carotene
Supplementation in Pre-Partum Holstein
Cattle on Acquisition of Immunity and
Growth in Calves*
Adviser: Peter Erickson

Cooper Bryer
Casey Coupe

Wildlife and Conservation Biology
*The Influence of Shrubland Type and Area
on the Abundance and Age Structure of
Male Prairie Warblers*
Adviser: Matthew Tarr

Jasmin Buteau

Marine, Estuarine and Freshwater Biology
*Characterizing an Unknown Blue Whale
(Balaenoptera musculus) Population in
the South Atlantic Ocean through Acoustic
Analysis of Song*
Adviser: Jennifer Miksis-Olds

Meghan Carr

Marine, Estuarine and Freshwater Biology
*Entanglement of Grey (Halichoerus
grypus) and Harbor Seals (Phoca vitulina)
at Duck Island Ledges, ME*
Advisers: Andrea Bogomolni, James
Coyer, Nadine Lysiak

Haylee Colannino

Carly Orlacchio

Elizabeth Suschana

Nutrition

*Let the BOD POD Be the Teacher:
An Advanced Understanding of Body
Composition Testing*
Adviser: Kevin Pietro

Timothy Curry

Environmental and Resource Economics

Rebecca Kammerer

Nicolette Niemiec

Environmental Sciences

Robert Keefe

Forestry

*Impacts of a Predator Free Area on
Vegetation Growth and Health*
Adviser: David Clarke

Marisa Butler

Nutrition

*Profiling the Health, Wellness, and
Nutrition of Collegiate Dancers*
Adviser: Jesse Morrell

Andrew Butts

Tara Cieszka

Zoology

*Predator Induced Plasticity in the Model
Organism, Ambystoma mexicanum, the
Mexican Axolotl*
Adviser: Jessica Bolker

Jacqueline Carey

Zoology

*Parasite Susceptibility of H. diversicolor, A.
virens, and A. succinea*
Adviser: Larry Harris

Ryan Chiesa

Environmental Sciences

*Cutting Height Is Critical in Control of
Invasive Glossy Buckthorn*
Adviser: Thomas Lee

Nicole Clark

Biology

*Role of the BinK Regulator in Symbiotic
Bioluminescence Regulation*
Adviser: Cheryl Whistler

Nina Coffey

Neuroscience and Behavior

Kadianne Tommasi

Marine, Estuarine and Freshwater Biology
*Is There a Connection between
Performance on Problem-Solving Tasks
and Dominance Levels in Canis familiaris?*
Adviser: Leslie Curren

Amelia Cullerot

Zoology

*Does Rapid Mimicry during Play Predict
Social Cognition in Domestic Dogs?*
Adviser: Leslie Curren

Luke Daley

Biomedical Science

*Does Type III Adenylyl Cyclase Regulate
Memory Formation in Adult Mice?*
Adviser: Xuanmao Chen

Molly Dawson

Biology

*Differential Gene Expression Patterns
Contributing to Color Mimicry within the
Imitator Poison Dart Frog (Ranitomeya
imitator)*
Adviser: Matthew MacManes

Nicholas deDiego

Genetics

*Genetic Interactions of Protein
Phosphatase 2A Subunits in Roots during
Salt Stress*
Adviser: Estelle Hrabak

Matthew Derrick

Emily Ray

Marine, Estuarine and Freshwater Biology
*Role of Daphnia in the Production of Toxic
Lake Aerosols*
Adviser: James Haney

Daniel Deschenes

Biochemistry, Molecular and
Cellular Biology

*Using Fluorometry to Create a Citizen-
Based Monitoring System of Cyanobacteria*
Adviser: James Haney

Anna Devitto

Ecogastronomy and Sustainable
Agriculture and Food Systems
*Assessing Coupled and Decoupled
Aquaponic Systems through Water Quality
and Nutrient Analysis*
Adviser: Todd Guerdat

Madeleine DiIonno

Community and Environmental Planning
New Hampshire Citizen Planner Engaging Municipal Boards to Inform Content and Training in Rockingham County, NH
 Advisers: Molly Donovan, Mary Friedman

Lauren Dingle

Environmental Conservation Studies

Gregory Thompson

Biochemistry, Molecular and Cellular Biology and Computer Engineering
Stream Salinization by Road Salt and the Effects on local NH Macroinvertebrates
 Adviser: Annette Schloss

Lauren Dingle

Environmental Conservation Studies

Emily Landry

Wildlife and Conservation Biology
The Aerosolization of Biotoxins as a Potential Link to Amyotrophic Lateral Sclerosis
 Adviser: James Haney

Jake Donahue**Michael Goulet**

Biomedical Science

Sarah Piet

Biochemistry, Molecular and Cellular Biology
Regulation of the Angiogenic Inducer, CNN1, in the Bovine Corpus Luteum: A Preliminary Study
 Adviser: Paul Tsang

Colleen Donovan-West

Nutrition and Psychology

Megan Duranko**Monica Ford Ortiz**

Psychology

Erin Hart**Kathryn Taylor**

Neuroscience and Behavior
Behavioral and Biological Markers Underlying Vulnerability to Heroin Abuse
 Advisers: Sergios Charntikov, Robert Drugan

Monique Duchesne

Community and Environmental Planning

Joshua Gilmore

Environmental and Resource Economics
Hydration Stations: Reducing UNH's Carbon Footprint
 Advisers: Mary Friedman, Patricia Jarema

Yusuf Ebrahim**Bria Frehner**

Biomedical Science
A Study of p53 Cytoplasmic Sequestration in Acute Myelogenous Leukemia Patient Samples
 Adviser: Charles Walker

Kerrie Enger

Genetics

The Prevalence of Avian Malaria in Hawaiian Birds from 2014-2016
 Adviser: Jeffrey Foster

Elizabeth Faircloth

Biology

Is the Expression of Tissue-Degrading Enzymes in the Skeletal Muscle of Spiny Dogfish Correlated to Capture Stress?
 Adviser: Paul Tsang

Bradley Friedman

Biology

Ida Whitcomb

Environmental Sciences
Bioaccumulation of Cyanotoxins Microcystins and BMAA in Phytoplankton and Zooplankton
 Adviser: James Haney

Ashley Gagnon

Biomedical Science

Untangling the Effects of TadC in the Vibrio fischeri - Eupryma scolopes Symbiosis
 Adviser: Cheryl Whistler

Benjamin Gallo

Marine, Estuarine and Freshwater Biology
Exploring the Recent Dominance of the Spiny Dogfish (Squalus acanthias) in the Gulf of Maine
 Adviser: Erik Chapman

Benjamin Gallo**Stephanie Sykes**

Marine, Estuarine and Freshwater Biology
The Raised Gillnet: The Application of a Novel Gear Modification to Improve Fishing Efficiency and Selectivity
 Adviser: Erik Chapman

Jane Garofalo

Health Management and Policy
Exploring Campus Policies at UNH via the Healthy POINTS Audit
 Advisers: Laura Brown, Tanya Horacek, Jesse Morrell

Elizabeth Gill

International Affairs and Sustainable Agriculture and Food Systems
Exploring the Diversity of Tropical Pumpkin in Costa Rica
 Adviser: Andrew Ogden

Meghan Gillespie**Emily Vulgamore**

Biology

Measuring Somatic Mutation in the Nematode, Caenorhabditis elegans
 Adviser: John Collins

Anna Gruen

Neuroscience and Behavior

The Influence of Nitric Oxide on Rhythmic Feeding Behavior in Melibe leonina
 Adviser: Winsor Watson

Avianna Guerrero

Biomedical Science

Microwave-Assisted Glycosaminoglycans Labeling Using 1-phenyl-3-methyl-5-pyrazolone Followed by MALDI-TOF-MS Analysis
 Advisers: Qing Guo, Vernon Reinhold

Mackenzie Gunn

Ecogastronomy and Marine, Estuarine and Freshwater Biology
Stress Mitigation of Striped Bass during Transportation Using Salt and Anesthetic
 Adviser: David Berlinsky

Jessica Guptill

Wildlife and Conservation Biology
Testing the Utility of Dental Morphology in Refining Diet Group Classifications of Rodents
 Adviser: Rebecca Rowe

Anna Haber

Genetics

Profiling the Involvement of Polyamines in the Drought and Salt Tolerance of Rice
 Adviser: Subhash Minocha

Kyle Hacker

Environmental Sciences

Dissolved Gas Concentrations in Two Reservoir Systems
 Adviser: Wilfred Wollheim

Kelsey Harrington

Genetics

Identification of Signal Molecules from Frankia that Induced the Early Step of Nodule Development in Casuarina

Adviser: Louis Tisa

Crysta HarrisSustainable Agriculture and Food Systems
Processing Pumpkin Varieties

Advisers: James Loy, Andrew Ogden

Erin Hart**Kathryn Taylor****Sara White**

Neuroscience and Behavior

Daniel Hertia

Biology

Ambry Lane

Psychology

A Quantitative Analysis of the Value-Enhancing Effects of Nicotine and Varenicline

Adviser: Sergios Charntikov

Molly Hartley

Biomedical Science

Using Comparative Transcriptomics to Classify Taste and Opsin Genes from the Evolutionary Ancient Cnidarian Hydra magnipapillata

Adviser: David Plachetzki

John Ianiri

Wildlife and Conservation Biology

Silviculture and Wildlife

Adviser: Theodore Howard

Molly Jacobson

Wildlife and Conservation Biology

Historical Changes in Distribution and Floral Associations of Bumble Bee (Apidae: Bombus) Species of Greatest Conservation Need in New Hampshire

Adviser: Sandra Rehan

Alison Jeffrey

Biomedical Science

The Relationship of Life Stage to Daily Social Patterns of Captive African Elephants (Loxodonta africana) and the Correlation of Handler Perceptions of Elephant Personality to Demonstrated Social Behaviors

Advisers: Vanessa Grunkemeyer, Clare Padfield, Debbie Young

Joel Jordan

Genetics

Loss of One Protein Phosphatase 2A A-Subunit Gene in Arabidopsis Is Partially Complemented by Other A-Subunit Genes

Adviser: Estelle Hrabak

Enrica JossiMarine, Estuarine and Freshwater Biology
*Diel and Seasonal Changes in Old**Durham Reservoir*

Adviser: James Haney

Amir Kirata

Wildlife and Conservation Biology

Diet Composition of Nestling Prairie Warblers (Setophaga discolor) Raised in an Active Gravel Pit in Southeastern New Hampshire

Adviser: Matthew Tarr

Amber KittleSustainable Agriculture and Food Systems
Effects of Garlic Mustard Invasion and Additional Abiotic Stressors on Fine Root Biomass of Native Tree Species

Adviser: Serita Frey

Victoria Kleiner

Biomedical Science

Mutational Analysis of Salt Tolerance in Casuarina Isolate Frankia

Adviser: Louis Tisa

Robert LeBel

Biochemistry, Molecular and Cellular Biology

Histological and Physiological Analysis of Neonatal Black 6 Mice Termination Caused by the Gene Ablation of Type 3 Adenylate Cyclase in Neuronal Primary Cilia

Adviser: Xuanmao Chen

Sofia Licht**Jacob Moore**Marine, Estuarine and Freshwater Biology
Bioaccumulation of Cyanobacteria Toxins in the Blood of American Bald Eagle Nestlings

Adviser: James Haney

Renee Loeffel

Zoology

Adaptive Exploitation of Noise: Phonotactic Response to Feeding Sounds in the Green Sea Urchin (Strongylocentrotus droebachiensis)

Adviser: Daniel Howard

Shuhan Long

Biomedical Science

Transitioning from Sun-Grown System to Shade-Grown System of Coffee: A Bioeconomic Model

Adviser: Shady Atallah

David Macomber

Biomedical Science

Rickettsia Bacteria in Michigan Tick Samples

Adviser: Jeffrey Foster

Shayna Mallat

Neuroscience and Behavior

Exploring the Prospect of Kin Recognition in the Planarian Species Dugesia dorotocephala

Adviser: Leslie Curren

Jacqueline Marshall

Genetics

Comparing the Regulation of Alternatively Spliced Isoforms of Ceramide Synthases in AML

Adviser: Brian Barth

Sarah Martini

Genetics

Seeing What Sticks: An Integrative Approach to Examine the Effect of Adhesion Mutation in Experimentally Evolved Vibrio fischeri Symbionts

Advisers: Molly Pankey, Cheryl Whistler

Jacob MayersonSustainable Agriculture and Food Systems
Evaluation of Eastern Skunk Cabbage, Symplocarpus foetidus, as a Heat Source for Winter Grown Lettuce inside a Controlled Environment

Adviser: Andrew Ogden

Britta McCarthy

Political Science

Determining the Importance of Local Hops in Craft Beer

Adviser: Shady Atallah

Kelley McDonnell

Environmental Conservation Studies

Generating Random Samples for the Reference Data of Cropland Maps

Advisers: Russell Congalton, Kamini Yadav

Danielle McGinty

Biomedical Science

Sequencing and Characterization of S-Acyl Transferase Mutants from Arabidopsis thaliana

Adviser: Estelle Hrabak

Seth McNutt

Biochemistry, Molecular and Cellular Biology

Andrew Morin

Biology

The Genome of Mya, a Molluscan Model for p53-Related Animal Cancers

Adviser: Charles Walker

Rebecca Migotsky

Biology

Is More Always More? Female Prairie Mole Crickets Ignore Vibrational Signals When Making Mate Choice Decisions

Adviser: Daniel Howard

Steven Moroni

Environmental Sciences

A Historic Understanding of Urbanized Tree Growth at UNH

Adviser: Mark Ducey

Allison Nash

Neuroscience and Behavior

The Distribution and Possible Roles of the Neuropeptide SCP in Melibe leonina

Adviser: Winsor Watson

Carly Nelson

Genetics

Characterization of a Palmitoyltransferase Mutant in Arabidopsis thaliana

Adviser: Estelle Hrabak

Valerie Nesom

Ecogastronomy and Plant Biology

A Step Further in Recipes for A New England Food Vision

Advisers: Joanne Burke, Daniel Winans

Hieu Nguyen

Biochemistry, Molecular and Cellular Biology

Using Chemical Cross-Linking and Mass Spectrometry to Identify the Binding Mechanism of PU-H71 on Heat Shock Protein 90 (Hsp90) in Embryonic Stem Cells

Adviser: Feixia Chu

Jenna O'del

Wildlife and Conservation Biology

Examining Animal Behavior through Dual Lenses: Indigenous Stories Predate but Also Highlight Western Ethological Principles in the Form and Function of Its Animal Characters

Advisers: Carrie Hall, Daniel Howard

Connor Perry

Biology

Bioaccumulation of Cyanotoxins in the Blood of Common Loons (Gavia immer)

Adviser: James Haney

Kira Rasmussen

Animal Science

Dairy Cow Preference for Free-Stall Barn versus an Outdoor Open Bark Mulch Pack

Advisers: Peter Erickson, Anne-Marie Smid, Marina von Keyserlingk

Alyssa Richman

Biomedical Science

Using Genome Wide Association Studies (GWAS) to Identify Candidate Genes Affecting Plant Root Phenotypes

Adviser: Dennis Mathews

Emmalayne Riley

Marine, Estuarine and Freshwater Biology

Nutritional Quality of Lettuce Grown in Hydroponic System vs Aquaponic System

Adviser: Todd Guerdat

Maegan Ryckman

Zoology

Imprinting Kin Recognition in Adult Male Guppies (Poecilia reticulata)

Adviser: Leslie Curren

Rachel Sabol

Biology

Bicistronic Regulation of the CERS1/GDF1 Transcript

Adviser: Brian Barth

Samuel Sanders

Wildlife and Conservation Biology

Effects of Camera-Trap Study Design on Avoidance Behavior in Coyotes (Canis latrans)

Adviser: Leslie Curren

Chloe Schmir

Nutrition

Farmers' Market Food Preferences and Food Habits among the Local Older Adults

Adviser: Kevin Pietro

Rebecca Sciallabba

Biochemistry, Molecular and Cellular Biology

Investigation of Aggregation Patterns of Soluble Htt Protein Complexes Using Analytical Ultracentrifugation with Fluorescence Detection System

Adviser: Clyde Denis

Moussa Siri

Environmental Sciences

Effect of Land Use on Sediment Transport in Streams Draining Coastal Watersheds

Adviser: Wilfred Wollheim

Frederique Sirois

Biomedical Science

Detection and Quantitative Analysis of Leptospirosis in Rat (Rattus rattus) Feces from the Kahanahaiki Forest of Oahu, Hawaii

Advisers: Jeffrey Foster, Katy Parise

Kathryn Slebodnik

Environmental Sciences

Impact of Management Intensive Grazing on Soil Carbon Sequestration and Greenhouse Gas Emissions at Organic Dairy Farms in the New England Region

Advisers: Alexandra Contosta, Andrew Grandy

Celeste Souza

Biomedical Science

Frankia Mediated Bioremediation of Dioxin Like Compounds

Adviser: Louis Tisa

Kaitlyn Sterns

Biomedical Science and Psychology

Medial Prefrontal Neurons Encode Information about Stimuli Signaling Reinforcement

Adviser: Robert Mair

Gianna Tempera

Animal Science

Effects of Feeding Sugar and Flax Oil on Performance of Holstein Cows Fed Flaxseed Meal

Advisers: Andre Brito, Caren Ghedini

Mason Twombly

Community and Environmental Planning
First Impressions: Somersworth
Advisers: Molly Donovan, Mary Friedman

Emily VanGulick

Marine, Estuarine and Freshwater Biology
Neuroanatomical Mapping and RNA Expression and Localization in the Brain of a Basal Vertebrate, the Sea Lamprey (Petromyzon marinus)
Adviser: Stacia Sower

Emma Warren

Neuroscience and Behavior
Comparing Cortical Activity of Prefrontal Neurons While Rats Perform Two Tasks with Different Decision Making Requirements
Adviser: Robert Mair

Ida Whitcomb

Environmental Sciences
Effects of Land-Use Changes on Nitrate Concentrations in Four New England Watersheds
Adviser: Wilfred Wollheim

Shana Whitney

Environmental Conservation Studies
Fungal Responses to Elevated Temperature and Soil Nitrogen Availability
Adviser: Serita Frey

Molly Womersley

Zoology
The Larval Mass Effect and the Behavior of Calliphora vomitoria
Adviser: Leslie Curren

Peter T. Paul College of Business and Economics First-Year Innovation and Research Experience (FIRE) URC

Poster Presentations & Oral Presentations

**Saturday, April 29
9 a.m.–2 p.m.**

Peter T. Paul College Building

FIRE is an integrated, team-based, and game-like experience for first-year Paul College students. Through a series of challenges, students develop business plans that are presented at this year-end finale, which features poster and oral presentations on students' business plans and concludes with a "Grand Challenge Round."

Grand Challenge: Addictive Society

Team: Masterminds

Adviser: Jessica Hill

Molly Bernier
Jacquelyn Boucher
Jacob Easter
Carolyn Fadden
Madeline Marchisio
Sara Peckham
Holly Reed
Hanna Schultz
Theresa Selesky
Hospitality Management
Bridget Burkett
Timothy Farrow
Riley Gardner
Grace Gendron
Jaimee Hersch
Travis Hurley
Richard Johnson
Leanna Klein
Cassandra Lee
Business Administration

Sarah Grady

Business Administration and Justice Studies
Amy Stanieich
Marketing

Team: One Nation Under Paul

Adviser: Catherine Wolstromer

Shae Berry
Michael Carbone
Sara Cordova
Catherine Eshbaugh
Connor Finnegan
Matthew Hotchkiss
Kirsten LaFleur
Ryan Leach
Timothy Lefebvre
Bryce Little
Trevor Lunn
Emily Morris
Samantha Moussalli
Brendan O'Connor
Miguel Penalba Diaz
Cody Twombly
James Webber
Business Administration
Molly Genest
Finance
Joseph Perry
Economics BA

Team: Risky Business

Adviser: Samantha Blaine

Cassidy Bartlett
Olivia Brigagliano
Ciara Brooks
Anthony Costalas
Ethan Floyd
Dylan Grocer
Joshua Hollis
Aaron Hunt
Hunter Lambroff
Thomas Licence
Sean McDonough
Matthew McEvoy
Andrew Merchant
Grace Monahan
Kaley Patterson
Nathan Rumford
Business Administration
Abigail Chapman
Undeclared

Ian Cummings
Economics BS
Connor Goff
Finance

Team: The 29ers

Adviser: Hayley Siemering

Samantha Carlen
Julia Dushane
Elizabeth Eilertson
Charles Gates
Ian Stocker
Emily Sullivan
Business Administration
Katherine Falzone
Emilia Favorito
Holly Grodt
David Jakubowski
Isabel Jimenez
Shawn Johnstone
Sarah Jones
Hanna Lawler
Sara Mihajlovits
Quynh Thao Nguyen
Kate Rosenblatt
Jordan Schille
Amelia Smiaroski
Escarle Turcios
Hospitality Management

Team: TRA1L8LAZERS

Adviser: Charles Cappetta

Colin Albrecht
Brianna Becotte
Julia Breed
Brandon Cann
Andrew Casson
Ashley Ceriani
Liam Costello
Bryce Currier
Danielle Doonan
John Eklund
Haley Flynn
Max Porrazzo
Carlton Robie
Business Administration
Tyler Bujwid
Business Administration and
Justice Studies
Shivani Sudan
Marketing

Team: W1LDF1RE

Adviser: Ahd Alhamdan

Eric Berkemeier
Corey Bleau
Benjamin Chapin
Emma Conner
RyleeMckay Culverwell
Madeline Guay
Patrick Hamill
Laci Hanington
Emile Hobeika
Sierra Juneau
Bulat Khamidullin
Erick MacCormack
Ryan Quinn
Edward Speidel
Andrew Wilson
Business Administration
Evan Carpinella
Nicholas Gould
Undeclared
Joshua Jasneski
Statistics
Jamie Nelson
Business Administration and
Entrepreneurial Studies

Grand Challenge: Food?

Team: Arnold Paulmer

Adviser: Katarina Gallogly

Gregory Abbott
Adam Chase
Matthew Coleman
Michael Cusolito
Ryan Donahue
Brendan Forauer
Kelsey Girard
Jaspreet Kaur
Kevin Kerrigan
Ivana Korusiakova
Charles Lamplough
Kayleigh Moquin
Patrick Moriarty
Daniel Nadeau
Brett Noone
Michael Parker
Keegan Porter
Sierra Riedel
Kendall Robinson
Business Administration

Team: Catch 22

Adviser: Michelle Paulsen

Joseph Capodagli
Economics BA
Rachel Conroy
Jessica Gagnon
Alana Hovey
Zachary Jarvis
Madeline Karlberg
Amylee Lawn
Hunter Letendre
Tara Marand
Cameron Piana
Brian Rivet
Kyle Romero
Sara Sherburne
Chelsea Sihombing
Cara Small
Hailey Studley
Jacob Woodrow
Business Administration
Savannah Hayes
Management
Nicholas Karas
Undeclared
Hannah Simard
Accounting

Team: Fuego 5

Adviser: Scout Pierce

Daniel Bamber
Jack Briggs
Jill Conry
Charles Davis
Jeffrey Foster
Caroline Hagan
Grant Harris
Emma Landry
Kijana Love
Cameron Novotny
Lily Pabo
Jack Rohrer
Dylan Salazar
Abigail Stearns
Caroline Tucker
Ponmani Vongsay
Business Administration
Eric Munson
Finance
Enoska Ventura
International Business and Economic
and Psychology
Maxwell Williamson
Marketing

Team: No aPAULogies

Adviser: Kelsey Ulaskiewicz

Rachel Doherty
Management
Meghan McGonagle
Hospitality Management
Elizabeth Lane
Cynthia Liu
Mary McKenna
Savannah McMenemy
Amelia Milonas
Brayden Moreno
Kalyani Pearson
Nicholas Powers
Bryanna Richardson
Nicholas Rocchio
Jordan Ross
Brandon Sasserson
Zachary Schneeloch
Nathan Sheeler
Madeline Surette
Joseph Suriner
Justin Thomas
Brian Thorne
Christine Tringali
Business Administration

Team: The Great 28

Adviser: Brandilynn Barker

Colby Barrett
Jackson Burbic
Martin Hecka
Casey Hopkins
Meghan McAvoy
Arielle Seavey
Ryan Sherman
Carly Sikorski
Philip Sy
Christopher Torname
Matthew Townsend
Kimberly Tsui
Shay Waldsmith
McLane Wood
Business Administration
Bretton Belden
Economics BS and English/Journalism
Ryan Gallant
Undeclared
Luke Gouldsbrough
Marketing

Patrick Morse
Economics BS
Nicholas Wyman
Finance

Team: Views from the 9

Adviser: Matthew Vossler

Alexa Ardolino
Taylor Barbagallo
Nora Biron
Benjamin Buchholz
John Cahill
Scott Callahan
Marissa Capone
Kayley Cedrone
Bethany Cherubini
Michael Ciardiello
Antonio Cosentino
Sean Crimmins
Anthony DeBeer
Samuel Eggert
Althea Gere
Peter Grande
Laura McArdle
Erin McCarthy
Madison Murdick
Business Administration
Timothy McCarthy
Entrepreneurial Studies

Grand Challenge: Medical Breakthroughs

Team: Almost Legal

Adviser: Alexandra Flagler

Nicolle Balesteri
Morgan Dudley
Megan Elwell
Justin Fregona
Thomas Frigulietto
Corey Gallagher
Patrick Grasso
Dylan Hogan
Nicholas O'Neil
Ayden Ricker
Joseph Sacco
Samrawit Silva
Michael Sullivan
Emily Tennis
Gavin Tierney

Brendan van Riemsdyk
Courtney White
Ryan Wickey
Business Administration
Joseph LaRocca
Economics BS
Anthony Rizzo
Business Administration and
Management Marketing

Team: Burning Up

Adviser: Michael Ellison

Samuel Bennett
Accounting
Nicholas Celentano
Daniel Delaney
Daniel Dixon
Jack Doherty
Nola Hesby
Megan Kikosicki
Madeleine Lessard
Sebastian McLinden
Grace Meehan
Megan Menard
Taylor Nottbart
Peyton Osgood
Patrick Roy
Taylor Spica
Keith Styles
Business Administration
James Ordway
Economics BA

Team: Elite 8

Adviser: Kyle Hurley

Haley Burns
Catherine Francis
Nguyen Phuong Khanh Huynh
Derin Josephson
Phillip Kimera
Brian Letourneau
Alexandra Lipinski
Annalee May
Brennan McGuirk
Craig Millard
Benjamin Moy
Conor Osborn
Olivia Patrick
Korey Paull
Isabella Zampieri
Business Administration

Harrison Glaude
Management
Alex Hiltz
Undeclared
Madison Jackson
Benjamin Mader
Marketing

Team: FIRE Kitties

Adviser: Nicholas Bouchard

Riley Ammerman
Attilio CrimiVaroli
Kyle Gelinas
Jennifer Hawley
Steven Hazeltine
Jackson Housman
Colby Lawless
Nicholas Lorden
Colin Maguire
Thomas Matthews
Sinead McDonagh
Bettyjane Moore-Strauss
Sean Ray
Thomas Stanley
Andrew Stefanski
Alicia Steinkrauss
Chad Supranowicz
Emily Tanski
Logan Welti
Emma Woodhouse
Jake Yennaco
Business Administration

Team: Justice League

Adviser: Ryan Justice

Tiger DeStefano
Undeclared
Alec Early
Thomas Egan
Elliot Ferland
William Fogel
Colin MacDonald
Connor McNamara
Conor O'Regan
Cameron Paquette
Campbell Quinn
Christina Sears
Erika Sillon
Chase St. Laurent
Marc Stokes
Nicolas Weisman
Daniel Whritenour
Business Administration

Lauren MacMillan
Accounting
Jeffrey Manning
Accounting and Finance
Paulina Papadopoulos
Business Administration and Hospitality
Management

Team: Paws of Paul

Adviser: Micah Allgood

Oliver Botthof
Brandon McNeil
Michael Norris
Robert Payne
Eric Penner
Matthew Phillips
Abigail Powers
Cory Ramsden
Max Ravenelle
Jeffrey Rhodes
Alexandria Richards
Madeleine Robinson
Zachary Rodrigues
Nikkilette Salley
William Saunders
Alexandra Scarfo
Liam Smith
Rose Tarvainen
Business Administration

Grand Challenge: Threats from Cyberspace

Team: Fire Proof

Adviser: George Pantelis

Alexei Baranov
Jack Barnes
Autumn Becker
Collin Belt
Sarah Cassandro
Alyson Cote
Patrick Cross
Micheal Curley
Margaret Dauphinais
Maxamillian DiBella
Zachary Doss
Nicholas Doubleday
Jamie Driscoll
Mohamed Elassy
Andrew Iannuzzi

Simran Kaur
Bailee McNamara
Kevin Murphy
Business Administration
Amanda Berry
Accounting
Jeffrey Campanile
Finance
Kelly Cheng
Undeclared

Team: Legion of Business

Adviser: Nicholas Doucette

Eric Buckenmaier
Finance
Gwenyth Hale
Gianna Lanzillo
Vincent LoBuono
Madelyn McAteer
Erinn McCarthy
Porter McManus
Mark Melanson
Jordan Murray
Andrew Palmer
Cameron Richall
Thomas Roark
Reid Shostak
Lauren Silver
Maxwell Whyman
Business Administration
Nicholas LaCreta
Finance and Information Systems
Management
Brendan Paulsen
Accounting
Nicholas Stuart
Entrepreneurial Studies and Finance
Derek Sturm
Information Systems Management

Team: Paul Patriots

Adviser: Jordan Collins

Matthew Alexander
Katherine Auger
Noah Auger
Madison Blais
Victoria Burns
Timothy Collins
Connor Czerepuszko
Colin Daly
Kallie Dougherty
Paige Duffy

Jack Dwyer
Mary Farley
Zoe Fitzgerald
Sean Fontaine
Samantha Galvin
Gerard Leard
Ethan Letourneau
Jared Silkman
Hailey Thompson
Jonathan Washington
Business Administration

Team: Stop, Drop, and Roll Cats

Adviser: Dakota Hippert

Nicholas Cambra
Cameron Chrystal
Devin Cowhig
Cortlynn Danby
Luke Doverspike
John Driscoll
Caroline Dunn-Packer
Tiemo Fenner
William Fraser
Christian Goodwin
Riley Green
Jeffrey Kearns
Nicholas Kenney
Jennifer Luetters
Carter Mercer
Skyla Mrosk
Harrison Zarak-Croke
Business Administration
Benjamin Monti
Economics

Team: The Economists

Adviser: Samantha Barrett

Nooran Alhamdan
Andrew Bisbee
Michael Brideau
Trevor Deane
Sarah Hobbs
Alexander McKenna
Sarah Nadeau
Daniel Norcross
Charlotte Sweetman
Economics BA

Parker Armstrong
Teresa Chen
Joseph Hook
Charles McKelvey
Richard Planchet
Andrea Scarfo
Evan Sevincgil
Jessica Shah
Economics BS
Isaiah Dubois
Amanda Lee
Business Administration
Andrew Griffin-Leon
Economics

Team: The Fire Cats

Adviser: Timothy Closson

Alonzo Addae
Aidan Brown
Regan Carriere
Alyssa Colbert
John Crawford
Dylan Feliciano
Christopher Grande
Evan Horn
Jason Hughes
Julia Hyatt
Joseph Lavery
Christian Lupoli
Justin Maguire
Austin McKenna
Blain Ouellette
Erica Perkins
William Pollard
Victoria Rice
Business Administration
Alexander Bunnell
Business Administration and Economics
Sean Power
Hospitality Management

Grand Challenge: Water Is Life

Team: F1R3 Goodell

Adviser: Kevin Johnson

Joseph Colasuono
Makenzie Donahue
Carly Dotson
Brendan Gallagher
Emma Gilmartin
Kyle Gourley
Andrew Groch
Ri Gulotta
Philip Hughes
Lindsey Innaimo
Timothy Larkin
Dana Levine
Kyle Lorenz
Sarah MacEachern
Nicole MacLellan
Olivia MacLellan
Kelly Marshall
Emily O'Connor
Justin O'Donnell
Evan Royer
Peter Steckowych
Business Administration

Team: FIRE Team 6

Adviser: Jon Tamposi

Robert Anderson
Joshua Andonian
Michael Dateo
Erin DeWolfe
Claire Durfee
Benjamin Factor
Jared Joy
Kyle Jutras
Kristine Keller-Miller
Page Laurendeau
Kathleen McDermott
Edward McNulty
Divyasree Mudhiredy
Hanzla Sheikh
Cole Spencer
Alyson Veo
Emily Vien
Chasia Warshow
Business Administration
Daniel Pinheiro
Economics BA
Devin Pronco
Accounting

Team: FORTUNE 500

Adviser: Julianne Calef

Elizabeth Brandt
 Ryan Brooks
 Alexander Haslam
 Heather Hill
 Sabrina Jowders
 Alexa Ladue
 Lauren Lumbr
 Theresa MacDowell
 Sarah Mahon
 Daniel McDougall
 Nora Miller
 Corey Mills
 Andrew Noyes
 Daniel O'Leary
 Reed Pfeffer
 Nathan Ralston
 Hannah Saulnier
 Jillian Sellers
 Nathalie St. Pierre
 Amanda Tongue
 Dylan Whitaker
 Business Administration

Team: R15E

Adviser: Grant Flewelling

Aaron Bernier
 Matt Cancian
 Matthew Cohen
 Alexa Guerrieri
 Meagan Hall
 Lauren Kelly
 Evan MacHenry
 Brian Mader
 Deandre Morales
 Bronson Paradis
 Eric Perry
 Maxwell Polay
 Lauren Reissfelder
 Emma Richards
 Daniel Sheehan
 Kevin Shields
 Thomas Simo
 Business Administration
 Anne Durgin
 Thomas Nappo
 Undeclared

Team: The 7 Wonders of Paul

Adviser: Alexys Gilcreast

Jessica Doherty
 Jonathan Dryja
 Charles Dundon
 Holly Eisenberg
 Nicholas Fay
 Alexandra Fogarty
 Stefanie Green
 Devon MacLeod
 Valerie Mattice
 Dylan McAteer
 Christopher McCarthy
 Ian Moscaritolo
 Reece Paquette
 Christina Pescatore
 Kyle Sedler
 Liam Seperack
 Laura Shea
 Bridget Stockwell
 Lucas Townsend
 Ryan Weinberg
 Cole Whitaker
 Business Administration

Team: The Wolf of Paul Street

Adviser: Hannah Coffey

Jared Farley
 Daniel Johnson
 Daniel Krivitsky
 Kevin Lawton
 Julie Montgomery
 Sean Psaledas
 Madeline Ragno
 Julianna Rinaldi
 Gregory Surgenor
 Robert Sweeney
 Matthew Sylvestre
 Russell Tam
 Skyler Tarczali
 Clare Wetmore
 Paul Wolstromer
 Samantha Woodward
 Jeremy Worden
 Shiyue Yuan
 Qixin Yang
 Business Administration
 Bryce Moser
 Economics BA and Finance
 Kenneth Uhlar
 Finance

**Chemistry Department
Poster Exhibition****Friday, May 5****3–4:30 p.m.****Parsons Hall, Southwest Lobby**

The Chemistry Department Poster Exhibition is the result of students' year-long senior thesis research in such areas as organic, inorganic, physical or analytical chemistry, and under the direction of their research adviser.

Graham Beaton

Chemistry

Synthesis and Characterization of Porphyrin Containing Nanoparticles to Model Heme Proteins

Adviser: Samuel Pazicni

Robert Biro

Chemistry

Precise Spacing of Pendant Vinyl Crosslinking Functionality along a Polymer Chain

Adviser: John Tsavalas

Jennifer Chouinard

Chemistry

Exploring the Synthesis and Internal Cross-Linking Abilities of Single Polymer Chains via Diels-Alder Reactions

Adviser: Erik Berda

Luke Daly

Biomedical Science

Does Type III Adenylyl Cyclase Regulate Memory Formation in Adult Mice?

Adviser: Xuanmao Chen

Marissa DelConte

Chemistry

Forensic Analysis by Scanning Electron Microscopy

Adviser: Patricia Wilkinson

Madison Dombrowski

Chemistry

Synthesis of a Bifunctionalized Bipyridine Ligand for Iron Coordination and Chain-Transfer Polymerizations

Adviser: Samuel Pazicni

Bryanna Dowcett

Chemistry

*Synthesis and Evaluation of Carbapenem
Beta-Lactams Containing Bulky
Hydrophobic C-6 Side Chains as Potential
Inhibitors of Carbapenemases*

Adviser: Marc Boudreau

Ashley Ellis

Chemistry

The Dark Side of Blue Light

Adviser: Glen Miller

Cynthia Gerber

Chemistry

*Isolation and Characterization of
Microplastics Used in Soaps and Cosmetics*

Adviser: Margaret Greenslade

Adria Kajenski

Chemistry

*Detection of Clozapine,
Desmethylozapine, and Clozapine-N-
Oxide in Plasma*

Adviser: Patricia Wilkinson

Brent Lawson

Chemistry and Physics

*Dicarboxylic Acid Shell on an Inert Aerosol
Core: A Variable Controlled Hygroscopicity
Investigation with Unexpected Results*

Adviser: Margaret Greenslade

Anthony Lemieux

Chemistry

*Light Induced Dehalogenation of
Halobenzene Using Carbon Quantum Dots*

Adviser: Christine Caputo

Dale Tardif

Chemistry

*Charge-Altering Releasable Transporters
for the Commercialization of C.R.I.S.P.R.*

Adviser: Patricia Wilkinson

Colman Wimsatt

Chemistry

*Synthesis of Single-Chain Nanoparticles to
Model [FeFe] Hydrogenase*

Adviser: Samuel Pazicni

Ann Manchester Kelley Nursing Inquiry Day

Tuesday, May 9**8:15 a.m.–4 p.m.**

**Memorial Union Building
Granite State Room**

This event features scholarly
presentations by undergraduate
Honors students and Graduate
Program students in Nursing.

Lauren Barker

Nursing

*Self Care of T2DM Patients with Chronic
Wounds in Ghana*

Adviser: Gene Harkless

Celine Boutin

Nursing

*Stress Levels and Their Relationship to
Coping Mechanisms and Personality
Traits in Nursing Students*

Adviser: Rosemary Taylor

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Nursing

*The Effects of Alcohol Prep Pads and
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Glucose Results*

Adviser: Susan Fetzer

Alexa Gilmore

Nursing

*Women's Experiences in the
CenteringPregnancy™ Program*

Adviser: Joyce Cappiello

Christen Soucy

Nursing

*The Work of Mental Health Nurses
in Australian Primary Care:
A Descriptive Study*

Adviser: Gene Harkless

Mary Kate Visnic

Nursing

*Neutropenic Diet: Standardizing the
Practice Using Evidence-Based
Practice Methods*

Adviser: Gene Harkless

Eleni Zotos

Nursing

*Urinary Incontinence among Female High
School Athletes: A Pilot Study*

Adviser: Gene Harkless

Peter T. Paul College of Business and Economics Paul J. Holloway Innovation-to-Market Prize Competition

Championship Round

Tuesday, May 9**1– 5:30 p.m.****Peter T. Paul College Building**

This competition takes students
out of the classroom and into the
real world. Students are required to
research and prepare strategies for
commercializing new products and
services, which they present to a
panel of industry judges. Prizes are
awarded for the most feasible and
fundable approaches for starting,
acquiring, or expanding a business
venture.

Acknowledgments

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