



University of
New Hampshire

Undergraduate Research Conference | April 11–26, 2014

Showcase for undergraduate research, engagement, scholarship, and creative presentations



A welcome to participants and attendees



MARK W. HUDDLESTON



LISA MACFARLANE

WELCOME to the 15TH annual celebration of research and discovery at the University of New Hampshire. The Undergraduate Research Conference (URC) highlights the outstanding research, scholarship, and creative activities of our students and their faculty mentors. We take pride in—and learn from—their accomplishments.

The long tradition of college-based research conferences came together as a University-wide effort in the spring of 2000. Since then, the URC has become an annual tradition that celebrates the ingenuity, talent, and accomplishments of UNH students, and honors the collaboration and mutual respect between our students and their faculty. Our conference is one of the largest and most diverse in the nation, and this year marks another record in participation. More than 1,100 students will present their findings at both the Durham and Manchester campuses, and represent academic achievements in every college and school.

At UNH, we seek through our discovery-based education to give every student the knowledge, skills, and confidence they need to turn their ideas into action, whether they pursue graduate studies, fulfilling careers, and, always, lives of meaning and commitment. The URC represents a moment for reflecting on our students' success, and their promise.

Whether your visit includes a poster session, a formal presentation, an art exhibit, or a creative demonstration, we know you will be impressed with the participants' knowledge and understanding. Thank you for your interest in, and support of, our remarkable students.

Sincerely,

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 "Lisa MacFarlane".

LISA MACFARLANE, PROVOST

Inquiry, Discovery, and Engagement:

The UNH Undergraduate Research Conference



JULIE E. WILLIAMS



LYNNE D. COOPER

WELCOME to our springtime celebration of academic success and achievement at the University of New Hampshire. We take special pride in the efforts of our students and in the dedication of the faculty who mentor and guide them. A hallmark of a UNH education is the opportunity to engage in hands-on research with faculty scholars.

This year, more than 1,100 UNH students mentored by more than 320 UNH faculty members will present their research and scholarship. Presentations will represent many disciplines as well as multidisciplinary learning communities where empirical research, engaged scholarship, and creative scholarship result.

Our undergraduate students also have this unique opportunity to gain essential skills to help them pursue graduate study, learn how to collaborate across disciplines, pursue meaningful careers, and make a difference in the world. Faculty members enjoy mentoring students, and report that working with students strengthens their teaching and research.

One of our goals at UNH is to provide a unique opportunity for undergraduate students to inquire, learn, discover, and engage. For many, the URC is their first opportunity to showcase their work to a much broader audience. They 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. This faculty-student partnership and the varied audiences to whom they present are vital to enriching and bringing new learning to life, which often leads to new areas of inquiry.

Please join us in thanking each student presenter and every faculty mentor who is making this great event possible. We encourage you to read the posters, listen to the presentations, and ask questions of our students. We are confident you will be impressed with what you learn and we look forward to your active engagement with the University of New Hampshire!

A handwritten signature in cursive script that reads "Julie E. Williams".

JULIE E. WILLIAMS, SENIOR VICE PROVOST, ENGAGEMENT AND ACADEMIC OUTREACH

A handwritten signature in cursive script that reads "Lynne D. Cooper".

LYNNE D. COOPER, CHAIR, URC PLANNING COMMITTEE

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All events are free and open to the public.

Accessibility accommodation requests may be directed to Lynne Cooper at (603) 862-1997.

URC 2014 Calendar

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

Friday, April 11

6–8 p.m.

2014 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition and Preview Reception

Paul Creative Arts Center
Museum of Art (6)

(Exhibition runs April 11–May 16, 2014)

Wednesday, April 16 and Thursday, April 17

Wednesday, 5–8 p.m.

Graduate Research Conference (GRC)
Poster Presentations
Whittemore Center Arena (1)

Thursday, 9 a.m.–3 p.m.

Graduate Research Conference (GRC)
Oral Presentations
Holloway Commons (2)

Tuesday, April 22

10 a.m.–2 p.m.

UNH Manchester Undergraduate Research Conference
Oral Presentations
UNHM Auditorium

Wednesday, April 23

9 a.m.–Noon

Thompson School Community Leadership Program
Memorial Union Building
Rooms 330/332 and 334/336 (3)

10:30 a.m.–Noon

UNH Office of Community Service and Learning and Seacoast Reads
Memorial Union Building
Rooms 330/332 and 334/336 (3)

Noon–2 p.m.

The Naked Arts—Creativity Exposed! (Act I)

Paul Creative Arts Center
Museum of Art (6)

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
Peter T. Paul College, G-35 (11)

2–5 p.m.

Interdisciplinary Science and Engineering (ISE) Symposium
Whittemore Center Arena (8)

3:30–6 p.m.

UNH Manchester Undergraduate Research Conference
Poster Presentations
UNHM Auditorium

Thursday, April 24

8 a.m.–5 p.m.

UNH Manchester Undergraduate Research Conference Technology Day Engineering Technology Senior Projects
UNHM, Pandora Mill, second floor

2–4 p.m.

UNH Manchester Undergraduate Research Conference Technology Day Computing Technology Poster Presentations
UNHM, Pandora Mill, second floor

10 a.m.–1 p.m.

UNH Manchester Undergraduate Research Conference
Cinema Arts Day
UNHM Auditorium

12:40–2 p.m.

The Naked Arts—Creativity Exposed! (Act II)
Paul Creative Arts Center
Museum of Art (6)

12:30–2 p.m.

History Department Undergraduate Presentations
Memorial Union Building
Rooms 332, 338, and 340 (3)

5:30–7:30 p.m.

Thompson School Undergraduate Student Showcase
Stacey's at Cole Hall (10)

Friday, April 25

9–9:30 a.m.

Parents Association Undergraduate Research Symposium Breakfast
Memorial Union Building (3)
Granite State Room

9:30 a.m.–1:30 p.m.

Parents Association Undergraduate Research Symposium
Poster and Oral Presentations
Memorial Union Building (3)

10 a.m.–5 p.m.

Paul College of Business and Economics Undergraduate Research Conference
Peter T. Paul College Building (11)

1–5 p.m.

Paul College of Business and Economics University-wide Paul J. Holloway Prize Innovation-to-Market Competition
Bud Albin Challenge Round

12:15–1 p.m.

The Naked Arts—Creativity Exposed! (Act III)
Memorial Union Building
Strafford Room (3)

1:30–4 p.m.

College of Health and Human Services Grimes Award Competition
Pettee Hall, G-10 (9)

1:30–5 p.m.

Psychology Department
George M. Haslerud Undergraduate Research Conference
Conant Hall, Room 101 (12)

2–6 p.m.

Honors English Undergraduate Research Conference
Hamilton Smith Hall
English Department (4)

4–8:30 p.m.

Philosophy Department Undergraduate Research Conference
Murkland Hall, G-17 (5)

8 p.m.

Student Composers' Concert
Paul Creative Arts Center
Bratton Recital Hall (6)

Saturday, April 26

7:45 a.m.–2 p.m.

23rd Annual College of Life Sciences and Agriculture (COLSA) Undergraduate Research Conference
Huddleston Ballroom and
Holloway Commons (1) and (2)

Friday, May 2

3–4 p.m.

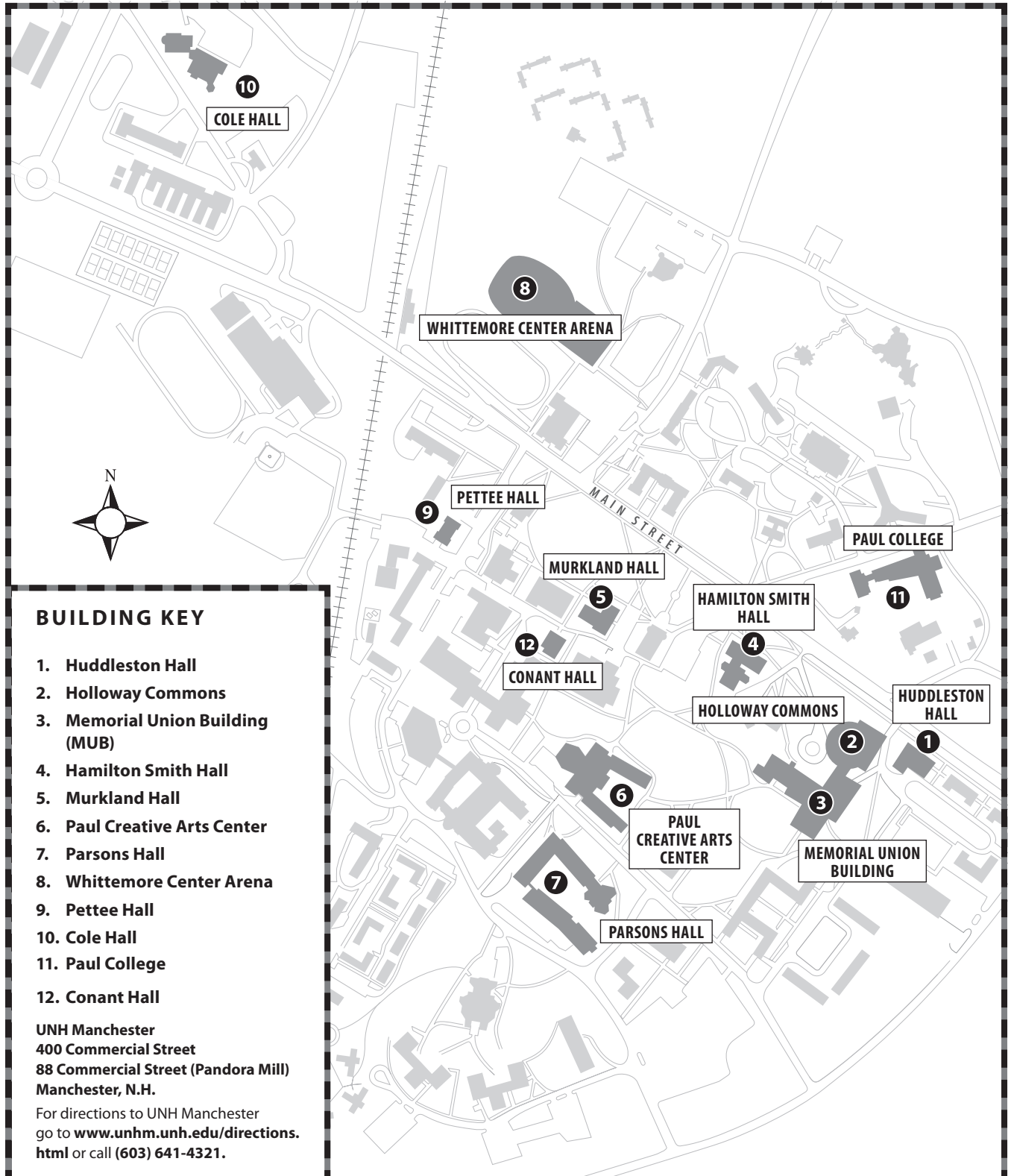
Chemistry Department Poster Exhibition
Parsons Hall, Iddles Lobby (7)

Wednesday, May 7

1–5:30 p.m.

Paul College of Business and Economics University-wide Paul J. Holloway Prize Innovation-to-Market Championship Round
Holloway Commons
Squamscott Room (2)

URC 2014 Campus Map



2014 Senior B.A., B.F.A. & M.F.A. Exhibition and Preview Reception

Friday, April 11

6–8 p.m.

Museum of Art, Paul Creative Arts Center

This annual show celebrates the achievements of graduating art students from the UNH Department of Art and Art History.

A list of participants will be available at this event.

Graduate Research Conference (GRC)

Poster Presentations

Wednesday, April 16

5–8 p.m.

Whittemore Center Arena

The Graduate Research Conference (GRC) is devoted to celebrating the high quality research being conducted by graduate students at UNH and is designed to showcase research from graduate students in all disciplines. Participants interact with other graduate students and faculty from across campus. Attending the GRC affords the entire university community the opportunity to participate in the graduate education experience.

Graduate Research Conference (GRC)

Oral Presentations

Thursday, April 17

9:00 am–3:00 pm

Holloway Commons

The Graduate Research Conference (GRC) is devoted to celebrating the high quality research being conducted by graduate students at UNH and is designed to showcase research from graduate students in all disciplines. Participants interact with other graduate students and faculty from across campus. Attending the GRC affords the entire university community the opportunity to participate in the graduate education experience.

UNH Manchester Undergraduate Research Conference

Oral Presentations

Tuesday, April 22

10 a.m.–2 p.m.

University Center

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

Nelson Gbeve

Communication Arts

From Conversation to Connectivity: How the Mobile Phone has Facilitated and Altered Personal Relationships

Adviser: Jeffrey Klenotic

Jinnea-Brianne Hebert

Psychology

Spiritual Care in Hospice and Palliative Care

Adviser: Alison Paglia

Patrick Phair

Communication Arts

Digital Dostoyevsky: The Quest for Meaningful Narrative in the Video Game Medium

Adviser: Jeffrey Klenotic

Alan Provance

Undeclared

The American Response to the Bolshevik Revolution

Adviser: John Resch

Patrick Synan

English and Politics and Society

Translation and Tradition in Seamus Heaney's Human Chain

Adviser: Susan Walsh

Thompson School of Applied Science Community Leadership Program Presentations

Capstone Portfolios and Nonprofit Research

Wednesday, April 23

9 a.m.–Noon

Memorial Union Building

Rooms 334/336 and 338/340

The Community Leadership Program is an innovative associate degree and diploma program that prepares students of all ages to work effectively within community organizations and to be active, influential citizens. This exhibition displays students' work in two areas: students who have researched the donor-worthiness of specific nonprofits through their Introduction to Nonprofit Organizations class and students who are presenting their leadership portfolios as part of their Capstone work.

MUB, Rooms 334/336**Capstone Portfolios**

Moderator and Adviser: Tim Barretto

Katherine CharronCommunity Leadership
Cocheco Valley Humane Society
Fundraiser**Michael Donahue**Community Leadership
Swing Big for Brain Tumor Research**Emeric Farr-Szep**Community Leadership
Girl Rising: A Global Action Campaign
for Girls Education**MUB, Rooms 338/340****Nonprofit Research**

Moderator and Adviser: Kate Hanson

Odun AdegbiteHealth Management and Policy
Nonprofit Research: Operation Blessing**Victoria Bassi**Family Studies
Nonprofit Research: Fair Tide Investigation
and Evaluation**Adriana Castrillon Reyes**Family Studies
Nonprofit Research: Special Olympics of
New Hampshire**Ryan Flanagan**Community Leadership
Nonprofit Research: New Heights**Alyssa Fraser**Family Studies
Nonprofit Research: A Safe Place**Laura Kazmierczak**Family Studies
Nonprofit Research: Great Bay Services**Devin Kelsey**Anthropology and Sociology
Nonprofit Research: Child and Family
Services of NH**Arielle Marquis**Psychology
Nonprofit Research: Somersworth Youth
Safe Haven**Jillian Marquis**Communication
Nonprofit Research: Donorability of the
American Cancer Society**Casey Mazar**Sustainable Agriculture and Food Systems
Nonprofit Research: Waysmeet Center**Vivian Pham**Psychology and Family Studies
Nonprofit Research: Goodwin Community
Health**Abigail Rabinovitz**Applied Animal Science and Community
Leadership
Nonprofit Research: NHSPCA**Kerry Ryan**Community Leadership
Nonprofit Research: Environmental League
of Massachusetts**Leah Schwanke**Culinary Arts and Nutrition
Nonprofit Research: The Birchtree Center**Emma Vachon**International Affairs and European
Cultural Studies
Nonprofit Research: Friends Forever**Cody Waites**Family Studies
Nonprofit Research: Friends in Action**Erica Wuorio**Communication
Nonprofit Research: UNH Fund**UNH Office of Community
Service and Learning
and Seacost Reads****Wednesday, April 23****9 a.m.–Noon****Memorial Union Building**

This display showcases the work of student service organizations and student groups—ranging from spring break trips to residence hall community partnerships—engaged in community service and service-learning projects throughout the year.

Taylor DevineCommunication Sciences and Disorders
Building Relationships with Books:
Seacoast Reads Volunteer Tutoring
ProgramAdvisers: Pamela Bishop, Carrie Smart,
Ruth Wharton-McDonald**The Naked Arts—
Creativity Exposed****Act I****Wednesday, April 23****Noon–2 p.m.****Museum of Art, Paul Creative Arts
Center**

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.

Jennifer Lamontagne

Fine Arts

What We Needed to Know

Adviser: Julee Holcombe

Kimberlee Meserve

Fine Arts

Memories: Near and Afar

Adviser: Julee Holcombe

Amber Petty

Fine Arts

Portraits of Home

Adviser: Julee Holcombe

Keelie Winslow

English

Spotted Horse: A Short Story

Adviser: Thomas Payne

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

Charles & Miriam Nelson Poster Competition

Wednesday, April 23
Noon–2 p.m.
Paul College, Room G35

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 and A with the judges.

Steven Adams

Information Systems Management and Management

Lisa Callahan**Kevin Chase**
Management**Brett Cole**

Marketing

Richard Flocco**Eric Inglese**

Finance and Management

Breezy Mirror

Adviser: William Hassey

Daniel Barlow**Samuel Gruber****Michael Murphy**

Management

Jaimee Harvey

Finance and Management

Nathan Mainemer

Marketing and Management

Tracey Nicholson

Marketing

NightLife

Adviser: William Hassey

Kristen Bellomo**Melissa Karpel**

Marketing and Management

Jaclyn Deasy**Marisa Quintanar**

Management

Quinn Desiderio

Accounting

Joshua Sokol

Marketing and Entrepreneurial Studies

EZ-Park Business Proposition

Adviser: William Hassey

Brian Bissonette

Economics and Management

Gregory Cuoco**Jacob Lang**

Management

Cameron Perl

Electrical Engineering

PAPaya Prevention

Adviser: Marc Sedam

Richard Boudrow

Entrepreneurial Studies

Ryan Byrne

Entrepreneurial Studies and Finance

HouseU

Adviser: Rob Patton

Robert Bowman

Entrepreneurial Studies and Management

Christopher Buxton**Scott Ricketts**

Marketing

Mark Hodges

Finance and Management

Griffin Nuttall

Management

Dcubed

Adviser: A. R. Venkatachalam

Emily Buswell

Accounting and Entrepreneurial Studies

Peter Mancuso

Finance and Entrepreneurial Studies

Matthew McAuliffe

Marketing and Entrepreneurial Studies

MyStyle

Adviser: John Ela

Adam Carignan**Alyson Packhem****Taylor Walter**

Environmental Engineering

Elizabeth McCrary

Entrepreneurial Studies

Flow and Grow

Adviser: Nancy Kinner

Cara Carter

Marketing and Management

Brianne Cox

Marketing

William Foley**Amanda Walker**

Finance and Management

Cody Marchand**Jared Perkins**

Management

My Living Experience

Adviser: Caitlin DeSoye

Douglas Carter**Matthew Sweeney**

Mechanical Engineering

Thomas DelSignore**Galen Hand**

Marketing

The Bar-Back

Adviser: Peter Masucci

Joseph Corcoran

Undeclared

Driven

Advisers: Juan Florin, Peter Masucci

Daniel Crowley**Bridget Fay****Cole Jaillet**

Marketing and Entrepreneurial Studies

Jeffrey Moore**Andrew Nelligan**

Mechanical Engineering

Granite State Ventures: TiltOne

Adviser: Jeffrey Sohl

Toby Dewhurst (*Graduate Student*)*ThoughtSoko: Empowering the Creative World*

Adviser: Fiona Wilson

Matthew Doubleday

Finance and Accounting

Daniel Lambert

Economics and Finance

SunRaise

Adviser: Ahmad Etebari

Martin Gorman

Entrepreneurial Studies and Marketing

HitSpit

Adviser: Bruce Pfeiffer

Hayley Harmon

Ecogastronomy and Economics

The Central Market House

Adviser: Daniel Winans

Kristopher Hopkins

Mechanical Engineering

Cole Jaillet

Marketing and Entrepreneurial Studies

Curtis Lush

Computer Engineering

SkiSmart

Adviser: Andrew Earle

Kevin Joaquim

Finance and Entrepreneurial Studies

Benjamin Rodgers

Entrepreneurial Studies and Management

WorldSleep

Adviser: Andrea Kokolis

Corey Keenan**Jonathan Vignaly**

Entrepreneurial Studies

Global Brew

Adviser: John Ela

Christopher Kontos

Entrepreneurial Studies

James Landry

Entrepreneurial Studies and Economics

Fitness Fuel

Adviser: John Ela

Samuel St. Germain

Entrepreneurial Studies and Management

Nicholas Tovey**William Watson**

Entrepreneurial Studies

TuneSquad

Adviser: John Ela

Emily Stone

Marketing and Management

*DiaBEATit: A Gaming App for Adolescents**With Type 1 Diabetes*

Adviser: Andrew Earle

Emma Vaillancourt (*Graduate Student*)*Going Outfitters*

Adviser: Robert Gough

Interdisciplinary Science & Engineering Symposium (ISE)

Poster Presentations

Wednesday, April 23**2–5 p.m.****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. Students have an opportunity to interact with peers and gain professional experience presenting research. Attendees learn more about research and educational opportunities in science and engineering at UNH. The program will include a poster session, refreshments, and an awards ceremony.

Salar Abbas**Daniel Christensen****Mateen Eslamy**

Information Technology

Research SAS Visual Analytics

Adviser: Scott Valcourt

Zain Abbas

Physics

*Understanding Thermometry at Low**Temperature*

Adviser: Karl Slifer

Odin Achorn

Chemistry

*Radically-Exchangeable Alkoxyamines as**Heat-Responsive Crosslinkers for Polymeric**Nanostructures and Nanocomposites*

Adviser: Erik Berda

Travis Adams

Civil Engineering

*Dynamic Testing Procedures for**Performance Assessment of Nuclear Fuel**Rods*

Adviser: Ricardo Medina

Ian Ainslie**Ewan Miller****Adam Hunsaker**

Civil Engineering

Stephen Rosenberg

Civil Engineering, Geography, and Family Studies

Memorial Bridge Tidal Turbine

Adviser: Erin Bell

Samuel Allen**Nicholas Sweeney-Cook**

Chemical Engineering

*Facile Synthesis of Metal Oxide**Nanoparticle in Solution*

Adviser: Xiaowei Teng

Tristan Amaral

Earth Sciences

*How Does Snowpack Evolution Affect**Climate?*

Advisers: Jack Dibb, Cameron Wake

Michael Anderson**Matthew Cote****Matthew Macey****Chelsea Noyes****Liam O'Brien****Brandon Smith**

Civil Engineering

Sibley Pond Bridge Replacement

Adviser: Ricardo Medina

Samantha Anderson

Environmental Sciences

Fine Scale Species Composition in a Region of Discontinuous Permafrost

Advisers: Michael Palace, Ruth Varner

Grigoriy Androsov**John Connolly****Christopher Raymond**

Civil Engineering

Historic Building Renovation in Newmarket

Adviser: Tat Fu

Zachary Angelini**Abygail Mangar****Katerina Messoligitis**

Environmental Engineering

Taygra Longstaff

International Affairs and Civil Engineering

Tegan O'Neill

Political Science

The World Energy Project Team at the University of New Hampshire

Adviser: James Malley

Zachary Angelini

Environmental Engineering

Optimization of a Small Business' Sustainability Using Life-cycle Analysis Software and Benefit Corporation Assessment Tools

Adviser: Kevin Gardner

Georgianne Areizaga

Electrical Engineering

Haley Moore

Mechanical Engineering

Small Scale Wind Turbine

Advisers: Michael Carter, Martin Wosnik

Brittany Artale

Chemical Engineering

Developing Genetic Tools for Geobacillus

Adviser: Kang Wu

Adam Atkins**Wesley Bird****Sean Buxton****Andrew Felber****John Wight**

Mechanical Engineering

Diode Pumped Alkali Laser Prototype

Advisers: F. William Hersman, Christopher White

Michael Auger**Douglas Carter****Amanda Makowiecki**

Mechanical Engineering

Separation Phenomena in Shear Wake Flows

Adviser: Joseph Klewicki

Griffin Aurora**Daniel Barowski****Tyler King**

Civil Engineering

Tyler Couett

International Affairs and Civil Engineering

Design Concept for the Epping Public Library

Adviser: Charles Goodspeed

Adam Baillargeon**Ryley Paquette****Michael Trovato**

Environmental Engineering

Jeffrey Sires

Civil Engineering and Environmental Engineering

Slow Sand Filter for San Pedro de Casta

Adviser: Michael Collins

Dylan Ball**Sarah Marie Frankenberger****Chad Lawrence****Zachary Paight**

Civil Engineering

UNH Cowell Stadium Upgrade

Adviser: Raymond Cook

Madelyn Ball**Per Lindgren**

Chemical Engineering

Phenol Deoxygenation Over Hydrotreating Catalysts

Adviser: Palligarnai Vasudevan

Thomas Ball**Jessica Constant****Charles Riccardi****Dustin Sewall**

Civil Engineering

Six Flags Wooden Roller Coaster

Adviser: Erin Bell

Jonathan Banker

Information Technology

Help Desk CSR

Adviser: Joanne Rollins

Christopher Barr**Tyler Fausnacht****Nicholas Geist****Sean Gribbin****Alex LeBoeuf****Matthew Sweeney**

Mechanical Engineering

Eric Boudreau**Sean Leighton**

Computer Science

Ryan Cahill

Computer Engineering

UNH ROV: Underwater Remotely Operated Vehicle

Advisers: M. Robinson Swift, May-Win Thein

Philip Barron II**Myles Duncanson****Kaitlin Frederick**

Mechanical Engineering

Magnetic Pulse Welding

Adviser: Brad Kinsey

Eric Beaudoin

Genetics

Characterization of the Colletotrichum Species Complex Across Fruit in the Northeastern United States

Adviser: Kirk Broders

Rachel Beaudry**Devon Christen****Paige Dickie****Christopher Dowd****Justin Pennell****Kevin Tisdale**

Civil Engineering

UNH Steel Bridge Team

Adviser: Charles Goodspeed

Thomas Beaulieu
Tucker Berube
Joseph Bleczinski
Ryan Bonin
Benjamin Brownell
Randall Carlson
Steven DeSantis
Matthew Dolan
Nicholas Elliott
Joshua Guion
Peter Konstatilakis
Stephen Miller
Manasvi Putcha
Brad Thompson
Yigit Tokbey
 Mechanical Engineering
Jeffrey Cahill
 Electrical Engineering
University of New Hampshire Precision Racing
 Adviser: Todd Gross

Sarah Benner
 Information Technology
Smartify
 Adviser: Sandra Rand

Jean-Francois Benoit
 Earth Sciences
Testing the Age of the Western Branch of the East African Rift Using Magnetostratigraphy
 Adviser: William Clyde

Brendan Bishop
 Chemical Engineering
Superior Power Performance of Vanadium Oxide Layered Nanostructure
 Adviser: Xiaowei Teng

Christopher Blais
 Chemical Engineering
Fabrication and Characterization of HSA Microcapsules
 Adviser: Nivedita Gupta

Michael Bogochow
Jeffrey Masucci
Cody Noel
 Computer Science
Thomas Conway
Andrew D'Amore
William Lerner
Kristin Therrien
 Mechanical Engineering
Autonomous Surface Vehicle
 Adviser: May-Win Thein

Daniel Bolan
Joseph Jourdain
 Computer Science
Jesse Davis
Erik Larson
Brett Ruggles
Stephen Swanick
 Mechanical Engineering
Timothy Mitsopoulos
 Computer Engineering
ET-NAVSWARM
 Adviser: May-Win Thein

Chase Borden
Hau Doan
Joshua Feltner
Taylor Gamble
Daniel Holm
Cameron Keefe
Jeffrey Moore
Andrew Nelligan
Tucker Nugent
Jonathan Slowe
 Mechanical Engineering
UNH Baja SAE
 Adviser: Barbaros Celikkol

Calvin Boseke
Andrew Scire
Evan Vigue
 Mechanical Engineering
Design of Automated Jigging Device
 Adviser: Kenneth Baldwin

Joshua Bouthillier
Joseph DeSantis
Stephen Groark
Ryan Parker
David Schlatter
 Civil Engineering
Residential Cargo Container Living
 Adviser: Robert Henry

Andrew Boutin
David Harrigan
Justin Mansfield
 Computer Science
Northeastern Collegiate Cyber-Defense Competition
 Adviser: Kenneth Graf

Michael Boyd
Brendan Martin
Sean Patry
Timothy Patterson Jr
Bradley Poegel
 Mechanical Engineering
Nicholas Frederico
Drew Stock
 Computer Engineering
Jesse Mailhot
 Computer Science
NASA MMS QuadSat Generation C
 Adviser: May-Win Thein

John Brindley
Jesse Shull
 Mechanical Engineering
Research & Development of WingTip Devices for Hydro-Kinetic Turbines and other Marine Applications
 Adviser: Martin Wosnik

Lauren Brodie
 Environmental Sciences
Landfills: Permanent Solution or Risky Business
 Adviser: Michael Palace

Cody Burliss
Michael Wawrzyniak
 Information Technology
Clinton York
 Information Technology and Management
SDN: NetFPGA
 Adviser: Scott Valcourt

Trung Cao
Julie Rose
 Information Technology
Twitter Comfort Website
 Adviser: Tat Fu

Blaine Cardali**Brian Diezel****William Edgerton****Andrew Marlin**

Civil Engineering

Hannah Leonard

Environmental Engineering

Remediation of the Elizabeth Mine Superfund Site

Adviser: Jean Benoit

Adam Carignan**Alyson Packhem****Taylor Walter**

Environmental Engineering

Elizabeth McCrary

Entrepreneurial Studies

Durham Urine Diversion and Recycle Feasibility Study

Adviser: Nancy Kinner

Ian Carlisle

Geology

Arsenic Dynamics in New England Groundwater

Adviser: Julia Bryce

Anthony Caruso**Colin Fenton****Colby Tidd**

Civil Engineering

Cottages of Durham

Advisers: Thomas Ballestero,

Joe Persechino

David Chadwick

Electrical Engineering and Management

Wireless Electrocardiogram for Consumers

Adviser: John LaCourse

Jacob Chaisson**Michael Figueroa****Christopher Jacques****Sonja Pape**

Civil Engineering

Sea Level Rise Adaptation Options for New Castle Causeway

Advisers: Jo Daniel, Jennifer Jacobs

Eric Chamberlain**Jackson Corson****Daniel Moss**

Computer Science

Course Scheduling Application

Advisers: Radim Bartos,

Michel Charpentier

Brittany Chambers

Biomedical Science

Building a Better Pentacene with Excellent Photooxidative Resistance and Thin Film Morphology

Adviser: Glen Miller

Stephen Chambers

Information Systems Management

SPDY vs HTTP/1.1: An Empirical Evaluation of Network Protocol Performance

Adviser: Radim Bartos

Daniel Chandler**Jonathan George****Nico Gobbi****Stefan Kargakis****Jared Nash**

Civil Engineering

Hooksett Service Area

Advisers: Paul Godfrey, Robert Henry

Zach Charewicz**Zachary Countie****Dimitry Harris**

Mechanical Engineering

Effects of Scale on Model Wind Turbines

Adviser: Martin Wosnik

Michael Checkoway**Rishab Khanna****Ryan Turner**

Information Technology

Datacasting

Adviser: Scott Valcourt

Chad Civello

Physics

Analyzing Heavy Photon Search Simulations to Determine the Potential for True Muonium Discovery

Adviser: Maurik Holtrop

Ethan Cline

Physics

Characterization of a Silicon Microstrip Detector With an Infrared Laser

Adviser: Maurik Holtrop

Michael Cobb (Special Guest from Elizabeth City State University)

Chemistry

The Watermark Project: Human Actions Impacting the Quality of Water

Adviser: Linda Hayden (ECSU)

Joseph Collins

Mechanical Engineering

Exploring Auxetic Designs With 3-D Printing

Adviser: Yaning Li

Scott Cooney**Jordan Donovan****David Wyman**

Information Technology

Software Defined Networking (OpenDaylight)

Adviser: Scott Valcourt

Samuel Cordeiro**Cassandra DeNunzio****Andrew Felicetti****Robert Galli****Cameron Perl****Kevin Tierney**

Electrical Engineering

The Goddard Project

Adviser: W. Thomas Miller

Justin Cullity

Chemical Engineering

Resistance of Geobacillus to Heavy Metals

Adviser: Kang Wu

Leland Curtis**Zachary Duve**

Computer Science

Anthony Edmonds**Kyle Gagnon****Justin Murphy****Jonathan Shepard**

Mechanical Engineering

UNH Lunabotics Team

Adviser: May-Win Thein

Scott Cypher

Computer Science

Designing and Implementing an Android Application and Arduino Library for Simplified Bluetooth Communication

Adviser: Radim Bartos

Lindsey Daniels

Chemistry

Formation of Amino Acid-derived Cyclopropanols

Adviser: Charles Zercher

Daniel Darcy

Chemistry
*Molecular Dynamic Study of
 Coarse-Grained Heteropolymer Folding*
 Advisers: Erik Berda, Howard Mayne

Jeffrey Davies**Kristopher Hopkins****Brian Regan**

Mechanical Engineering
Rope-less Fishing in the Gulf of Maine
 Adviser: Kenneth Baldwin

Abigail Davis**Megan Hamilton****Khoa Le****Ryan McMullen**

Civil Engineering
Mechanically Stabilized Earth Wall
 Adviser: Majid Ghayoomi

Joel DeStasio

Environmental Sciences
*Methane and Carbon Dioxide Production
 Rates in Lake Sediments From Sub-Arctic
 Sweden*
 Adviser: Ruth Varner

Jessica DelGreco

Environmental Sciences
*Estimating Anthropogenic Influences in
 Tropical Forests using Charcoal*
 Adviser: Michael Palace

Salvatore Devito**Scott Doe**

Electrical Engineering
*Developing a Tool for Converting MP3
 Audio Files to Staff Music*
 Adviser: Richard Messner

Joseph DiDonna

Electrical Engineering
*RC Airplane Instrument Landing System
 Glide Slope*
 Adviser: Kent Chamberlin

Patrick Dodd**Steven Dvorak****John Stowell****Spencer Zimmerman**

Mechanical Engineering

Michael Kirby

Information Technology and Business
UNH Aero SAE
 Advisers: Todd Gross, Glenn Shwaery

Azaline Dunlap-Smith

Chemistry
*Attempted Synthesis of a Very Novel
 Silatrane*
 Adviser: Arthur Greenberg

Adam Dyer

Chemistry
*Synthesis of a Novel Self-Assembling,
 Hyperbranched, Dendrimer Polymer via
 RAFT Polymerization Capable of Tem-
 perature Controlled Fe(II) Complexation*
 Adviser: W. Rudolf Seitz

Meaghan Elrick

Chemistry
Refractive Indices of Atmospheric Aerosols
 Adviser: Margaret Greenslade

Nicholas Frederico**Drew Stock**

Computer Engineering
NASA MMS QuadSat Generation-C
 Adviser: W. Thomas Miller

Jonathan Frey

Electrical Engineering
Hardware Trojan Detection
 Adviser: Qiaoyan Yu

Logan Gagne

Glenn Martin
 Information Technology
IPv6 Monitoring
 Adviser: Scott Kitterman

Arsani Gaied

Computer Science
*Graphical Analysis of Meta-Genomic
 Sequence Clusterings*
 Adviser: R. Daniel Bergeron

Nihco Gallo**Julian Lovering**

Mechanical Engineering
Investigation of Avian Flight Mechanics
 Adviser: John LaCourse

Laurenz Gallopyn**Michael Rabideau****Jonathan Thomas**

Computer Science
Asteroid Modeling Project
 Adviser: May-Win Thein

Ryan Gardiner

Computer Engineering
Player Tracking Grid
 Adviser: Kent Chamberlin

Dana Gauci**James Tardiff****Adam Zak**

Electrical Engineering
*Measuring Precognition by Physiological
 Responses*
 Adviser: Kent Chamberlin

Jason Gelinas**Xinghua Zhang**

Computer Science
*Enhancing the User Experience With Moss
 Plagiarism Detection*
 Adviser: R. Daniel Bergeron

Eric Germann

Physics
*Monte Carlo Modeling of the Proposed
 Mars 2020 Instrument DUNE Response to
 Energetic Ions*
 Adviser: James Connell

Molly Goelzer

Chemical Engineering
*Historical Heliospheric Magnetic Field
 Flux and Cosmic Ray Intensity Based on
 Sunspot Number and Prediction for the
 Coming Solar Minimum*
 Advisers: Nathan Schwadron, Charles
 Smith

Jason Graham**Devin Pingree**

Information Technology
DNS-RPZ Firewall
 Adviser: Scott Kitterman

Nicolas Grande**Daniel McGuire**

Information Technology
*Northeast Collegiate Cyber Defense
 Competition Information Technology
 Section*
 Adviser: Kenneth Graf

Megan Grass

Biomedical Science
*Quantifying Carbon From Soil Organic
 Nitrogen Preserved in Mycorrhizal Fungal
 Tissues Using Culture Studies*
 Adviser: Erik Hobbie

Joel Griffith**Hayden Hicks**

Mechanical Engineering
Memorial Bridge Hydrokinetic Power Generation
 Adviser: Kenneth Baldwin

Eric Guinto

Chemistry
Investigation of Hydrogen Bonding in Metal Centers
 Adviser: Samuel Pazicni

Rose Hadley

Chemistry and Neuroscience and Behavior
Evaluation of the Effect of Divalent Cations on Phosphodiesterase Activity
 Adviser: Roy Planalp

Megan Hamilton

Civil Engineering
Pile-Soil Interaction in Unsaturated Soil Conditions
 Adviser: Majid Ghayoomi

Thaddeus Hatch

Timothy Smith
 Information Technology
EPREM Web Interface
 Adviser: Matthew Gorby

Cory Hayward

Tyler MacPherson
 Information Technology
Lobster Research Database
 Adviser: Scott Valcourt

John Heavisides

Physics
Extremely-Low Frequency Whistlers at South Pole Station
 Adviser: Marc Lessard

Derek Hellested

Ryan Huard
 Chemical Engineering
Synthesis of Silver Nano-wires for Conductive Ink
 Adviser: Dale Barkey

Joseph Henderson

Carl Smith
Corey Sullivan
 Mechanical Engineering
Wave Energy Conversion Buoy
 Advisers: Kenneth Baldwin, M. Robinson Swift

Adrienne Hill (*McNair Scholar*)

Civil Engineering
Experimental and Theoretical Evaluation of Internal Loads in Underground Retaining Structures
 Adviser: Majid Ghayoomi

Charles Hill

Chemistry and Biology
B-Proline Formation via Tandem Homologation-Mannich Reactions
 Adviser: Charles Zercher

Clayton Hobbs

Information Technology

Robert Johansen

Brennan VanderLaan
 Computer Science
The CORTANA Project (HUD displays)
 Adviser: John LaCourse

Taylor Hodgdon

Geology
The Origin of Enclaves in the Belknap Mountains of New Hampshire
 Adviser: Jo Laird

Samuel Holdridge

Matthew Simon
 Electrical Engineering
Long Range Weapons Simulator
 Adviser: Richard Messner

Philip Honigfeld

Derek Smith
 Mechanical Engineering
Plasma Spray Operation
 Adviser: Todd Gross

Jacob Howard

Joshua Pelletier
 Information Technology
Terrain App
 Adviser: R. Daniel Bergeron

Lindsey Howard

Emily Massed
Alyssa Pineau
 Environmental Engineering
Georgetown, Maine Climate Change Vulnerability Study
 Adviser: Nancy Kinner

Kyle Ireland**Christopher Len**

Alicia O'Brien
 Computer Science
Pac Help Application
 Adviser: Matthew Plumlee

Alexander Ivanov

Biochemistry, Molecular and Cellular Biology
Stress Granules in Saccharomyces cerevisiae
 Adviser: Clyde Denis

Rhiannon Jacobs

Chemical Engineering
Multiscale Simulation of Enzyme Conformational Dynamics
 Adviser: Harish Vashisth

Olivia Jobin (*McNair Scholar*)

Environmental Engineering
Critical Shear Stresses of Sunken Oils
 Adviser: Nancy Kinner

David Johnson

Computer Engineering
Neuroendocrinological Control Systems Model to Help Understand the Normalizing Effect of Acupuncture on the Female Reproductive Cycle
 Adviser: Wayne Smith

Alan Jones

Geology
Geochemical Provenance of Clay in the Belize River Watershed: Implications for Maya Societal Dynamics
 Advisers: Julia Bryce, Eleanor Harrison-Buck

Stacy Karthas

Physics and Mathematics
Re-analysis of the World Data on the EMC Effect and Extrapolation to Nuclear Matter
 Adviser: Patricia Solvignon Slifer

Alexis Kasparian

Chemistry
Exploration Into the Synthesis and Analysis of a Novel Sensor for Biological Metal Ions
 Adviser: Roy Planalp

Ryan Kaulbach**Adam Roy****Kyle Westhaver**

Civil Engineering

Lebanon Regional Solid Waste Facility

Adviser: Jean Benoit

Katarina Kieleczawa

Environmental Sciences

*Hummingbird (Trochilidae) Species**Diversity and Habitat Transformation in Neotropical Cloud Forest*

Adviser: Alan Master

James Kilpeck

Physics

*Improving Resolution in Ion Mass**Measurements on the Ion Mass Spectrum Analyzer*

Advisers: Lynn Kistler, Harald Kucharek, Marc Lessard, Mark Popecki

Matthew Kilpeck

Computer Science

Shawn King

Computer Science

Jonathon Lauer

Computer Science

Kyle Vickers

Computer Science

Exploring 3D Environments With the Oculus Rift

Adviser: R. Daniel Bergeron

Brian Kispert

Chemistry

*Synthesis of Novel Cyclic and Bis-Bicyclic**Polyamine Ligands for Biomedical and Catalysis Studies*

Advisers: Gary Weisman, Edward Wong

Jeffrey Kling**Connor Nolan****Martin Wilkinson**

Mechanical Engineering

CFD Modeling of Princeton Data Center

Adviser: Kenneth Baldwin

Adam Knedeisen

Chemistry

Imaginary Refractive Indexes of Common Secondary Organic Aerosol Components

Adviser: Margaret Greenslade

Amanda Lade

Chemical Engineering

Bioremediation of Hydrocarbons via Geobacillus

Adviser: Kang Wu

Nicholas Landry

Mechanical Engineering

Computationally Efficient Representation of Statistically Described Material Microstructure for Tractable Forming Simulations

Adviser: Marko Knezevic

Jon Larson

Biology

Matthew Sullivan

Biomedical Science

Polyamines in the Life Cycle of Brassica rapa

Adviser: Subhash Minocha

James Lawrence

Geology

Petrology of the Exeter Pluton

Adviser: Jo Laird

Douglas Locker**Joseph Marshall****John McTigue****Scott Ozana****Kenneth Taylor**

Civil Engineering

ASCE Concrete Canoe

Adviser: Raymond Cook

Amy Lovely

Earth Sciences: Teaching

Utilizing CoCoRaHS Climate Data to Enhance Climate Literacy at the Middle School Level

Adviser: Mary Stampone

Trevor Low**John Plaisted**

Computer Science

Melissa Martel**Nicholus Thomas****Nathan Tine**

Mechanical Engineering

Trinity College Fire Fighting Home Robot Contest

Adviser: Barry Fussell

Micah Lucas**Rudra Timsina**

Electrical Engineering

Marc Salas

Environmental Engineering

Quadcopter

Adviser: Richard Messner

Allen Ma (McNair Scholar)

Mechanical Engineering

Designing a Thermally Conductive, Constant-Temperature Wall Plate To Be Used In a Small-Scale Boundary-Layer Wind Tunnel

Adviser: Christopher White

Alexandra Mackinnon

Chemistry

Synthesis and Cationic Rearrangements of Polynaphthyls

Adviser: Richard Johnson

Kadina Mazic

Biochemistry, Molecular and Cellular Biology

The Use of First Principle Analytical Techniques in Order to Determine the Effect of pH on the Colloidal Properties of Monoclonal Antibodies

Advisers: Dana Filoti, Thomas Laue, Carrie May

Michael McManus**Nicholas Nazarenko****Michael Perez****Andreas Wigger**

Electrical Engineering

Touch Audio Game (TAG) Table

Adviser: Richard Messner

Kathleen Miller

Chemical Engineering

Process to Impart Chemical Resistance to Anodized Aluminum

Adviser: Dale Barkey

Chrystal Moser

Physics

Design and Fabrication of a Miniature Fluxgate Magnetometer for Space Flight

Adviser: Marc Lessard

Kathryn Nelson

Rachel Provost

Weston Rich

Civil Engineering

Douglas OsborneInternational Affairs and Civil
Engineering*Pedestrian and Bicycle Infrastructure for
Durham*

Adviser: Kevin Gardner

Caitlin Nover

Environmental Sciences

*Impact Analysis of the South Coast Rail
Project on Wetland Connectivity*

Adviser: Michael Palace

Justin O'Brien

Chemistry

*Progress Toward a Polymer-Bound Diiron
Cluster to Model [FeFe]-Hydrogenase*

Adviser: Samuel Pazicni

Sebastian Pantovich

Chemistry

*Photocatalytic Reduction of Carbon
Dioxide Using Semiconductor
Nanoparticles*

Adviser: Gonghu Li

Sonja Pape

Civil Engineering

*Using Additional Asphalt Binder to
Improve High RAP Mixtures in the
Northeast*

Adviser: Jo Daniel

Hannah Paroline

Chemistry

*Progress Towards the Synthesis of
4,5-Benzoxepin: Investigation of
Mechanism for Formation of Ring-Opened
Metabolites of Cytochrome P450*

Adviser: Arthur Greenberg

Elizabeth Pettitt

Geology

*Mycorrhizal Weathering Across a
Geological Gradient in New England
Forests*

Adviser: Julia Bryce

Margot Popecki

Biology

*Genome-Wide Methylation Patterns in
Daphnia pulex in Response to Microcystis
During Development*

Adviser: James Haney

**Nigel Pugh (Special Guest from Elizabeth
City State University)**

Computer Science

The Biosynthesis of Ethanol

Adviser: Linda Hayden (ECSU)

Nicholas Rainsford**Alexander Seiger**

Electrical Engineering

*Linear Electromagnetic Particle
Accelerator*

Adviser: Kent Chamberlin

Jeffrey Rano

Chemical Engineering

*Estimation of Nitrate Removal in the
Lamprey River Using Longitudinal
Profiling with High Frequency Sensors*

Adviser: Gopala Mulukutla

Rosemary Read

Environmental Sciences

*Assessing the Water Footprint of Milk
Production at the UNH Organic Dairy
Research Farm*

Adviser: John Davis

Denise Richard

Physics

*On the Role of Alpha-Particle Driven Beam
Instabilities for the Thermodynamics of the
Solar Wind*

Adviser: Benjamin Chandran

Dexter Richards

Computer Science

CanopyApp

Advisers: Philip Collins, Annette Schloss

Kirstin Rickarby

Chemistry

*Synthesis of 2,7-Dimethyloxepin for the
Investigation of Benzene Metabolism*

Adviser: Arthur Greenberg

Rachel Ross

Biomedical Science

*The Effect of Riders With Disabilities
on Equine Mean Heart Rate in the
Therapeutic Setting*

Adviser: Elizabeth Boulton

Glen Ruggiero**Cody Santangelo****Evan Taylor**Mechanical Engineering
50 Caliber

Adviser: Brad Kinsey

Patrick Rydin

Mechanical Engineering

*Breaking Gates at Thompson Investment
Casting*

Adviser: Todd Gross

Daniel SavageMechanical Engineering and Health
Management and Policy*Modeling Machining Distortion Using the
Crystal Plasticity Finite Element Method*

Adviser: Marko Knezevic

Austin Sawyer

Environmental Sciences

*Deer Ticks: A Model of their Lifecycle
Using STELLA*

Adviser: Michael Palace

Dylan Schiff

Environmental Sciences

*Uncertainties in Daily Snowfall Amounts
at NWS COOP NH27-2174-02, Durham,
N.H.*

Adviser: Mary Stampone

Herbie Smith (McNair Scholar)

Physics

*Systematic Analysis of Semi-Realistic
String Compactifications*

Adviser: Per Berglund

Kelly Smith

Mathematics

*How Teacher Beliefs About Mathematics
Affect Student Beliefs About Mathematics*

Adviser: Sharon McCrone

Hilary Thompson

Chemistry

*New Chemistry of Arenium Ions: Synthesis
& Rearrangements*

Adviser: Richard Johnson

Kathryn Thomson

Environmental Sciences

What Does an Oil-spill from the Montreal to Portland Pipeline Mean for Water Quality in New England's Rivers?

Adviser: Cameron Wake

Sarah Tierney

Environmental Conservation Studies

Salt Marsh Values in a Changing World: Examining Sea Level Rise on Tidal Marshes With a Surface Elevation Table

Adviser: David Burdick

Joshua Trott

Environmental Sciences

Assessment of a Wort-style Heat Exchanger as a Geothermal Milk Chiller

Adviser: John Davis

Austyn Turner**Michael Wilkins**

Electrical Engineering

Testing the Permittivity of Biological Specimens Through Properties of Dielectric Heating

Adviser: Kent Chamberlin

Andrew Wells

Civil Engineering

Sarah Mildred Long Bridge: Finite Element and Vibration Analysis

Advisers: Erin Bell, Tat Fu

Samantha Werner

Environmental Sciences

Increase in Sedge Biomass Across a Permafrost Thaw Gradient Correlates to Changes in the Magnitude and Isotopic Composition of Methane Emissions

Adviser: Ruth Varner

Jonathan Wurtz

Physics

Forcing Mutual Coherence for Broad Area Diode Lasers: a Theoretical Study

Adviser: F. William Hersman

UNH Manchester Undergraduate Research Conference**Poster Presentations****Wednesday, April 23****3:30–6 p.m.****University Center**

The UNHM 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.

Charles Alfaro

Business

Public Response of Russian Invasion in Afghanistan

Adviser: John Resch

Audrey Ameen

Biological Sciences

Testing for Total Coliforms and E. coli in Water

Adviser: Patricia Halpin

Audrey Ameen**Alex Beaulieu****Samantha Gonzales****Jennifer Ledoux**

Biological Sciences

Invaders of Lake Massabesic: Exotic Species Infestation

Adviser: Cheryl Wood

Stephen Appleby

History

The Role of Investors in Manufacturing in Manchester, New Hampshire 1804-1834

Adviser: Robert Macieski

Nathaniel Biddle**Courtney Jewett****Joseph LaBarre** (Graduate Student)**Timothy Larochelle****Alyssa Paquin****Galen Sturup**

Psychology

The Effects of Depth and Mask Coherence on Disappearance Frequency and Duration in Motion Induced Blindness

Adviser: John Sparrow

Jessica Bissett

Humanities

Truth, Reconciliation, and Restorative Justice: An Inquiry

Adviser: John Resch

Nicole Bouley

Undeclared

The Public Opinion on the Worn Commission Report

Adviser: John Resch

Kelsey Breton

Communication Arts

Internship: Exploring CASA of NH

Adviser: Patrice Mettauer

Derek Burkhardt**Joshua Linnane****Marc Stanieich**

Biological Sciences

Goose Bumps

Adviser: Patricia Halpin

Derek Burkhardt**Ashley Kennedy****Naeleh Marin****Elizabeth McLaughlin**

Biological Sciences

Lake Massabesic as a Water Supply

Adviser: Stephen Pugh

Nicholas Burt

Business

Drug Use Within the Military During Vietnam

Adviser: John Resch

Morgen Camponescki

Sign Language Interpretation
*The Public Reaction to the Violence
 Against the Demonstrations in Selma,
 Alabama*
 Adviser: John Resch

Sara Clark

Sign Language Interpretation and
 Psychology
Exploration of the Deaf Soul Through Art
 Adviser: Jack Hoza

Cassandra Corley

History
Affirmative Action: Origins and Challenge
 Adviser: John Resch

Amber-Rose Couture

Sign Language Interpretation
Student Reactions to Brown v. Board
 Adviser: John Resch

Michael DeLuco

History
*The Effects of the Amoskeag Company
 on Workers Lives*
 Adviser: Robert Macieski

Kevin DeNaro

History
Martin Luther King
 Adviser: John Resch

Julianna DelVecchio

Psychology
The Bay of Pigs
 Adviser: John Resch

Ashley Donahue

Communication Arts
*Internship at Clear Channel Radio, Rock
 101*
 Adviser: Anthony Tenczar

Kyle Douglas

Communication Arts
Communications Internship
 Adviser: Patrice Mettauer

Anes Dulas

Biological Sciences
Anesthesia in Veterinary Medicine
 Adviser: Stephen Pugh

Brian Gailis

Computer Information Systems
CIS Internship Experience: SharePoint
 Adviser: Mihaela Sabin

Raquel Gawron

History
*Racial Impressions: A Look Into Race
 Relations in New Hampshire from
 1820 to 1860*
 Adviser: Robert Macieski

Samantha Gonzales

Biological Sciences
Tibial Plateau Leveling Osteotomy in Dogs
 Adviser: Stephen Pugh

Jesse Grazewski

Psychology
*Defining Spirituality in Palliative and
 Hospice Care*
 Adviser: Alison Paglia

Courtney Holdsworth

Alexander Larochelle
Therese Mehrmann
Phylicia Wisti
 Biological Sciences
Importance of Source Water Protection
 Adviser: Stephen Pugh

Christopher Hynes

Communication Arts
*Understanding Human Resources
 Management*
 Adviser: Patrice Mettauer

Courtney Jewett

Psychology
*Public Reaction to the Fall of the Berlin
 Wall*
 Adviser: John Resch

Courtney Jewett

Psychology
*The Effects of Color Contrast on Motion
 Induced Blindness*
 Adviser: John Sparrow

Courtney Kapetanakis

Communication Arts
ESPN New Hampshire Radio
 Adviser: Patrice Mettauer

Ashley Kennedy

Biological Sciences
Testing for E. coli in Water Samples
 Adviser: Patricia Halpin

Jessy Lamontagne

History
Public Response to Reagan's Visit to Berlin
 Adviser: John Resch

Kristin LeComte

English
*My Experience at New Hampshire
 Magazine*
 Adviser: Patrice Mettauer

Rachel Lewis

Communication Arts
*WWPass Marketing and Finance
 Internship*
 Adviser: Patrice Mettauer

Jacob Linxweiler

History
*Native American Identity in Pre Civil War
 New England*
 Adviser: Robert Macieski

Elizabeth Mason

Communication Arts
Internship in Digital and Social Media
 Adviser: Patrice Mettauer

Stephanie McQuaid

Biological Sciences
A Day in the Life of an Optometrist
 Adviser: Stephen Pugh

Lisa Miserandino

Biological Sciences
*The Role of an LNA in Caring for
 Alzheimer's Patients*
 Adviser: Stephen Pugh

Straton Mitali

Biological Sciences
*Monitoring and Managing Autistic
 Behavior with Adults*
 Adviser: Stephen Pugh

Taylor Murray

English
The Formation of the Tuskegee Airmen
 Adviser: John Resch

Samuel O'Brien

History
*New Hampshire's Agricultural Decline
 (1800-1860)*
 Adviser: Robert Macieski

Melissa O'Meara

Communication Arts
Internship at First Start Children's Center
 Adviser: Patrice Mettauver

Timothy Pion

Biological Sciences
Assassination of Malcolm X
 Adviser: John Resch

Jeremy Provencher

Biological Sciences
The Role of Advanced EMTs in Emergency Medicine
 Adviser: Stephen Pugh

Nicholas Ryba

Business
The Citizen Impact of Medicare Through the Great Society
 Adviser: John Resch

Bradley Schaefer

Biology
Watergate
 Adviser: John Resch

Sean Schmidenberg

History
Berdan's Sharpshooter Division in the American Civil War
 Adviser: Robert Macieski

Sean Stafford

History
Effects of the Amoskeag Locomotive Works on the Social and Economic Landscape of New Hampshire in the 1840s, 50s, and 60s
 Adviser: Robert Macieski

Patrick Synan

English and Politics and Society
Responsibility to Protect in the MENA Region
 Adviser: Melinda Negron-Gonzales

Paige Tobin

Business
Betty Friedan
 Adviser: John Resch

David Wiley

English
Public Response to the Patriot Act
 Adviser: John Resch

Katelyn Williams

Psychology
Evaluation of Spiritual Care in NH Hospice and Palliative Care
 Adviser: Alison Paglia

Justin Wolbert

History
The Humanities and the Public School Development
 Advisers: Robert Macieski

Haley Wright

Humanities
United Nations Human Rights Declaration: Origins and Assessment
 Adviser: John Resch

UNH Manchester Undergraduate Research Conference Technology Day

Engineering Technology Senior Projects

Thursday, April 24
8 a.m.–5 p.m.
Pandora Mill
88 North Commercial, Manchester

The UNHM Engineering Technology Program presents its annual Senior Project Presentation 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.

Jeffrey Deming

Alex Roy
 Mechanical Engineering Technology
Velcro USA: Improvement of the Hot Air Ring Cleaner
 Adviser: Faize Jamil

Yonatan GenaoBaez

Atul Shrestha
 Electrical Engineering Technology
High Resolution ADC Performance
 Adviser: David Forest

Richard Hilton

Casey Hoefler
 Electrical Engineering Technology
Rooftop SnowScaletm Project 2KR Systems, LLC—UNH Manchester
 Advisers: David Forest, Christopher LeBlanc

Joshua MacPherson

Electrical Engineering Technology
Exacom Mobile Application
 Adviser: Michael Jonas

Andrew Mack

Mechanical Engineering Technology
Biomass Design and Energy Audit
 Adviser: David Forest

Drew Mather

Electrical Engineering Technology
Exacom Radio Traffic Simulator
 Adviser: Michael Jonas

Matthew McBride

Electrical Engineering Technology
BAE Systems (ES): Component Evaluation Card with FPGA
 Advisers: David Forest, Christopher LeBlanc

Christopher Treadwell

Mechanical Engineering Technology
Energy Efficiency in Municipal Buildings
 Adviser: Faize Jamil

Valentin Vacariu

Electrical Engineering Technology
Redesign and Expand the Calibration Test System in the Martel 71X Production Area
 Adviser: David Forest

Samuel Workman

Electrical Engineering Technology
UNH Manchester Callrouter
 Adviser: Michael Jonas

UNH Manchester Undergraduate Research Conference Technology Day

Computing Technology Poster Presentations

Thursday, April 24
2–4 p.m.
Pandora Mill
88 North Commercial, Manchester

Arwa Ahmad Hamdi
Valerie Therrien
Sinisa Vidic
 Computer Information Systems
CIS Capstone: Systems Group
 Adviser: Michael Jonas

Justin Alix
Justin Silva
 Computer Information Systems
CIS Capstone: Tools Group
 Adviser: Michael Jonas

Joshua Anderson
Brian Gailis
Ramon Whitman
Pauline Wilk
 Computer Information Systems
CIS Capstone: Experiment Group
 Adviser: Michael Jonas

Melissa Bruno
Colby Chenard
 Computer Information Systems
NHVBSR Web App: Security
 Adviser: Edward Nelson

Melissa Bruno
 Computer Information Systems
Problem Destroying with Integration Engineering
 Adviser: Karla Vogel

Colby Chenard
Colby Johnson
David Meehan
 Computer Information Systems
Forrest Surprenant
 Electrical Engineering Technology
CIS Capstone: Modeling Group
 Adviser: Michael Jonas

Ed Daniels
 Electrical Engineering Technology

Justin Silva
 Computer Information Systems

David Sprague
 Biological Sciences
Explore Manchester Water Works Treatment Plant
 Adviser: John Blumberg

Mitchell Dezak
John Kelley
Jared Rohrdanz
 Computer Information Systems
CIS Capstone: Data Group
 Adviser: Michael Jonas

Mitchell Dezak
Nicholas Tello
 Computer Information Systems
NHVBSR Web App: Volunteer Input
 Adviser: Edward Nelson

Mohamed Fadlalla
Dakota Heyman
Samuel Sweet
 Computer Information Systems
NHVBSR Web App: Boater Survey Input
 Adviser: Edward Nelson

Stephen Griffin
Valerie Therrien
 Computer Information Systems
NHVBSR Web App: Database Infrastructure
 Adviser: Edward Nelson

Brittany Horne
 Sign Language Interpretation
Fire Hydrant Tracker
 Adviser: John Blumberg

Samuel Sweet
 Computer Information Systems
Customer Billing Information Application
 Adviser: John Blumberg

Pauline Wilk
 Computer Information Systems
Increasing Participation of Women in Computing: An Analysis of Current Statistics and How to Improve Them
 Adviser: Mihaela Sabin

Samuel Workman
 Electrical Engineering Technology
Fish Finder: A Fish Catching Application
 Adviser: John Blumberg

UNH Manchester Undergraduate Research Conference Cinema Arts Day

Thursday, April 24
10 a.m.–1 p.m.
University Center

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.

Amanda Amato
 Undeclared
The Untold Story of Michael Fleming
 Adviser: Anthony Tenczar

Derek Burkhardt
Joshua Linnane
Marc Stanieich
 Biological Sciences
Goose Bumps
 Adviser: Patricia Halpin

Jennifer Cooper
 Communication Arts
Off
 Adviser: Anthony Tenczar

Michael Costello
Communication Arts
The Procedure
Adviser: Anthony Tenczar

Steven Galante
Communication Arts
A Music Insider with Brad Bosse
Adviser: Anthony Tenczar

Alexander LaRoza
Communication Arts
Communication Arts Film
Adviser: Anthony Tenczar

Michael Lang
Communication Arts
Runner
Adviser: Anthony Tenczar

Stephanie McQuaid
Biological Sciences
How Do You See?
Adviser: Patricia Halpin

History Department Undergraduate Presentations

Thursday, April 24
12:30–2 p.m.
Memorial Union Building,
Rooms 332, 338, and 340

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, 338

Close, Far, and Across Time

Moderator: Jan Golinski

Cory McKenzie
History, Philosophy, and Classics
Yuriwaka Daijin: The Debate over Japan's Odysseus
Advisers: Gregory McMahon, Michiko Mori

Rose Phipps
History and Art History
Contract Labor: The Relationship between Apprenticeship and Freedmen's Bureau Contracts
Adviser: Jessica Lepler

Katy Devine
History
'The Honest Wizard': An Examination of Early Mormonism in Relation to Early Modern Belief Systems
Adviser: Jan Golinski

Ashley Mosley
History
The Armenian Genocide: European and American Responses
Adviser: Sara Wolper

Colleen Rielly
History
Campus Activism at UNH in the 1960s
Adviser: Jason Sokol

MUB, 340

The Business of War and Well-being

Moderator: Cynthia Van Zandt

William Meyer
History and Economics
Building Boeing: The B-17, World War II, and the Rise of a Company
Advisers: Kurk Dorsey, Jessica Lepler

Stephanie Moore
History
Letters, War Bonds and The Army: Piecing Together a Timeline
Adviser: Kurk Dorsey

Jennifer Allen
Biomedical Science
Exploring the Patient-Physician Relationship in the United States: A Comparison of Contemporary Physicians and Patients and Their 19th Century Counterparts
Adviser: Marion Dorsey

Kerri Hunkele
Justice Studies and History
History of African American Healthcare Policies
Adviser: J. William Harris

MUB, 332

Theorists, Thespians, and the Politics of Progress

Moderator: Eliga Gould

Amanda Rice
History and Political Science
The Federalist Papers: Easing the Minds of Skeptics
Adviser: Eliga Gould

Stephanie Savage
History
American Exceptionalism in British Politics: Edmund Burke, A Friend of America
Adviser: Eliga Gould

Marissa Raymond
History
A Revolution Within The Revolution: Vermont and its Impact on America
Adviser: Eliga Gould

Christina Ellis
History
Prostitution, Literature, and Social Progress in Victorian Britain
Adviser: Nicoletta Gullace

Danielle Barrett
Theatre and History
Setting the Stage for War: A Study of Change Through Theater
Adviser: Kurk Dorsey

The Naked Arts— Creativity Exposed

Act II

Thursday, April 24
12:40–2 p.m.
Museum of Art,
Paul Creative Arts Center

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.

Kimberly D’Agnese
 Theatre

[title of show]: The Little Musical that Could, but it Wasn’t Easy
 Advisers: Raina Ames, Szu-Feng Chen

Nathan Faro
 Music Theory

The ‘Millennial Symphony’: Composition as Cultural Reflection
 Advisers: Michael Annicchiarico, Robert Haskins

Jennifer Lindsay
 International Affairs and Art Studio
Contemporary Art with Chinese Characteristics: Relations Between Beijing Artists and the Chinese Government, post 1989
 Adviser: Jennifer Moses

Daniel Shine
 Theatre

It’s Just a Joke: The Cyclical Relationship of Comedy and Social Commentary
 Adviser: David Kaye

Thompson School Undergraduate Student Showcase

Thursday, April 24
5:30–7:30 p.m.
Cole Hall (Stacey’s)

Thompson School of Applied Science students translate academic instruction into practical presentations at this year’s URC. Join selected students who will showcase their expertise in such diverse areas as food services management and forest and horticultural technology.

Alanna Broesler

Integrated Agricultural Management and Veterinary Technology
Small Growers Greenhouse Operation
 Adviser: Andrew Conroy

Jacob Harris

Integrated Agricultural Management and Veterinary Technology
Harris Farm Future Growth and Improvement Plans
 Adviser: Andrew Conroy

Nathaniel Kimball-Barr

Integrated Agricultural Management and Veterinary Technology
Beech Hill Farm: Exploring Options for the 9th Generation on the Family Farm
 Adviser: Andrew Conroy

Parents Association Undergraduate Research Symposium

Welcome Breakfast with
 UNH Provost Lisa MacFarlane
 and Parents Association
 President Nithyanandam
 Mathiyazhagan

Friday, April 25
9–9:30 a.m.
Memorial Union Building,
Granite State Room

This informal gathering gives students, faculty and attendees an opportunity to visit with UNH Provost Lisa MacFarlane and Parents Association President Nithyanandam Mathiyazhagan, before experiencing the large university-wide event that follows—the Parents Association Undergraduate Research Symposium.

Parents Association Undergraduate Research Symposium

Oral Presentations, Session A

Friday, April 25
9:30–10:40 am
Memorial Union Building

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

MUB, Room 338**Health Related Research,
Group 2**

Moderator: Shawn Green

Madeline Allen

Kinesiology

*Short-Term Adaptations to Resistance
Training in Older Adults*

Adviser: Summer Cook

Kailee Collins

Occupational Therapy

*Animal-Assisted Therapy Volunteerism:
Motivations and Rewards*

Adviser: Kerryellen Vroman

Amber Craft (McNair Scholar)

Athletic Training

*Comparison Of Fourier And Wavelet
Transformations On a SEMG Frequency
Spectra During Rapid Fatiguing Muscular
Contractions*

Adviser: Ronald Croce

Samuel Gagnon

Kinesiology

*The Relationship of Quadriceps Power and
Physical Functioning in Older Adults*

Adviser: Summer Cook

Katherine Fischer

Kinesiology

*Muscle Strength and Activation Influence
Gait Speed in Older Adults*

Adviser: Dain LaRoche

Jacob Moyer

Kinesiology

*The Effects of Resistance Training on
Preferred Walking Speed in Older Adults*

Adviser: Summer Cook

MUB, Room 340**Health Related Research,
Group 1**

Moderator: Melissa Rodgers

Hannah Barile

Kinesiology

*Muscle Size and Specific Force Along the
Length of the Quadriceps in Older and
Young Men and Women*

Adviser: Summer Cook

Tonimarie Black

Health Management and Policy

*Place Matters: A Comparison Between
Virginia and West Virginia Associated
with Healthcare Access*

Adviser: Robert McGrath

Ashley Meyer

Kinesiology

*Strength and Hypertrophic Changes
Following 3 Months of Resistance Training
in Older Adults*

Adviser: Summer Cook

Emily Quinn

Health Management and Policy

*New Hampshire Medicaid Expansion
and its Effects on the Mental Health
Community*

Adviser: James Lewis

Jesse Schwartz

Kinesiology

*The Effects of Blood Flow Restricted
Resistance Training on Muscle Size and
Strength in Older Adults*

Adviser: Summer Cook

Tyler Whealan

Athletic Training

*Analysis of Neck Motion During Shoulder
Pad Removal After a C-Spine Injury*

Adviser: Erik Swartz

MUB, Strafford Room**Health, Vitality and Equity:
Opportunities for a Better Life**

Moderator: Laurie Whitman

Benjamin Bullock

Sociology

*Cats on Ice: Rubbing Out Gender
Inequalities in UNH Ice Hockey*

Adviser: Rebecca Glauber

Kaitlin Dresser

Nutrition

*Is Protein Supplementation in Male Weight
Trainers, Ages 18–24, Associated With
Increased Lean Body Mass, Upper Body
Strength and Dietary Intake?*

Adviser: Jesse Morrell

Tegan O'Neill

Political Science

*Mapping Sustainability in New Hampshire:
Building an Interactive Mapping Tool for
Issues, Organizations, and Actions Related
to Sustainability in New Hampshire*

Adviser: Colleen Flaherty

Kelsey Swalwell

Nutrition

Nutrition for UNH Rowers

Adviser: Jesse Morrell

Kathryn Thomson

Environmental Sciences

*What Does an Oil-spill from the Montreal
to Portland Pipeline Mean for Water
Quality in New England's Rivers?*

Adviser: Cameron Wake

MUB, Room 233**Honors Theses and Research
Projects in Communication**

Moderator: Jennifer Borda

Katherine Bartow

Communication

*Media Advocacy and Body Image: How
Social Media is Empowering a New
Generation*

Adviser: Joseph Terry

Linda Chardon

Communication

*Redefining Female Success and Empower-
ment in a Post-feminist Landscape: The
Personal, The Political, and The Virtual?*

Adviser: Jennifer Borda

Breanne Peloquin

Communication

*Building Character: The Construction of
Ethos in 'Tempo and Mode in the Macro-
evolutionary Reconstruction of Darwinism'*

Adviser: Michael Jackson

Katina Sousa

Communication

*Manson Family Coercion: A Study of
Religious Rhetoric in Cult Structures and
Social Groups*

Adviser: Michael Jackson

MUB, Room 330***International Affairs: Gender Norms, Empowerment, and Reproductive Rights***

Moderator: Catherine D'Auteuil

Jordan Doucette

International Affairs and Psychology
The Catholic Religion and Its Effects on Gender Inequality in Spain
 Adviser: Molly Wallace

Allison Ginwala

International Affairs and English/Journalism
Cultural Capital: Beauty Advertising in China
 Adviser: Molly Wallace

Adriana Mundy

International Affairs and Sociology
Contraception Behaviors in Costa Rica: The Influence of Social Institutions on Family Planning Practices
 Adviser: Molly Wallace

Jaden Riendeau

International Affairs and Political Science
Empowerment through Sports? The Impact of Athletic Participation on Women in Morocco
 Adviser: Molly Wallace

Sydney Skinner

International Affairs and Geography
Giving Mothers Ownership of their Future: The Need to Legalize Abortion in Chile
 Adviser: Molly Wallace

MUB, Room 332***International Affairs: Integration or Secession?—Causes and Effects***

Moderator: Molly Doyle

Jasmin Cesko

International Affairs and Political Science
It's Time to Move Beyond Dayton: Changing the Constitutional Framework in Bosnia
 Adviser: Molly Wallace

Jamie McDonough

International Affairs and Communication
Independence in Catalonia, Spain: The Causes Which Impel Them to Separation
 Adviser: Molly Wallace

Conrad Nawrocki

International Affairs and Political Science
Preventing Catastrophic Dissolution: The Factors and Circumstances That Cause Failure in Political and Economic Unions
 Adviser: Molly Wallace

Tuan Nguyen

International Affairs and Economics
The Hungarian Economy after The European Integration: Winner or Loser?
 Adviser: Molly Wallace

Michael O'Hara

International Affairs and Sociology
East and West German Perspectives on Rapid Reunification: An Evaluation of the Economic and Political Effects of German Reunification in the Two Former States
 Adviser: Molly Wallace

MUB, Room 334***International Affairs: Perspectives on Russia—Foreign Policy, Governance, and Culture***

Moderator: Beth Kilinc

Madeleine Bennett

International Affairs and French
Contempt in Context: Custine's Russia in 1839 in the Company of Its Peers
 Adviser: Molly Wallace

Kirill Melnichak-Zhuravlev

International Affairs and Political Science
U.S. Interests in the Russia/Georgia Conflict of 2008
 Adviser: Molly Wallace

Kellie Shea

International Affairs and Russian
Putin's Democracy?
 Adviser: Molly Wallace

Avary Thorne

International Affairs and Russian
Human Rights Protection in Russia Under Putin
 Adviser: Molly Wallace

MUB, Room 336***International Affairs: Sustainable Development—The Role of Ecotourism, Art and Architecture, and Multinational Corporations***

Moderator: Greg Orifici

Meghan Curtis

International Affairs and Environmental Conservation Studies
Banana Production in Costa Rica: United Fruit Company and Chiquita's Impact on Costa Rica's Development
 Adviser: Molly Wallace

Milana Glukharev-Fleszar

International Affairs and Economics
Costa Rica: The Accidental Green Tourist
 Adviser: Molly Wallace

Taygra Longstaff

International Affairs and Civil Engineering
The Role of Architecture in the Revitalization of Bilbao, Spain
 Adviser: Molly Wallace

Austin Manor

International Affairs and Political Science
Ecotourism and Poverty Alleviation in Costa Rica: Economic Development or Cultural Degradation?
 Adviser: Molly Wallace

Jordan McGrath

International Affairs and Spanish
Going Beyond the Either-Or of Giving or Taking: Assessing the Importance of Surfing and Surfbreak Protection in Spain
 Adviser: Molly Wallace

MUB, Room 237**Language, Identity and Culture**

Moderator: Danielle Peterson

Molly Foye

Spanish and Anthropology
Localizing Foreign Languages: A Focus on UNH's Resources and the Latino Community

Adviser: Lori Hopkins

Mitchell Gates (McNair Scholar)

Linguistics and Philosophy
Gay Masculinities in Primetime Television

Adviser: Kevin Healey

Avery Normandin

Biomedical Science
Stampede: Albrecht Dürer's Rhinoceros and its Influence in the Arts

Adviser: Rebecca Karo

Theresa Renker

Spanish
Quechua Language Use in Modern Peru: An Investigation of Cultural Authenticity and Identity Construction

Adviser: Lori Hopkins

Graham Smith

Humanities
Dogma and Heresy in Yevgeny Zamyatin's Dystopian Novel 'We'

Adviser: Ronald LeBlanc

Gwyneth Welch

Neuroscience and Behavior
I'm Going Home: The Resurgence of Sacred Harp Singing in New England

Adviser: Rose Pruiksma

MUB, Room 207**Political Science:
Contemporary International
Security Challenges**

Moderator: Alden Reed

Michael Barton

Political Science
Non-Nuclear-Weapon States Concerns With the Non-Proliferation Treaty

Adviser: Lionel Ingram

Steven Bosse

Political Science and Russian
Seeking Stability: US Policy towards Ukraine

Adviser: Lionel Ingram

Michael Jacobs

Political Science
Iran's Nuclear Capabilities

Adviser: Lionel Ingram

Christopher Melanson

Political Science
Military in Afghanistan

Adviser: Lionel Ingram

MUB, Room 203**Political Science:
Lessons From Abroad—Case
Studies in Comparative Politics**

Moderator: Alexandra Sargent

Elizabeth Barker

English Teaching and Political Science
The Impacts of Civic Education on Democracy and Corruption in Colombia and U.S. Foreign Policy

Adviser: Lionel Ingram

Cecilia Martins

Political Science
Immigration in the United States, Brazil, and Portugal: A Comparative Case Study of Assistance and Amnesty

Adviser: Mary Malone

Antonio Nastasia

Political Science
Plan Colombia: Examining US Efforts to Combat Colombian Cartelism

Adviser: Mary Malone

Taylor Reidy

Political Science
High Liner Foods: A Case Study of Joint US-Canadian Economic Relations

Adviser: Susan Siggelakis

Brendan Scott

Political Science
The Two Faces of Latvia: Political Identity in a Post-Soviet Age

Adviser: Susan Siggelakis

MUB, Room 321**Spanish Linguistics and
Literature**

Moderator: John Chaston

Mary Foster

Spanish and Linguistics
Semantic and Syntactic Losses in the English Translation of Allende's Zorro

Adviser: John Chaston

Brenna McLaughlin

International Affairs and Spanish
Mentiras mi Maestra me Enseñó about Spanish Subjunctive: Not so Textbook Black and White

Adviser: John Chaston

John O'Mahony

Spanish
Bilingualism in Spain as Reflected in Modern Cinema

Adviser: Jaume Marti-Olivella

Robert Sanzo

Spanish
Variation In Spanish Mood In Evaluative Pseudo-Cleft and Impersonal Constructions

Adviser: John Chaston

Kelly Taveras

Spanish
Spanish Assertives in the Indicative: Ya Me Imagino That There's Another Option

Adviser: John Chaston

MUB, Room 302**The Impact of Cultural
Expectations**

Moderator: Elizabeth Cilley

Casey Benner

Justice Studies and Psychology
Sometimes the Internet is a Safe Place: Reporting Differences in Unwanted Sexual Experiences

Adviser: Ellen Cohn

Nadine Maliakkal

Psychology

Raise a Buddy, Not a Bully: Parental Legitimacy as a Predictor of Bullying

Adviser: Ellen Cohn

Halie Olszowy

Sociology

Hollywood Goes to College: Examining First-Year College Students' Expectations Through Film

Adviser: Catherine Moran

Steven Pampreen

Accounting

Alison Smith

Communication Sciences and Disorders

Gender's Impact on Donations: Why'd the Women Get All the Money!

Adviser: Rachel Rawlinson

MUB, Room 304***The Only Cure for Bias is Other People: Working to Create an Equal Climate for LGBTQ+ Individuals***

Moderator: Kateryna Sylaska

Meghan Craig

Psychology

Religion and Minority Stress: The Effect of IPV and Coming Out on Stress in Young Adults

Advisers: Katie Edwards,

Kateryna Sylaska

Annie Crossman

Psychology and Women's Studies

Supporting LGBTQ+ Survivors: A Qualitative Evaluation of LGBTQ+ Intimate Partner Violence and Disclosure Experiences to Social and Community Supports

Advisers: Katie Edwards,

Kateryna Sylaska

Rachel Garofalo

Psychology

Examining Connections Among Bisexuality, Stress, and Social Support

Advisers: Katie Edwards,

Kateryna Sylaska

Arianna Schaaff

Psychology and Sociology

Where are the Safe Zones?: How to Support LGBTQ+ Persons

Advisers: Katie Edwards,

Kateryna Sylaska

Parents Association Undergraduate Research Symposium**Poster Presentations Session A****Friday, April 25****9:30–10:40 a.m.****Memorial Union Building, Granite State Room**

The Parents Association Undergraduate Research Symposium showcases students from all disciplines.

Students present their faculty-mentored projects in either of two interactive poster sessions, or in one of the three oral presentation sessions. University-wide participants come from a variety of disciplines.

Samantha Arsenault

Neuroscience and Behavior

Investigating Geometric Representations in Rodents

Adviser: Brett Gibson

Devon Ayer

Justice Studies and Family Studies

Chelsea Davignon

Psychology

Who's Legit: Parents or Peers?

Adviser: Ellen Cohn

Denise Barstow

Recreation Management and Policy

Participation at the 2013 Folklife Festival

Adviser: Boyd Hegarty

Elise Beattie

Nursing

Nurses' Perceptions of the Barriers to Advocacy Related to Pain Management

Adviser: Joan Hahn

Erica Brasley (McNair Scholar)**Cora Lehet****Lydia Manzo****Benjamin Wormwood (Graduate Student)**

Neuroscience and Behavior

Change in Memory Coding Properties of PFC in Long Evans Rats Through Pharmacological Inactivation of Thalamic Input

Advisers: Brett Gibson, Robert Mair

Alexander Buell**Sarah DiIanni****Nicholas Duggan****Patricia Levesque****Alec Rader****Maureen Raubach****Alyssa Reilly****Tyler Weber**

Neuroscience and Behavior

Andrew Kitt (Graduate Student)**Jenny Lang (Graduate Student)**

Psychology

Eliza Wood

Neuroscience and Behavior and

Philosophy

The Psychophysics of Local and Global Stereopsis

Adviser: William Stine

Alexander Buell**Sarah DiIanni****Nicholas Duggan****Patricia Levesque****Alec Rader****Maureen Raubach****Alyssa Reilly****Tyler Weber**

Neuroscience and Behavior

Andrew Kitt (Graduate Student)**Jenny Lang (Graduate Student)**

Psychology

Eliza Wood

Neuroscience and Behavior and

Philosophy

The Effects of Varying Coherence of Glass Patterns on the Perception of Motion Induced Blindness

Adviser: William Stine

Alexander Buell

Sarah DiIanni

Alec Rader

Tyler Weber

Neuroscience and Behavior

Jenny Lang (Graduate Student)

Psychology

Differential Impact of Delta Pedestal on Increment and Decrement Contrast Processing

Adviser: William Stine

Chelsea Cahill

Nursing

How Nursing Students View Nursing: Changes in Perspectives from the First Year to Senior Year

Adviser: Raelene Shippee-Rice

Tina Cannon

Psychology and Women's Studies

Jennifer Hogan

Amy Winkler

Psychology

Unveiling New Hampshire Legislators' Knowledge and Attitudes About Intimate Partner Violence and Relevant Policies

Adviser: Katie Edwards

Amber Carlson (Graduate Student)

Psychology and Justice Studies

Nicolas Grafton

Joel Wyatt

Psychology

Bystander Behaviors: The Factors That Impact Intervention Among High School Students

Adviser: Kara Anne Rodenhizer

Dylan Chase

Hannah Cole

Benjamin Wormwood (Graduate Student)

Neuroscience and Behavior

Neurons in the Prefrontal Cortex Within the Rat Encode Place Information During a Memory Task

Advisers: Brett Gibson, Robert Mair

Benjamin Claxton

Biochemistry, Molecular and Cellular Biology

What Subset of a Clinical Population of Acute Myelogenous Leukemia (AML) Patients Exhibit Cytoplasmic Sequestration of p53 and is Mortalin Involved?

Adviser: Charles Walker

Jennifer Dickson

Biomedical Science

*What are the Trends in Phenotypic Variation in *Harmonia axyridis*?*

Adviser: Matthew Macmanes

Samantha Docos

Biomedical Science

Effect of Insulin-Like Growth Factor-1 (IGF-1) on the Expression of NFκB and cFLIP in Bovine Granulosa Cells

Adviser: David Townson

Althea Dubravsky

Psychology

Influence of DRD4 on the Temporal Dynamics of Item and Source Memory

Adviser: Robert Ross

Candice Ellis

Rikki Miller (Graduate Student)

Heather Morreo

Benjamin Wormwood (Graduate Student)

Neuroscience and Behavior

Prefrontal Cortical Cells Code for Location and Movement in the Rat

Advisers: Brett Gibson, Robert Mair

Lisa Flaman

Melissa Ryan

Megan Thompson (Graduate Student)

Genetics

Kendall Milkey

Biomedical Science

Nicole Petersen

Biochemistry, Molecular and Cellular Biology

*A Screen to Identify Sodium-Induced Root Skewing Mutants in *Arabidopsis thaliana**

Adviser: Estelle Hrabak

Lisa Flaman

Megan Thompson (Graduate Student)

Genetics

Kendall Milkey

Biomedical Science

*Identifying Mutation Sites in Protein Phosphatase 2A Causing Sodium-Dependent Root Skewing in *Arabidopsis thaliana**

Adviser: Estelle Hrabak

Miranda Francoeur

Cristy Theriault

Neuroscience and Behavior

Kristen Onos

Psychology

Coding Properties of Prefrontal Cortical Neurons in Rodents During a Spatial Memory Task

Advisers: Brett Gibson, Robert Mair

Stephanie Gibbons

Neuroscience and Behavior

Global and Communication Issues in Dentistry

Adviser: Christine O'Keefe

Benjamin Grotton

Biochemistry, Molecular and Cellular Biology

Detection of Adhesion Molecule Expression in the Bovine Corpus Luteum

Adviser: David Townson

Emily Guild

Occupational Therapy

Exploration of Reported Social Engagement and Observed Quality of Social Interaction for Youth in Transition with an Autism Spectrum Disorder

Adviser: Lou Ann Griswold

Mary Holleran

Occupational Therapy

Middle School Girls Friendship

Preferences: Attitudes Towards Girls Who Are Obese

Adviser: Kerryellen Vroman

Judith Hoskin

Genetics and Nutrition

*Identification of Palmitoyltransferase Mutants in *Arabidopsis thaliana**

Adviser: Estelle Hrabak

Timothy Marquis

Biomedical Science

*Distribution and Expression of Glycoprotein Hormone Subunits, GpA2, GTHB, and GpB5, in the Sea Lamprey, *Petromyzon marinus**

Adviser: Stacia Sower

Amy Meikleham

Health Management and Policy

Career Progression and Satisfaction in Hospital Administration

Adviser: Robert McGrath

Kendall Milkey

Biomedical Science

Megan Thompson (*Graduate Student*)

Genetics

Characterization of the srs-1 and srs-2 Root-Skewing Mutants of Arabidopsis thaliana

Adviser: Estelle Hrabak

Rikki Miller (*Graduate Student*)**Elizabeth Smedley**

Neuroscience and Behavior

Emily Ryder

Biomedical Science

Memory Coding Properties of Central Thalamus in Rats.

Advisers: Brett Gibson, Robert Mair

Heather Muir

Psychology

The Hidden Differences Between Self-Esteem and Happy/Sad Autobiographical Memories

Adviser: Zorana Ivcevic

Katie Parent**Thomas Reese**

Psychology

Who Can I Tell?: The Role of Confidants in Rule-Violating Behavior

Adviser: Ellen Cohn

Victoria Santospago

Music and Music Education

Moving Freely, A Flutists Exploration of Body Mapping

Adviser: Jenni Cook

Alexa Schimmel

Nursing

The Experience of Parental Presence During an Acute Neonatal Transport from a Referring Hospital to a Tertiary Care Center: A Qualitative Study

Adviser: Susan Fetzer

Lindsey Shapiro

Neuroscience and Behavior

The Influence of COMT Genetic Polymorphisms on the Temporal Dynamics of Memory Retrieval

Adviser: Robert Ross

Cynthia Siemens

Communication Sciences and Disorders

My Brazilian Sister: A Case Study

Adviser: Mary Jane Sullivan

Erica Vazza (*Theo-Steelman Public Service Fellow 2013*)

Social Work and Recreation Management and Policy

UNH 2013 Move-out Waste Audit

Advisers: Nate Trauntvein

Caroline Ward

Biomedical Science

*Investigating the Interactions Between**Cyanobacteria and Vibrio parahaemolyticus*

Advisers: Vaughn Cooper, Cheryl Whistler

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

Adviser: Christine O'Keefe

Mary Chamard

English Literature

*Ethics in Publishing***Russell Contino**

Information Systems Management

*Professional Writing in Information Technology***Kyla Jones**

Nutrition

*Discrediting the 'Thin Ideal'***Nicholas Kane**

Economics

*Economics of Ethics***Devin McCarthy**

Communication

*Technical Writing in Sports Media***Robert Post**

Communication

*Technical Writing in Communication***Parents Association Undergraduate Research Symposium****Oral Presentations, Session B****Friday, April 25****10:50 a.m.–Noon****Memorial Union Building**

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

MUB, Room 233**Analyzing Public Opinion and Discussion on Politics and Popular Culture**

Moderator and Adviser:
Mark Hungerford

Daniel Crane

Communication

*The Dynamics of Public Opinion on Network Neutrality***Kara Gingras**

Communication

*Public Opinion on NSA Surveillance and Privacy***Mondi Lam**

Communication

*Americans' Views on the Fair Minimum Wage Act***Jamie McDonough**

International Affairs and Communication

The 'Truth': Understanding the Media Audience of the Truth® Campaign

Rachel Strauss

Communication

Polysemy, Polyvalence, and Pink: Audience Responses to Music Videos

MUB, Room 321

Classical Myth and Ovid

Moderator and Adviser:

R. Scott Smith

Amber Davis

Classics and Biomedical Science

Ovid's Manipulation of Myth in Metamorphoses

Richard DiCillo

English and Classics

Caeneus and Cynus: Ovid's Ballroom Blitz

Taylor LaHaise

Classics

Old Age as a Disguise in Classical Mythology

Michael Mignanelli

Classics

Ovid Through the Inferno: A study of Ovidian Myth in Dante's Inferno

MUB, Room 302

Communication and the Body

Moderator and Adviser:

Mardi Kidwell

Amanda Flores

Communication and Sociology

Body Behavior as a Function of Gender Display in Marriage Proposals

Brooke Ashley Guertin

Communication

The Significance of Built Space and Body Behavior in Social Interaction

Devin McCarthy

Communication

Communication in Coaching: The Importance of Body Behavior in Sideline Interactions

Mary Wade

Communication and Psychology

The Importance of Gaze in Social Interaction

MUB, Room 237

Feminism in Action: Promoting Social Justice at UNH and Beyond

Moderator: **Faina Bukner**

Emily Dickman

Social Work, Women's Studies, and

Community Leadership

Adviser: **Joelle Ruby Ryan**

Maura Gallagher

Sociology and Women's Studies

Adviser: **Joelle Ruby Ryan**

Sarah Jones

Women's Studies

Adviser: **Joelle Ruby Ryan**

Eleanor Mackenzie

Social Work and Women's Studies

Adviser: **Joelle Ruby Ryan**

Evelyn Weston

Art Studio

Adviser: **Joelle Ruby Ryan**

Amy Winkler

Psychology

Adviser: **Joelle Ruby Ryan**

MUB, Room 338

Gender, Body, and Religion

Moderator and Adviser:

Svetlana Peshkova

Samantha Cotellessa

Anthropology and Women's Studies

Gender and Politics in Islam

Rachel Draper

Anthropology and Women's Studies

Education of Women in Egypt

Molly Foye

Spanish and Anthropology

Internalized Oppression Among Yemeni

Women: How Economic Change Triggers

the Discrimination of Domestic Workers

Aseebulla Niazi

International Affairs and International

Business and Economics

Sharia Law and Divorce

Christian Steckler

Philosophy

Contemporary Violence and the Body

MUB, Room 330

International Affairs: Economic Challenges—Financial Crises, Healthcare Spending, and Trade

Moderator: **Scott Pruett**

Andrea Alie

International Affairs and Economics

Economic Regionalism in Spain: Why are There Inequalities?

Adviser: **Molly Wallace**

Henry Bowen

International Affairs and Physics

The Cost of Living: A Comparative Analysis

of French and U.S. Healthcare Spending

Adviser: **Molly Wallace**

Brianna Cole

International Affairs and Political Science

¿Viva Argentina? Causes and Consequences

of the Economic Crisis in Argentina

Adviser: **Molly Wallace**

Mark Karetskiy

International Affairs and Economics

A Macroeconomic Analysis of Spain's

Economic and Political Woes

Adviser: **Molly Wallace**

Brenna McLaughlin

International Affairs and Spanish
Bandaging Up the Effects of Spain's Cuts: Analyzing Healthcare Spending in Spain
 Adviser: Molly Wallace

Cassie Stever

International Affairs and International Business and Economics
Modernization of China and Trade With the U.S.
 Adviser: Molly Wallace

MUB, Room 332

**International Affairs:
 Managing Resources, Natural Disasters, and Environmental Impact**

Moderator: Jennifer Purrenhage

Douglas Osborne

International Affairs and Civil Engineering
Environmental Policy, Infrastructure and Practices: A Comparison Between France and the United States
 Adviser: Molly Wallace

Darcy Peyser

International Affairs and History
Collaboration in Times of Disaster: Government and NGO Networks
 Adviser: Molly Wallace

Andrew Schafer

International Affairs and Political Science
Water Scarcity in the Jordan Valley
 Adviser: Molly Wallace

Daniel Zotos

International Affairs and Political Science
The Politics of Fishing: Surveying the Political Economy of the Bluefin Tuna Fishery in Modern-day Spain
 Adviser: Molly Wallace

MUB, Room 334

**International Affairs:
 Media, Art, Philosophy, and Social Change**

Moderator: Aykut Kilinc

Jesse Buell

International Affairs and Spanish Culture and Gaming: *How Different Cultures Approach Online Strategy Games*
 Adviser: Molly Wallace

Susan Doucet

International Affairs and English/Journalism
The State of the Media in France
 Adviser: Molly Wallace

Anthony Hamoui

International Affairs and Communication
The Effects of New Media on Traditional Arab Society
 Adviser: Molly Wallace

Jennifer Lindsay

International Affairs and Art Studio
Contemporary Art with Chinese Characteristics: Relations Between Beijing Artists and the Government Post-1989
 Adviser: Molly Wallace

Emma Vachon

International Affairs and European Cultural Studies
The Meaning of May: An Exploration of How Intellectual and Philosophical Movements Influenced the 1968 Social Uprisings in France
 Adviser: Molly Wallace

MUB, Room 336

**International Affairs:
 Minority/Immigrant Communities and National Identity: Discrimination and Resilience**

Moderator: Jeanne Sokolowski

Amanda Condon

International Affairs and Political Science
Economic Implications of Immigration: How Immigrants Impact Unemployment in Spain
 Adviser: Molly Wallace

Jessica Hansen

International Affairs and Political Science
Cultural Barriers: The Integration of North African Immigrants in France
 Adviser: Molly Wallace

Luke Hansford

International Affairs and Spanish Language in Catalonia: *A Third Perspective*
 Adviser: Molly Wallace

Sarah Keane

International Affairs and French
The Extent and Effect of Radical Discrimination of North African Immigrants in France
 Adviser: Molly Wallace

Lauren Saucier

International Affairs and English/Journalism
Jewish Identity in Post-WWII Germany
 Adviser: Molly Wallace

Rachael Wheaton

International Affairs and Political Science
Understanding National Identity in Spain
 Adviser: Molly Wallace

MUB, Rockingham Lounge**Literary Narratives of Globalization: Tales of Shanghai, Bombay, and Other(ed) Spaces**

Moderator and Adviser:
Sandya Shetty

Kaitlynn Bilodeau
English

The Question of the Human in Capitalist Globalization

Kelsey Brandon

English Literature

Fast Fashion and Fakes: The Garment Industry and Personhood in Postcolonial Literature

Jonathan Constable

English Literature

Equal City: Examining Verticality and Horizontality in Tash Aw's Five Star Billionaire and Vikram Chandra's 'Shakti'

Caitlin Rose Duttry

English Literature and Women's Studies

Copycat People: Media Imagery and Counterfeit Identities in Tash Aw's Five Star Billionaire

Dana Roach

English

New Urban Imaginaries: Human Sociality and Cyberspace in Five Star Billionaire

MUB, Room 304**Literature and the First World War**

Moderator and Adviser:
Martin McKinsey

Ashley Doonan

English Literature

An Era of Increased Prospects

Ian Henry

English Teaching

For England

Thomas Lusted

English

Camaraderie and Nationalism

Nicole Robinson

English

Switched at War

MUB, Room 207**Political Science: Post-Conflict Dilemmas and Interventions in Syria**

Moderator: Nicholas Pasquale

Philip Boynton

Political Science

Policy Recommendation: Responsibility to Protect (Syria)

Adviser: Lionel Ingram

Mark Gagnon

Political Science

Coercive Diplomacy in Syria

Adviser: Lionel Ingram

Amanda Hundley

Political Science

Analysis and Recommendation of U.S. Policy in Syria

Adviser: Lionel Ingram

Hannah Waller

Political Science

Transitional Justice in Post-Conflict Societies: A Case Study of Bosnia-Herzegovina

Adviser: Mary Malone

MUB, Room 340**Political Science: The Pivot to Asia and US Foreign Policy**

Moderator: Michael Cole

Meagan Beckert

Political Science

U.S. Response to the Current Ukrainian Crisis

Adviser: Lionel Ingram

Tyler McAfee

Political Science

Crisis Management in Taiwan

Adviser: Lionel Ingram

Jonathan Merrill

Economics and Political Science

The Trade Deficit With China

Adviser: Lionel Ingram

Tegan O'Neill

Political Science

The World Energy Project: A Practical Application of Sustainable Energy Development in Ghana

Adviser: Stacy VanDeveer

Christine Turner

Political Science

Cross-Straight Corruption: Taiwanese Attitudes Across Sectors

Adviser: Lionel Ingram

MUB, Strafford Room**Race and Gender in Film**

Moderator and Adviser:
Delia Konzett

Dylan Arky

English

Madalyn Northcutt

English

James Parolisi

English

Shema Rubdi

Communication

Parents Association Undergraduate Research Symposium

Poster Presentations, Session B

Friday, April 25
10:50 a.m.–Noon
Memorial Union Building,
Granite State Room

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

Christopher Barr
Matthew Sweeney
Tyler Fausnacht
Nicholas Geist
Sean Gribbin
Alex LeBoeuf
 Mechanical Engineering

Eric Boudreau
Sean Leighton
 Computer Science

Ryan Cahill
 Computer Engineering
UNH ROV: Underwater Remotely Operated Vehicle
 Advisers: M. Robinson Swift,
 May-Win Thein

Alecia Bassett
 Anthropology and History
Environmental History and its Effects on Eastern United States Traditional Ecological Knowledge
 Adviser: Meghan Howey

Evan Beals
Danielle Fournier
 Kinesiology
Andrew Doyle
 Kinesiology and English/Journalism
Elizabeth Lieblein
 Kinesiology and Psychology
Career Preparation Patterns of Early to Mid-Career Professionals in NCAA Division-I Athletic Administration
 Adviser: Heather Barber

Amanda Berger
 Biomedical Science
Effects of Keratin Filaments on ERK Signaling during Fas-induced Death of Cervical Cancer (HeLa) Cells
 Adviser: David Townson

Emma Brown
 Linguistics
Wicked Intense: the Grammaticalization of Wicked
 Adviser: Maya Ravindranath

Karen Brunetti
Saad Chowdhry
 Psychology

Joshua Dolman
 Psychology and Family Studies
Eleanor Mackenzie
 Social Work and Women's Studies
'She Had It Coming': Gender, Age, and a History of Sexual/Physical Assault as Predictors for Rape Myth Endorsement
 Advisers: Katie Edwards, Angela Neal

Alexander Buell
Sarah DiIanni
Nicholas Duggan
Patricia Levesque
Alec Rader
Maureen Raubach

Alyssa Reilly
Tyler Weber
 Neuroscience and Behavior
Andrew Kitt (Graduate Student)
Jenny Lang (Graduate Student)
 Psychology

Eliza Wood
 Neuroscience and Behavior and Philosophy
Isolating S-Cone Responses in Koniocellular Layers
 Adviser: William Stine

Amanda Buks
Taylor Messina
Jessica Palmer
 Nutrition
Evaluating the Healthfulness of UNH's Vending Machines
 Adviser: Jesse Morrell

Tina Cannon
 Psychology and Women's Studies

Kelsey Evans
Chloe Flanagan
Ellen Haynes
Ashley MacPherson
 Psychology
Should You Stay or Should You Go?: Women's Rationale Behind Leaving or Staying in an Abusive Relationship
 Advisers: Katie Edwards,
 Kara Anne Rodenhizer

Jade Chandronnait
 Nursing
Adherence to Daycare Exclusion Policies in New Hampshire
 Adviser: Pamela Dinapoli

Angela Cicia
 Biochemistry, Molecular and Cellular Biology

Cayla Compton (McNair Scholar)
 Wildlife and Conservation Biology
Fecal Steroid Analysis for Monitoring Reproductive Status in Captive Animals
 Adviser: Paul Tsang

Joseph Collins
 Mechanical Engineering
Exploring Auxetic Designs with 3-D Printing
 Adviser: Yaning Li

Paige Driscoll
 Anthropology and Art Studio
Voice Scavenger: Improving Public Health Through Public Art
 Adviser: Semra Aytur

Cody FitzGerald
 Mathematics and Genetics
Mutational Mechanisms of Evolution of Mucooid Types From Burkholderia Small Colony Variants
 Adviser: Vaughn Cooper

Joyce Fontaine

Neuroscience and Behavior

Nathaniel Stafford (*Graduate Student*)

Psychology

Effects of Socially Induced Early Life Stress in Juvenile Rats on Stress Responsivity and Ultrasonic Vocalizations During Intermittent Swim Stress in Adulthood

Adviser: Robert Drugan

Mackenzie Gavin

Nutrition

The Effect of Parent Education Level on Diet Quality

Adviser: Jesse Morrell

Kayleigh Greaney**Kelly Palmer**

Psychology

Reactions to Intimate Partner Violence Research: A Mixed Methodological Study of Rural Young Adults

Adviser: Katie Edwards

Matte Horton

Nursing

Lateral Violence in Direct Entry Accelerated Masters Nursing Graduates

Adviser: Pamela Dinapoli

Adele Jones

Psychology and Theatre and Dance

Ultrasonic Vocalizations in Rats During Intermittent Swim Stress as an Indicator of Resilience to Social Anxiety

Adviser: Robert Drugan

Sarah Kinsman

Animal Science

Nicolette Schwab

Biomedical Science

Factors Influencing Programmed Cell Death (apoptosis) of Human Ovarian Granulosa Tumor Cells

Adviser: David Townson

Kasey Lesner

Occupational Therapy

Examining and Promoting the Role of Assistive Technology for People with Disabilities in the Workplace

Adviser: Sajay Arthanat

Amy Lovely

Earth Sciences: Teaching

Utilizing CoCoRaHS Climate Data to Enhance Climate Literacy at the Middle School Level

Adviser: Mary Stampone

Emily McDermott

Zoology

The Influence of Landscape and Habitat Factors on the Sex Ratio of the New England Cottontail

Adviser: Adrienne Kovach

Stephanie Parisi

Biomedical Science

Examining the Tumorigenic Ability of Cyokeratin 8/18 Filaments in Cervical Cancer Cells In Vitro

Advisers: Thomas Foxall, David Townson

Kyle Scarano

Biomedical Science

Local Communication in Sports Medicine

Adviser: Michelle Fleetwood

Erin Spaulding

Nursing

Instilling Diet and Exercise Confidence: Influence of Nurse Body Size

Adviser: Joyce Cappiello

Jeffrey Sullivan

Statistics

The Predictive Power of a Single Baseball Season

Adviser: Philip Ramsey

Rebecca White

Sociology and Geography

Poverty, Race, and Place: The Spatial Distribution of Poverty and Wealth in Three American Cities

Adviser: Kenneth Johnson

Molly Williams

Neuroscience and Behavior

Drug Reactivity

Adviser: Robert Drugan

Stephanie Winn

Nursing

Quality of Postnatal Care for Mothers and Babies in Nepal

Adviser: Gene Harkless

Shannon Zimmerman

Psychology

Don't Tell My Parents: The Relation Between Being Caught and Emotions on Delinquency

Adviser: Ellen Cohn

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

Adviser: Christine O'Keefe

John DeGennaro

Anthropology

*Radio in the Age of the Internet***Joel Kost**

English/Journalism

*Technical Writing in Journalism***Matthew Lautenschlager**

Linguistics

*What Body of Knowledge Means to You***Michael Pastore**

English and Psychology

*Technical Writing Issues in the Freelance Writing World***Melanie Pryor**

Hospitality Management

*Technical Writing in Hospitality***Kelsey Slade**

English

*Technology and the World of Journalism***Erin Sobecki**

Geography

*Technical Writing in Geography***Lindsey Zolot**

Communication

Technical Writing and Journalism

Parents Association Undergraduate Research Symposium

Oral Presentations, Session C

Friday, April 25
12:15–1:25 p.m.
Memorial Union Building

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MUB, Room 321

Asian American Graphic Narratives

Moderator and Adviser: Monica Chiu

Ellyn Dugan

English Teaching

The Hidden Agenda: Race and Sexuality in the Graphic Narrative Skim

Colleen Graham

English

On Color and Racial Stereotyping in Chew and Shortcomings

Hannah Rivers

English/Journalism

The Anomalous Depiction of Text in Chew and How Groensteen's "The Balloons in the Page" Substantiates its Contribution to Content and Meaning

MUB, Room 233

Comm-entary 2014: A Selection of Research from the Undergraduate Communication Journal

Moderator: Kevin Healey

Leigh Fraser

Communication

Skepticism as Rhetorical Strategy in Scientific Argument

Adviser: Michael Jackson

Olivia Mullen

Communication

Coffee as a Religion

Adviser: Kevin Healey

Robert Post

Communication

The Forbidden Fruit of Cult & Capitalism

Adviser: Kevin Healey

Brieanne Young

Communication

Environmental Protest Framing as 'Ecoterrorism'

Adviser: Jennifer Borda

MUB, Room 207

Critical Approaches to Literature

Moderator: TBD

Jonathan Constable

English Literature

A Bloody Racist: Interpreting Heart of Darkness and An Image of Africa

Adviser: Petar Ramadanovic

Ashley Doonan

English Literature

Trauma Memory in Heart of Darkness

Adviser: Petar Ramadanovic

Colton Huelle

English Literature

Interpretation and Experience: J. Hillis Miller's Reading of Heart of Darkness

Adviser: Petar Ramadanovic

Marisa Milone

English Literature

Reader-Response Theory vs. Feminist Criticism

Adviser: Petar Ramadanovic

MUB, Room 302

Film Genre

Moderator and Adviser:
Delia Konzett

Dylan Arky

English

Bridget Costello

English

Stephanie Royka

Genetics

Shema Rubdi

Communication

Taylor Walton

English

MUB, Room 330

Merging Theory and Practice: Knowledge Construction in the 21st Century

Moderator: Janet Cass

Joseph Collins

Mechanical Engineering

Exploring Auxetic Designs With 3-D Printing

Adviser: Yaning Li

Joel Ford (McNair Scholar)

Chemical Engineering

Fabrication of Biomass-Based Activated Carbons for Removal of Emerging Contaminants from Water

Adviser: Jillian Goldfarb

Adrienne Hill (McNair Scholar)

Civil Engineering

Experimental and Theoretical Evaluation of Internal Loads in Underground Retaining Structures

Adviser: Majid Ghayoomi

Avery Normandin

Biomedical Science

The Role of Broadly-Neutralizing Antibodies in HIV-1 Vaccinology

Adviser: Thomas Pistole

Maxwell Renke

Computer Science

The Role of Alternative Currencies in the Global Marketplace: Bitcoins and Other Alternative Currencies

Adviser: Radim Bartos

Ann Steeves (McNair Scholar)

Ecogastronomy and Health Management and Policy

The 4-H Essential Elements: Evaluation of Program Implementation and Evidence of Impact

Adviser: Robert McGrath

MUB, Room 332**Political Science: American Politics and Perspectives in Transition**

Moderator: Christina Pretorius

Ariel Berry

Political Science

Literature: A Means of Transcending a Misogynistic Society

Adviser: Marla Brettschneider

Ashley Marcoux

Political Science

Erasing the Line Between the Private and Public Sphere

Adviser: Marla Brettschneider

Alexxandre Schlieder

Political Science

The Breakdown of Bureaucracy in Response to Hurricane Katrina and Why it Matters

Adviser: Alynna Lyon

Sophia White

Political Science and English Literature

Capital Punishment in the United States: A Dynamic Entity

Adviser: Richard Aliano

MUB, Room 334**Political Science: Environmental Politics and Policies**

Moderator: Stacy VanDeveer

Jacob Belanger

Political Science

The United States Senate: Dynamics of Energy Policy Reform

Adviser: Susan Siggelakis

James Caviston

Political Science

Green Politics

Adviser: Stacy VanDeveer

Sarah Eigenbrode

Political Science

Patterns of Industrialized Farming

Adviser: Stacy VanDeveer

Rebecca Gobeil

Sustainable Agriculture and Food Systems

The Path of Tuna, The Path of Destruction

Adviser: Stacy VanDeveer

Tegan O'Neill

Political Science

Not in my Backyard: Citizen Attitudes and Disaster Preparedness Policies at the Local Level

Adviser: Stacy VanDeveer

MUB, Room 336**SEEDS of Change**

Moderator: Kristi Dixon

Danielle Blevens

Psychology and Social Work

Empowerment

Adviser: Katie Edwards

McKenzie Dow

Psychology

Laying the Foundation for Growth

Adviser: Katie Edwards

Jennifer Turner

Psychology

Exploring the Power of Positive Outlooks in Survivors

Adviser: Katie Edwards

Amy Winkler

Psychology

Sistering Sobriety, Beyond the AA Model

Adviser: Katie Edwards

MUB, Room 237**UNH Feminist Leadership**

Moderator: Joelle Ruby Ryan

Emily Dickman

Social Work and Women's Studies and

Community Leadership

Feminist Leadership at the Waysmeet Center

Adviser: Faina Bukher

Erica Tamposi

Communication

Feminist Leadership in the Women's Studies Program

Adviser: Faina Bukher

Samantha Webb

Family Studies and Women's Studies

A Feminist Vision

Adviser: Faina Bukher

Danielle Zamarchi

Sustainable Agriculture and Food Systems

Feminism is a Process

Adviser: Faina Bukher

MUB, Room 304**Updating Homer**

Moderator and Adviser:

Michael Ferber

Benjamin Bertrand

History

*The Legacy of Achilles***Adrienne Bode**

English Teaching

*Helen as the First Feminist Character***Jacklyn Trexler**

English

The Sherlock Holmes of Ithaca

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

Poster Presentations

Friday, April 25
10 a.m.–1:30 p.m.
Paul College Building

Through original research and valuable guidance from mentors, this event helps 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 Building, Great Hall
10 a.m.–11:30 a.m.

Accounting and Finance Posters

Moderator: Wenjuan Xie

Lindsey Byrne

Accounting

Accounting For Financial Instruments: Difficulties With Fair Value Measurement and Reporting

Adviser: Le (Emily) Xu

John Cicci

Finance

The Solar Industry and its Potential for Feasible Investments

Adviser: Wenjuan Xie

Daniel Cray

Accounting and Finance

Wine as an Investment

Adviser: Ahmad Etebari

Daniel Gravina

Accounting and Finance

Proposed Audit Reporting Changes: Considerations of Stakeholders' Perspectives

Adviser: Michael Ozlanski

John Kerrigan

Finance

Performance of Different Types of Real Estate: 1978-2012

Adviser: Ahmad Etebari

Abby Lamothe

Accounting

Farm Business Management: A Localized Analysis of Financial Tools Utilized in

Agribusiness

Adviser: David Hasseldine

Binh Nguyen

Accounting and Finance

Leverage Buy-out Case Study

Adviser: David Hasseldine

Casey Wade

Accounting

Auditing the Auditors: Are Investors Listening?

Adviser: Michael Ozlanski

Paul College Building, G25
Noon–1:30 p.m.

Business Analytics and Spreadsheet Modeling

Moderator: Benjamin Porter

Cailee Alper

Finance and Information Systems Management

Management

Katie Chen

Accounting and Information Systems Management

Classroom Schedule Optimization

Adviser: Benjamin Porter

Jonathan Banker

Information Technology

Cody Fischer

Information Systems Management and Marketing

Kelly Horton

Accounting and Finance

Information Systems Management UNH Housing Pricing Model

Adviser: Benjamin Porter

Ana Capuano

Information Systems Management

Logan Gagne

Information Technology

Sovaneka Liek

Information Systems Management and Finance

Student Schedule Optimization

Adviser: Benjamin Porter

Brian Cocozziello

Information Systems Management and Finance

Christopher Thornton

Entrepreneurial Studies and Information Systems Management

Gymnasium Schedule Optimization

Adviser: Benjamin Porter

William Dalrymple

Information Systems Management and Accounting

Duncan MacArthur

Information Systems Management

Brandon Shea

Information Systems Management and Management

Grafton White

Information Systems Management and Finance

Virginia Waste Services Driver

Optimization

Adviser: Benjamin Porter

Alexander Dunn

James Tasiopoulos

Information Systems Management and Finance

Nicholas Kaschak

Information Systems Management and Economics

Eric Muise

Information Systems Management and Management

Dining Hall Schedule Optimization

Adviser: Benjamin Porter

Paul College, Great Hall
Noon–1:30 p.m.

**Economics Capstone Research
 Projects**

Moderator: Aziz Saglam

Travis Begin

Economics
Social Costs of Alcohol Consumption
 Adviser: Aziz Saglam

Carolyn Bradley

Justice Studies and Economics
*Do Hiatuses During TV Show Seasons
 Impact Ratings and Viewer Retention
 Rates?*
 Adviser: Aziz Saglam

Kelly Galvin

Economics
Does Money Buy Happiness?
 Adviser: Aziz Saglam

Joshua Goodrich

Economics
Effects of Accession on Trade in the EU
 Adviser: Aziz Saglam

Zachary Goumas

Economics
*The Spillover Effects from New Hampshire
 Tax Credits*
 Adviser: Aziz Saglam

John Habzda

Economics
*The Economic Impact of Electric Utility
 Deregulation in the U.S.*
 Adviser: Aziz Saglam

Dennis Horten

Economics
*Is Community Supported Agriculture an
 Indicator of Economic Prosperity?*
 Adviser: Aziz Saglam

Stephanie Ingalls

Economics
*Measuring the Effects of Taxation on
 Cigarette Consumption*
 Adviser: Aziz Saglam

Greg Jackson

Economics
*Race and Gender: Differences in Peak
 Salary*
 Adviser: Aziz Saglam

Jack Landry

Economics and Management
*The Impact of Successful Sports
 Organizations on Local Economies*
 Adviser: Aziz Saglam

Alex Loiseau

Economics
Minimum Wage and the Poverty Rate
 Adviser: Aziz Saglam

Eric McCann

Economics
*Do Americans Work Too Much? The Effects
 of a Shorter Work Week on Productivity*
 Adviser: Aziz Saglam

Jonathan Merrill

Economics and Political Science
*What Drives the Long Term Euro/USD
 Exchange Rate?*
 Adviser: Aziz Saglam

Sishemo Mwesigwa

Economics
3G/4G Network & App Market
 Adviser: Aziz Saglam

Viet Ha Nguyen

Economics
*How U.S. Higher Education Affects the
 Labor Market and Economy*
 Adviser: Aziz Saglam

Sean Oddy

Economics
Evolution of Scoring in Hockey
 Adviser: Aziz Saglam

Bradley Olmsted

Economics
*Societal Effects of Government Military
 Expenditures in Developing Countries*
 Adviser: Aziz Saglam

Gino Orlando

Economics
The Economics of Cybercrime
 Adviser: Aziz Saglam

Tyler Rousseau

Economics
*Impact of Ski Lift Ticket Prices on
 Mountain Attendance*
 Adviser: Aziz Saglam

Michael Sanchez

Economics and Philosophy
*How Has Microfinance Lending Affected
 Hiring By Small Businesses in the U.S.?*
 Adviser: Aziz Saglam

Michael Soltys

Economics
How to Buy Wins in the NBA
 Adviser: Aziz Saglam

Tiffany Waters

Economics
What Factors Make a Box Office Hit?
 Adviser: Aziz Saglam

Daniel Weidman

Economics
*Do New Stadiums Help Teams Perform
 Better?*
 Adviser: Aziz Saglam

Samuel Williams

Economics
*Matching Theory and Market for National
 Football League Coaches*
 Adviser: Aziz Saglam

Paul College Building, Great Hall
10 a.m.–11:30 a.m.

Economics of Sports

Moderator: James Wible

Brad Blais

Undeclared
*How to Build a Team: Indiana Pacers vs.
 Miami Heat*
 Adviser: James Wible

John Corona

Economics
Seattle Seahawks Roster Evaluation
 Adviser: James Wible

Scott Cote

Management
Sports Economics
 Adviser: James Wible

Zachary Dhionis

Information Systems Management
Economics in the PGA Tour
 Adviser: James Wible

Aaron Dow

Economics
Economic Evaluation of the Boston Bruins Roster and Allocations
 Adviser: James Wible

Michelle Gearin

Finance and Economics
Economic Evaluation of Celtic's Home Game Ticket Pricing
 Adviser: James Wible

Matthew Gioia

Information Systems Management
The Economics of Sports Research Econ 698
 Adviser: James Wible

James Landry

Entrepreneurial Studies and Economics
Economic Impact of a New UNH Football Stadium
 Adviser: James Wible

Colin MacArthur

Information Systems Management
Detroit Red Wings Roster Valuation
 Adviser: James Wible

Duncan MacArthur

Information Systems Management
Toronto Maple Leafs Roster Valuation
 Adviser: James Wible

Eric McCann

Economics
The Economics of Success: A Roster Valuation of the New England Patriots
 Adviser: James Wible

Catherine Putney

Economics
Chicago Blackhawks: Salary Cap and Roster Valuation
 Adviser: James Wible

Benjamin Randall

Economics
Roster Evaluation of the Minnesota Wild
 Adviser: James Wible

Philip Sophinos

Mathematics, Interdisciplinary
2014 Milwaukee Brewers Roster Evaluation
 Adviser: James Wible

Evan Taylor

Mechanical Engineering
NCAA & Paying Athletes
 Adviser: James Wible

Travis Worra

Statistics and Economics
The Rise of the Beautiful Game in America
 Adviser: James Wible

**Paul College, G25
 10 a.m.–11:30 a.m.**
Multidisciplinary Posters

Moderator: Pei-Jou Kuo

Brian Bissonette

Economics and Management

Gregory Cuoco

Jacob Lang
 Management

Cameron Perl

Electrical Engineering
PAPaya Prevention
 Adviser: Marc Sedam

Kellen Busby

Information Systems Management

Matthew Newton

Information Systems Management and Management

Emma Smith

Accounting and Information Systems Management
Enterprise Level Data Mapping
 Adviser: Kholekile Gwebu

Nicholas Cornell

Economics

Emily Faller

Marketing

Nathan Provencher

Finance and Economics
Monetary Policy in Emerging Markets
 Adviser: Evangelos Simos

Alyssa Dupont

Hospitality Management
An Examination of Chain Restaurants Exterior Colors
 Adviser: Pei-Jou Kuo

Marnee Dupont

Hospitality Management
It's Not the Serve, But the Return
 Advisers: Valentini Kalargyrou, Carl Lindblade

Allen Gersky III

Daniel Lambert
 Economics and Finance
Impacts of the Financial Crisis on an Industrialized Country
 Adviser: Evangelos Simos

Hayley Harmon

Ecogastronomy and Economics
Network Transaction Costs: Comparative Review of Italian & US Pork Production
 Adviser: Neil Niman

Kira Jacobsen**Sarah Sullivan**

Information Systems Management and Finance

Lillian Weimer

Information Systems Management and Accounting
Mobile Authentication
 Adviser: Kholekile Gwebu

Eric McCann

Economics

Sarah Wiggins

Management
Sustainability and Business: A Review of Annie's Homegrown, Inc.
 Adviser: Fiona Wilson

Viet Ha Nguyen

Economics
Cost-Effectiveness Analysis of Smoking Cessation
 Adviser: Robert Woodward

Hannah Tripp

International Business and Economics and Finance
The Effects of Social Media on Brand Image
 Adviser: Meera Venkatachalam

Paul College, G45
Noon–1:30 p.m.

**Ecogastronomy: Capstone
 Research and Projects**

Moderator: Daniel Winans

Bryan Boucher

Ecogastronomy and Economics
*Grove Grocery: A Business Model for a
 Small-Scale Specialty Foods Shop in
 Portsmouth, NH*
 Adviser: Daniel Winans

Sarah Brown

Ecogastronomy and Environmental
 Conservation Studies
*An Exploration of Community Gardens:
 Bringing People Together and Food-
 Insecurity Out?*
 Adviser: Daniel Winans

Samantha Dinnan

Ecogastronomy and Anthropology
The Fats of Life: A History of Dietary Fats
 Adviser: Daniel Winans

Zoe Farricker

Ecogastronomy and Nutrition
*School-Based Outcomes of a Successful
 Farm-to-School Garden Program*
 Adviser: Daniel Winans

Acacia Kreidermacher

Ecogastronomy and Nutrition
*Importance of Family Meals: UNH
 Students' Perceptions of Family Meal
 Times*
 Adviser: Daniel Winans

Megan Letendre

Ecogastronomy and Sustainable
 Agriculture and Food Systems
*Salanova Transplants vs. Direct Sown
 Lettuce: Days to Harvest, Cost, Labor and
 Yield Study*
 Advisers: Andrew Ogden, Daniel Winans

Meghan Lusty

Ecogastronomy and Tourism Planning
 and Development
The Last Hope for the Hive
 Adviser: Daniel Winans

Emily McKeen

Ecogastronomy
*A New Approach to Urban Farming:
 Shipping Container-to-Table*
 Adviser: Daniel Winans

Kendra Moffett

Ecogastronomy and Nutrition
*Creating an Allergy Policy: St Paul's
 School, Concord, NH*
 Adviser: Daniel Winans

Taylor Nelson

Ecogastronomy and Communication
*Expanding Seacoast Markets: A Proposal
 to Bring a Winter Farmers Market to UNH*
 Adviser: Daniel Winans

Olivia Newhall-Thayer

Ecogastronomy, French, and Hospitality
 Management
*Fast and Nutritious: Changing the Face of
 Fast Food*
 Adviser: Daniel Winans

Emily Nicholson

Sustainable Agriculture and Food Systems
*Emma's Home Grown: Business Proposal of
 a Raised Bed Installation and Maintenance
 Service for the Seacoast Area*
 Adviser: Daniel Winans

Amanda Parks

Ecogastronomy and Nutrition
*Mobile Merroir: A New Approach to
 Rediscovering Local Seafood*
 Adviser: Daniel Winans

Courtney Ruffen

Ecogastronomy
Wine Labeling Uncorked
 Adviser: Nelson Barber

Ann Steeves (McNair Scholar)

Ecogastronomy and Health Management
 and Policy
*The Luquillo Farm Sanctuary: A Case
 Study of the Energy Exchange Program*
 Adviser: Daniel Winans

Amanda Taitel

Ecogastronomy and Environmental
 Conservation Studies
*The UNH Dairy Bar Food Footprint: A
 Sustainability Analysis of Food Products
 and Recommendations for Improvement*
 Adviser: Daniel Winans

Emily Tassinari

Ecogastronomy and Biology
*From the Field to Your Fork: A Complete
 Guide to Foraging and Preparing New
 England's Wild Edible Flora*
 Adviser: Janet Sullivan

Paul College Building, G25,
Noon–1:30 p.m.

Marketing Posters

Moderator: Lin Guo

Meredith Cline

Marketing
*Analyzing the Effects of Environmental
 Constraints on Local Business*
 Adviser: Lin Guo

Sarah Daigle

Marketing and Psychology
UNH Women in Business
 Adviser: Melissa Bishop

Sarah Daigle

Marketing and Psychology
*Self-Theory and its Impact on Brand
 Attachment*
 Adviser: Lin Guo

Ryan Hovey

Marketing
*Past and Current Marketing Efforts in
 Russia*
 Adviser: William Machanic

Alexa LoMonaco

Marketing and Information Systems
 Management
*Smart Phone Purchasing Habits Among
 the University of New Hampshire Students*
 Adviser: M. Billur Akdeniz

David Mesa

Finance and Economics
*Assessing Hispanic Culture Relevance
 in the U.S. When Creating a Marketing
 Strategy*
 Adviser: Peter Masucci

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

Oral Presentations

**Friday, April 25
10 a.m.–1:30 p.m.
Paul College Building**

Through original research and valuable guidance from mentors, this event helps 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, Room 125
10–11:30 a.m.**

Marketing Workshops, Session I

**Moderator and Adviser:
Peter Masucci**

Ashley Babineau
Richard Bernardi
Kevin Davis
Alyssa Johnson
Nicholas Nolin
Kerry O'Connor
Alex Pepicelli
Leah Preble
Benedetto Weigler
Marketing

Cara Carter
Marketing and Management
Development of a Marketing Campaign to Increase Awareness of the UNH Employee Health Clinic, and to Help Drive Greater Utilization by Faculty and Staff

David Biondo
Brett Cole
Nicole Eberhart
Jacquelyn Murtha
Robert Peiffer
Maxwell Penfield
Caitlin Pennycuik
James Spadea
Marketing

Daniel Crowley
Marketing and Entrepreneurial Studies
Research and Development of Marketing Programs to Assist in the Launch of an Online eCommerce Shopping Website for Tuscan Kitchen and Market

Taylor Cefalo
Kevin Cyr
Cameron Frank
Brett Geer
Tracey Nicholson
Julia O'Brien
Jordan Pritikin
Scott Ricketts
Nikollette Storro
Marketing

Drew Gaberseck
Marketing and Finance
Enterprise Rent-A-Car: Research and Development of a Marketing Campaign to Attract UNH Students to Apply for Full-Time Positions in the Company's Management Training Program

Christopher Clapp
Brianne Cox
Christopher Dunleavy
Cody Jaskot
Sean Leahy
Margaret Rounds
Taylor Sherman
Jacob Shillue
Marketing
Melissa Karpel
Emily Stone
Marketing and Management
Gabe's Café: Development and Implementation of a Marketing Campaign to Increase Awareness of, and Drive Business to This Café/Restaurant

**Paul College, Room 115
Noon–1:30 p.m.**

Marketing Workshops, Session II

**Moderator and Adviser:
Peter Masucci**

Nathan Angus
Adam Stokes
Marketing and Finance

Ross Batchelder
Danielle Bonner
Barret Guild
Mackenzie Joyce

Derek Shea
Marketing

Sarah Daigle
Marketing and Psychology

Michael Marinelli
Marketing and International Business and Economics
MyLockBox.net: Research Into the Market Opportunity for On-premises Personal Safes, and the Development of Marketing Programs to Promote and Increase Sales

Sara Barone
Ryan Hovey
Emily Jennison
Lindsey Mahoney
Carl Sutkus
Marketing

Michael Boeri
Marketing and Communication

Hillary Flanagan
Marketing and International Business and Economics

Cole Jaillet
Marketing and Entrepreneurial Studies

Brittani LeBel
Marketing and Management

Taylor Perras
Marketing and Hospitality Management

Chloe Swift
Marketing and English
Shop UNH: Research, Development and Implementation of a Marketing Plan for This Online University eCommerce Website

Kristen Bellomo
Nathan Mainemer
 Marketing and Management

Christina Cooper
Ryan Hegarty
Daniel Karambelas
Erin McCormick

John Milbank
 Marketing
Alexa LoMonaco
 Marketing and Information Systems
 Management

Joshua Sokol
 Marketing and Entrepreneurial Studies
*FroyoWorld: Research and Development
 of a Marketing Plan and Promotional
 Programs Aimed at Increasing Aware-
 ness of, and Traffic to This Frozen Yogurt
 Franchise Shop*

Meghan Bridges
Tucker Cutter
 Marketing and Finance

Kelly Dow
Jessica Jamison
Keri Longacre
Tobey Miller
Thomas Ryan
Rebecca Turner

Jonathan Wu
 Marketing

Bridget Fay
 Marketing and Entrepreneurial Studies
*Museum of Art: Research and Develop-
 ment of a Marketing Plan and Promotional
 Program to Increase Attendance and
 Membership at the UNH Museum of Art*

Paul College, Room 135
12:45–2:15 p.m.

Paul College Atkins Investment Group

Moderator and Adviser:
Ahmad Etebari

Charles Almeida
James Miller
 Finance and Accounting

Jay Camper
 Finance
Industrials Team

Janine Appleton
 Biomedical Science

John Kerrigan
Nicholas Sorkin
 Finance
Healthcare Team

Austin Bauer
Eric Paul
 Finance

Connor Slein
 Political Science
Portfolio Strategy Team

Douglas Cataldo
Ryan Feeney
Nicholas Ventresca
 Finance
Financials Team

John Cicci
 Finance
Bryan Merrill
 Political Science
*Environmental, Social, and Governance
 Team*

Gaetan Ciot
Peter Guy
Victoria Hexeberg
 Finance
Consumer Discretionary Team

Daniel Cray
Tyler Walsh
 Accounting and Finance

Victoria Hexeberg
William McCarran
 Finance

Daniel Lambert
 Economics and Finance
Executive Officer Team

Anna Darling
 Information Systems Management

Daniel Lambert
 Economics and Finance

John Stowell
 Mechanical Engineering
Energy Team

Matthew Doubleday
 Finance and Accounting

Matthew Maloney
 Finance
Telecom Team

Ryan Lavin
 Applied Mathematics and Statistics

Patrick Sloyan
Adam Thompson
 Finance
Consumer Staples Team

Jacob Lehoux
Scott Morris
James Taylor
 Finance
Basic Materials Team

Brian Lowell
 Accounting and Finance

Alexander Ossinger
John Schwartz
 Finance
Utilities Team

Jason Michonski
Jeffrey Wyer
 Finance

Brandon Ossinger
 Information Systems Management
Technology Team

Paul College, Room G45
10–11:30 a.m.

Multidisciplinary Oral Presentations

Moderator: Reagan Baughman

Travis Begin
 Economics
*The Growth and Transformation of the
 Temporary Job Market*
 Adviser: Reagan Baughman

Derek Cummings
 Management and Marketing

Julie Fierley
Alexandra Malagodi
Nicolette Nassiopoulou
 Marketing
Minicase Study: Nikon's COOLPIX
 Adviser: Ludwig Bstieler

Bradley Olmsted
 Economics
*Quantitative Analysis of Disparities in US
 Unemployment Rates*
 Adviser: Ju-Chin Huang

Maxwell Renke

Computer Science

The Role of Alternative Currencies in the Global Marketplace: Bitcoins and Other Alternative Currencies

Adviser: Radim Bartos

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

Bud Albin Challenge Round

Friday, April 25
Noon–7 p.m.

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.

The Naked Arts— Creativity Exposed

Act III

Friday, April 25
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.

Jennifer Lindsay

International Affairs and Art Studio

Richardson Smith

Music Theory

Alexa Wynschenk

Theatre and English Teaching

La Verdad de Las Mujeres: a Naked Arts Collaboration

Advisers: Szu-Feng Chen, Rob Haskins,
David Kaye, Jennifer Moses

College of Health and Human Services Grimes Award Competition

Friday, April 25
1:30–4 p.m.
Petee Hall, Room G10

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.

Psychology Department George M. Haslerud Undergraduate Research Conference

Friday, April 25
1:30–5 p.m.
Conant 101

The George M. Haslerud Undergraduate Research Conference, 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.

Melissa Copeland

Psychology and Women's Studies

'It Was My Fault': Rape Myths and Self-Blame From the Survivor's Perspective

Adviser: Victoria Banyard

Meghan Craig

Psychology

Risk of Non-Suicidal Self-Injury Among Sexual Minority Young Adults: The Role of Minority Stress and Psychological and Behavioral Health

Adviser: Katie Edwards

Laura Gaines

Psychology

Student Attitudes Towards Alcohol Consumption

Adviser: Rebecca Warner

Ellen Haynes

Psychology

Family, Identity, and Autobiographical Memory

Adviser: Carolyn Mebert

Jennifer Hogan

Psychology

Parental Conversation Style and Children's Scientific Memory

Adviser: Michelle Leichtman

Adele Jones

Psychology and Theatre: Dance

Nathaniel Stafford (*Graduate Student*)

Psychology

Ultrasonic Vocalizations in Rats during Intermittent Swim Stress as an Indicator of Resilience to Social Anxiety

Adviser: Robert Drugan

Andrew Minigan

Psychology

The Reminiscence Bump in Priests' Life Stories

Adviser: David Pillemer

Heather Muir

Psychology

The Hidden Differences Between Self-Esteem and Happy/Sad Autobiographical Memories

Adviser: Zorana Ivcevic

Amy Oldenquist

Justice Studies and Psychology

Power of Peers: The Effects of Peer Legitimacy and Peer Delinquency on Rule Violating Behavior

Adviser: Ellen Cohn

Chelsea Parent

Psychology

Variations in Cognitive Orientation Among Adolescents

Adviser: Juan Chavajay

Elizabeth Wible

Psychology

Sexual Violence and Relationship Abuse Among College Students: The Bystander Intervention Process

Adviser: Victoria Banyard

Joel Wyatt

Psychology

Social Support and Coping Self-Efficacy as Moderators of the Relationship Between Intimate Partner Violence and Health Outcomes

Adviser: Katie Edwards

Honors English Undergraduate Research Conference

Friday, April 25**2–6 p.m.****Hamilton-Smith Hall,
English Department**

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.

Elizabeth Barker

English Teaching and Political Science

Materialism in the Democratic Community

Adviser: Sarah Sherman

Tess Congo

English

Domestic Drama in Poetry

Adviser: Delia Konzett

Amy Conte

English

Deterritorialization in Ma Rainey's Black Bottom

Adviser: Reginald Wilburn

Richard DiCillo

English and Classics

An Unbroken Series of Successful Gestures: Queer Theory in The Great Gatsby.

Adviser: Sarah Sherman

Caitlin Rose Duttry

English Literature and Women's Studies

Between Black Bodies: Liberatory Female Relationships in Alice Walker and Zora Neale Hurston's Masterpiece Novels

Adviser: Reginald Wilburn

Sarah Fenerty

English

The Unique One

Adviser: Delia Konzett

Allison Ginwala

International Affairs and English/Journalism

Cultural Identity of Chinese and Chinese American Women and the Westernized Notion of 'Ideal Beauty.'

Adviser: Delia Konzett

Amanda Plante

English

S(i)ntax of the White Divine: Repurposing English and the Concept of Divinity in Phillis Wheatley's Elegiac Style

Adviser: Reginald Wilburn

Dana Roach

English

The Cold Surrender of Midnight's Passing

Adviser: Delia Konzett

Philosophy Department Undergraduate Research Conference

Friday, April 25**4–8:30 p.m.****Murkland Hall**

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 question-and-answer period.

Joshua Hamor

Philosophy

Timothy Williamson on the Relation Between Counterfactual Thinking and Metaphysically Modal Thinking

Adviser: Paul McNamara

Cory McKenzie

History, Philosophy, and Classics
Seeking Old Japan: Heidegger, Hegel, and the Philosophy of Folklore
 Adviser: Timm Triplett

Kathryn O'Malley

Philosophy
Philosophizing with Children
 Adviser: Timm Triplett

Christian Steckler

Philosophy
Contemporary Violence and the Body II
 Adviser: Svetlana Peshkova

Timothy Vorachak (McNair Scholar)

Philosophy
Stereotypes and Counter-stereotypes
 Adviser: Willem De Vries

Student Composers' Concert

Friday, April 25
8 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.

Nathan Faro

Music Theory
Wind Quintet #1 'Pioneer'
 Adviser: Michael Annicchiarico

Nathan Faro

Music Theory
The Snowman (for Mezzo-Soprano and Piano)
 Adviser: Michael Annicchiarico

Trevor Frost

Music Education
A Nightingale Serenade
 Adviser: Andrew Boysen

Trevor Frost

Music Education
Arabian Journey
 Adviser: Andrew Boysen

Katja Kleyensteuber

Music Education
Untitled Brass Quartet
 Adviser: Ryan Vigil

Ian Nelson

Music Education
Marimba Duet
 Adviser: Andrew Boysen

Frank Noah

Music
*String Quartet for String Quartets—
 A String Quartet*
 Adviser: Michael Annicchiarico

Richardson Smith

Music Theory
Nantucket Flood/Porch Orange Glow
 Adviser: Michael Annicchiarico

23rd Annual COLSA Undergraduate Research Conference

Oral Presentations

Saturday, April 26

7:45 a.m.–2 p.m.

**Huddleston Ballroom and
 Holloway Commons**

Patricia Akrivoulis

Biomedical Science

Steven Troy

Biochemistry, Molecular and Cellular Biology
The Effects of Gold and Silica Nanoparticles on Horizontal Gene Transfer in Escherichia Coli
 Adviser: Subhash Minocha

Erica Brasley (McNair Scholar)

Rikki Miller (Graduate Student)
 Neuroscience and Behavior
Memory Coding Properties of Central Thalamic Neurons: Relationship to Prefrontal Neuronal Coding
 Adviser: Robert Mair

Cody FitzGerald

Mathematics and Genetics
Mutational Mechanisms of Evolution of Mucoicid Types From Burkholderia Small Colony Variants
 Adviser: Vaughn Cooper

Katarina Kieleczawa

Environmental Sciences
Hummingbird (Trochilidae) Species Diversity and Habitat Transformation in Neotropical Cloud Forest
 Adviser: Alan Master

Kendall Milkey

Biomedical Science

Megan Thompson (Graduate Student)

Genetics
Characterization of the srs-1 and srs-2 Root-Skewing Mutants of Arabidopsis thaliana
 Adviser: Estelle Hrabak

Kadina Mazic

Biochemistry, Molecular and Cellular Biology
The Use of First Principle Analytical Techniques in Order to Determine the Effect of pH on the Colloidal Properties of Monoclonal Antibodies.
 Advisers: Dana Filoti, Thomas Laue, Carrie May

23rd Annual COLSA Undergraduate Research Conference

Poster Presentations

Saturday, April 26
7:45 a.m.–2 p.m.
Huddleston Ballroom and Holloway Commons

Student presentations at the Annual COLSA URC are based on research conducted in any of the college's departments. Research ranges from field studies to molecular biology to genomics studies. Registrants will be notified by the COLSA URC committee if they are selected for an oral presentation.

Behailu Aklilu (*Graduate Student*)
 Genetics

Allison Thomas
 Biochemistry, Molecular and Cellular Biology
RPA1A and RPA1C Regulate Progression of Meiosis in Arabidopsis thaliana.
 Adviser: Kevin Culligan

Behailu Aklilu (*Graduate Student*)
Lisa Edwards
 Genetics
RPA1B and RPA1D Genes are Required for Normal DNA Replication and Efficient Progression of Meiosis in Arabidopsis thaliana
 Adviser: Kevin Culligan

Patricia Akrivoulis
 Biomedical Science

Steven Troy
 Biochemistry, Molecular and Cellular Biology
The Effects of Gold and Silica Nanoparticles on Horizontal Gene Transfer in Escherichia Coli
 Adviser: Subhash Minocha

Jennifer Allen
 Biomedical Science
The Psychological Effects of Chronic Illness in Young Adults
 Adviser: Judy Stevens

Noor Alsalihi
Lindsay Michaud
 Biomedical Science

Sheri Martin
Arika Zielfelder
 Psychology
Number Discrimination in the Clark's Nutcracker (Nucifraga Columbiana)
 Adviser: Brett Gibson

Samantha Anderson
 Environmental Sciences
Species Composition at the Sub-Meter Level in Discontinuous Permafrost in Sub-Arctic Sweden
 Advisers: Michael Palace, Ruth Varner

Mary Awad
 Biochemistry, Molecular and Cellular Biology
Karyn Cahill
Expression and Characterization of Recombinant PDE6C GAF Domain
 Adviser: Rick Cote

Amanda Berger
 Biomedical Science
Effects of keratin filaments on ERK signaling during Fas-induced death of cervical cancer (HeLa) cells
 Adviser: David Townson

Megan Blais
 Biomedical Science
Evaluating the Plasma Free Amino Acid Dose-Response Method to Determine the Content of Metabolizable Methionine in a Rumen-Protected Methionine Supplement
 Adviser: Andre Brito

Kaitlin Boyle
 Neuroscience and Behavior
Serotonin Transporter Changes EEG Signal During Source Memory
 Adviser: Robert Ross

Amanda Buks
Taylor Messina
Jessica Palmer
 Nutrition
Evaluating the Healthfulness of UNH's Vending Machines
 Adviser: Jesse Morrell

Phil Burke
Evan DaSilva (*Graduate Student*)
 Genetics
The Global Symbiosis Regulator, GacA, Regulates the Nitrogen Assimilation Regulator GlnD and Iron Uptake in Vibrio fischeri
 Adviser: Cheryl Whistler

Alexandra Catalano
Kelly O'Connor
 Biomedical Science
Andre De Barros Duarte Pereira (*Graduate Student*)
Brianna Isenberg
 Animal Science
The Effects of Supplementing a Pasture-based Diet with Ground Flaxseed in Organically-managed Jersey Cows
 Adviser: Andre Brito

Alexandra Catalano
Kelly O'Connor
 Biomedical Science
Andre De Barros Duarte Pereira (*Graduate Student*)
 Animal Science
Christopher Dorich (*Graduate Student*)
 Earth Sciences
A Comparison Between the Sulfur Hexafluoride Tracer Technique and the Portable Automated Head Chamber System for Measurement of Enteric Methane Emissions From Mid-Lactation Holstein Cows
 Adviser: Andre Brito

Gabrielle Chesney
 Nutrition
Drug Metabolizing Enzymes in Rat Liver and Their Role in Vitamin D Inactivation
 Adviser: Gale Carey

Angela Cicia (Graduate Student)

Biochemistry, Molecular and Cellular Biology

Cayla Compton (McNair Scholar)

Wildlife and Conservation Biology
Fecal Steroid Analysis for Monitoring Reproductive Status in Captive Animals
Adviser: Paul Tsang

Elizabeth Clark

Equine Studies
Milk Production of Dairy Cows with Addition of Granulated Cane Sugar
Adviser: Peter Erickson

Benjamin Claxton

Biochemistry, Molecular and Cellular Biology
What Subset of a Clinical Population of Acute Myelogenous Leukemia (AML) Patients Exhibit Cytoplasmic Sequestration of p53 and is Mortalin Involved?
Adviser: Charles Walker

Michael DeGirolamo

Biochemistry, Molecular and Cellular Biology
The Human Platelet Glycome: Structural Analysis Reveals Glycoconjugates Impacting Platelet Storage and Transfusion.
Advisers: Andy Hanneman, Vernon Reinhold

Joel DeStasio

Environmental Sciences
Methane and Carbon Dioxide Production Rates in Lake Sediments From Sub-Arctic Sweden
Adviser: Ruth Varner

Nicholas Devanney

Biochemistry, Molecular and Cellular Biology
Does Withanone Reverse Cytoplasmic Sequestration of p53 and Promote Apoptosis in Acute Myelogenous Leukemia?
Adviser: Charles Walker

Jennifer Dickson

Biomedical Science
*What are the Trends in Phenotypic Variation in *Harmonia axyridis*?*
Adviser: Matthew Macmanes

Marcus Dillon (Graduate Student)

Genetics

Chelsea Jones

Biology
*The Distribution of Fitness Effects Varies for Different Replication Errors in *Vibrio fischeri**
Adviser: Vaughn Cooper

Marcus Dillon (Graduate Student)

Genetics

Brian Van Dam

Biomedical Science
*The Pleiotropic Effects of Beneficial Mutations in Adapted *Escherichia coli* Populations*
Adviser: Vaughn Cooper

Kelsey Dobe

Biology
Migration as a Lifestyle: Effects of Diel Vertical Migration on the Zooplankton Community of Russell Pond
Advisers: Alan Baker, Jonathan Dufresne, James Haney

Samantha Docos

Biomedical Science
Effect of Insulin-Like Growth Factor-1 (IGF-1) on the Expression of NFκB and cFLIP in Bovine Granulosa Cells
Adviser: David Townson

Gabrielle Dowell

Biomedical Science
*Ecology, Not Hypermutation, Drives Unpredictable Fluctuations in Experimental *Pseudomonas* Biofilms*
Adviser: Vaughn Cooper

Kaitlin Dresser

Nutrition
Is Protein Supplementation in Male Weight Trainers, Ages 18–24, Associated With Increased Lean Body Mass, Upper Body Strength and Dietary Intake?
Adviser: Jesse Morrell

Natalie Feldsine

Marine, Estuarine and Freshwater Biology
Survey of the Rare Flora of the Tidal Reaches of the Squamscott River and Lamprey River, New Hampshire
Adviser: Gregg Moore

Claire Fisher

Neuroscience and Behavior
MAO-A and the EEG Recognition Memory Signal in Left Parietal Cortex
Adviser: Robert Ross

Lisa Flaman**Melissa Ryan**

Megan Thompson (Graduate Student)
Genetics

Kendall Milkey

Biomedical Science

Nicole Petersen

Biochemistry, Molecular and Cellular Biology
*A Screen to Identify Sodium-Induced Root Skewing Mutants in *Arabidopsis thaliana**
Adviser: Estelle Hrabak

Lisa Flaman

Megan Thompson (Graduate Student)
Genetics

Kendall Milkey

Biomedical Science
*Identifying Mutation Sites in Protein Phosphatase 2A Causing Sodium-Dependent Root Skewing in *Arabidopsis thaliana**
Adviser: Estelle Hrabak

Andrew Ford

Environmental Sciences
Isotopic Analysis of Arctic Ground Squirrel Tissues and Potential Food Sources
Adviser: Erik Hobbie

Olivia Foy

Genetics
Evaluating DNA Extraction From Archaeological Atlantic Cod Bone
Adviser: Adrienne Kovach

Heather Frechette

Wildlife and Conservation Biology
Plastics in Society
Adviser: Alexander Freid

Amanda Gagnon

Neuroscience and Behavior
Effects of Chronic Reboxetine Administration on Intermittent Swim Stress-Induced Ultrasonic Vocalizations and Subsequent Performance on the Forced Swim Test
Adviser: Robert Drugan

Mackenzie Gavin

Nutrition

The Effect of Parent Education Level on Diet Quality

Adviser: Jesse Morrell

Evan GirardEnvironmental and Resource Economics
Marginal Effects of Land Tenure on Smallholder Farms in Rural Kenya

Adviser: John Halstead

Peter GoodeWildlife and Conservation Biology
Do Exotic Shrubs Reduce Caterpillar Abundance in Common Yellowthroat (Geothlypis trichas) Breeding Territories?

Adviser: Matthew Tarr

Peter GoodeWildlife and Conservation Biology
Do Anadromous Blueback Herring (Alosa aestivalis) and Alewife (Alosa pseudoharengus) Hybridize in a Tank Spawning Environment?

Advisers: David Berlinsky, Adrienne Kovach, Jennifer Walsh

Madeleine Gould

Nutrition

Quality Of Olive Oils Available Locally: Chemical, Sensory And Market Investigations

Adviser: Joanne Curran-Celentano

Benjamin Grotton

Biochemistry, Molecular and Cellular Biology

Detection of Adhesion Molecule Expression in the Bovine Corpus Luteum

Adviser: David Townson

Christine Hebert

Biomedical Science

Exploring the Importance of Single Nucleotide Polymorphisms of HSPA9 Gene in DNA of Sarcoma Patients

Adviser: Charles Walker

Judith Hoskin

Genetics and Nutrition

Identification of Palmitoyltransferase Mutants in Arabidopsis thaliana

Adviser: Estelle Hrabak

Brian Hurley

Biology

Katie Lantz (Graduate Student) Human α -Galactosidase-A production in Transgenic Arabidopsis thaliana

Adviser: Subhash Minocha

Sheldon Hurst IV (Graduate Student)**Kristen Pitkanen**

Genetics

Exploring Novel Genetic Tools for Geodermatophilaceae

Adviser: Louis Tisa

Saba Ilyas**Avery Normandin**

Biomedical Science

Feng Xu (Graduate Student)

Genetics

The Presence of Hemolysin Genes, but Not Necessarily Hemolytic Activity, Correlates With Virulence Potential in Clinical Isolates of the Emerging Environmental Pathogen Vibrio parahaemolyticus

Adviser: Cheryl Whistler

Emily Johnson

Wildlife and Conservation Biology

Does a Reduction in Caterpillar Abundance Caused by the Exotic Shrub Frangula alnus Reduce Plasma Carotenoids in Nestling Common Yellowthroats (Geothlypis trichas)?

Adviser: Matthew Tarr

Sarah Kinsman

Animal Science

Nicolette Schwab

Biomedical Science

Factors Influencing Programmed Cell Death (apoptosis) of Human Ovarian Granulosa Tumor Cells

Adviser: David Townson

David Kortjohn

Environmental Sciences

Soil Food Web Community Response to Maize Treated With Pesticide Seed Treatments

Advisers: Lesley Atwood, Richard Smith

James Lydecker

Plant Biology

Assessment of Conservation Requirements and Concerns for Rare New Hampshire Grass Taxa With Emphasis on the Genus Glyceria (Poaceae)

Adviser: Janet Sullivan

Conor Madison

Environmental Sciences

Drought Sensitivity of Slash Pine and Longleaf Pine Deduced by Tree Ring Analysis

Adviser: Heidi Asbjornsen

Conor Madison

Environmental Sciences

Effects of Road Construction on Nearby Trees

Adviser: Barrett Rock

Timothy Marquis

Biomedical Science

Distribution and Expression of Glycoprotein Hormone Subunits, GpA2, GTHB, and GpB5, in the Sea Lamprey, Petromyzon marinus

Adviser: Stacia Sower

Kadina Mazic

Biochemistry, Molecular and Cellular Biology

The Use of First Principle Analytical Techniques in Order to Determine the Effect of pH on the Colloidal Properties of Monoclonal Antibodies.

Advisers: Dana Filoti, Thomas Laue, Carrie May

Emily McDermott

Zoology

The Influence of Landscape and Habitat Factors on the Sex Ratio of the New England Cottontail

Adviser: Adrienne Kovach

Gabrielle Mele

Nutrition

Metabolic Syndrome and Whole Grain Intake in UNH Men and Women

Adviser: Joanne Curran-Celentano

David Morejon

Biomedical Science

Fitness Associated With Adaptation to a Novel Environment

Adviser: Vaughn Cooper

Matthew Morris

Sustainable Agriculture and Food Systems

Do Pesticide Seed Treatments Exacerbate Weed Problems?

Advisers: Richard Smith

Alexander Nardone

Biology

Treatment with Mortalin-targeted Agents Will Promote Nuclear Translocation of p53 and Apoptosis of KG-1 Acute Myelogenous Leukemia Cancer Cells

Adviser: Charles Walker

Katherine Norwood

Biochemistry, Molecular and Cellular Biology and Mathematics

Investigations Into ALDEFLUOR as a Novel Method for Identifying Leukemia in Soft-Shell Clams

Adviser: Charles Walker

Chijioko Okereke

Nutrition

Diabetic Conditions and Atherogenic Cellular Events In Vitro

Adviser: Thomas Foxall

Stephanie Parisi (McNair Scholar)

Biomedical Science

Examining the Tumorigenic Ability of Cytokeratin 8/18 Filaments in Cervical Cancer Cells In Vitro

Advisers: Thomas Foxall, David Townson

Audrey Petteruti

Biomedical Science

Do Flame Retardants Promote Vitamin D Deficiency?

Adviser: Gale Carey

Allison Pike

Biomedical Science

Evaluating Colostrum Quality with Niacin Supplementation in the Diet of Dairy Cattle

Adviser: Peter Erickson

Nicholas Pizzi

Zoology

The Effects of Phosphodiesterase (PDE) Inhibitors on Chemotaxis Along a Salt Gradient in C. elegans

Advisers: Rick Cote, Kevin Schuster

Katherine Rafuse

Marine, Estuarine and Freshwater Biology

The Effects of Diet on the Growth and Survival of Juvenile Channeled Whelks (Busycotypus canaliculatus)

Adviser: Elizabeth Fairchild

Daren Robinson

Biochemistry, Molecular and Cellular Biology

Role of the Molecular Motor Dynein in Translocation of p53 Protein to the Nucleus in the IMR-32 Neuroblastoma Cell Line

Adviser: Charles Walker

Rachel Ross

Biomedical Science

The Effect of Riders With Disabilities on Equine Mean Heart Rate in the Therapeutic Setting

Adviser: Elizabeth Boulton

Victoria Sicard**Kylie Weber**

Biomedical Science

Modeling Virulence of V.parahaemolyticus in Arabidopsis thaliana.

Adviser: Cheryl Whistler

Lee Sutcliffe

Environmental Conservation Studies

Insights From Project FeederWatch: Changes in the Abundance and Occurrence of Birds in New Hampshire Over the Past 24 Years

Adviser: Rebecca Rowe

Katherine Swan

Environmental Sciences

Investigation of Nitrogen Loading in the Great Bay Estuary: Is Moore Fields Contributing to the Nitrogen Loading in the Oyster River?

Adviser: William McDowell

Stephanie Sykes

Marine, Estuarine and Freshwater Biology

Evaluating Attractiveness of Bait in the American Lobster (Homarus americanus)

Adviser: Winsor Watson

Kathryn Thomson

Environmental Sciences

What Does an Oil-spill from the Montreal to Portland Pipeline Mean for Water Quality in New England's Rivers?

Adviser: Cameron Wake

Sarah Tierney

Environmental Conservation Studies

Kingswood Lakes Management Plan: Brookfield, NH

Advisers: Alan Baker, James Haney

Brienna Tomlinson

Biomedical Science

Prevalence of Intestinal Parasites in Dogs Transported to NHSPCA

Advisers: Michelle Fleetwood, Sarah Proctor

Shersingh Tumber-Davila (McNair Scholar)

Environmental Conservation Studies

Quantifying Carbon Allocation to Mycorrhizal Fungi by Temperate Forest Tree Species Across a Nitrogen Availability Gradient

Adviser: Andrew Ouimette

Caroline Ward

Biomedical Science

Investigating the Interactions Between Cyanobacteria and Vibrio parahaemolyticus

Advisers: Vaughn Cooper, Cheryl Whistler

Samantha Werner

Environmental Sciences

Increase in Sedge Biomass Across a Permafrost Thaw Gradient Correlates to Changes in the Magnitude and Isotopic Composition of Methane Emissions

Adviser: Ruth Varner

Molly Williams

Neuroscience and Behavior

Drug Reactivity

Adviser: Robert Drugan

Danielle Zamarchi

Sustainable Agriculture and Food Systems
Where's the Beef?: A Study on the Availability, Production, and Consumption of Locally Produced Beef in Rockingham and Strafford Counties of New Hampshire, and York County of Maine
 Advisers: Benjamin Brown, Joanne Curran-Celentano

Chemistry Department Poster Exhibition

Friday, May 2**3–4 p.m.****Parsons Hall, Iddles Lobby**

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

Odin Achorn

Chemistry
Radically-Exchangeable Alkoxyamines as Heat-Responsive Crosslinkers for Polymeric Nanostructures and Nanocomposites
 Adviser: Erik Berda

Lindsey Daniels

Chemistry
Formation of Amino Acid-derived Cyclopropanols
 Adviser: Charles Zercher

Daniel Darcy

Chemistry
Molecular Dynamic Study of Coarse-Grained Heteropolymer Folding
 Advisers: Erik Berda, Howard Mayne

Adam Dyer

Chemistry
Synthesis of a Novel Self-Assembling, Hyperbranched, Dendrimer Polymer via RAFT Polymerization Capable of Temperature Controlled Fe(II) Complexation
 Adviser: W. Rudolf Seitz

Meaghan Elrick

Chemistry
Refractive Indices of Atmospheric Aerosols
 Adviser: Margaret Greenslade

Edward Everett

Chemistry
Self-Healing Polymers
 Adviser: Richard Johnson

Tyler Goff

Chemistry
Coal Processing Chemical Contaminates West Virginia Water Supply
 Adviser: Richard Johnson

Eric Guinto

Chemistry
Investigation of Hydrogen Bonding in Metal Centers
 Adviser: Samuel Pazicni

Rose Hadley

Chemistry and Neuroscience and Behavior
Evaluation of the Effect of Divalent Cations on Phosphodiesterase Activity
 Adviser: Roy Planalp

Charles Hill

Chemistry and Biology
B-Proline Formation via Tandem Homologation-Mannich Reactions
 Adviser: Charles Zercher

Alexis Kasparian

Chemistry
Exploration Into the Synthesis and Analysis of a Novel Sensor for Biological Metal Ions
 Adviser: Roy Planalp

Brian Kispert

Chemistry
Synthesis of Novel Cyclic and Bis-Bicyclic Polyamine Ligands for Biomedical and Catalysis Studies
 Advisers: Gary Weisman, Edward Wong

Adam Knedeisen

Chemistry
Imaginary Refractive Indexes of Common Secondary Organic Aerosol Components
 Adviser: Margaret Greenslade

Alexandra Mackinnon

Chemistry
Synthesis and Cationic Rearrangements of Polynaphthyls
 Adviser: Richard Johnson

Tyler Mendenhall

Chemistry
Medical Spectroscopy
 Adviser: Roy Planalp

Justin O'Brien

Chemistry
Progress Toward a Polymer-Bound Diiron Cluster to Model [FeFe]-Hydrogenase
 Adviser: Samuel Pazicni

Sebastian Pantovich

Chemistry
Photocatalytic Reduction of Carbon Dioxide Using Semiconductor Nanoparticles
 Adviser: Gonghu Li

Hannah Paroline

Chemistry
Progress Towards the Synthesis of 4,5-Benzoxepin: Investigation of Mechanism for Formation of Ring-Opened Metabolites of Cytochrome P450
 Adviser: Arthur Greenberg

Kirstin Rickarby

Chemistry
Synthesis of 2,7-Dimethyloxepin for the Investigation of Benzene Metabolism
 Adviser: Arthur Greenberg

Hilary Thompson

Chemistry
New Chemistry of Arenium Ions: Synthesis & Rearrangements
 Adviser: Richard Johnson

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

Championship Round

**Wednesday, May 7
12:30 p.m.–6 p.m.
Holloway Commons,
Squamscott Room**

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

The UNH Undergraduate Research Conference has grown to become a signature event at the University, an annual highlight of the spring semester and one of the largest and most diverse conferences of its kind. Bringing the URC to fruition each year is the result of a collaborative, behind-the-scenes network of a great many campus community members. Here, we acknowledge these individuals and campus institutions, and thank them for helping make URC 2014 happen.

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Office of the Senior Vice Provost for Engagement and Academic Outreach

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Department of Civil Engineering

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Institute for the Study of Earth, Oceans, and Space

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New Hampshire Space Grant Consortium

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Molly Tetreault, Director, Connors Writing Center, Adjunct Faculty, English Department

Sandhya Shetty, Associate Professor, English Department

Julie Williams, Senior Vice Provost, Engagement and Academic Outreach

2014 URC Event Chairs/Co-chairs:

Mike Annicchiarico, Student Composers' Concert

Tim Barretto and Kate Hanson, Thompson School, Community Leadership Program

Carole Berry, Kent Chamberlin, Tara Hicks Johnson, and Jim Ryan, Interdisciplinary Science & Engineering Symposium

Jen Borda and Janet Cass, Parents Association Undergraduate Research Symposium

Jay Derick, Jake Kenyon and Cari Moorhead, Graduate Research Conference

Val Dusek and Robert Scharff, Philosophy Department Undergraduate Research Conference

Marianne Fortescue, UNH Office of Community Service & Learning

Rob Haskins, Naked Arts—Creativity Exposed!

John Hasseldine, Laura Hill and Stacy Hokinson, Paul College Undergraduate Research Conference

Delia Konzett, Honors English Undergraduate Research Conference

Jessica Lepler, History Department Undergraduate Research Conference

Ginger Lever and Dan Reagan, UNHM Undergraduate Research Conference—Oral, Poster, Cinema Day, Technology Day

Mike Merenda and Cynthia Nizzari-McClain, Paul College Holloway Prize University-wide Innovation-to-Market Poster Session and Championship Round Competition

Subhash Minocha, 23rd Annual COLSA URC

Jennifer Moses, 2014 Senior B.A. & B.F.A. Art Exhibition & Reception and M.F.A. Thesis Exhibition

Susan Moore and David Pillemer, Psychology Department George M. Haslerud URC

Cindi Rohwer, Chemistry Department Poster Exhibition

Carrie Smart and Ruth Wharton-McDonald, Seacoast Reads Exhibition

Neil Vroman, CHHS Grimes Award Competition

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