“The URC gave me my first opportunity to present research I had done primarily on my own, and get a look at what my future will hold.”

“I loved having people come up and talk to me about their own research and how it related to mine. I got inspired with new ideas.”

“The most memorable aspect was having my parents come up to watch me present. I don’t think I’ve ever given a presentation in front of them, so it was kind of nice to be able to share this experience.”
Welcome to participants and attendees

Welcome to the 12th 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.

What began as a University-wide effort in the spring of 2000 has blossomed into an annual tradition that puts UNH students in the spotlight. Our conference is now 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 events across both the Durham and Manchester campuses, and represent academic achievements in every college and school.

This extraordinary learning experience helps students build the knowledge, skills, and confidence to pursue graduate studies and meaningful careers. The URC is a shining example of our students’ success and discovery-based education at UNH.

Whether your visit includes a poster session, an oral presentation, an art exhibit, or a creative presentation, we are confident that you will be impressed with these participants’ knowledge and understanding. Thank you for your interest in and support of our remarkable students.

Sincerely,

Mark W. Huddleston, President

John D. Aber, Provost
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 300 UNH faculty members will present their research and scholarship. Presentations will represent many disciplines as well as multidisciplinary learning communities where empirical research and engaged 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!

Julie E. Williams, Senior Vice Provost
Engagement and Academic Outreach

Peter F. Masucci, Chair, URC Planning Committee
**URC 2011 Contents**

Calendar of Events ........................................... 4
Map ......................................................................... 5

**Friday, April 15 Events**

2010 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition (I) Preview Reception ........................................... 6

**Monday & Tuesday, April 25–26 Events**

Graduate Research Conference (GRC) ........................................... 6

**Wednesday, April 27 Events**

Whittemore School of Business and Economics Undergraduate Research Conference ........................................... 6
Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, Charles and Miriam Nelson Poster Competition ........................................... 12
Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, Bud Albin Challenge Round ........................................... 14
Seacoast Reads Exhibition ........................................... 14
Thompson School Community Leadership Program ........................................... 15
UNH Office of Community Service Student Partnerships ........................................... 15
The Naked Arts—Creativity Exposed! (Act I) ........................................... 15
Interdisciplinary Science and Engineering Symposium (ISE) ........................................... 16
UNH Manchester URC—Poster Presentations ........................................... 22

**Thursday, April 28 Events**

UNH Manchester URC—Cinema Arts Day ........................................... 23
The Naked Arts—Creativity Exposed! (Act II) ........................................... 24
History Department Undergraduate Presentations ........................................... 24

**Friday, April 29 Events**

UNH Manchester URC—Engineering Technology Senior Project Presentations ........................................... 25
Parents Association Breakfast and Welcome with UNH Provost John Aber and Parents Association Council President ........................................... 27
Parents Association Undergraduate Research Symposium
Oral Presentations, Session A ........................................... 27
Poster Presentations, Session A ........................................... 30
Oral Presentations, Session B ........................................... 33
Poster Presentations, Session B ........................................... 36
Oral Presentations, Session C ........................................... 37
The Naked Arts—Creativity Exposed! (Act III) ........................................... 40
College of Health and Human Services Grimes Award Competition ........................................... 40
Psychology Department George M. Haslerud URC ........................................... 41
Honors English Undergraduate Research Conference ........................................... 42
Philosophy Department Undergraduate Research Conference ........................................... 42
Student Composers’ Concert ........................................... 43

**Saturday, April 30 Events**

20th Annual COLSA Undergraduate Research Conference ........................................... 43

**Events in May**

Chemistry Department Poster Exhibition ........................................... 48
Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, Championship Round ........................................... 49

**Additional Features**

Acknowledgements ........................................... 50
Student Index ........................................... 51

All events are free and open to the public.

Accessibility accommodation requests may be directed to Lynne Cooper at (603) 862-1997.
URC 2011 Calendar

(Building numbers are bold and in parenthesis.)

Friday, April 15
6–8 p.m.
2011 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition and Preview Reception
Museum of Art, Paul Creative Arts Center (6)
(Exhibition runs April 16–May 20, 2011)

Monday & Tuesday, April 25–26
Monday 5–7 p.m.
Graduate Research Conference (GRC) Poster Presentations
Huddleston Ballroom (1)

Tuesday 9 a.m.–3 p.m.
Graduate Research Conference (GRC) Oral Presentations
Huddleston Ballroom (1)

Wednesday, April 27
9 a.m.–6 p.m.
Whittemore School of Business and Economics Undergraduate Research Conference
Memorial Union Building (MUB) (3)

10:30 a.m.–Noon
Seacoast Reads Exhibition
MUB, Rooms 330/332 (3)

10:30 a.m.–Noon
Thompson School Community Leadership Program
MUB, Rooms 330/332 (3)

10:30 a.m.–Noon
UNH Office of Community Service Student Partnerships
MUB, Rooms 330/332 (3)

Noon–2 p.m.
The Naked Arts—Creativity Exposed! (Act I)
Museum of Art, Paul Creative Arts Center (6)

2–5 p.m.
Interdisciplinary Science and Engineering (ISE) Symposium
Kingsbury Hall and Morse Hall (8 & 9)

3:30–6 p.m.
UNH Manchester Undergraduate Research Conference Poster Presentations
UNHM Auditorium

Thursday, April 28
10 a.m.–1 p.m.
UNH Manchester Undergraduate Research Conference Cinema Arts Day
UNHM Auditorium

12:30–2 p.m.
The Naked Arts—Creativity Exposed! (Act II)
Hennessy Theatre, Paul Creative Arts Center (6)

12:40–2 p.m.
History Department Undergraduate Presentations
MUB, Rooms 338/340 and Theatre I (3)

Friday, April 29
8:00 a.m.–Noon
UNH Manchester Undergraduate Research Conference Engineering Technology Senior Project Presentations
UNHM Auditorium

9–9:30 a.m.
Parents Association Breakfast with Provost John Aber and UNH Parents Association Council President Peter Hayden
MUB, Granite State Room (3)

9:30 a.m.–3 p.m.
Parents Association Undergraduate Research Symposium
MUB, Granite State Room, and assigned rooms (3)

12:15–1 p.m.
The Naked Arts—Creativity Exposed! (Act III)
MUB, Strafford Room (3)

12:30–4 p.m.
College of Health and Human Services Grimes Award Competition
Pettee Hall, Room G10 (10)

1:30–5 p.m.
Psychology Department George M. Haslerud Undergraduate Research Conference
Merkland Hall, Room 115 (5)

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
Merkland Hall, Room G17 (5)

8:00 p.m.
Student Composers’ Concert
Bratton Recital Hall, Paul Creative Arts Center (6)

Saturday, April 30
7:45 a.m.–2 p.m.
20th Annual College of Life Sciences and Agriculture (COLSA) URC
Huddleston Ballroom and Holloway Commons (1 & 2)

Friday, May 6
3–4 p.m.
Chemistry Department Poster Exhibition
Parsons Hall, Iddles Wing

Wednesday, May 11
1–6 p.m.
Whittemore School of Business and Economics University-wide Paul J. Holloway Innovation-to-Market Prize Competition Championship Round
Holloway Commons (2)
UNH Manchester
400 Commercial Street
Manchester, N.H.
For directions to UNH Manchester go to www.unhm.unh.edu/directions.html or call (603) 641-4321.
2011 Senior B.A., B.F.A. & M.F.A. Exhibition and Preview Reception

Friday, April 15
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.

Bachelor of Fine Arts degree candidates:
Katharine Austin
Fine Arts, painting
Advisers: Benjamin Cariens, Michael McConnell

Elizabeth Beaudoin
Fine Arts, painting
Adviser: Benjamin Cariens

Shayna Bicknell
Fine Arts, painting
Adviser: Leah Woods

Heather Hall
Fine Arts, drawing and painting
Adviser: Benjamin Cariens

Joshua Torbick
Fine Arts, sculpture
Adviser: Leah Woods

Master of Fine Arts in painting degree candidates:
Youngsheen Jhe
Mark Soderling
Nicole Weber
Advisers: Grant Drumheller, Craig Hood

Bachelor of Arts degree candidates from UNH Art and Art History Department, whose work will also be on view:
Erin Alvarez
Studio Arts, wood/furniture design
Adviser: Julee Holcombe

Christopher Baldwin
Studio Arts, photography
Adviser: Julee Holcombe

Kelli Brosnahan
Studio Arts, photography
Adviser: Julee Holcombe

Rachel Dennis
Studio Arts, painting
Adviser: Jennifer Moses

Alexandra Estee
Studio Arts, photography
Adviser: Julee Holcombe

Helen-Ann Ireland
Studio Arts
Adviser: Scott Schnepf

Shannon Malley
Studio Arts, drawing
Adviser: Scott Schnepf

Sara McGrath
Studio Arts, painting/drawing
Adviser: Michael McConnell

Megan North
Studio Arts, painting
Adviser: Jennifer Moses

Rosilind O’Connor
Studio Arts, photography
Adviser: Julee Holcombe

Elizabeth Palmatier
Studio Arts, painting
Adviser: Craig Hood

Morgan Paré
Studio Arts, photography
Adviser: Ben Cariens

Katrina Reid
Studio Arts, painting
Adviser: Maryse McConnell

Brittani Ross
Studio Arts, photography
Adviser: Julee Holcombe

Peter Strifflino
Studio Arts, painting
Adviser: Grant Drumheller

Brittany Verville
Studio Arts, photography
Adviser: Michael McConnell

Graduate Research Conference (GRC)

April 25–26
Monday, 5–7 p.m.
Graduate Research Conference
Poster Presentation
Huddleston Ballroom

Tuesday, 9 a.m.–3 p.m.
Graduate Research Conference
Oral Presentations
Holloway Commons

The Graduate Research Conference 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.

Whittemore School of Business and Economics Undergraduate Research Conference

The Whittemore School of Business and Economics celebrates its undergraduate students who participate in this exciting research opportunity. Through original research and valuable guidance from mentors, students show how they gain deeper academic knowledge as well as professional experience. The WSBE program knows that its students strive for success, and we invite you to join us at this rewarding event. The URC includes a presentation of posters, oral presentations, and feedback from University and business leaders.
Poster Presentations

Wednesday, April 27
9 a.m.–6 p.m.
Memorial Union Building

MUB, Strafford Room
9 a.m.–Noon

Accounting and Finance
Robert Albee
Economics
Anthony Cipolla
Electrical Engineering
Cyclicality of Financial Markets
Adviser: Stephen Ciccone

William Fritzky
Accounting
The Life of Accounting: Its Past, Present, and Future
Adviser: Catherine Plante

Joel Peltokangas
Accounting and Management
Going Green: Income Tax Incentives
Adviser: Catherine Plante

Economics
Chelsea Berg
Economics and Communication
Does Music Make You Smarter? A Research Study on the Affects of Music Education on Student Achievement
Adviser: Aziz Saglam

Ryan Connors
Economics
The Effect of Sports on the United States Economy
Adviser: Aziz Saglam

John Rolfe
Entrepreneurial Venture Creation and Economics
Let it Snow: The Economic Variables That Affect Cocaine Use in Young Adults
Adviser: Aziz Saglam

John Rolfe
Entrepreneurial Venture Creation and Economics
A Tale of Two Vices: An Applied Economic Analysis of Alcohol and Tobacco Consumption
Adviser: Andrew Houtenville

Daniel Zilnicki
Economics
Sovereign Debt and the Euro
Adviser: Aziz Saglam

Hospitality Management
Christine Meyer
Hospitality Management
Investigation of Marketing in Bed and Breakfasts
Adviser: Udo Schentrich

Management
Jillian Lawrence
Management
Performance and Learning in College Student Teams: The Role of Personality and Team Dynamics
Adviser: Vanessa Druskat

Sarah Scenary
Management
Coaching Leadership Style and Success: An Evaluation in Collegiate Athletics
Adviser: Anthony Pescosolido

Marketing
Karrah Kwasnik
Marketing
Warning: The Impact of Digital Enhancement Labels on Print Advertising
Adviser: Melissa Bishop

Elizabeth Morash
International Affairs and Business Administration
The Social Media Impact
Adviser: William Machanic

MUB, Room 334/336
9–10:20 a.m.

Atkins Investment Group
Students research and analyze current economic developments, industry sectors, and specific company stock performance to manage a portfolio known as the Wildcat Investment Fund. The fund uses real dollars to buy and sell investments.

Moderators and Advisers: Stephen Ciccone and Ahmad Etabari

Alternative Investments
Robert Albee
Economics
Colin Kelley
Finance
Charles Nettleship
Finance and Marketing

Financials
Benjamin Allen
Eric Harwood
Benjamin Lawlor
Finance

Basic Materials
Tyler Campbell
Matthew DiGirolamo
Finance
David Runnals
Economics

Healthcare
Nicholas Castaldi
Gregory Ucich
Finance
Anthony Cipolla
Electrical Engineering

Econ Team
Christopher Celi
Catherine Relihan
Economics
Ryan Guidice (UNH McNair Scholar)
International Business and Economics
Chad Nettleship ’12
FINANCE AND MARKETING

Visit Chad Nettleship’s presentation at the URC and you may pick up some tips for boosting your investment portfolio. Nettleship, a finance and marketing major at the Whittemore School of Business and Economics, is a member of the student-run Atkins Investment Group (AIG). Some 40 students in AIG are responsible for building and maintaining an all equity portfolio called The Wildcat Fund. Started in 2005, the fund is worth about $52,000 and it consistently out-performs the S&P 500 index.

Consumer Staples
Stephanie Constant
Finance and Management
John McGrath
Anthony Savani
Finance

Consumer Discretionary
Kelli DeDonato
Alyssa King
Brian Thompson
Finance

Utilities
David Freeman
Ryan Shelley
Finance
Matthew Gaboury
Finance and Management

Telecom
Robin Gerum
Finance
Jenna Pisarek
Economics and Finance
Benjamin Schenck
Business Administration

Technology
Gwynneth Heaps
Finance and International Affairs
Zachery Leach
Joseph Stanek
Finance

Energy
Glenn Law
Colin Sullivan
Finance
Jeffrey Lowell
Accounting

Industrials
David Maxfield
Ian Seraichik
Cheyenne Skog
Finance

MUB, Room 237
9–10:20 a.m.

EcoGastronomy
Students in the Capstone Course for the Dual Major in EcoGastronomy identify and pursue a research topic related to EcoGastronomy. These topics can include a wide range of areas of focus including agriculture, hospitality, nutrition, and the myriad social, economic, environmental, political, and ethical issues associated with food production and eating.

Moderator: Daniel Winans

Maryn Bonniwell
EcoGastronomy Dual Major and Spanish
Comprehensive Model of Food Solutions: Foundations of Reducing the Growing Rate of Overweight Youth
Adviser: Amy Redman

Sarah Breen
EcoGastronomy Dual Major and Tourism Planning and Development
Experiential Food Studies Within New England
Adviser: Daniel Winans

Emily Goldman
EcoGastronomy and Hospitality Management Dual Major
Eating as One: An Exploration of Social Dining
Adviser: Amy Winans

Lauren Gordon
Hospitality Management and EcoGastronomy Dual Major
Seacoast Local Food Purveyor
Adviser: Jay McSharry

Michael Longeri
Hospitality Management and EcoGastronomy Dual Major
Saving Our Regional Food History: How Heirloom and Native Plants Contributed to Year Round Production and Consumption Advisers: John Forti, Daniel Winans
Erika Colbath  
Finance  
An Economic Analysis of George v. Farrar

Nicholas Driscoll  
Finance and Economics  
An Economic Analysis of Hafner v. Hansen: Easement by Prescription

Kurt Eddins  
Economics and Political Science  

Miles Ela  
Economics and Finance  
An Economic Analysis of U.S. Salt v. Boston

Dylan Fischer  
Economics  
An Economic Analysis of Florida DEP v. Stop Beach

Bridget Harris  
English  
An Economic Analysis of Cahill v. Morrow

Thomas Harritt  
Classics  
Efficient Allocation of Property: The Effect of Sakansky v. Wein and Easements on the Economic Development of Land

Samuel Jenness  
Finance  
An Economic Analysis of Kline v. Burns

Dianna Kurowyckyj  
Health Management and Policy  
An Economic Analysis of Kelo v. New London

JoHannah Langley  
Health Management and Policy and Business Administration  
An Economic Analysis of Philip Morris USA v. Williams

Samuel Leger  
Economics  
An Economic Analysis of Walling v. Przybylo

Peter Mead  
Economics  
An Economic Analysis of How J. Ryan & Associates v. Century Brewing Association

Dana Morrell  
Psychology  
An Economic Analysis of F.B.T. Prods., LLC v. Aftermath Records

Joseph Navelski  
Sociology and Chemical Engineering  
An Economic Analysis of MGM Studios, Inc. v. Grokster, Ltd.

Hillary Piispanen  
Economics  
An Economic Analysis of State of New Hampshire v. State of Maine

Jake Posternak  
Finance and Economics  
An Economic Analysis of Dastar Corp. v. Twentieth Century Fox

David Runnals  
Economics  
An Economic Analysis of Edward J. Butler v. Joseph Bruno, Rhode Island Supreme Court

Jonathan Upchurch  
Economics and Political Science  
An Economic Analysis of DeLong v. Baldwin

Rod Walker  
Economics  
An Economic Analysis of Liebeck v. McDonalds Restaurant

Lauren Wells  
Economics and Psychology  
An Economic Analysis of a Legal Decision

Emily Malnati  
Business Administration  
Survival Strategies: A Cross Cultural Comparison of Value-Added Dairy Businesses in Italy and New England  
Adviser: Andrew Conroy

Ryan Millian  
Hospitality Management and EcoGastronomy Dual Major  
Environmentally Sustainable Wine Production  
Advisers: Nelson Barber, Daniel Winans

Kayla Oteri  
Hospitality Management and EcoGastronomy Dual Major  
Gate-to-Plate  
Adviser: Trent Schriefe

MUB, Room 334/336  
10:40 a.m.–Noon

Law and Economics

The U.S. legal system provides implicit and explicit rules, which allocate benefits and costs among the individuals and organizations in our society. Poster presentations showcase students’ independent research on the legal system and the economic consequences of property, contracts, torts, criminal law and mediation.

Moderator and Adviser: James Wible

Melinda Adams  
Economics  
An Economic Analysis of R.A.V. v. City of St. Paul

Michael Chan  
Political Science  
An Economic Analysis of Omega v. Costco Wholesale Corporation

Christopher Chandler  
Economics and Earth Sciences  
An Economic Analysis of Roberts v. Vaughn, Supreme Court of Michigan
Oral Presentations

Wednesday, April 27
9 a.m.–6 p.m.
Memorial Union Building

MUB, Room 203
9–10:20 a.m.

Marketing Research
Moderator and Adviser:
Charles Martin
Caitlin Agnelli
Management and Marketing
Maria Albers
Brandon Amico
Hannah Cametti
Tim Cox
Joseph Daloiisio
Sarah Davison
Alexa Dufault
Samantha Engle
Stephanie Farnham
Lauren Fopiano
Alexander Foss
Scott Haskell
Jonathan Jagelsky
Jonathan Parker
Alexandra Peterson
Jennifer Phillips
Thomas Ray
Casey Reilly
Petra Ross-Raymond
Laura Tentas
Sierra Thresher
Ryan Torres
Zachary Tyler
Julie Walsh
Marketing
Michael Dwyer
Management
Katelyn Gale
Business Administration and Marketing
Jillian Granucci
Marketing and Kinesiology
Texting While Driving

Samuel Alexanian
Nathaniel Berg
Andrew Bogosian
Patrick Cash
Jonathan Cilley
Lindsey Coleman
Jonathan Dunham
Gretchen Eastman
Chelsea Elliott
Daniel Gejay
Dylan George
Henri Hendricks
Allyson Kimball
Damon Kipp
Michael Mattia
Tracy Naylor
Brian Norman
Katherine O’Connor
Gordon O’Hearne
Max Stewart
Robert Valickus
Marketing
Marketing Research on the In-Class Texting Behaviors Among College Students

Lauren Alfano
Hospitality Management
Nicholas Blanchette
Rachel Casey
Jamie Chasin
Ilana Cohen
Glee Corsetti
Chelsea Cumings
Jason Deutsch
Christine Dinisi
Caitlin Elliott
Georgina Gapp
Henri Hendricks
Ashley Kimball
Kelly LaFrance
Allysa Marinelli
Reid McCarthy
Danielle McVicar
Elizabeth Merriken
Lindsey Minton
Emily Nardone
Jill Peterson
Alanna Reeves
Bridget Robinson
Kara Scozzari
Joana Simoneau
Max Stewart

Kyle Suva
Courtney Thomson
Marketing
Megan Horowitch
Marketing and Chemical Engineering
Natalie Kitchen
Marketing and Management
Cell Phone Use and Concentration During Class

Daniele Alves
Andre Garron
Business Administration
Michelle Avendano
Tyler Bascom
Kristen Betro
Nicholas Brown
Kelly Donahue
Brooke Duchaney
Samantha Engle
Stephanie Farnham
Dustin Feldman
James Frackleton
Steven Gianguliulio
Gregory Harris
Taylor Hodges
Seohyun Hwang
Ashley Kaplan
Noel Lindgren
Ryan Martinez
Jessica Paterson
Anthony Saia
Jonathan Taylor
Joshua Tilton
Elizabeth Tom
Vance Turner
Hannah Ward
Edward Young
Marketing
Michael Germaske
Marketing and Finance
Shannon Mellen
Management and Marketing
John Hernon
Kaycee Smith
Management
Facebook Study
MUB, Room 330/332
9 a.m.–Noon

Marketing Workshops

Students are organized into teams and work for an entire semester to resolve a marketing problem provided by an outside company or organization. These real-world situations require extensive field research and data analysis, and research findings are used to design and implement programs to solve the client’s marketing challenge.

Session A
Moderator: William Machanic

Jean Adams
Patrick Clasby
Hayley Comeau
Jillian Kalogeropoulos
Eric Kenny
Kelly LaFrance
Stacy Simione
Benjamin Stephenson
Caitlin Verville
Marketing

Development and Implementation of a Marketing Campaign for UNH Printing and Mailing Services
Adviser: Peter Masucci

David Arrigg
Michelle Avendano
Daniel Bolton
Benjamin Bourque
Brittany Covert
Chelsea Elliott
Samantha Engle
Alicia Farrar
Matthew Gargano
Joseph Gehling
Rachel Grundhoff
Kory Himmer
Kirby Hounsell
Thomas Johnson
Brian King
Karrah Kwansnik
Ryan Mutch
Emily Nardone
Kelly O’Connell

Kegan Quimby
Brittany Wiseman
Matthew Zanderigo
Marketing

Marketing the New Chevrolet Cruze to College Students
Adviser: Peter Masucci

Danielle Beaman
Lauren Borges
Megan Callaghan
Katelin Gaillardetz
Scott Giacalone
Lindsey Marshall
Marc Paradise
Matt Thompson
Marketing

Development of a Marketing Campaign for the Z7 Brand from New England Footwear
Adviser: Peter Masucci

Chelsea Cumings
Erin Gallagher
Sabrina Hashmi
Alyssa Marinelli
Brittany McClintick
Katherine O’Connor
Vicente Satir
Marketing

Ryan Tkowski
Marketing and Education

Developing a Marketing Campaign for The Children’s Museum of New Hampshire
Adviser: Peter Masucci

Dylan George
Angela Lambert
Kelly Lundin
Michael Mattia
Jill Peterson
Joana Simoneau
Courtney Thomson
Marketing

Development and Implementation of a Marketing Campaign for UNH Housing
Adviser: Peter Masucci

Session B
Moderator: William Machanic

Nathanial Berg
Rachel Casey
Glee Corsetti
Sarah Davison
Michael DeAngelo
Elizabeth Merriken
Alanna Reeves
Bridget Robinson
Robert Valickus
Marketing

Develop a New Brand Identity and Marketing Campaign for the College of Engineering and Physical Sciences at UNH
Adviser: Peter Masucci

Nicholas Blanchette
Patrick Cash
Jamie Chasin
Jonathan Cilley
Christine Dinisi
Gretchen Eastman
Amanda Merisotis
Sarah Morse
Rebecca Richardson
Adam Zelenka
Marketing

John DeWispelaere
Marketing and Entrepreneurial Venture Creation

Development of a Marketing Campaign for the Z7 Brand from New England Footwear
Adviser: Peter Masucci

Nicholas Blanchette
Patrick Cash
Jamie Chasin
Jonathan Cilley
Christine Dinisi
Gretchen Eastman
Amanda Merisotis
Sarah Morse
Rebecca Richardson
Adam Zelenka
Marketing

John DeWispelaere
Marketing and Entrepreneurial Venture Creation

Development of a Marketing Campaign for the Z7 Brand from New England Footwear
Adviser: Peter Masucci

Kegan Quimby
Brittany Wiseman
Matthew Zanderigo
Marketing

Marketing the New Chevrolet Cruze to College Students
Adviser: Peter Masucci

Danielle Beaman
Lauren Borges
Megan Callaghan
Katelin Gaillardetz
Scott Giacalone
Lindsey Marshall
Marc Paradise
Matt Thompson
Marketing

Development of a Marketing Campaign for the Z7 Brand from New England Footwear
Adviser: Peter Masucci

Chelsea Cumings
Erin Gallagher
Sabrina Hashmi
Alyssa Marinelli
Brittany McClintick
Katherine O’Connor
Vicente Satir
Marketing

Ryan Tkowski
Marketing and Education

Developing a Marketing Campaign for The Children’s Museum of New Hampshire
Adviser: Peter Masucci

Dylan George
Angela Lambert
Kelly Lundin
Michael Mattia
Jill Peterson
Joana Simoneau
Courtney Thomson
Marketing

Development and Implementation of a Marketing Campaign for UNH Housing
Adviser: Peter Masucci
Sarah Fournier  
Georgina Gapp  
Laura Greichen  
Allyson Kimball  
Reid McCarthy  
Kara Scozzari  
Hannah Slavin  
Marketing  
Charles Nettleship  
Finance and Marketing  
Marketing Tradeport, Inc., Services to Students, Faculty, and Staff at UNH  
Adviser: Peter Masucci

Moderator and Adviser:  
Andrew Houtenville  
Christopher Celi, Team Leader  
Economics  
The Optimalists  
Eric Harwood, Team Leader  
Finance  
The Marginalists

Whittemore School of Business and Economics  
Paul J. Holloway  
Innovation-to-Market Prize Competition

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.

Charles and Miriam Nelson Poster Competition

Wednesday, April 27th  
9 a.m.–Noon  
MUB, Strafford Room

Jean Adams  
Marketing  
Micaela Flynn  
Accounting and Marketing and Finance  
Kimberly Page  
Finance and Entrepreneurial Venture Creation  
Virtual Mall  
Adviser: William Hassey

Lauren Adams  
Management  
Jonathan Edmunds  
Business Administration  
Kyle Labbe  
Business Administration and Management  
AppFit  
Adviser: Warren Daniel

Aaron Arsenault  
Entrepreneurial Venture Creation  
BotaniBrew  
Adviser: William Hassey

Benjamin Bathalon  
Lauren Treacy  
Business Administration  
Rachel Casey  
Marketing  
Transit Tracker  
Adviser: Warren Daniel

Nicholas Boghosa  
Colleen Fyfe  
Entrepreneurial Venture Creation  
Biodiesel Executive Car  
Adviser: M. Billur Akdeniz

Lauren Borges  
Marketing  
Kelly Lavallee  
Brian Morrison  
Business Administration  
Communtiversity  
Adviser: Warren Daniel

Patrick Bowling  
Horace Zhang  
Environmental Engineering and Municipal Processes

Adam Gagne  
Environmental Engineering  
Tahlor Marchi  
Entrepreneurial Venture Creation and Management  
UNH Bike Share  
Adviser: Alison Watts

Grant Broom  
Patrick Hoy  
Stephen Miller  
Business Administration  
LifeBelt  
Adviser: William Hassey

MUB, Room 302  
9–10:20 a.m.

Multidisciplinary Oral Presentations

Moderator: Catherine Blake

Jenna Pisarek  
Economics and Finance  
The Current Economic Recovery  
Adviser: Zeynep Senyuz

David Runnals  
Economics  
Diffusion Index for the Strength of International Multilateral Coordination  
Adviser: Aziz Saglam

MUB, Room 302  
10:40 a.m.–Noon

The UNH Federal Reserve Challenge

Each year the U.S. Federal Reserve holds a tournament-style competition, the “Fed Challenge,” in which university teams from across the country face off, putting forward their best economic forecasts and policy recommendations. In preparation for next year’s Challenge, two teams from the UNH Council on Economic Affairs will face off this year at the URC in front of a panel of UNH faculty and Ph.D. students.
Christopher Canaway (graduate student)
*Share the Beer*
Adviser: Juan Florin

Russell Chin
Business Administration and Finance and Management

Andrew Hart
Management

Adam Robichaud
Accounting and Management  
*Campus Carpool*
Adviser: Audrey Ashton-Savage

Barrett Cox  
Benjamin Groeleau
Business Administration

Benjamin Lawlor
Finance  
*RaiseNow*
Advisers: Stephen Ciccone, Kholekile Gwebu, William Hassey

Matthew Cuneo
Matthew Steckowych
Management

Jason Roach
Finance and Management  
*D.A.R.T. (Durham Alternative Rental Transportation)*
Adviser: Audrey Ashton-Savage

Davis Demers
Business Administration, Finance and International Business and Economics  

Nicholas Febonio
Business Administration and International Business and Economics  
*Sweet Life*
Adviser: Audrey Ashton-Savage

Nicholas French
Entrepreneurial Venture Creation

James Fritz
Management  
*FNF Taxi Service*
Adviser: Howard Allen

Benjamin Gallant
Sarah Screery
Management

Mikyla Lasher
Management and Finance  
*Fuel Performance*
Adviser: Audrey Ashton-Savage

Jeffrey Gargaly
Daniel McAuliffe
Business Administration and Entrepreneurial Venture Creation

Evan Leach
Corey Snelling
Mechanical Engineering

Ian Macdonald
Entrepreneurial Venture Creation  
*Interceptor Speakers, Inc.*
Adviser: William Hassey

Janet Greer-Carney (graduate student)
*TLC Institute*
Adviser: Juan Florin

Morganne Helprin
Management and Finance

Shannon Mellen
Management and Marketing

Ashley Thibeault
Management  
*Go-Go Grocer*
Adviser: Audrey Ashton-Savage

Erica Hjorth
Kelly Weisert
Management  
*Scan-Print-Credit ’Inprint Technology’*
Adviser: Audrey Ashton-Savage

Stephen Lamarre
Management

Emily Malnati
Business Administration

Heather Mitchell
Business Management

Thomas Thomas
Accounting  
*Laundry Trackers*
Adviser: Warren Daniel

Jared Lambert
Community and Environmental Planning

Alex Manoogian
Management

Raymond Shirtz
Business Administration  
*CollegeConnection.com*
Adviser: Audrey Ashton-Savage

Matthew Law
Management and Accounting

Brittany Verville
Entrepreneurial Venture Creation and Art Studio

Caitlin Verville
Marketing  
*University Note Takers LLC.*
Adviser: Audrey Ashton-Savage

Jeffrey Levesque
Mathematics and Psychology  
*Degbe.com*
Adviser: Junhao Shen

Tahlor Marchi
Gregory Mili
Entrepreneurial Venture Creation and Management  
*Urban Farming*
Advisers: William Hassey, William Knowles

Meaghan McClellan (graduate student)
*HealthFull Express*
Adviser: Juan Florin

Michael Miller
Management and Finance

Christian Peta
Joshua Poisson
Management and Entrepreneurial Venture Creation  
*MediaManiac*
Adviser: Audrey Ashton-Savage

Christine Phipps
Business Administration  
*Iron Horse*
Adviser: Catherine Blake

John Rolfe
Entrepreneurial Venture Creation and Economics  
*An Online Lending Platform Connecting College Students to Private Investors*
Adviser: William Hassey

Vicente Satir
Marketing

Ryan Tkowski
Marketing and Education  
*iDoc: Bridging the Gap to the Digital World*
Adviser: William Hassey
The Seacoast Reads exhibition displays the work of UNH student volunteers who tutor young children in elementary schools and after-school programs in literacy. Since 1998 over one thousand UNH students have worked through Seacoast Reads to tutor a like number of children. Sponsored by the Graduate Program in Reading and housed in the Department of Education, Seacoast Reads draws students from across the University and represents one of the largest service and outreach organizations on campus.

Amanda Bourgoine
English Teaching
Seacoast Reads!
Adviser: Carrie Powers

Michaela Champlin
Family Studies
Jenna Guerriero
Family Studies
Seacoast Reads!
Adviser: Carrie Powers
Thompson School Community Leadership Program

Wednesday, April 27
10:30 a.m.–Noon
Memorial Union Building Rooms 338/3340

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’ leadership portfolios and highlights significant community projects and partnerships.

Capstone Projects

Nicholas DeMulder
Community Leadership
The ‘Art In Motion’ Experience
Adviser: Timothy Barretto

Ernst Ketel
Community Leadership
Reds Race, HUB Captains and Teams Fundraiser
Adviser: Timothy Barretto

Niklas Sigl
Community Leadership
Pi Kappa Phi’s Annual 5K Road Race!
Adviser: Timothy Barretto

Nonprofit Research

Thomas Anderson
Business Administration
NH Businesses for Social Responsibility
Adviser: Kate Hanson

Victoria Belkin
Humanities
The North Conway Community Center
Adviser: Kate Hanson

Andrew DeGrace
Communication
NH Businesses for Social Responsibility
Adviser: Kate Hanson

Allison Doucette
Community Leadership
Seacoast Science Center
Adviser: Kate Hanson

Samantha Fulford
Animal Sciences: Equine Sciences
The New Hampshire Society for the Protection of Cruelty to Animals
Adviser: Kate Hanson

Julie Loosigian
English
Kaleo Coffee
Adviser: Kate Hanson

Dylan Palmer
Food Service Management
Wild Cat Friends
Adviser: Kate Hanson

Nathan Riggs
Sociology
New Hampshire Public Radio
Adviser: Kate Hanson

Christian Stone
Morgan Townsend-Curley
Community Leadership
Sexual Assault Support Services
Adviser: Kate Hanson

Brittany Thompson
Family Studies
HUB Family Resource Center
Adviser: Kate Hanson

Meredith Thompson
Undeclared
The New Hampshire Society for the Prevention of Cruelty to Animals
Adviser: Kate Hanson

Reading Makes a Difference

Elyssa Arriel
Social Work
Reading Makes a Difference
Adviser: Kate Hanson

Sarah Cowart
Social Work
Reading Makes a Difference
Adviser: Kate Hanson

Carla Joseph
Social Work
Reading Makes a Difference
Adviser: Kate Hanson

UNH Office of Community Service Partnerships

Wednesday, April 27
10:30 a.m.–Noon
Memorial Union Building Rooms 338/3340

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.

Alexander Freid
Political Science and Philosophy
UNH Trash 2 Treasure
Adviser: Marianne Fortescue

The Naked Arts—Creativity Exposed

Act I

Wednesday, April 27
Noon–2 p.m.
Museum of Art, Paul Creative Arts Center

This event exposes the inner creative process of artists working in various concentrations. Student presenters will describe the work they undertake to bring an artistic creation from initial inspiration to the gallery.

Katharine Austin
Fine Arts, Painting
Advisers: Benjamin Cariens, Michael McConnell

Shayna Bicknell
Fine Arts, Painting
Adviser: Leah Woods

Joshua Torbick
Fine Arts, Sculpture
Adviser: Leah Woods
Interdisciplinary Science & Engineering Symposium (ISE)

Poster Presentations

Wednesday, April 27
2–5 p.m.
Kingsbury Hall and Morse Hall

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.

Christopher Abbott
Jonathan Carabello
Gregory Cole
Peter Gazzara
Joseph Kelly
Kyle Letourneau
Jared Majcher
Addison Masse
Matthew Morin
Guy Pederzani
Kevin Perkins
Andrew Reeves
Michael Spacone
Justin Tremblay
Mechanical Engineering
SAE Collegiate Design Series Mini-Baja
Adviser: Robert Jerard

Hajrush Aliu
Neeraj Gill
Electrical Engineering
Remote Controlled Lawn Mower
Adviser: Wayne Smith

Jonathan Alix
Kurtis Bartlett
Physics
An Infrared Laser Testing Facility for the Characterization of the CLAS12 Silicon Detectors
Advisers: Maurik Holtrop, Sarah Phillips

Nathaniel Allen
Patrick Kilar
Brian Roy
Mechanical Engineering
Hydrokinetic Turbine Featuring Variable Flux Generation
Advisers: Kenneth Baldwin, Martin Wosnik

Jacqueline Amante
Theodore Harris (graduate student)
Environmental Science: Ecosystems
The Response of Cyanobacteria and Zooplankton to Experimental Addition of Nitrogen to Large Lake Enclosures
Adviser: Frank Wilhelm

Miles Amaral
Matthew Bedard
Lucas Henry
Eoghan Kelley
Gregory Lonsdale
Jonathan Swiger
Samuel Wesley
Patrick Woodman
Mechanical Engineering
A Water Pumping Windmill For Developing Regions
Adviser: Ioannis Korkolis

Cory Anderson
Gabriel Dakowicz
Gregory Halsey
Rowen Prescott
Devin Quinn
Civil Engineering
Bridge Girder Lab Testing
Adviser: Charles Goodspeed

Jeffrey Anderson
Geology
Comparing Mineral Modes of Littleton Volcanic Samples Taken from Lyme and Cornish, NH
Adviser: Peter Thompson

David Andrews
Electrical Engineering
Auto-Negotiation Python Board
Adviser: Michael Carter

Matthew Andrews
Electrical Engineering
Vacuum Tube Audio Amplifier
Adviser: Michael Carter

Justin Audley
Blake Brown
Christopher Dean
Andrew Russell
Andrew Saunders
Electrical Engineering
Wireless Hummer
Adviser: Richard Messner

Shane Baia
Mechanical Engineering
Christopher Carrier
Mechanical Engineering
VFG Turbine Deployment Structure
Advisers: Kenneth Baldwin, Martin Wosnik

Parris Ballentine
Jordan Kusch
Alexander Lippincott
Ethan Thibaudeau
Mechanical Engineering
Electromagnetic Forming Machine
Adviser: Brad Kinsey

Timothy Barnum
Geology
Magnetostratigraphy of Late Cretaceous Through Paleocene Patagonian Sedimentary Formations
Adviser: William Clyde

Kelly Barry
Jack Bauer
Ryan Mastromarino
Arianna Paquette
Samuel White
Civil Engineering
Culvert Replacement in New Durham, NH
Adviser: Rebekah Gaudreau
Kelly Barry
Civil Engineering
Effect of Increasing Binder Replacement with Recycled Asphalt Shingles in Hot Mix Asphalt
Adviser: Jo Daniel

Samantha Beam
Zoology
Effects of Social Status of Female Red Deer on Herd Movement
Adviser: Michelle Scott

Makenzie Benander
Environmental Science: Hydrology

Daniel Broman
Civil Engineering

Christopher Dorich
Environmental Science: Ecosystems
The Effect of Snow on Green Roofs
Adviser: David Townson

James Blackwell
Geology

Amanda氢 (graduate student)
Vincent Percuoco (graduate student)
Nutrient Removal Along a Salinity Gradient in Coastal Louisiana
Advisers: Linda Kalnejais, Anne Lightbody

Joseph Bonner
Daniel Broman
Michele Duspiva
Civil Engineering
Shoals Marine Laboratory: Geographic Information System Web Application
Adviser: Nancy Kinner

Nathaniel Bonnier
Peter Duve
Michael Giguere
Hao Hoang
Joshua Laverdiere
Evan Leach
Matthew Munoz
Michael Simon

Corey Snelling
Mechanical Engineering
LunaCats—Senior Design Project
Adviser: May-Win Thein

Robert Bouchard
Joshua Cerri
Wesley Cotnoir
Nicholas DeMarchi
Camilla Leonila Garcia
Nicholas Jean
Adam Jordan
Mark Richards
Cameron Torrey
Joseph Wilson
Alicia Zani
Mechanical Engineering
FSAE: UNH Precision Racing
Adviser: Todd Gross

Julian Bratina
International Affairs and Civil Engineering
Karen Huberdeau
Andrew McRae
Gaston Ngarukiye
Arthur Patch
Diego Soto
Civil Engineering
Ash Street Bridge Design
Adviser: Rebekah Gaudreau

Nathan Brouwer
Electrical Engineering
Image Processing and Detection of DNA Markers from Electron Microscope Images
Adviser: Richard Messner

Jonathan Brown
Samuel Marlin
Computer Engineering
Improvement of Audio Capture in Handheld Devices Through Digital Filtering
Adviser: W. Miller

John Burdett
Electrical Engineering and Psychology
Automated E-HERMS Brewery
Adviser: John LaCourse

Lauren Buzinski
Abigail Morris
Geology
Determining Sediment Provenance in the Atchafalaya River Delta, Louisiana
Advisers: Linda Kalnejais, Anne Lightbody

Levi Byers
International Affairs and Civil Engineering

Justin Forte
Maureen McHugh
Zachary Schmidt
Shawn Thompson
Civil Engineering
Yacht Club Development
Adviser: Rebekah Gaudreau

Julie Cafarella (graduate student)

Cathleen Turner (UNH McNair Scholar)
Hydrology
The Relationship Between Turbulence Intensity (T.I.) and Local Sediment Deposition in Sites with Different Biomass Density in a Salt Water Marsh
Advisers: Linda Kalnejais, Anne Lightbody

Ramon Calderon Jr. (UNH McNair Scholar)
Statistics and Mathematics
Mathematical Instruction: The Effect on Selecting a Math Related Major
Adviser: Karen Graham

Bradford Cannon
Physics
Study of Interplanetary Magnetic Waves Due to Newborn Interstellar Ions as Observed by the Ulysses Spacecraft
Adviser: Charles Smith

Cheryl Caputo
Samuel Despins
Sarah Kissell
Environmental Engineering

John DeWispelaere
Marketing and Entrepreneurial Venture Creation

Stormwater Design (Hodgson Brook)
Adviser: Alison Watts

Joel Carrier
Kaitlyn Jacobson
Tucker McCarthy
Cory Osgood
Justin Smith
Civil Engineering
Fast Food Restaurant Site Design
Adviser: Rebekah Gaudreau
Yunus Cezairli
David Gallagher
Anthony Visone
Mechanical Engineering
UNH Jet Ski
Adviser: James Forsythe

Gina Chaput
General Biology

Kyle Charmanksi
Mechanical Engineering

Marissa Rousseau
Physics
Biodiesel: Utilization of Waste Water to Cultivate Microalgae Oil Feedstock
Adviser: Ihab Farag

Justin Charos
Corey Dietrich
Civil Engineering

Ryan Dyer
Civil Engineering and Sociology

Nicholas Pearson
Civil Engineering and Civil Technology
MUB Staircase
Adviser: Raymond Cook

Lindsey Chiron
Electrical Engineering
Electric Snowmobile
Adviser: L. Gordon Kraft

Phyllicia Cicilio
Amanda Devine
Emely Medina
James Stewart Jr.
Chemical Engineering

Rebecca Wilson
Environmental Engineering
Silver Nanoparticle Synthesis and Process Design for Printable Conductive Media
Adviser: Dale Barkey

Phyllicia Cicilio
Haley Harper
Brian McConnell
Lauren Pappas
Emily Smith
Seth Tremblay
Augustin Wimsatt
Brian Zukas
Chemical Engineering
UNH American Institute of Chemical Engineers ChemE Car
Adviser: Jillian Goldfarb

Anthony Cipolla
Electrical Engineering
Automated Protein Dilutor and Interferometer
Advisers: Allen Drake, Thomas Laue

Andrew Clemence
Grant Dillon
Stephen Pamboukes
Mechanical Engineering

Aaron Murtagh
Mechanical Engineering and Nursing

Charles Sullivan
Mechanical Engineering and Business Administration

Christopher Cogswell
Chemical Engineering and Philosophy

Dakota Smith
Chemical Engineering
Incorporation of Metal Nanoparticles in Anodic Aluminum Oxide Coatings
Adviser: Dale Barkey

John Cole
Patrick Kerrigan
Michael Litchfield
Electrical Engineering

Nicholas Rivera
Mechanical Engineering

UNH Combat Robot
Adviser: Francis Hludik

Michael Consiglio
Chad Hayes
Andrew Kongmany
Joshua Roy
Christopher Taylor
Jonathan Zoller
Civil Engineering

Ossipee Lake Road Bridge
Adviser: Rebekah Gaudreau

Joseph Corsello
Erie Doe
Kathryn Quay
Thomas Zakarian
Environmental Engineering

Mini Ecoline
Adviser: Alison Watts

David Cote
Miguel Miranda (UNH McNair Scholar)
Environmental Engineering

Raeanna Hughes
Environmental Engineering and History
Small Scale Drinking Water Filtration for Schools in the Dominican Republic
Advisers: James Malley, Alison Watts

Yuanyuan Cui (graduate student)
Xiameng Liu
Chemical Engineering
Surfactant Effects On Drop Formation in Co-Flowing Fluids
Adviser: Nivedita Gupta

Tyler Curtis
Athena Gagnon
Mitchell Osbourne
Samuel Silver
Amy Underwood
Mechanical Engineering
NASA Magnetospheric MultiScale Mission TableSatIII
Adviser: May-Win Thein

Matthew Daigle
Robert Hunter
Kendra Kreider
Electrical Engineering
A/V LED Cube
Adviser: Richard Messner

Shirley Dame
Physics
Measuring Atmospheric Neutrons from Space
Adviser: Mark McConnell

Timothy Davis
Computer Engineering
Handheld GPS
Adviser: Francis Hludik

Benjamin Decato
Computer Science
Synteny and Orthology
Adviser: Philip Hatcher

Justin Deloatch (guest from Elizabeth City State University)
Computer Science
The Spectral Reflectance of Ship Wakes between 400 and 900 nm
Adviser: Darnell Johnson (ECSU)
Joshua R. French ’12

PHYSICS

Even before a rocket blasted off from Norway in December carrying UNH-built star sensing equipment, Joshua French would have been justified saying, “Mission Accomplished.” French is presenting his URC project on his work with the team that developed the Rocket Experiment for Neutral Upwelling (RENU). French says the process of calibrating a star sensor on the rocket taught him a great deal about hands-on research, teamwork, and overcoming obstacles under pressure. “Working with the star sensor was truly the culmination of my undergraduate research at the University of New Hampshire,” says French, who was mentored by Eberhard Möbius, UNH professor of plasma physics.
Katherine Gray  
Civil Engineering  
Comparative Analysis of Difference Shingle Sources in the Production of Asphalt Concrete  
Adviser: Jo Daniel

Katherine Gray  
Timothy Harmon  
Richele Reynolds  
Nicholas Tamblyn  
Civil Engineering

Scott Olsen  
Environmental Engineering

Jessica Streitmatter  
Business Administration  
University Resource Management Application  
Adviser: Nancy Kinner

Luke Gregory  
Isaac Yeaton  
Mechanical Engineering  
Cellulosic Bioethanol Refinery  
Adviser: Christopher White

Kathryn Hack  
Alison Wirth  
Mechanical Engineering  
Disney Imaginations—Wall_E Roller Coaster  
Adviser: Barbaros Celikkol

Cedric Hall (guest from Elizabeth City State University)  
Mathematics  
Correspondence Between Inherent Optical Properties and Net Oxygen Production  
Adviser: Darnell Johnson (ECSU)

Gregory Halsey  
Dana Martin  
Civil Engineering  
Properties and Performance of Building Derived Aggregate in Comparison to Crushed Stone  
Adviser: Jeffrey Melton

Andrew Harmon  
Justin Languirand  
Mechanical Engineering  
Intelligent Tool Holder for CNC Milling Applications  
Advisers: Barry Fussell, Robert Jerard

Timothy Harmon  
Civil Engineering  
Analysis of Fish Populations Along Northern New Hampshire Streams  
Adviser: Thomas Ballester

Runzhi He  
Brian Zukas  
Chemical Engineering  
Microcapsule Dynamics in Varying Channel Geometries  
Adviser: Nivedita Gupta

Laura Hood  
Andrew Klein  
Alexander Stitt  
Civil Engineering  
Concrete Canoe  
Adviser: Ricardo Medina

Stephen Hoogendoorn  
Chadd LaFond  
Sean Pinette  
Heather Waice  
Civil Engineering  
Safe Routes  
Adviser: Kevin Gardner

Amy Hunter  
Jay Johonnett  
Monica Plante (UNH McNair Scholar)  
Civil Engineering  
Hogdson Brook TMDL  
Adviser: Jennifer Jacobs

Luke Jablonski  
Physics  
Computer Simulations of Lanthanum Bromide Scintillation and Light Readout  
Adviser: Peter Bloser

Erick Janampa  
Computer Engineering  
Nicholas Parrott  
Electrical Engineering  
Instrumented Workboot  
Adviser: John LaCourse

Michael Jefferson Jr. (guest from Elizabeth City State University)  
Computer Science and Mathematics  
Tracking Ice Flow in Two Greenland Outlet Glaciers  
Adviser: Darnell Johnson (ECSU)

Henry Jones  
Wildlife Ecology  
Predation on Capercaille (Tetrao urogalus) Nests—Loses to Different Predators  
Adviser: Peter Pekins

Colin Joyce  
Physics  
Observations and Theory of Waves Generated by Newborn Pickup Ions  
Adviser: Charles Smith

Kyle Kalutkieicz  
Physics and Mathematics  
Cosmological Prospects of Axionic String-Inflation in Large Volume String Compactifications  
Adviser: Per Berglund

Sarah Kissell  
Environmental Engineering  
Determining the Bioavailability of Organic Contaminants With the Use of Passive Sampling Techniques  
Adviser: Kevin Gardner

Kaitlin Kwiecien  
Patrick Massicotte  
Luke Teal  
Georgian Tutuianu  
Civil Engineering  
Bridges to Prosperity Senior Design  
Adviser: Rebekah Gaudreau

Kaitlin Kwiecien  
Civil Engineering  
Rapid Response Flood Zone Mapping for Disaster Relief in Data Sparse Regions: A Case Study in Haiti  
Adviser: Jennifer Jacobs

Carlo LaScala  
Chemical Engineering  
Nano-catalyst Design for the Direct Ethanol Fuel Cell Reaction  
Adviser: Xiaowei Teng

Zachary Laforet  
Geology  
Indirect Measuring of Soil Conductivity for the Calculation of Soil Salinity  
Adviser: Gregg Moore
Ruben Lalinde
Benjamin Major
Ben Minerd
Computer Engineering

Andrew Pavlik
Electrical Engineering
Reconnaissance Robot
Adviser: Francis Hludik

Emily Lantz
Katherine Lantz
Medical Laboratory Science

Rajtilak Majumdar (graduate student)
Plant Biology
Managing a Genetic Disease by Enzyme Replacement Therapy: Plants to the Rescue
Adviser: Subhash Minocha

Ryan Lawrence (guest from Elizabeth City State University)
Chemistry
Survey of Post Last Glacial Maximum Environment: Unusual Soil Constituents in Rocky Hock Bay Stratigraphy
Adviser: Darnell Johnson (ECSU)

Stephanie LeRette
Meaghan Maher
Chemical Engineering

Rebecca Wilson
Environmental Engineering
Copper Electrodeposition for High-Density Vertical Semi-Conductor Integration
Adviser: Dale Barkey

Evan Lonstein
Civil Engineering
Cocheco River Dredging Project
Adviser: Kevin Gardner

Rajtilak Majumdar (graduate student)
Plant Biology

Ashley Matthews
Nutritional Sciences
Miraculous Tomatoes: Optimizing the Production of a Taste Bud Modifying Protein
Adviser: Subhash Minocha

Brian McConnell
Seth Tremblay
Chemical Engineering
Effect of Harvesting Frequency and Water Recycling on Algae Growth
Adviser: Ihab Farag

Kristen McNeill
Biochemistry
Regulation of Yeast mRNA Production
Adviser: Clyde Denis

Joseph Miller
Computer Science
Internet Security of the Future: A Look at Security in IPv6
Adviser: Timothy Carlin

Miguel Miranda (UNH McNair Scholar)
Environmental Engineering
Desalination With Ultraviolet Light as Pretreatment
Adviser: James Malley

Peter Moran
Chemistry
Progress Towards the Synthesis of (±)-Heliotridane
Adviser: Charles Zercher

Matthew Mower
Chemistry and Mathematics
Studies in Cyclopropyl Alcohol Formation and Peptidomimetics
Adviser: Charles Zercher

Zygmunt Nowak-Solinski
Civil Engineering
CIE 788.01 Project Planning and Design: Guild Lagoon Closure
Adviser: James Malley

Amadin Osagiede
Timothy Postlethwaite
Civil Engineering
Memorial Park Design
Adviser: Charles Goodspeed

Alex Papantones
Chemistry
Molecular Recognition Using Polymers of N-isopropylacrylamide
Adviser: W. Rudolf Seitz

Arianna Paquette
Civil Engineering
Geomorphic Trends Downstream of an Impoundment
Adviser: Thomas Ballestero

Rachel Pisa
Environmental Engineering
Adviser: Cameron Wake

Monica Plante (UNH McNair Scholar)
Civil Engineering
Creating an Apparatus to Test Microbial Degradation at Cold Temperatures (-20 to 5 Degrees Celsius)
Adviser: Nancy Kinner

Jordan Reddel
Chemistry
Design, Synthesis, and Characterization of Novel Bifunctional Ligands for Use in a Copper (II) Sensor
Adviser: Roy Planalp

Austin Rickert
Hydrology
Water Table Characteristics of Fen Microtopography
Adviser: Ruth Varner

David Robinson
Civil Engineering
Kingsbury Courtyard Senior Project
Adviser: Charles Goodspeed

Kevin Rychert
Physics
Statistical Study of Pulsating Aurora Using the THEMIS All-Sky Camera Array with Respect to Large-Scale Spatial and Temporal Aspects as well as Correlation to GOES-13 Satellite Particle Flux Data
Adviser: Marc Lessard

Steven Rzepka
Civil Engineering
Molecular Recognition Using Polymers of N-isopropylacrylamide
Adviser: W. Rudolf Seitz

Arianna Paquette
Civil Engineering
Geomorphic Trends Downstream of an Impoundment
Adviser: Thomas Ballestero

Rachel Pisa
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Adviser: Cameron Wake

Monica Plante (UNH McNair Scholar)
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Jordan Reddel
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Design, Synthesis, and Characterization of Novel Bifunctional Ligands for Use in a Copper (II) Sensor
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Austin Rickert
Hydrology
Water Table Characteristics of Fen Microtopography
Adviser: Ruth Varner

David Robinson
Civil Engineering
Kingsbury Courtyard Senior Project
Adviser: Charles Goodspeed

Kevin Rychert
Physics
Statistical Study of Pulsating Aurora Using the THEMIS All-Sky Camera Array with Respect to Large-Scale Spatial and Temporal Aspects as well as Correlation to GOES-13 Satellite Particle Flux Data
Adviser: Marc Lessard

Steven Rzepka
Civil Engineering
Molecular Recognition Using Polymers of N-isopropylacrylamide
Adviser: W. Rudolf Seitz

Arianna Paquette
Civil Engineering
Geomorphic Trends Downstream of an Impoundment
Adviser: Thomas Ballestero
Jennifer Scolamiero  
Civil Engineering  
UNH Bike Infrastructure Enhancement Program  
Adviser: Kevin Gardner

Kyle Shaughnessy  
Matthew Standley  
Russell Wilcox  
Mechanical Engineering  
Automation of an Ultrasonic Transmission Process  
Adviser: Brad Kinsey

Samantha Sinclair  
Geology  
Reconstructing the History of Sedimentation at the Former Head-of-tide Dam on the Bellamy River, Dover, NH  
Adviser: Joel Johnson

Stacey Snyder  
Geology  
Constraining Mantle Melting Depth of Icelandic Glacial Volcanoes: A Comparison of the Most Recent and Penultimate Glaciations  
Advisers: Julia Bryce, Joseph Licciardi

Joshua Stawarz  
Physics  
Applications of Third-Moment Theory to Turbulence in the Solar Wind at 1 AU  
Adviser: Charles Smith

Amanda Steed  
Mathematics  
Cupolet Classification by Instrument  
Adviser: Kevin Short

Matthew Stemkowski  
Physics  
Computation of the Autocorrelation Function for Solar Wind Turbulence at 1 AU  
Advisers: Charles Smith, Bernard Vasquez

Travis Trottier  
Mechanical Engineering  
Measurement of Mass Transfer by Rapid Ablation  
Adviser: Christopher White

Cathleen Turner (UNH McNair Scholar)  
Hydrology  
The Effects of Hydro-modification on Water Quality in the Lamprey River Watershed  
Adviser: John Davis

Georgian Tutuianu  
Civil Engineering  
Shower Head Infiltrometer SURF  
Adviser: Thomas Ballestero

Victoria Ward  
Hydrology  
Modeling of Sediment Deposition in the Mississippi River Delta  
Adviser: Anne Lightbody

Carick Wienke  
Computer Engineering  
Indoor Localization Using a Modern Smartphone  
Adviser: Nicholas Kirsch

David Wilk  
Chemistry

Leon Wong (post-doctoral researcher)  
Functionalization of Cyclam Derivatives  
Advisers: Gary Weisman, Edward Wong

Matthew Young  
Physics  
A Statistical Study of Narrow-Band ELF Events Observed at the South Pole  
Adviser: Marc Lessard

Brian Avery  
James Bartoldus  
Karen Ibev  
Nicholas Sandberg  
Electrical Engineering Technology

Scott Innes  
Corey Mooney  
Christopher Reekie  
Matthew Wakim  
Computer Information Systems  
Capstone Experience in Computer Information Systems: An Undergraduate Speech Research Group  
Adviser: Michael Jonas

William Cabana  
Computer Information Systems  
Lock It-Track It: Protect Your Network  
Adviser: Karla Vogel

Laura Cassella  
Matthew Edmonds  
Christopher Reekie  
Matthew Wakim  
Computer Information Systems  
Open Source Donation Management Software  
Adviser: Mihaela Sabin

Harry Dodson  
Scott Innes  
Computer Information Systems

Rebecca Lee  
Communication Arts  
Case Management System for Domestic Violence Unit of Manchester  
Adviser: Mihaela Sabin

Matthew Douston  
History  
Plagues and Sickness in Antebellum Manchester  
Adviser: Robert Macieski

Lisa Eagleson  
History  
Teacher Training in Antebellum New Hampshire  
Adviser: Robert Macieski

Matthew Evans  
Computer Science  
Corporate Virus and Malware Solutions  
Adviser: Karla Vogel

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**UNH Manchester Undergraduate Research Conference**

**Poster Presentations**

**Wednesday, April 27**  
3:30–6 p.m.  
University Center  
Manchester

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.
Derek Gallant
History
Death and Crime in Victorian Manchester
Adviser: Robert Macieski

John Grossmith
Computer Information Systems
Increasing Efficiency Through Standardization at Best Buy
Adviser: Karla Vogel

Christopher Hardy
History
Manchester 1846: From a Town to a City
Adviser: Robert Macieski

Aaron Jarzombek
Brice Rader
Thomas Tierney
Computer Information Systems
Internship2Career: Management System for the UNHM Internship Program
Adviser: Mihaela Sabin

Jillian Kinney
History
Irish in Manchester
Adviser: Robert Macieski

Shawn Kraus
History
Manchester Taverns and Temperance in the Mid-nineteenth Century
Adviser: Robert Macieski

Lowell Mower
History
Colonial Manchester: Stark’s Fort and the Protection of an Expanding Frontier
Adviser: Robert Macieski

Cristina Murphy
History
Impact That Living and Working Conditions in Manchester Had on People’s Physical and Mental Health During 1830–1860
Adviser: Robert Macieski

Keith Naber
History
Temperance Movement in Manchester
Adviser: Robert Macieski

Schuyler Norman
Computer Information Systems
Recreate Production Environment for QA Testing
Adviser: Karla Vogel

Daniel Pepin
Computer Information Systems
Developing the OpenITware Platform Architecture
Adviser: Mihaela Sabin

Matthew Wakim
Computer Information Systems
Redesigning a Phone Infrastructure for Stephens and Michaels Associates
Adviser: Karla Vogel

Andrew Casey
Communication Arts
Severed
Adviser: Jeffrey Klenotic

Mike Fidyk
Communication Arts
Paul Murphy and the Red Sox
Adviser: Anthony Tenczar

Danielle Flynn
Business Administration and Media Practices
GET IT ON
Adviser: Anthony Tenczar

Andrew Gibson
Communication
MEDIUM
Adviser: Anthony Tenczar

David Klein
Communication Arts
Heartbeat
Adviser: Anthony Tenczar

Kevin Mason
Communication Arts and Politics and Society
Pattern
Adviser: Anthony Tenczar

Erroll James Ponio
Communication Arts
Film Projects
Adviser: Anthony Tenczar

Camille Quarles
Communication
A Dedicated Service: Phillip Parker
Adviser: Anthony Tenczar

Christopher Spencer
Communication
Shaken Up
Adviser: Anthony Tenczar

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UNH Manchester Undergraduate Research Conference

Cinema Arts Day

Thursday, April 28
10 a.m.–1 p.m.
University Center
400 Commercial Street
Manchester

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

Heather Anderson
Communication Arts
Wherever I Am
Adviser: Anthony Tenczar
Annie Grace Couvillion ’12
STUDIO ART

As a sophomore, Annie Grace Couvillion received a Summer Undergraduate Research Fellowship to photograph the underbelly of New Hampshire life in the summer of 2010. She spent three months traveling throughout the state, photographing the people and places that summer tourists generally do not see.

Couvillion says her project, which will be shown at the URC, had a dual purpose: to help her explore documentary photography as a career, and to create a body of work that might bring into focus the world of the disadvantaged in New Hampshire.

The Naked Arts—Creativity Exposed

Act II

Thursday, April 28
12:30–2 p.m.
Hennessy Theatre
Paul Creative Arts Center

This event exposes the inner creative process of artists working in various disciplines. Student presenters will describe the work they undertake to bring an artistic creation from initial inspiration to the stage or gallery.

George Adams (UNH McNair Scholar)  
Music  
*Beat-Class Modulation in Steve Reich’s Music for 18 Musicians*  
Adviser: Rob Haskins

Victoria Carot  
Theatre  
*Costume Design for Museum, A Play by Tina Howe*  
Adviser: Szu-Feng Chen

Annie Grace Couvillion  
Art Studio  
*Out of Focus: Images of the Underside of New Hampshire Life in 2010*  
Adviser: Julee Holcombe

Jonathan Gray  
English  
*The Creative Process: A Personal Experience of Cartoons, Muses, and Much More*  
Adviser: Thomas Payne

Justin Morin  
Theatre  
*Set Design for Museum, A Play by Tina Howe*  
Adviser: Szu-Feng Chen

Jake Nevrla  
Communication  
*On the Morning That She Found Him*  
Adviser: Thomas Payne

Benjamin Tibbetts  
Music Theory  
*Setting Khalil Gibran’s The Prophet to Music*  
Adviser: Christopher Kies

History Department  
Undergraduate Presentations

Thursday, April 28  
12:40–2 p.m.  
Memorial Union Building  
Rooms 338/340, Theatre I

The History Department hosts a panel of undergraduate history majors, presenting research projects from their academic classes, research seminars, and honors theses.

Peter Daigle  
History  
*World War II as a Proving Ground for an Independent Air Force*  
Adviser: Janet Polasky

Thibaut Delloue  
History and Philosophy  
*Abraham Lincoln and New Hampshire’s Independent Democrats*  
Adviser: J. William Harris
Evan Monty
History
A Struggle Against Change: Rural New Hampshire During the Great Depression
Adviser: W Jeffrey Bolster

Ella Nilsen
History and English/Journalism
Being Jewish in Russia and the United States: Immigration, Legacy, and Family History
Adviser: Cathy Frierson

UNH Manchester Undergraduate Research Conference

Engineering Technology Senior Project Presentations

Friday, April 29
8 a.m.–Noon
University Center
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.

Brett Austin
Mechanical Engineering Technology
Viega—Design and Analysis of a Radiant Heating System
Adviser: Ralph Draper

James Bartoldus
Electrical Engineering Technology
Kratylos—Client Server System
Adviser: Ralph Draper

Brandon Bergeron
Mechanical Engineering Technology
PT Castings—Tooling Manual
Adviser: Ralph Draper

Matthew Conti
Mechanical Engineering Technology
OSRAM—Cathode Shrinkage Reduction
Adviser: Ralph Draper

Steve Cyr
Mechanical Engineering Technology
Munters—Design of Clamping System
Adviser: Ralph Draper

Karim El Mouatacim
Electrical Engineering Technology
PSNH—Evaluate Interconnection of Mobile Generator
Adviser: Ralph Draper

Shaun LeClaire
Mechanical Engineering Technology
Pedro’s Inc.—Testing Fixture for Bicycle Chain Lubricants
Adviser: Ralph Draper

Josh LeTarte
Mechanical Engineering Technology
LAARS—Numerical Model of a Heat Exchanger
Adviser: Ralph Draper

Benjamin Leary
Electrical Engineering Technology
JPSA—Laser Testing/Data Collection System
Adviser: Ralph Draper

Kevin Maffei
Electrical Engineering Technology
UNH-IOL—Automation of Displays
Adviser: Ralph Draper

Matthew Morrill
Mechanical Engineering Technology
D.G. O’Brien—Powder Coat Process
Adviser: Ralph Draper

Zachary Paul
Mechanical Engineering Technology
OSRAM—Cost Reduction for Arc Tube
Adviser: Ralph Draper

Daniel Rollins
Electrical Engineering Technology
Zeta—Test Board for Seismograph
Adviser: Ralph Draper

Colton Seymour
Mechanical Engineering Technology
Wirebelt—Automated Lowering System
Adviser: Ralph Draper
High-quality undergraduate research is the hallmark of a University of New Hampshire education. With funds provided by the Parents Association, the University has been able to increase its support to students during the UNH Undergraduate Research Conference (URC). Helping to fund student innovation: it’s one of the many ways the Parents Association enhances the University’s academic mission.

UNH Parents working on behalf of students.
Parents Association Undergraduate Research Symposium

Welcome Breakfast with UNH Provost John Aber and Parent Association Council President Peter Hayden

Friday, April 29
9–9:30 a.m.
Memorial Union Building
Granite State Room

This informal gathering gives students and attendees an opportunity to visit with UNH Provost John Aber and Parents Association Council President Peter Hayden. Both speakers will provide a preview of the large University-wide event that follows: the Parents Association Undergraduate Research Symposium.

Parents Association Undergraduate Research Symposium

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.

Oral Presentations, Session A

Friday, April 29
9:30–10:40 a.m.
Memorial Union Building

MUB, Room 203

Ethnic Studies: Inventing the (In)visible Self

These sessions are sponsored in part by the minors in Africana and African American Studies, American Studies, and Race, Culture and Power. Housed in the UNH Center for the Humanities, these interdisciplinary academic programs promote understanding of American and African, Diasporic, and African American culture and history as well as the connections between and among race, culture, and power on the national and global level. Partnering with offices and initiatives campus-wide, the programs support the University’s commitment to fostering inclusive excellence.

Moderator: Reginald Wilburn
Chloe Abu-Jaber
Renee Poisson
English
Native American Authors from New England: A Collaborative Online Project
Adviser: Siobhan Senier

Lauren Barry
English
Maria W. Stewart and Phillis Wheatley: The Origins of an Enlightened Literary Tradition
Adviser: Reginald Wilburn

Allison Bratton
English Teaching
Afrocentricity
Adviser: Reginald Wilburn

Josh DiPirro
English
The Absent Egg: Existential Dialectics as a Social Critique in Invisible Man
Adviser: Reginald Wilburn

Travis Pynenburg
English Literature
Ralph Waldo Ellison as Major American Author
Adviser: Reginald Wilburn

MUB, Room 237

Feminism in Action: Women’s Studies Internships

Moderator and Adviser: Carina Self
Bie Aweh
Women’s Studies
NARAL/ProChoice NH, Concord, NH

Allison Hitchings
Family Studies
New Generations, Greenland, NH

Laura Joseph
Women’s Studies and Spanish and International Affairs
Waysmeet Center, Durham, NH

Erin King
Women’s Studies
Planned Parenthood of the Rocky Mountains, Denver, CO

Holly Surette
Women’s Studies
Dover Permaculture Group, Dover, NH

Sarah Ward
Women’s Studies and Family Studies
Arts in Reach, New Castle, NH

Fileshea White
Women’s Studies
Barrington Permaculture, Barrington, NH
MUB, Strafford Room

Honors Program: US-Sino Relations (1)
Moderator: Monica Chiu

Henry Bowen
Undeclared
The Gap: Understanding the US-China Trade Deficit
Adviser: Lawrence Reardon

Amanda Condon
International Affairs and Political Science
Nationalism in Modern Day China
Adviser: Lawrence Reardon

Daniel Cray
Business Administration
Imbalance: The Reasons Behind the Sino-US Trade Deficit
Adviser: Lawrence Reardon

Allison Ginwala
International Affairs and English/Journalism
US-Sino Relations: Censorship Tension
Adviser: Lawrence Reardon

Hannah Lawrence
Political Science and Justice Studies
 APRÉS 6.4: U.S. Foreign Policy Concerning Human Rights in China
Adviser: Lawrence Reardon

Christine Turner
Political Science
Leaning East: The United States' Trade Dependence on Chinese Goods
Adviser: Lawrence Reardon

MUB, Room 334

International Affairs—From Hip-hop to Howitzers: Popular Resistance in Comparative Perspective
Moderator: Claire Malarte-Feldman

Katherine Bragg
International Affairs and Communication
Symbolic Resistance as a Source of Disunion within Catalonia and Spain
Adviser: Lawrence Reardon

Gideon Cohn
International Affairs and Anthropology
Hip Hop and Rebellious Youth
Adviser: Stacy VanDeveer

Elizabeth Morash
International Affairs and Business Administration
From Miss Canary Islands 1936 to Generalissimo: Francisco Franco's Orchestration of the Fascist Spanish State in 1939
Adviser: Lawrence Reardon

Jodie SanDonato
International Affairs and Spanish
Rebels Without a Cause? The Common Occurrence of Strikes in Spain
Adviser: Benjamin Cole

MUB, Room 332

International Affairs—Learning to Hate: Immigration, Xenophobia and Extremism in Germany
Moderator: Kirk Buckman

Christopher Buchanan
International Affairs and Political Science
Turks in German Society: An Integration Failure
Adviser: Lawrence Reardon

Gregory Lenz
International Affairs and Political Science
Why We Hate: A Look Into Rising Xenophobia in Germany
Adviser: Benjamin Cole

Natalija Ulemek
International Affairs and Communication
Media's Contribution to Political Change in Post-Communist Russia
Adviser: Lawrence Reardon
Sebastian Sink  
International Affairs and German  
The Anatomy of a Curb-Stomp: Youth and Right-wing Hatred in Contemporary Germany  
Adviser: Benjamin Cole

Marc Venhaus  
International Affairs and Business Administration  
Germany as an Immigration Destination  
Adviser: Stacy VanDeveer

MUB, Room 338  
International Affairs—New Immigration Patterns and Old Prejudices, Europe and Latin America  
Moderator: Stacy VanDeveer

Victoria Adebumi (UNH McNair Scholar)  
International Affairs and Political Science  
Will Costa Rica Take the “Poor, Huddled Masses, Yearning to Breathe Free”? Public Policy and Public Opinion Towards Refugees in Costa Rica  
Adviser: Lawrence Reardon

Adam Harr  
International Affairs and Linguistics  
Legitimate Language: French and European Discrimination Against Indigenous Languages  
Adviser: Lawrence Reardon

Emma Prichard  
International Affairs and Anthropology  
Emarginati in Italia: How New Immigrants and Old Prejudices are Affecting the Roma in Italy  
Adviser: Lawrence Reardon

Vanessa Richards  
International Affairs and Spanish  
The Next Great Migration: Ecuador to España  
Adviser: Benjamin Cole

MUB, MUB Room 330  
International Affairs—Production, Consumption, and the Environment in Central and North America  
Moderator: Theodore Howard

Timor Gamirov  
International Affairs and English  
On-site Solar in New Hampshire Business: Why Do Companies Get Involved?  
Adviser: Stacy VanDeveer

Jessica Giguere  
International Affairs and Environmental and Resource Economics  
Environmental Damages in Costa Rica’s Protected Parks  
Adviser: Lawrence Reardon

Natallia Leuchanka  
International Affairs and Environmental Science: Ecosystems  
The Loss of Ecosystem Services on the Yucatán Peninsula in the 21st Century  
Adviser: Lawrence Reardon

Tessa Mandra  
International Affairs and Environmental Conservation Studies  
Sustainable Development in Costa Rica  
Adviser: Stacy VanDeveer

Vanessa Valencia  
International Affairs and Business Administration  
Consumerism in America  
Adviser: Lawrence Reardon

MUB, Room 332  
Multidisciplinary Session 2: Human Health Issues  
Moderator: Brent Bell

Karla Armenti (Department of Health and Human Services, State of N.H.)  
Health Management and Policy and Business Administration  
Characterization of Adult Blood Lead Levels in the New Hampshire Adult Blood Lead Epidemiology and Surveillance Program (ABLES)  
Adviser: Rosemary Caron

Anna Dupuis  
Health Management and Policy  
Ultraviolet Exposure in the Sun and Tanning Salons  
Adviser: Robert McGrath

Bethany Murphy  
Kinesiology  
Acute Effects of Blood Flow Restricted Exercise on Muscular Function and Central Activation  
Adviser: Summer Cook

Cathryn Reynolds  
Kinesiology  
Prehospital Emergency Removal of Football Helmets Using Two Techniques  
Adviser: Erik Swartz

Heidi Shumila  
Kinesiology  
Influence of Obesity on Gait and Metabolic Cost of Walking in Older Adults  
Adviser: Dain LaRoche
Parents Association Undergraduate Research Symposium

Poster Presentations
Session A

Friday, April 29
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.

Ashleigh Alario
Valerie Cartier
Nursing
The Influence of Caffeine Knowledge on Consumption During Pregnancy
Adviser: Pamela Dinapoli

Kevin Anderson
Psychology
Learning Choice-Reinforcement Contingencies in Major Depressive Disorder
Adviser: Paul Hamilton

Jennifer Bakan
Psychology
The Impact of Pediatric Hematopoietic Stem Cell Transplant on the Family
Advisers: Carolyn Mebert, Susan Parsons MD, MRP (The Health Institute at Tufts Medical Center)

Elyssa Barrick
Kristen Onos (graduate student)
Psychology
The Role of Hippocampus in Spatial Working Memory in the Rat: Direction Versus Location-based Cues
Adviser: Robert Mair
Catherine Bousquet
Psychology and Justice Studies
Effects of Parental Monitoring on Adolescent Behavior
Adviser: Ellen Cohn

Rachael Butterfield
Nursing
Care Giving at Home for Sick Children in Pune, India
Advisers: Gene Harkless, Carol Williams-Barnard

Lauren Campbell
Occupational Therapy
Analyzing the Effect of Teacher-directed Structure on Social Interaction of Children Using the Evaluation of Social Interaction (ESI)
Adviser: Lou Ann Griswold

Herbert Cornell III
Justice Studies and History
The Effects of Playing Violent Video Games on the Aggressive Behavior of New Hampshire Adolescents
Adviser: Ellen Cohn

Olivia Cristaldi
Sociology
Gender and Age Differences in IT Use
Advisers: Rebecca Glauber, Kenneth Johnson

Sara Dennison (graduate student)
Jacqueline Hembrook
Psychology
Effects of Event-related Microstimulation of Mammillary Bodies on Spatial Working Memory in the Rat
Adviser: Robert Mair

Jennifer Dezeno
Nutritional Sciences
The Good Eats Cooking Series Research Study
Adviser: Joanne Burke

Karen Doyen
Communication Sciences and Disorders
English Phonetic Acquisition in Native Spanish Speaking Adults
Adviser: Jeanne O’Sullivan

Shanon Farley
Sociology
The Influence of Sex Education in Public Schools on Sexual Behavior
Advisers: Benjamin Brown, Jennifer Vanderminden

Joshua Gerry
General Biology

Allison Nahin
Timothy Stillwell
Biochemistry

TaylorAnn Sarro
Molecular, Cellular and Developmental Biology
Mutagenesis of Estrogen Receptor Alpha Phosphorylation Sites
Adviser: Andrew Laudano

Paul Goodwin
Geography
Pease International Tradeport—Success Post BRAC
Adviser: Alasdair Drysdale

Maren Gray
Nursing
Family Planning and Abortion Services in Ghana: An Exploration into the Thoughts and Perceptions of Reproductive Health-care Providers
Advisers: Carolyn Tobin, Carol Williams-Barnard

Katie Hallam
Nursing
Hospice Nurse Perceptions of the Hospice-Nursing Home Relationship
Adviser: Gerard Tobin

Lauren Kasparian
Nursing
Sleeping in Safety: A Descriptive Study of Nurse Anesthetists in Ghana
Adviser: Gene Harkless

Suzanne LaChance
Zoology
Environmental Enrichment of Blind (Chelonia mydas) and Fully-sighted (Caretta caretta) Sea Turtles
Adviser: Michelle Scott

Jillian Lawrence
Management
Performance and Learning in College Student Teams: The Role of Personality and Team Dynamics
Adviser: Vanessa Druskat

Theresa Lewis
International Affairs and Political Science
Las Mamas: Reflections on Indigenous Spirituality in Peru
Adviser: Frédérique Apffel-Marglin

Catherine Newkirk
Nursing
Maintaining the Patency of and Unclogging Nasogastric Tubes
Advisers: Susan Fetzer, Carol Williams-Barnard

Melody Pothier
Occupational Therapy
Early Intervention Services for Children (Birth to Three) with Autism
Adviser: Shelley Mulligan

Caitlin Rivers
Anthropology
Exploring Childhood Obesity in Rural New Hampshire
Adviser: Curt Grimm

Karyln Sheldon
Anthropology and Classics
Lithic Analysis, Living Sites, and Social Interactions During Late Prehistory in Northern Michigan
Adviser: Meghan Howey

Sarah Tower-Richardi
Psychology
Binding of Location and Color in Retinotopic, Not Spatiotopic, Coordinates
Advisers: Julie Golomb, Andrew Leber

Justin Witts
Health Management and Policy
Differences in Quality of Inpatient Care Between Urban and Rural Hospitals in New Hampshire
Adviser: Leslie MacLeod
**English 602: Advanced Technical Writing Project Posters**

Adviser: Cristy Beemer

Maureen Barry
English Literature

Amanda Bourgoine
English Teaching

Matthew Fall
English/Journalism

Ian Ferguson
English/Journalism

Jay Geigley
English

Mindy Lavallee
English

Melissa Stanwood
English

Thomas Wilbur
English

Leandra George
Classics

Alison Heelen
Music Education

Shannon Malley
Art Studio

Elizabeth Racine
Animal Sciences: Pre-veterinary Medicine

**MUB, Rockingham Lounge**

9:30 a.m.–Noon

**Social Work: Extraordinary Experiences!**

Senior social work students complete internships in a variety of agencies that address social justice issues or work with people in need of assistance. Examples include agencies focused on health care, education, adoption, corrections, unemployment, homelessness, and refugee assimilation to U. S. culture. This year approximately 20,000 internship hours will supplement students’ classroom learning and promote the University’s commitment to community engagement. Their posters reflect the variety, complexity, and contributions they have made to these agencies.

**Moderators:** L. Rene Bergeron, Gretchen Bean

**Melissa Blanchette**
Social Work
Do You Suspect Child Abuse? What Happens Next
Adviser: L. Rene Bergeron

**Caroline Brewer**
Social Work
Area Home Care and Family Services, Inc: Upholding a Client’s Right to Self-determination
Adviser: Gretchen Bean

**Amanda Brown**
Social Work and Spanish
Gaining Independence Through Community Resources After Brain Injury
Adviser: Gretchen Bean

**Lauren Catano**
Social Work
Residents Have Rights: A Grievance Process for Concerns and Complaints
Adviser: L. Rene Bergeron

**Gulsun Cavusoglu**
Social Work and Political Science
Becoming a New Hampshire Resident: The Refugee Resettlement Process
Adviser: L. Rene Bergeron

**Amanda Fuller**
Social Work
Parent’s Guide to Filing a CHINS Petition
Adviser: L. Rene Bergeron

**Skyla Heath**
Social Work
The Street Outreach Program
Adviser: L. Rene Bergeron

**Kelly Hogan**
Social Work
The Impact of Community Service Within Adolescent Diversion Programs
Adviser: Gretchen Bean

**Justin Husband**
Social Work
Do You Know Your Rights? You Should
Adviser: L. Rene Bergeron

**Jonathan Hutchings**
Social Work
Transitioning At-Risk Adolescents: An Ecological Model
Adviser: L. Rene Bergeron

**Jolene Jones**
Social Work and Justice Studies
Victim Impact Groups: Inmates Understanding and Taking Responsibility for Their Actions
Adviser: L. Rene Bergeron

**Katrina Nichols**
Social Work
Alcohol-related Sexual Assaults: An Analysis of Contributing Factors
Adviser: L. Rene Bergeron

**Brittany Noble**
Social Work
Importance of Prenatal Care: The Manchester Community Health Center
Adviser: Gretchen Bean

**Mallorie Patterson**
Social Work
Fathers Helping Fathers: A Group to Better Parenting
Adviser: L. Rene Bergeron

**Hannah Plimpton**
Social Work
Partnering with the Power of Horses: Equine-assisted Learning as a Motivational Learning Environment
Adviser: Gretchen Bean

**Hannah Plimpton**
Social Work
How Military Affiliation Effects Students’ Experiences in College: A Comparative Study
Adviser: Robert Jolley

**Abby Zorawowicz**
Social Work
Solution-focused Practice: What It Means for the Division for Children, Youth, and Families
Adviser: Gretchen Bean
Michael Pope
International Affairs and Political Science
Elections and Party Dominance in Southeast Asia
Adviser: Lawrence Reardon

Christopher Semaan
International Affairs and Political Science
Water Pollution in China: Enforcement and Implementation of Pollution Policies and Standards
Adviser: Lawrence Reardon

David Turner
Political Science
Investigating China’s Water Shortage
Adviser: Lawrence Reardon

MUB, Room 237
Communication Honors & McNair Program Research Panel
Moderator: Mardi Kidwell

Katherine Bragg
International Affairs and Communication
Symbolic Resistance as a Source of Disunion Within Catalonia and Spain
Adviser: Jennifer Borda

David Day
Communication
Starbucks: An Ethnography of a Routine
Adviser: Mardi Kidwell

Lauren Gancarz
Communication
The Evolution of Gender Role Construction in Modern Advertising
Adviser: Jennifer Borda

Arisbel Henriquez (UNH McNair Scholar)
Political Science and Justice Studies
Student’s Assessment of Crime and Safety in the Age of the Clery Act
Adviser: Mardi Kidwell

Laura Yegge
Communication
A Relational Approach to Social Transformation in War-Torn Areas
Adviser: Sheila McNamee

MUB, Room 237
Elections, Imbalances, and Desperation in Asia
Moderator: Brian Noonan

Tyler Easley
Political Science
The Chinese Water Crisis
Adviser: Lawrence Reardon

Michelle Galvin
Political Science and Justice Studies
Gender Imbalance in China
Adviser: Lawrence Reardon

Matthew Gibbons
Humanities
Desperate Housewives: A Brief Look at Modern Japanese Sexuality
Adviser: Lawrence Reardon

Ethnic Studies: Writing Race Matters, in Black and White

These sessions are sponsored in part by the minors in Africana and African American Studies, American Studies, and Race, Culture and Power. Housed in the UNH Center for the Humanities, these interdisciplinary academic programs promote understanding of American and African, Diasporic, and African American culture and history as well as the connections between and among race, culture, and power on the national and global level. Partnering with offices and initiatives campus-wide, the programs support the University’s commitment to fostering inclusive excellence.

Moderator: Courtney Marshall

Anthony Bosco
English
Casting Call: The Words and Roles that Define Black Womanhood
Adviser: Caitlin Vaughan

Amanda Bronson
Occupational Therapy
Revisiting This Bridge: Why Race Matters in Collaborative Writing
Adviser: Caitlin Vaughan
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<th>Name</th>
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**MUB, Strafford Room**

**Honors Program: US-Sino Relations (II)**

**Moderator: Monica Chiu**

- **Robyn Keriazes**
  - English/Journalism
  - Nominal Neutrality: U.S. Reasons for Supporting China Prior to World War II
  - Adviser: Lawrence Reardon

- **Hannah Paroline**
  - Chemistry
  - The Iraq Conflict and China’s Military Modernization
  - Adviser: Lawrence Reardon

- **Michael Pope**
  - International Affairs and Political Science
  - The Cross-Strait Status Quo: Taiwan’s Independence and the U.S.
  - Adviser: Lawrence Reardon

- **Patrick Quinn**
  - Music Performance
  - Western Classical Music in China
  - Adviser: Lawrence Reardon

- **Taylor Reidy**
  - Undeclared
  - Establishing Positive Sino-U.S. Relations During the Nixon Years
  - Adviser: Lawrence Reardon

**MUB, Room 332**

**International Affairs—Bridges to Nowhere: State Projects and Investments in Comparative Perspective**

**Moderator: Robert Mohr**

- **Courtney Arrigo**
  - International Affairs and Spanish
  - Spanish Universities: A Worthwhile Investment
  - Adviser: Benjamin Cole

- **Levi Byers**
  - International Affairs and Civil Engineering
  - Drilling for Oil in the Amazon
  - Adviser: Stacy VanDeveer

- **Christine Kratz**
  - International Affairs and Tourism Planning and Development
  - Olympic Size Dreams and Nightmares: An Analysis of the Impacts of Hosting the Olympic Games
  - Adviser: Benjamin Cole

- **Patrick Logue**
  - International Affairs and Spanish
  - Building Governments: Why States Manipulate Architecture
  - Adviser: Benjamin Cole

- **Nicole Marino**
  - International Affairs and French
  - The System of Education in France
  - Adviser: Stacy VanDeveer

**MUB, Room 330**

**International Affairs—Democracy and Dissent in the Middle East and Africa**

**Moderator: Jeannie Sowers**

- **Aisha Burns**
  - International Affairs and Communication
  - Kidnapping, Bombs, and Underwear: Yemen in Mainstream Media
  - Adviser: Benjamin Cole

- **Caroline Cenerizio**
  - International Affairs and Communication
  - Arabs, Israel, and the European Union
  - Adviser: Lawrence Reardon

- **John Dudley**
  - International Affairs and History
  - Internet Usage and Mass Protest: A Case Study of Egypt
  - Adviser: Benjamin Cole

- **Elizabeth Marcotte**
  - International Affairs and Political Science
  - Power and Politics in Africa: What Senegal Tells Us About Emerging Democracies in the 21st Century
  - Adviser: Benjamin Cole

- **Aaron Mohammed**
  - Communication
  - The History of Psychological Oppression: The Media, Geopolitics, and Myths Behind the Palestinian Expulsion: 1880–2010
  - Adviser: William Woodward

- **Madeline Sadowski**
  - Political Science
  - The Education of Women and Its Impact on Employment in Jordan, Iran, and Pakistan
  - Adviser: Jeannie Sowers
MUB, Room 338

International Affairs—
Gender and Identity Dynamics: Beyond the Birds and the Bees
Moderator: Jeff Sherman

Zachary Delcambre
International Affairs and Psychology and Spanish
'The Chilean Boys' Club: A Study of the Lack of Practical Application of Women's Rights
Adviser: Lawrence Reardon

Jessica LeBlanc
International Affairs and Sociology
Franco, Family Law, and the Feminine Identity: Progressing from Four Decades of Gendered Prescription and Restriction in Spain
Advisers: Benjamin Cole, Lawrence Reardon

Catherine Levesque
International Affairs and General Biology
Who Let Her Out of the Kitchen? The Sexist Side of HIV/AIDS
Adviser: Benjamin Cole

Oana Tutuianu
International Affairs and Linguistics and Chemistry
Chivalry or Chauvinism and its Reemergence in Spain
Adviser: Benjamin Cole

Abbey White
International Affairs and Spanish
Traditional Views Transcend Time: Machismo’s Presence in Contemporary Spain
Adviser: Lawrence Reardon

MUB, Room 336

International Affairs—
Promoting Development in the Third World
Moderator: Georgeann Murphy

Heather Dean
International Affairs and Sociology and Justice Studies
China’s Housing Bubble: To Pop or Not To Pop?
Adviser: Lawrence Reardon

Heather Lake
International Affairs and Spanish
Indigenous Poverty in Southern Mexico
Adviser: Lawrence Reardon

Joshua Richards
International Affairs and Anthropology
Get Rich, Have Less Kids, Plant More Trees: Rural-Urban Disconnect in China
Adviser: Lawrence Reardon

Sasa Tang
International Affairs and Political Science
Understanding State and Non-State Interactions: A Case Study of Tanzania
Adviser: Benjamin Cole

Sara Tatnall
International Affairs and English Literature
The Politics of Underdevelopment: Gabon Case Study
Adviser: Stacy VanDeveer

MUB, Room 334

International Affairs—
Public Policy Problems in Comparative Perspective
Moderator: Ray Cook

Laura Angers
International Affairs and French
Legality of the Roma Gypsy Expulsions from France
Adviser: Stacy VanDeveer

Theodore Brackett
International Affairs and Civil Engineering
The Sustainable French and Us
Adviser: Benjamin Cole

Sarah Cattin
International Affairs and Political Science
France & Rwanda: A Supportive to a Severed Relationship
Adviser: Benjamin Cole

Sarah Feehan
International Affairs and English
The Obscurity of Japanese Politics and How It Led to the Passage of Bill 156
Adviser: Stacy VanDeveer

Katherine Pavone
International Affairs and History
The Mafia: A Continued Plague Upon the Modern Italian State
Adviser: Stacy VanDeveer

William Altenburg
Philosophy and Biochemistry
The Nature of Free Will: Its Origin in the Biothermodynamics of Living Systems
Adviser: Willem De Vries

Abigail Boduch
Biochemistry
ORC6 Association with ATR
Adviser: Kevin Culligan

Julie Cafarella (graduate student)
Cathleen Turner (UNH McNair Scholar)
Hydrology
The Relationship Between Turbulence Intensity (T.I.) and Local Sediment Deposition in Sites with Different Biomass Density in a Salt Water Marsh
Advisers: Linda Kalnejais, Anne Lightbody

Laura Angers
International Affairs and French
Legality of the Roma Gypsy Expulsions from France
Adviser: Stacy VanDeveer
**Parents Association Undergraduate Research Symposium**

**Poster Presentations**

**Session B**

Friday, April 29
10:50 a.m.–Noon
Memorial Union Building
Granite State Room

- **Kevin Anderson**
  Psychology
  *Personality Moderates the Legal Socialization Model of Rule-violating Behavior*
  Adviser: Ellen Cohn

- **Margarite Bechis**
  Psychology
  *Speaking on Eggshells: Perceived Partner Security as a Predictor of Deceptive Communication in Romantic Relationships*
  Adviser: Edward Lemay

- **Lyssa Wilson**
  Sociology
  *Duplicity: Refugees Experience with Racial Identity*
  Adviser: Benjamin Brown

**MUB, Room 302**

- **Risk and the Human Experience**
  Moderator: Michelle Grenier

- **Robin Baum**
  Kineiology
  *The Effects of Being Raised by a Teen Mother*
  Adviser: Brent Bell

- **Ryan Fyfe**
  Kineiology
  *What Form(s) of Risk Might Be Inflicted Upon an Individual If They Were to Not Dream?*
  Adviser: Brent Bell

- **Cassandra Godinez**
  Communication Sciences and Disorders
  *American Sign Language versus Cued Speech*
  Adviser: Nicole Dobson

**MUB, Room 321**

- **Multidisciplinary Session 5: Social Science, Language, and Community**
  Moderator: Thomas Safford

- **David Brefini**
  Spanish
  *Understanding Femicide in the Globalized Context of Ciudad JuÁrez*
  Adviser: Lori Hopkins

- **Jacob Goodwin**
  History
  *Faded Memories: Confronting the Hungarian Holocaust through Cemetery Restoration*
  Adviser: Jeffry Diefendorf

- **Katie-Ann Lawrence**
  Sociology and Women’s Studies
  *Female Sexuality: A Qualitative Explanation of Development and Behavior*
  Adviser: Jean Elson

- **Alexandru Panait**
  Sociology and History
  *Video Game Habits of UNH Students at Philbrook*
  Adviser: Lawrence Hamilton

- **Vanessa Richards**
  International Affairs and Spanish
  *Subjunctive in Adverbial Clauses of Probability and Possibility in Spanish? Guess Again.*
  Adviser: John Chaston

- **Ronnie Harris**
  Kineiology
  *What are the Risks Associated with Texting for College Students?*
  Adviser: Brent Bell

- **Kailey McKenna**
  Kineiology
  *Are Gelatinases Present in the Plasma of the Spiny Dogfish Shark, Squalus acantbias?*
  Adviser: Paul Tsang
Christine Coyne (graduate student)
Angela Neal (graduate student)
Margaret Wile
Psychology
Self-Protective Memory of Interpersonal Events
Adviser: Edward Lemay

Nicole D’Alessio
Environmental and Resource Economics
The New Pirates of the Caribbean: Tourism in Barbados
Adviser: Douglas Morris

Andraya Ehrlich
General Biology
Measurement of Ribonuclease Sa Charge Variants with Membrane-confined Electrophoresis
Adviser: Thomas Laue

Mary Foley
Occupational Therapy
Comparison of Social Interaction of Deaf Children and Their Hearing Peers
Adviser: Lou Ann Griswold

Joshua Gerry
General Biology

Allison Nahin
Biochemistry

TaylorAnn Sarro
Hallie Webster
Molecular, Cellular and Developmental Biology
Activation of Estrogen Receptors in MCF7 Breast Cancer Cells By Tyrosine Phosphorylation
Adviser: Andrew Laudano

MaryGrace Kelleher
English
Cosmetics and Beauty Remedies of the 17th and 18th Centuries
Adviser: Nicola Imbrascio

Matthew Libman
Psychology
Intermittent Swim Stress Exposure Results in Sex Differences in Animal Models of Depression
Advisers: Robert Drugan, Timothy Warner

Jessica Loper
Fine Arts and Psychology and Family Studies
Dating Violence in Adolescence
Adviser: Erin Sharp

Amy Ma (UNH McNair Scholar)
Occupational Therapy
Analysis of Intervention on Stressed Pregnant Women’s Social Networks
Adviser: Barbara White

Rajtilak Majumdar (graduate student)
Matthew Power (graduate student)
Lin Shao (graduate student)

Michael Sellarole
General Biology

Rajtilak Majumdar (graduate student)

Ashley Matthews
Nutritional Sciences
Miraculous Tomatoes: Optimizing the Production of a Taste Bud Modifying Protein
Adviser: Subhash Minocha

Kevin O’Leary
Psychology and Justice Studies
Earning Honesty Credentials: Partners’ Negativity Reduces Authenticity Doubts for Low Self-Esteem Individuals
Adviser: Edward Lemay

Sarah Ransom
Psychology and Justice Studies
Effects of Victim and Perpetrator Reputation on Attitudes Towards Relational Aggression: Who is the Bully?
Adviser: Ellen Cohn

Michael Vidal (UNH McNair Scholar)
International Affairs and Psychology
The Directive Functions of Autobiographical Memories: Selecting a Major
Advisers: Kie Kuwabara, David Pillemer

Parents Association
Undergraduate Research Symposium
Oral Presentations
Session C
Friday, April 29
1:40–2:50 p.m.
Memorial Union Building

MUB, Room 237

Case Studies in Persuasion and Public Problems
Moderator and Adviser: Lawrence Prelli
Oluwatobiloba Afolayan
International Affairs and Communication
Jordyn Krall
Kirstin Lang
Communication
Damned If You Do and Damned If You Don’t: The Rhetoric of Infrastructure Maintenance in Newmarket

Alexander Cooper
Brittany Duffy
Katherine Gunts
Travis Harsin
Communication
Competing Dramas About Student Alcohol Use at UNH: The Case of Alcohol Amnesty

Michael Crupi
Nathaniel Goodrich
Ryan Murphy
Danielle Olean
Communication
Rhetorical Management of Public Perceptions of Public Problems: The Downtown Portsmouth Parking Issue
MUB, Theatre I

Dramatic Innovations: Students Present Drama and Research Drawn from English Literary Classics

Moderator and Adviser: Cord Whitaker

Luke Bella-Spooner
Bronwyn Field
Allison Lane
Sara Smith
Claire McCahan
Amanda Pelchat
Nick Reid
Alexandra Sargent
Jillian Stackhouse
John Bender
Michael Hatton
Elizabeth Liguori
Thomas Selinka
Emily Sullivan
Dillon Welch
Vincent Spadafora
Andrew Brady
Andrew Doyle
Hannah Perreault
Annie Eliza Stevens
Robert Fontaine
Siobhan Smith

Alicia Conn
Kathryn Losik
Andrew Dionne
Alyssa Lofaro
Margaret Lubanko
Erin Simpson
Kyle VanEtten
Alicia Conn
Kathryn Losik
Andrew Dionne
Alyssa Lofaro
Margaret Lubanko
Erin Simpson
Kyle VanEtten

MUB, Room 332

International Cooperation on the Environment

Moderator: Matthew DiLorenzo

Kevin Farrell
Environmental Conservation Studies
The IPCC and Climate Change
Adviser: Alynna Lyon

Claire Stodola
Environmental Conservation Studies
Nile Basin Initiative Influenced the Riparian Sates’ Management
Adviser: Alynna Lyon

Sara Tatnall
International Affairs and English Literature
The World Bank and the Chad-Cameroon Pipeline
Adviser: Alynna Lyon

Andrea Urbano
Environmental Conservation Studies
The Effectiveness of the Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal
Adviser: Alynna Lyon

MUB, Room 203

Ethnic Studies: Difference and the World Around Us

These sessions are sponsored in part by the minors in Africana and African American Studies, American Studies, and Race, Culture and Power. Housed in the UNH Center for the Humanities, these interdisciplinary academic programs promote understanding of American and African, Diasporic, and African American culture and history as well as the connections between and among race, culture, and power on the national and global level. Partnering with offices and initiatives campus-wide, the programs support the University’s commitment to fostering inclusive excellence.

Moderator: Sandhya Shetty

Bie Aweh
Women’s Studies and Political Science
The Fight Against the War on Women
Adviser: Carina Self

Daniel Healy
English Teaching
Hell on Earth: Ultimate Evil as a Catalyst for 19th-Century Black Women’s Radical Decisions
Adviser: Reginald Wilburn

MUB, Room 334

International Security and Humanitarian Cooperation

Moderator: Brian Noonan

Ashley Benoit
Political Science
Sex Trafficking: Prevention, Awareness and Reform in Asia
Adviser: Lawrence Reardon

Andrea Turmel
Political Science and Psychology
UN Military Capacity and NATO as a Political and Military Alliance
Adviser: Alynna Lyon
Zahkary Wedemeyer  
Political Science  
The Impact of the Shanghai Cooperation Organization on Stability in Central Asia  
Adviser: Alynna Lyon

MUB, Room 330
Issues in the 2010 Congressional Elections
Moderator: Dante Scala
Evign Dodge  
Political Science  
Yes We Can: Leading the Next Generation  
Adviser: Susan Siggelakis

Kaitlyn Dowling  
Political Science  
Legends of the Untersberg Mountain  
Adviser: Burt Feintuch

Patrick Marvin  
Political Science  
Expansion of the American Financial Crisis  
Adviser: Lionel Ingram

Brooks Payette  
Political Science  
Preparing for the Perfect Storm  
Adviser: Dante Scala

David Turner  
Political Science  
Florida’s U.S. Senate Race  
Adviser: Dante Scala

MUB, Room 331
Multidisciplinary Session 6: Issues in Education and Development
Moderator: Molly Doyle
David Jacobsen  
Political Science and Women’s Studies  
Manhunt: The Public Body and the Struggle for Queerness in Rurality: Reconsidering Counterpublics and the Pornographic Narrative  
Adviser: Courtney Marshall

MUB, Room 338
Multidisciplinary Session 7: Explorations in Engineering and BioScience
Moderator: TBD
Sinor Ali (UNH McNair Scholar)  
Civil Engineering  
Clean Drinking Water for Small System Through Intermittent Slow Sand Filtration (i.e., Biosand Filters)  
Adviser: Michael Collins

Richard Jimenez (UNH McNair Scholar)  
Justice Studies and Spanish  
The Relationship Between the Production-Location of Methamphetamine and the Establishment of the Drug in New Markets  
Advisers: John Kirkpatrick, Kevin O’Shea

Emily Lantz  
Katherine Lantz  
Medical Laboratory Science  
Managing a Genetic Disease by Enzyme Replacement Therapy: Plants to the Rescue  
Adviser: Subhash Minocha

Monica Plante (UNH McNair Scholar)  
Civil Engineering  
Creating an Apparatus to Test Microbial Degradation at Cold Temperatures (-20 to 5 Degrees Celsius)  
Adviser: Nancy Kinner

Rebecca Wilson  
Environmental Engineering
Zlatan Zuka (UNH McNair Scholar)  
Chemical Engineering  
A Comparative Study of Nanofiltration and Hexane Evaporation for the Recovery of Microalgae Lipids  
Adviser: Ihab Farag

MUB, Room 302
Multidisciplinary Session 8: Studies in Art History, Music and Philosophy
Moderator: Rebecca Karo
Ashley Brizard  
Anthropology  
Legends of the Untersberg Mountain  
Adviser: Burt Feintuch

Mariel Fluhr  
Music and Earth Sciences  
Subtitling Peppino: An Abusive Translation of I Cento Passi  
Adviser: Amy Boylan

Jennifer King  
Art History  
Menzel’s Circle  
Adviser: Rebecca Karo

Sean Matthews  
Philosophy  
Spirituality and Faith in OE: A Call for Intentional Focus on the Spiritual Life of the Individual  
Adviser: Brent Bell

Alison McCann  
History  
Michelangelo’s Last Judgment  
Adviser: Patricia Emison
### UNH Sustainability Internship Program

**Moderators:** Sara Cleaves and Jason Whitney

- **Emma Groves**
  - Geography
  - *New Hampshire Businesses for Social Responsibility: Creating a Sustainable Community Through Public Outreach*
  - Adviser: Jason Whitney

- **Corey Johnson**
  - Business Administration
  - *The Driving Forces Behind Sustainability in American Higher Education*
  - Advisers: Sara Cleaves, Ross Gittell

- **Thomas Zakarian**
  - Environmental Engineering
  - *Sustainability at UNH: An Internship with the UNH Sustainability Academy*
  - Adviser: Sara Cleaves

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### College of Health and Human Services Grimes Award Competition

**Friday, April 29**  
**12:30–4 p.m.**  
**Pettee 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. Information on participants will be available at this event.**

- **Anna Dupuis**  
  - Health Management and Policy
  - *Knowledge and Behavior Around UV Exposure in College-age Men and Women*
  - Adviser: Robert McGrath

- **Bethany Murphy**  
  - Kinesiology/Exercise Science
  - *Acute Effects of Blood Flow-restricted Exercise on Muscular Function and Central Activation*
  - Adviser: Summer Cook

- **Sarah DiStefano**  
  - Health Management and Policy
  - *Characterization of Adult Blood Lead Levels in the NH Adult Blood Level Epidemiology and Surveillance Program*
  - Adviser: Rosemary Caron

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### The Naked Arts—Creativity Exposed

**Act III**

**Friday, April 29**  
**12:15–1 p.m.**  
**Memorial Union Building Strafford Room**

This event exposes the inner creative process of artists working in various disciplines. In Act III, students perform and discuss a collaborative piece made as a result of interdisciplinary creativity within the artistic disciplines: Art, Music, and/or Theatre/Dance.

- **Meghan Blakeman**
  - Theatre

- **David Jacobsen**
  - Political Science and Women's Studies

- **Claire McCahan**
  - Music

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**Benjamin Tibbetts**  
*Music Theory*  
*Border Crossing*

Adviser: William Kempster

**Amy Ma (UNH McNair Scholar)**  
*Occupational Therapy*  
*Analysis of Intervention on Stressed Pregnant Woman's Social Networks*

Adviser: Barbara White

**Heidi Shumila**  
*Kinesiology/Exercise Science*  
*Influence of Obesity on Gait and Metabolic Cost of Walking in Older Adults*

Adviser: Dain LaRoche

**Amanda King**  
*Family Studies*  
*Being Different: How Attitudes Toward Diversity Impact Bullying in Elementary Schools*

Adviser: John Nimmo

**Carolyn Gilooly**  
*Occupational Therapy*  
*Assessment of the Level of Function and Healthcare Utilization of Individuals with Strokes in Belize*

Adviser: Kerryellen Vroman

**Cathryn Reynolds**  
*Kinesiology/Athletic Training*  
*Prehospital Removal of Football Helmets Using Two Techniques*

Adviser: Eric Swartz

**Lauren Campbell**  
*Occupational Therapy*  
*Analyzing the Effect of Teacher-Directed Structure on Social Interaction of Children Using the Evaluation of Social Interaction*

Adviser: Lou Ann Griswold

**Mary Foley**  
*Occupational Therapy*  
*Comparison of Social Interaction of Deaf Children and their Hearing Peers*

Adviser: Lou Ann Griswold
Psychology Department
George M. Haslerud
Undergraduate Research Conference

Friday, April 29
1:30–5 p.m.
Murkland Hall, Room 115

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.

Kevin Anderson
Psychology
Personality Moderates the Legal Socialization Model of Rule-violating Behavior
Adviser: Ellen Cohn

Jennifer Bakan
Psychology
The Impact of Pediatric Hematopoietic Stem Cell Transplant on the Family: Six Month Follow-Up
Advisers: Carolyn Mebert, Susan Parsons MD, MRP (The Health Institute at Tufts Medical Center)

Elyssa Barrick
Kristen Onos (graduate student)
Psychology
The Role of Hippocampus in Spatial Working Memory in the Rat: Direction Versus Location-based Cues
Adviser: Robert Mair

Margarite Bechis
Psychology
Speaking on Eggshells: Perceived Partner Security as a Predictor of Deceptive Communication in Romantic Relationships
Adviser: Edward Lemay

Kara Caputo
Psychology
Traits and Memory
Adviser: Michelle Leichtman

Amanda Cripps
Psychology and English/Journalism
Role of Ventral Midline Intralaminar Thalamic Nuclei in Working Memory
Adviser: Robert Mair

Sara Dennison
Jacqueline Hembrook (graduate student)
Psychology
Effects of Event-related Microstimulation of Mammillary Bodies on Spatial Working Memory in the Rat
Adviser: Robert Mair

Sara Douglas
Psychology
The Antecedents and Consequences of Interpersonal Understanding
Advisers: Ellen Cohn, Vanessa Druskat

Amy Ma ’12
OCCUPATIONAL THERAPY

Amy Ma, a UNH McNair Scholar, has been studying ways that stressed pregnant women might be able to decrease their levels of stress and increase the quality of their social support networks. Ma is presenting her URC project on the results of a 2008 study done by her mentor, Barbara P. White, associate professor of occupational therapy at UNH.

Their analysis showed that occupational therapy decreased stress in an intervention group compared to a control group.

Andrea Duys
Psychology
The Role of Norepinephrine in Affective Shifting
Adviser: Jill McGaughy

Lydia Garnhart
Psychology
Understanding Age Differences in Helping Behavior
Adviser: Victoria Banyard

Mireille Hartley
Psychology
Personal Experience and Stigma Towards Persons with Mental Illness and Criminal Conviction
Adviser: Rebecca Warner

FRIDAY 4/29

Amy Ma ’12

OCCUPATIONAL THERAPY

Amy Ma, a UNH McNair Scholar, has been studying ways that stressed pregnant women might be able to decrease their levels of stress and increase the quality of their social support networks. Ma is presenting her URC project on the results of a 2008 study done by her mentor, Barbara P. White, associate professor of occupational therapy at UNH.

Their analysis showed that occupational therapy decreased stress in an intervention group compared to a control group.
Laura Jarvis  
Psychology  
*Family Matters: The Effect of Family Structure and Parenting Factors on Adolescent Rule-violating Behavior*  
Adviser: Ellen Cohn

| Teresa Ware | Psychology  
|-------------|------------------------------------------------|
| *Children's Use of Autobiographical Memories in Solving Social Problems*  
Adviser: David Pillemer |

Erin Kuta  
Psychology  
*The Influence of Working Memory Resolution on Attention Capture*  
Adviser: Andrew Leber

Matthew Libman  
Psychology  
*Intermittent Swim Stress Exposure Results in Sex Differences in Animal Models of Depression*  
Advisers: Robert Drugan, Timothy Warner

Christine Miller  
Psychology  
*The Effects of Lesions in the Orbitofrontal Cortex on Reversal Learning in a Attention Set-shifting Task*  
Adviser: Jill McGaughy

Kevin O’Leary  
Psychology and Justice Studies  
*Earning Honesty Credentials: Partners’ Negativity Reduces Authenticity Doubts for Low Self-Esteem Individuals*  
Adviser: Edward Lemay

Jacqueline Roberge  
Psychology  
*Perspectives of Self and Time: A Measure of Possible Selves, Risky Behavior and Time Perspectives*  
Adviser: Carolyn Mebert

Tanya Rouleau  
Psychology and Sociology  
*Children’s Use of Autobiographical Memories During Social Problem-solving*  
Adviser: David Pillemer

Sarah Tower-Richardi  
Psychology  
*Updating Internal Representations of the Visual World After Eye Movements*  
Adviser: Andrew Leber

Amanda Morris  
English Teaching  
*Film Analysis of Pride and Prejudice*  
Adviser: Janet Yount

Sara Tatnall  
International Affairs and English Literature  
*Structure, Relationships, and Politics: The Dew Breaker And Haitian-American Transnationalism*  
Adviser: Reginald Wilburn

<table>
<thead>
<tr>
<th>Honors English Undergraduate Research Conference</th>
</tr>
</thead>
</table>
| **Friday, April 29**  
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.

Chloe Abu-Jaber  
English  
*Perspective and Remembrance in the Vietnam War*  
Adviser: Monica Chiu

Melissa Duhamel  
English  
*Breaking from Brecht in Heiner Muller’s Hamletmachine*  
Adviser: Georgeann Murphy

Jason Gilmore  
English Teaching  
*Decision in the Dragon Age: The Narrative Elements of Choice-driven Video Games*  
Adviser: Thomas Newkirk

<table>
<thead>
<tr>
<th>Philosophy Department Undergraduate Research Conference</th>
</tr>
</thead>
</table>
| **Friday, April 29**  
4–8:30 p.m.  
**Murkland Hall, Room G17** |

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

Jason Adams  
Philosophy  
*An Appeal to the Enlightenment Project: Foucault’s Politicization of Kant’s “What’s Enlightenment?”*  
Adviser: Nickolas Smith

William Altenburg  
Philosophy and Biochemistry  
*The Nature of Free Will: Its Origin in the Biothermodynamics of Living Systems*  
Adviser: Willem De Vries

Christopher Bruneau  
Philosophy  
*Altruistic Desire in Robert Audi’s The Architecture of Reason*  
Adviser: Paul McNamara
Student Composers’ Concert

Friday, April 29
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.

William Baldoumas
Music
Concerto for Trombone and Orchestra
Adviser: Christopher Kies

Parker Callahan
Music
Four Vignettes for Woodwind Quintet: Scenes from Summer
Adviser: Michael Annicchiarico

Jeffrey Heim
Music Theory
Suite for Woodwind Quintet
Adviser: Andrew Boysen

Brett Gallo
Music Theory
Wachträume for Oboe and Percussion
Adviser: Stacia Sower

Zachary Onett
Music Theory
Puppy for Piano Solo
Adviser: Christopher Kies

David Orr
Music Theory and Performance
Reflection for Trumpet and Piano
Adviser: Andrew Boysen

Benjamin Tibbetts
Music Theory
Tack Piano Concertino
Adviser: Lori Dobbins

Seth Waters
Music Education
Trois Dualites
Adviser: Lori Dobbins

20th Annual COLSA Undergraduate Research Conference

Oral Presentations

Saturday, April 30
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. Projects range from field studies to developmental to molecular biology and genomics studies. A number of studies are collaborative efforts between work here at UNH and work carried out in foreign countries.

Jacqueline Amante
Theodore Harris (graduate student)
Environmental Science: Ecosystems
The Response of Cyanobacteria and Zooplankton to Experimental Addition of Nitrogen to Large Lake Enclosures
Adviser: Frank Wilhelm

Dana Daukss
Takayoshi Kosugi (graduate student)
Biochemistry
The Effects of Novel Lamprey RFamide Peptides in Petromyzon marinus (Sea lamprey) Neuroendocrine System
Adviser: Stacia Sower

William Baldoumas
Music
Concerto for Trombone and Orchestra
Adviser: Christopher Kies

Parker Callahan
Music
Four Vignettes for Woodwind Quintet: Scenes from Summer
Adviser: Michael Annicchiarico

Jeffrey Heim
Music Theory
Suite for Woodwind Quintet
Adviser: Andrew Boysen

Brett Gallo
Music Theory
Wachträume for Oboe and Percussion
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Music Theory
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Benjamin Tibbetts
Music Theory
Tack Piano Concertino
Adviser: Lori Dobbins

Seth Waters
Music Education
Trois Dualites
Adviser: Lori Dobbins

SATURDAY 4/30
Nicole Abate
Zoology
*Effects of Nest Presence on Aggression in the Male Betta splendens*
Adviser: Michelle Scott

Noel Alaka
Molecular, Cellular and Developmental Biology
*The Identification of New Photoregulators*  
Mutant Defective in Motility  
Adviser: Louis Tisa

Julianne Ast
Biochemistry
*Megan Thompson (graduate student)*  
Genetics  
*Identifying Mutant Protein Phosphatase 2A Lines in Arabidopsis thaliana*  
Adviser: Estelle Hrabak

Ryan Baldwin
Marine and Freshwater Biology
*Use of Autofluorescence and Hyperspectral Reflectance to Measure Chlorophyll a and Phycocyanin on Membrane Filters*  
Adviser: James Haney

Diane Beaudoin
Environmental Science: Ecosystems  
*Characteristics of an Asian Bittersweet (Celastrus orbiculatus) Invasion at West Foss Farm, Durham, New Hampshire*  
Adviser: Thomas Lee

Christopher Benton (graduate student)
Biochemistry

Arthur Mathieson
Molecular, Cellular and Developmental Biology  
*A Comparison of Tide Pool Populations of Codium fragile subsp. fragile in the Brave Boat Harbor Estuary, York-Kittery, ME*  
Adviser: Anita Klein

Sophia Burke
Environmental Science: Ecosystems  
*Are Gelatinases Present in the Plasma of the Spiny Dogfish Shark, Squalus acanthias?*  
Adviser: Paul Tsang

Walter Bubley
Animal Sciences: Bioscience and Technology
*Behavior of Invasive Green Crabs Carcinus maenas Exposed to Different Light Sources*  
Adviser: Larry Harris

20th Annual COLSA Undergraduate Research Conference

Poster Presentations

Saturday, April 30  
7:45 a.m.–2 p.m.  
Huddleston Ballroom and Holloway Commons
Jennifer Dezenzo  
Nutritional Sciences  
The Good Eats Cooking Series Research Study  
Adviser: Joanne Burke

Christopher DiCroce  
Molecular, Cellular and Developmental Biology  
A Characterization of Bovine Corpus Luteum Endothelial Cells through Immunohistochemistry and Light Microscopy to Advance the Study of the Mammalian Corpus Luteum  
Adviser: David Townsend

Crystal Ellis (graduate student)  
Molecular, Cellular and Developmental Biology  
The Effects of Disturbance on Burkholderia cenocepacia Biofilm Communities  
Adviser: Vaughn Cooper

Andrew Butler  
Zoology  
Hybridization Between Rare New England Cottontails and Common Eastern Cottontails: Genetic Results Using Microsatellite DNA and Implications for Conservation of a Declining Species  
Adviser: Adrienne Kovach

Karyn Cahill (UNH Research Scientist)  
Elizabeth Dwinell  
Molecular, Cellular and Developmental Biology  
Recombinant Expression of Phosphodiesterase (PDE) for Studying Differences Between the Photoreceptor (PDE6) and Smooth-muscle (PDE5) Enzyme Families  
Adviser: Rick Cote

Karyn Cahill (UNH Research Scientist)  
Christina Loporcaro  
Biochemistry  
The Molecular Basis of Differences in Light Responsiveness of Rods and Cones: Role of the PDE6 Inhibitory Subunit  
Advisers: Rick Cote, Xiujun Zhang

Dorothy Cataldo  
Microbiology  
Development of a Microtiter Plate Assay for High Throughput Screening of Interactions Among Oral Microorganisms  
Advisers: Patricia Diaz, Frank Rodgers

Virginia Chamberlain  
Katherine Frazier  
Animal Sciences: Pre-veterinary Medicine  
Markers of Health in Pasture-fed vs. Total Mixed Ration-fed Dairy Cows  
Adviser: Thomas Foxall

Gina Chaput  
Genetics  
Cloning the Chlorella accD Gene for Use in Increasing Lipid Production  
Adviser: Estelle Hrabak

Jeremy Dobbins-Bucklad  
Biochemistry  
The Effects of Stress Conditions on Protein Translation: Observing Effect Through Analysis of 48S Complex Formation and Steady State Levels  
Adviser: Clyde Denis

Rachel Donner  
Microbiology  
Occurrence of Histidine Kinase Mutation and Population Dynamics of Adaptation  
Advisers: Brian Schuster, Cheryl Whistler

Kristin Duclos  
Marine and Freshwater Biology  
Ontogeny of Na+/K+ ATPase in Early Larval Rainbow Smelt, Osmerus mordax  
Adviser: David Berlinsky

Kristin Gallagher  
Zoology  
A Comparison of Phosphotyrosine Levels and the Tumor Suppressor Gene p53 as Indicators of Cancer in Tumors and Normal Tissues of Sharks  
Adviser: Andrew Laudano

Anna Gerber-Williams  
Marine and Freshwater Biology  
Recovery Assessment of Benthic Invertebrate Epifauna in the Western Gulf of Maine Fishing Closure  
Adviser: Raymond Grizzle
Daniel Mulhern ’12
BIOCHEMISTRY

The title of Daniel Mulhern’s URC project involves some heady stuff: “Is the Mitochondrial Heat Shock Protein, Mortalin, Involved in Cytoplasmic Sequestration of p53 in Human Neuroblastoma and Colon Carcinoma Cell Lines?” Thankfully, Mulhern and other URC participants embrace the opportunity to share even their most complex work in plain English—and in ways that show us how their work is important in our everyday lives.
Jeffrey Jett
Biochemistry
Expression of Biological Clock Proteins in Melibe leonina
Adviser: Winsor Watson

Suzanne Johnson
Zoology
Tidal Rhythms of Locomotion Expressed by Freely Moving Horseshoe Crabs, Limulus polyphemus, in the Great Bay Estuary
Adviser: Winsor Watson

Thomas Johnson
Biochemistry
A Messenger Molecule Governs Interdependency in an Evolved Pseudomonas aeruginosa Biofilm Community
Adviser: Vaughn Cooper

Kiara Jordan
Biochemistry
The Difference of Effect of Anions and Cations on the Charge of Ovalbumin
Adviser: Thomas Laue

Daniel Kilham
Forestry: Forest Science
Adviser: Theodore Howard

Mallory Korman
Molecular, Cellular and Developmental Biology
Breast Proteomics
Adviser: Meenakshi Singh

Anthony Kostek
Environmental Conservation Studies
Is Local Policy Helping Our Wetlands?
Adviser: Mimi Becker

Suzanne LaChance
Zoology
Environmental Enrichment of Visually-impaired and Fully-sighted Harbor Seals (Phoca vitulina)
Adviser: Michelle Scott

Emily Lantz
Katherine Lantz
Medical Laboratory Science

Rajtilak Majumdar (graduate student)
Plant Biology
Managing a Genetic Disease By Enzyme Replacement Therapy: Plants to the Rescue
Adviser: Subhash Minocha

Katherine Lawrence
Biochemistry
Construction and Analysis of Nanodiscs with Incorporation of E. coli FtsZ Protein
Adviser: Thomas Laue

Philip Lewis (UNH McNair Scholar)
Zoology
Developing a Survey Method to Measure Winter Tick (Dermacentor albipictus) Abundance on Harvested Moose (Alces alces)
Adviser: Peter Pekins

Jocelyn Lubniewski
Nutritional Sciences
Health-related Messaging in the University of New Hampshire Community
Adviser: Gale Carey

Lance Mailloux
Environmental Conservation Studies
Anthropogenic Impacts on Wetlands in Durham, New Hampshire
Advisers: David Burdick, Thomas Lee

Rajtilak Majumdar (graduate student)
Plant Biology
Matthew Power (graduate student, guest from University of Washington/Seattle)
Biochemistry

Lin Shao (graduate student)
Genetics

Michael Sellarole
General Biology
Sticky Tomatoes: Production of Barnacle Glue in Tomato Plants
Adviser: Subhash Minocha

Rajtilak Majumdar (graduate student)
Plant Biology
Ashley Matthews
Nutritional Sciences
Miraculous Tomatoes: Optimizing the Production of a Taste Bud Modifying Protein
Adviser: Subhash Minocha

Laura Mayo
Nutritional Sciences
The Effect of Perceived Social Support on Exercise Habits Among College Students
Adviser: Jesse Morrell

Allison McQueen
General Biology and French
Does Hexabromocyclododecane Decrease Gluconeogenesis in Rat Liver?
Adviser: Gale Carey

Ashley Miranda
Animal Sciences: Pre-veterinary Medicine
In Vitro Gas Profile of High and Low Sugar Alfalfa Supplemented With Molasses or Corn Meal
Adviser: Andre Brito

Ashley Miranda
Animal Sciences: Pre-veterinary Medicine
Effect of Kelp on Growth of Dairy Calves
Adviser: Andre Brito

Reed Mitchell
Zoology
The Location and Physiology of Putative Circadian Clock Neurons in Melibe leonina
Adviser: Winsor Watson

Amanda Murby (graduate student)
Marine and Freshwater Biology
Accumulation of Cyanobacterial Toxins in Agricultural Crops
Adviser: James Haney

Allison Nahin
Biochemistry
Transcriptional Activation of Estrogen Receptors in T47D Breast Cancer Cells by Estrogens, Xenoestrogens, and Environmental Estrogens
Adviser: Andrew Laudano

Katrina Papanastassion
Zoology
Is Fine-Scale Genetic Structure Exhibited in Southern Maine Saltmarsh Sparrow Populations?
Adviser: Adrienne Kovach
Hannah Rankin  
Biochemistry  
Research Study Characterizing Phagocytosis Ability of 3D4/31 Porcine Alveolar Macrophages In Vitro  
Adviser: Anthony Tagliaferro

Timothy Reilly  
Biochemistry  
Is the Ubiquitin Specific Peptidase, HAUSP, Present in the Genome of Cancerous and Non-cancerous Clam Hemocytes?  
Adviser: Charles Walker

Alexander Robles  
Biochemistry  
Is Antigrade Movement of p53 to the Mitochondria Dependent Upon the Chaperone Protein Hsp90?  
Adviser: Charles Walker

Benjamin Sherr  
General Biology

Megan Thompson (graduate student)  
Genetics  
Interaction Between Gravitropism and Skewing in Arabidopsis Roots  
Adviser: Estelle Hrabak

Amanda Shumway  
Nutritional Sciences  
Metabolic Syndrome Risk in College-age Individuals compared to College-age EMTs  
Adviser: Mary Katherine Lockwood

Justin Stilwell  
Animal Sciences: Pre-veterinary Medicine

Christine Wilkinson  
Environmental Conservation Studies  
Quantifying the Cost of Inexperience: Reduced Reproductive Success in Young Herring Gulls (Larus argentatus) on Appledore Island, Maine  
Advisers: David Bonter, Julie Ellis

Justin Stilwell  
Animal Sciences: Pre-veterinary Medicine  
A Survey of Fish Species in the Prey Remains of Great Black-backed Gulls, Larus marinus, in the Gulf of Maine  
Advisers: David Bonter, Julie Ellis

Breanna Travers  
General Biology  
Effects of Microcystin on the Indian Ponds’ Mussel Population  
Adviser: James Haney

Emily Troisi-Rauschenberger  
Environmental Conservation Studies  
Understanding the Environmental and Social Factors in Managing Desertification: A Case Study in Niger, Africa  
Adviser: Mimi Becker

Brittany Welch  
Animal Sciences: Pre-veterinary Medicine  
Comparison of Effectiveness of Daily Deworming with Pyrantel Tartrate to Rotational Deworming with Pyrantel Pamoate  
Adviser: David Townson

Jessica Whitmore  
Environmental Conservation Studies  
Community-based Wetland Restoration of Salt Marshes and Mangroves: The Roles of Education and Stewardship  
Adviser: David Burdick

William Wyman  
Microbiology  
Public Health Literacy in the Twenty-first Century: Policy and Implications for Contemporary Undergraduate Public Health Education  
Adviser: Rosemary Caron

Breanna Travers  
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Chemistry Department Poster Exhibition

Friday, May 6  
3–4:30 p.m.  
Parsons Hall, Iddles Wing

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

Christopher Devine  
Chemistry  
Chromatographic Analysis of Phenolic Compounds in Maple Sap  
Adviser: Sterling Tomellini

Carleen Dingman  
Chemistry  
Solvent Effects on Aerosol Phase Chemicals: Are Present UV/Vis Techniques Misleading?  
Adviser: Margaret Greenslade

Michael Gould  
Chemistry  
Well-defined Tetraaniline Grafted Polyethylene; Synthesis, Properties and Effect of Branch Placement  
Adviser: Roy Planalp

Scott Howard  
Chemistry  
Cellulosic Ethanol  
Adviser: Roy Planalp

Taylor Langkau  
Chemistry  
An Application of Nanocomposite Materials and Molecular Photocatalysis in Solids  
Adviser: Gonghu Li

Heather Lewis  
Chemistry  
Adiabatic Bomb Calorimetry: Enthalpy of Combustion  
Adviser: Roy Planalp
Matthew Marcinkowski
Chemistry
_A Binuclear Dye for Dye Sensitized Solar Cells_
Adviser: Gonghu Li

Alyssa Milano
Chemistry
_Analysis of Naturally Occurring Impurities and Economically Motivated Additives in Heparin Using High Performance Liquid Chromatography_
Adviser: Sterling Tomellini

Peter Moran
Chemistry
_Progress Towards the Synthesis of (±)-Heliotridane Through a Zinc-mediated Homologation_
Adviser: Charles Zercher

David Moyer
Chemistry
_Computer Modeling of Copper Complex Structures_
Adviser: Roy Planalp

Alex Papantones
Chemistry
_Molecular Recognition Using Polymers of N-isopropylacrylamide_
Adviser: W. Rudolf Seitz

Jordan Reddel
Chemistry
_Design, Synthesis, and Characterization of Novel Bifunctional Ligands for Use in a Copper (II) Sensor_
Adviser: Roy Planalp

James Roane
Chemistry
_Water Soluble Acenes for Thin-film Electronics_
Adviser: Glen Miller

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**Whittemore School of Business and Economics**
**Paul J. Holloway Innovation-to-Market Prize Competition**

**Championship Round**

**Wednesday, May 11**

1–6 p.m.

**Holloway Commons**

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. Information on participation will be available at this event.

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**Inquiry journal of undergraduate research**

The URC is but one means for students to share their findings. Some of the works you see here today might become the basis of a University honors or master’s thesis; others may find their way to national conferences and professional meetings where UNH undergraduates present their work to future colleagues and peers; still others may appear in _Inquiry_, UNH’s online journal of undergraduate research. Published annually, _Inquiry_ features the research articles, briefs, and commentaries of undergraduates.

_Read more at_

www.unh.edu/inquiryjournal

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**Links to research opportunities**

Centers and Institutes at UNH
www.unh.edu/research/

Center for International Education
www.unh.edu/cie

Hamel Center for Undergraduate Research
www.unh.edu/undergrad-research

McNair Graduate Opportunity Program
www.unh.edu/mcnair

Engagement
www.unh.edu/engagement

Research and Discover Summer Internship Program in Earth Sciences
www.eos.unh.edu/ResearchAndDiscover/

University Honors Program
www.unh.edu/honors-program
Acknowledgements

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 2011 happen.

Special thanks to:

Parents Association
Office of the Vice President for Student and Academic Services
Office of the Senior Vice Provost for Engagement and Academic Outreach
All Faculty Mentors

Center for International Education
College of Engineering and Physical Sciences (CEPS)
College of Engineering and Physical Sciences Alumni Association
College of Life Sciences and Agriculture
Editorial & Creative Services
Environmental Research Group
Hamel Center for Undergraduate Research
Institute for the Study of Earth, Oceans, and Space
Memorial Union Building Administrative Staff
New Hampshire Space Grant Consortium
Phi Beta Kappa
The University Honors Program
The University Writing Programs
UNH Advancement
UNH Dining Services
UNH Media Relations
UNH Photographic Services
UNH Printing Services
UNH Transportation Services
UNH Video Services
URC Program Assistants Katie McCabe ’12, Rebecca Howard ’14
Web Solutions
Whitmore School of Business & Economics Marketing and Advertising Club (Danielle Flynn ’12 and Julie Walsh ’12, co-presidents, and their team of hard-working student volunteers)

Thanks to the 2011 URC Planning Committee (and all the many individuals who served on numerous subcommittees)

Martha Barker, Co-Chair, URC Communications subcommittee; Senior Graphic Designer, Editorial and Creative Services
Brent Bell, Assistant Professor, Department of Kinesiology/Outdoor Education
Jennifer Borda, Associate Professor, Department of Communication
Janet Cass, Co-Chair, Parents Association Undergraduate Research Symposium; Director, UNH Parents Association
Kathy Cataneo, Director of Research Development, Office of the Senior Vice Provost for Research

Lyne Cooper, Co-Chair, Parents Association Undergraduate Research Symposium; Program Coordinator, Office of the Senior Vice Provost for Engagement and Academic Outreach

Vaughn Cooper, Chair, COLSA URC; Associate Professor, Department of Molecular, Cellular & Biomedical
Molly Doyle, Administrative Director, Hamel Center for Undergraduate Research
Kate Gillen, Consulting Director, Connors Writing Center

Jim Graham, Co-Chair, URC Communications subcommittee; Writer, Editorial and Creative Services
Erica Johnson, Director, InterOperability Lab
William Kempster, Chair, Naked Arts Subcommittee; Associate Professor, Department of Music
Pamela Libby, Chair, Outreach subcommittee; Director, Donor Relations, UNH Advancement
Peter Masucci, Chair, URC Planning Committee; Co-Chair, WSBE URC; Adjunct Professor, Department of Marketing
Robert McGann, Director, UNH Admissions
Jeffrey Melton, Co-chair, ISE subcommittee; Research Assistant Professor, Department of Civil Engineering
Michael Merenda, Co-Chair, WSBE URC; Professor, Department of Management
Cari Moorhead, Chair, Graduate Research Conference (GRC); Associate Dean, UNH Graduate School
Maggie Morrison, Associate Director, Alumni Programs, Alumni Association
Thomas Payne, Assistant Professor, Department of English
Dan Reagan, Chair, UNHM URC; Associate Dean, UNH Manchester
Lawrence Reardon, Associate Professor, Department of Political Science
Amanda Royce, Graduate Assistant/Coordinator, Graduate Research Conference (GRC)
Emily Robbins Bradley, Associate Director, Connors Writing Center
Mark Rubinstein, Vice President, Student and Academic Services
Ellen Ruggles, Senior Administrative Assistant, UNH Manchester
Tom Safford, Assistant Professor, Department of Sociology
Lisa Townsend, Chair, Evaluation subcommittee; Assistant Director, Cooperative Extension
Paul Tsang, Faculty Director, Hamel Center for Undergraduate Research; Professor, Department of Molecular, Cellular & Biomedical
Ruth Varner, Co-Chair, ISE Symposium; Research Associate Professor, Complex Systems Research Center, Institute for the Study of Earth, Oceans and Space
Cord Whitaker, Assistant Professor, Department of English
Debra Williams, Co-Chair, ISE Symposium; Administrative Manager, CEPS Office of the Dean
Julie Williams, Senior Vice Provost for Engagement and Academic Outreach

2011 URC Event Coordinators

Michael Annicchiarico, Student Composers’ Concert
Tim Barretto and Kate Hanson, Thompson School of Applied Sciences, Community Leadership Program
Michelle Leichtman, Psychology Department George M. Haselrud URC
Lyne Cooper and Peter Masucci, Parents Association Undergraduate Research Symposium (PAURS)
Marianne Fortescue, UNH Office of Community Service Partnerships
William Kempster, The Naked Arts – Creativity Exposed!
Vaughn Cooper, 20th Annual COLSA URC
Peter Masucci, Michael Merenda, and Cynthia Nizzari-McClain, WSBE URC and WSBE Paul J. Holloway Prize University-wide Innovation-to-Market Poster Session and Championship Round Competition
Cari Moorhead and Amanda Royce, Graduate Research Conference (GRC)
Dan Reagan, UNH Manchester Undergraduate Research Conferences
Cindi Rohwer, Chemistry Department Poster Exhibition
Janet Polasky, History Department URC
Catherine Mazur, Senior B.A., B.F.A. and M.F.A. Exhibition Preview Reception
Delia Konzett, Honors English Undergraduate Research Conference
Jeffrey Melton, Ruth Varner, and Debra Williams, Interdisciplinary Science and Engineering (ISE) Symposium
Neil Vroman, College of Health and Human Services (CHHS) Grimes Award Competition
Eliza Wood, Philosophy Department URC
Student Index

Abate, Nicole 44
Abbott, Christopher 16
Abu-Jaber, Chloe 27, 42
Adams, Amanda 30
Adams, George 24
Adams, Jason 42
Adams, Jean 11, 12
Adams, Lauren 12
Adams, Melinda 9
Adelhardt, Brittany 33
Adewumi, Victoria 29
Afolayan, Oluwatobiloba 28, 37
Agnelli, Caitlin 10
Aldrich, Robert 7
Aly, Alex 39
Aly, Hajrush 16
Alix, Jonathan 16
Allen, Benjamin 7
Allen, Nathaniel 16
Altenburg, William 35, 42
Alvarez, Erin 6
Alves, Danielle 10
Amalii, Scott 14
Amante, Jacqueline 16, 43
Amato, Miles 16
Amico, Brandon 10
Anderson, Cory 16
Anderson, Heather 23
Anderson, Jeffrey 16
Anderson, Kevin 30, 36, 41
Anderson, Thomas 15
Andrews, David 16
Andrews, Matthew 16
Angers, Laura 30, 35
Argento, Karla 29
Arriel, Alyssa 15
Arrig, David 11
Arrigo, Courtney 34
Arsenault, Aaron 12
Ast, Julianne 44
Audley, Justin 16
Austin, Brett 25
Austen, Katherine 6, 15
Avendano, Michelle 10, 11
Avery, Brian 22
Aweh, Bee 27, 38
Oluwatobiloba 28, 37
Bakan, Jennifer 30, 41
Baldoumas, William 43
Baldwin, Christopher 6
Baldwin, Ryan 44
Ballentine, Parris 16
Barbour, Kier 14
Barnum, Timothy 16
Barrick, Alyssa 30, 41
Barry, Kelly 16, 17
Barr, Lauren 27
Bartlett, Kurtis 16
Bartoldus, James 22, 25
Bathalon, Benjamin 12
Bauer, Jack 16
Baum, Robin 36
Beam, Samantha 17
Beaman, Danielle 11
Beaudoin, Diane 44
Beaudoin, Elizabeth 6
Becis, Margarite 36, 41
Bedard, Matthew 16
Belkin, Victoria 15
Bella-Spencer, Luke 32
Benander, Makenzie 17
Bender, John 38
Benoit, Ashley 38
Benton, Christopher 44
Berg, Chelsea 7
Berg, Nathaniel 10, 11
Bergeron, Brandon 25
Betro, Kristen 10
Bicknell, Shayna 15, 6
Birt, Alyssa 17, 36, 44
Bisson, Joseph 44
Blackwell, James 17
Blair, Jonathan 36
Blakeman, Megan 40
Blanchette, Melissa 32
Bland, Nicholas 10, 11, 14
Boduch, Abigail 35
Boghos, Nicholas 12
Bosigian, Andrew 10
Boisvert, Kelly 44
Bolton, Daniel 11
Bonner, Joseph 17
Bonnier, Nathaniel 17
Bonnwell, Maryn 8
Borges, Lauren 11, 12
Bosco, Anthony 33
Boselli, Megan 33
Bottomley, Daniel 14
Bouchard, Robert 17
Bourgoine, Amanda 14, 32
Bourque, Benjamin 11
Bousquet, Catherine 31
Bowen, Henry 28
Bowling, Patrick 12
Brackett, Theodore 35
Brady, Andrew 38
Bragg, Katherine 28, 33
Bratina, Julian 17, 28
Bratton, Allison 27
Brault, Daniel 14
Breen, Sarah 8
Brefini, David 36
Brewer, Caroline 32
Brizzard, Ashley 39
Brody, Amanda 11
Broman, Daniel 17
Bronson, Amanda 33
Broom, Grant 12
Brosnaham, Kelli 6
Brouwer, Nathan 17
Brown, Amanda 32
Brown, Blake 16
Brown, Jonathan 17
Brown, Nicholas 10, 11
Bruehl, Kirsten 44
Bruno, Kenge 12
Bruno, Christopher 42
Bruno, Gregory 36
Bulley, Walter 36, 44
Buchanan, Christopher 28
Bui, Lam 44
Burdeitt, John 17
Burke, Sophia 44
Burks, Tyler 45
Burns, Alisha 34
Butler, Andrew 45
Butterfield, Rachael 31
Buzinski, Lauren 17
Byers, Levi 17, 34
Caban, William 22
Cafarella, Julie 17, 35
Cahill, Karyn 45
Calderon, Ramon 17
Callaghan, Megan 11, 14
Callahan, Parker 43
Cametti, Hannah 10
Campbell, Lauren 31, 40
Campbell, Tyler 7
Canavan, Chelsea 33
Canaway, Christopher 13
Cannon, Bradford 17
Caputo, Cheryl 17
Caputo, Kara 41
Carabello, Jonathan 16
Carot, Victoria 24
Carrier, Christopher 16
Carrier, Joel 17
Cartier, Valerie 30
Casey, Andrew 23
Casey, Rachel 10, 11, 12
Cash, Patrick 10, 11
Cassella, Laura 22
Castaldi, Nicholas 7
Cataldo, Dorothy 45
Catano, Lauren 32
Cattin, Sarah 35
Cavusoglu, Gulsun 32
Celi, Christopher 7, 12
Cenerizio, Caroline 34
Cerri, Joshua 17
Cezairli, Yunus 18
Chamberlain, Virginia 45
Champlin, Michaela 14
Chan, Michael 9
Chandler, Christopher 9
Chaput, Gina 18, 45
Charmanski, Kyle 18
Charos, Justin 18
Chasin, Jamie 10, 11
Childs, Eric 14
Chin, Russell 13
Chiron, Lindsey 18
Chisholm, Katelyn 28
Cicilio, Phyllicia 18
Cilley, Jonathan 10, 11
Cipolla, Anthony 7, 14, 18
Clairmont, Paige 33
Clay, Patrick 11
Clemence, Andrew 18
Cobb, Nonie 36
Cogswell, Christopher 43, 18
Cohen, Iiana 10
Cohn, Gideon 28
Cobath, Eric 9
Cole, Gregory 16
Cole, John 18
Coleman, Lindsey 10
Comeau, Hayley 11
Comeau, Lindsey 33
Condon, Amanda 28
Conn, Alicia 38
Connolly, Kacie 36
Connors, Ryan 7
Consiglio, Michael 18
<table>
<thead>
<tr>
<th>Name</th>
<th>Page</th>
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</thead>
<tbody>
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<td>31, 41</td>
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<td>Ray, Thomas</td>
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<td>Reddel, Jordan</td>
<td>21, 49</td>
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<td>Reekie, Christopher</td>
<td>22</td>
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<tr>
<td>Rees, Cori</td>
<td>36</td>
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<td>Reeves, Alanna</td>
<td>10, 11</td>
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<tr>
<td>Reeves, Andrew</td>
<td>16</td>
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<td>Reid, Katrina</td>
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<td>Reid, Nick</td>
<td>38</td>
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<td>Reidy, Taylor</td>
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<td>Reilly, Casey</td>
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<td>Reilly, Timothy</td>
<td>48</td>
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<td>Relihan, Catherine</td>
<td>7</td>
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<tr>
<td>Reynolds, Cathryn</td>
<td>29, 40</td>
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<td>Reynolds, Richele</td>
<td>20</td>
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<tr>
<td>Richards, Joshua</td>
<td>35</td>
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<td>Richards, Mark</td>
<td>17</td>
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<td>Richards, Matthew</td>
<td>39</td>
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<td>Richards, Vanessa</td>
<td>29, 36</td>
</tr>
<tr>
<td>Richardson, Rebecca</td>
<td>11</td>
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<tr>
<td>Rickert, Austin</td>
<td>21</td>
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<td>Rigs, Nathan</td>
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<td>Rivera, Nicholas</td>
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<td>Rivers, Caitlin</td>
<td>31</td>
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<td>Rivers, Kylie</td>
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<td>Roach, Jason</td>
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<td>Roach, Laura</td>
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<td>Roane, James</td>
<td>49</td>
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<td>Roberge, Jacqueline</td>
<td>42</td>
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<td>Robichaud, Adam</td>
<td>13</td>
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<tr>
<td>Robinson, Bridget</td>
<td>10, 11</td>
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<td>Robinson, David</td>
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<td>Robinson, Matthew</td>
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<td>Robles, Alexander</td>
<td>48</td>
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<tr>
<td>Rolfe, John</td>
<td>7, 13</td>
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<tr>
<td>Rollins, Daniel</td>
<td>25</td>
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<td>Root, Paige</td>
<td>30</td>
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<td>Ross, Brittni</td>
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<td>Ross-Raymond, Petra</td>
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<td>Rotondo, Margaret</td>
<td>14</td>
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<td>Rouleau, Tanya</td>
<td>42</td>
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<td>Rousseau, Marissa</td>
<td>18</td>
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<tr>
<td>Roy, Brian</td>
<td>16</td>
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<td>Roy, Joshua</td>
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<td>Runnals, David</td>
<td>7, 9, 12</td>
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<td>Russell, Andrew</td>
<td>16</td>
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<td>Rychert, Kevin</td>
<td>21</td>
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<td>Rzepka, Steven</td>
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<td>Sadowski, Madeline</td>
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<td>Saia, Anthony</td>
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<td>Sandberg, Nicholas</td>
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<td>28</td>
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<td>40</td>
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<td>Sargent, Alexandra</td>
<td>38</td>
</tr>
<tr>
<td>Sarro, TaylorAnn</td>
<td>31, 37, 46</td>
</tr>
<tr>
<td>Satir, Vicente</td>
<td>11, 13</td>
</tr>
<tr>
<td>Saunders, Andrew</td>
<td>16</td>
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<td>8</td>
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<td>7, 13</td>
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<td>14</td>
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<td>Selinka, Thomas</td>
<td>38</td>
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<td>37, 47</td>
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<td>33</td>
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<td>10, 11</td>
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<td>38</td>
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<td>23, 33</td>
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<td>38</td>
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<td>8, 25</td>
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<td>32</td>
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“The most rewarding aspect of the URC was being able to communicate to a wide range of people about the work that I have done. It was rewarding to receive praise from professors, friends, industry professionals, and others who support undergraduate research.”

“I enjoyed reflecting on my internship experience and being able to answer the audience’s questions. I learned the most from what they asked me.”

“The URC boosted my confidence in my research capabilities, public speaking, and sharing ideas with others.”