

April 15–30, 2011

“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.”



“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.”



“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.”



URC 2011

A welcome to participants and attendees



MARK W. HUDDLESTON



JOHN D. ABER

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,

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

MARK W. HUDDLESTON, PRESIDENT

A handwritten signature in black ink, appearing to read "John D. Aber".

JOHN D. ABER, PROVOST

Inquiry, Discovery, and Engagement:

The UNH Undergraduate Research Conference



JULIE E. WILLIAMS

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.



PETER MASUCCI

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

One of our goals at UNH is to provide a unique opportunity for undergraduate students to inquire, learn, discover, and engage. For many, the URC is their first opportunity to showcase their work to a much broader audience. They share the results of their scholarship with fellow students, faculty, staff, family members, federal and state agency personnel, business and industry representatives, and members of our local community. This faculty-student partnership and the varied audiences to whom they present are vital to enriching and bringing new learning to life, which often leads to new areas of inquiry.

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

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

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

A handwritten signature in cursive script that reads "Peter F. Masucci".

PETER F. MASUCCI, CHAIR, URC PLANNING COMMITTEE

URC 2011 Contents

Calendar of Events	4	Friday, April 29 Events	
Map	5	UNH Manchester URC—Engineering Technology Senior Project Presentations	25
Friday, April 15 Events		Parents Association Breakfast and Welcome with UNH Provost John Aber and Parents Association Council President	27
2010 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition (I) Preview Reception	6	Parents Association Undergraduate Research Symposium	
Monday & Tuesday, April 25–26 Events		Oral Presentations, Session A	27
Graduate Research Conference (GRC)	6	Poster Presentations, Session A	30
Wednesday, April 27 Events		Oral Presentations, Session B	33
Whittemore School of Business and Economics Undergraduate Research Conference	6	Poster Presentations, Session B	36
Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, <i>Charles and Miriam Nelson Poster Competition</i>	12	Oral Presentations, Session C	37
Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, <i>Bud Albin Challenge Round</i>	14	The Naked Arts—Creativity Exposed! (Act III)	40
Seacoast Reads Exhibition	14	College of Health and Human Services Grimes Award Competition	40
Thompson School Community Leadership Program	15	Psychology Department George M. Haslerud URC	41
UNH Office of Community Service Student Partnerships	15	Honors English Undergraduate Research Conference	42
The Naked Arts—Creativity Exposed! (Act I)	15	Philosophy Department Undergraduate Research Conference	42
Interdisciplinary Science and Engineering Symposium (ISE)	16	Student Composers' Concert	43
UNH Manchester URC—Poster Presentations	22	Saturday, April 30 Events	
Thursday, April 28 Events		20th Annual COLSA Undergraduate Research Conference	43
UNH Manchester URC—Cinema Arts Day	23	Events in May	
The Naked Arts—Creativity Exposed! (Act II)	24	Chemistry Department Poster Exhibition	48
History Department Undergraduate Presentations	24	Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, <i>Championship Round</i>	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

All events are free and open to the public.

(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

Murkland 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

Murkland 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

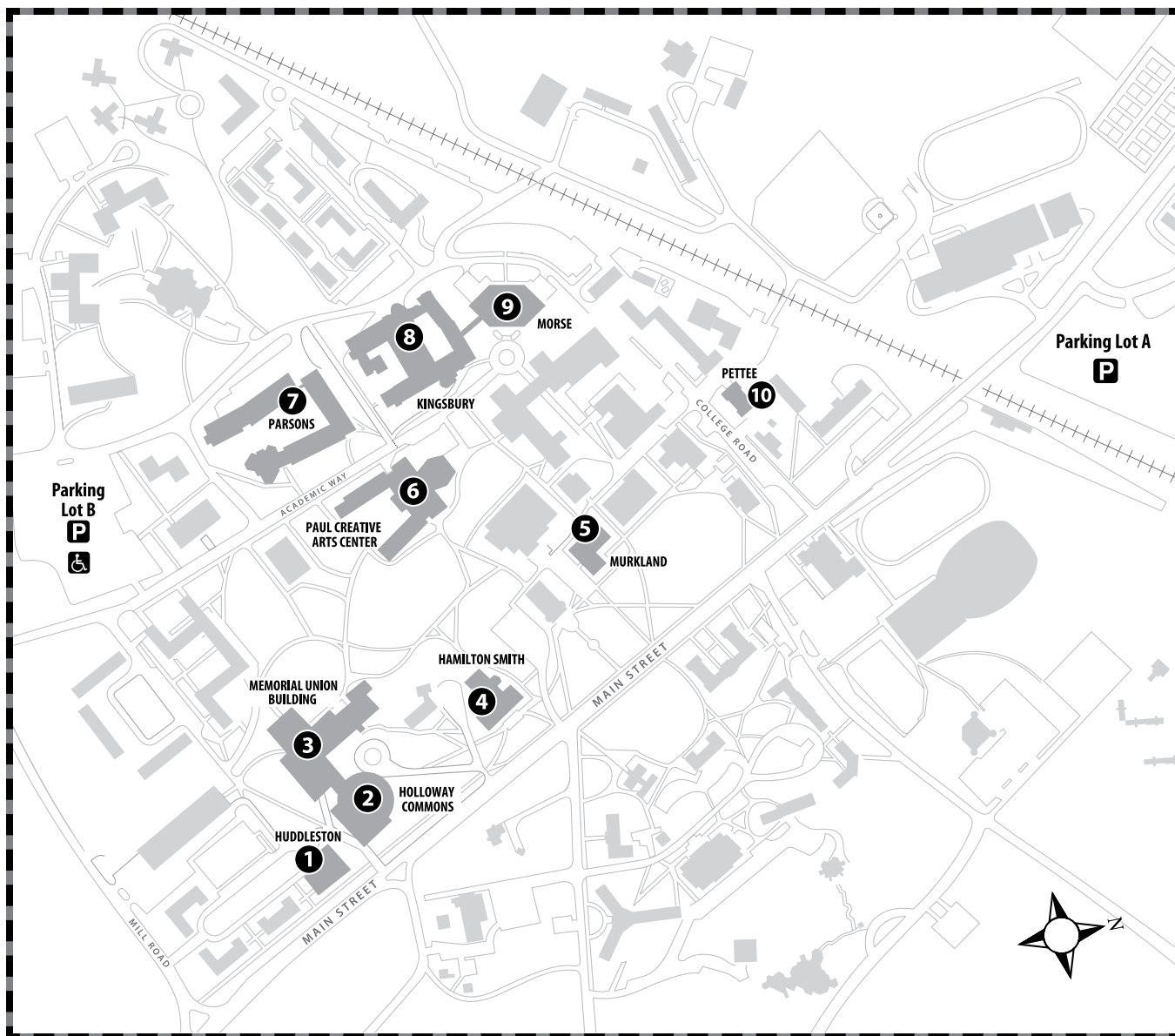
Wednesday, May 11

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**)

Campus Map



BUILDING KEY

- | | |
|----------------------------------|------------------------------|
| 1. Huddleston Hall | 6. Paul Creative Arts Center |
| 2. Holloway Commons | 7. Parsons Hall |
| 3. Memorial Union Building (MUB) | 8. Kingsbury Hall |
| 4. Hamilton Smith Hall | 9. Morse Hall |
| 5. Murkland Hall | 10. Pettee Hall |

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

Brittini Ross

Studio Arts, photography

Adviser: Julee Holcombe

Peter Striffolino

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
Cyclicalities 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 Schlentrich

Management

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

Sarah Sceery
 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 Seraichick

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

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 Schriefer

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

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
An Economic Analysis of Princeton University Press v. Michigan Document Services, Inc.

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 Kurowyckj

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

Laura Roach

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

David Runnals

Economics
An Economic Analysis of Mitchell v. Castellaw, Supreme Court of Texas

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

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 Daloisio
 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
 Caitlan Elliott
 Georgina Gapp
 Henri Hendricks
 Ashley Kimball
 Kelly LaFrance
 Alyssa 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 Giangliulio
 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 Simone
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 Kwasnik
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
Marketing the New Organizational Structure of the Office of the Senior Vice Provost for Research at UNH
Adviser: Peter Masucci

Amanda Brody
Nicholas Brown
Caryn Cormier
Rachael Dille
Katherine Glennon
Sara Hartley
Ashley Kimball
Brian Norman
Kristen Schwaegerle
Justin Silva
Benjamin Simmers
Marketing

John DeWispelaere
Marketing and Entrepreneurial
Venture Creation

John Hernon
Management
Development and Implementation of a Marketing Campaign for the NH Innovation Commercialization Center
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

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.

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 Hoyt
Stephen Miller
 Business Administration
LifeBelt
 Adviser: William Hassey

Christopher Canaway (*graduate student*)*Share the Beer*

Adviser: Juan Florin

Russell ChinBusiness Administration and Finance
and Management**Andrew Hart**

Management

Adam RobichaudAccounting and Management
Campus Carpool

Adviser: Audrey Ashton-Savage

Barrett Cox**Benjamin Groleau**

Business Administration

Benjamin Lawlor

Finance

*RaiseNow*Advisers: Stephen Ciccone,
Khokile 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 DemersBusiness 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 Sceery**

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 MacdonaldEntrepreneurial 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 VervilleEntrepreneurial Venture Creation and
Art Studio**Caitlin Verville**

Marketing

University Note Takers LLC.

Adviser: Audrey Ashton-Savage

Jeffrey LevesqueMathematics 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 RolfeEntrepreneurial 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

Susanne Schaller (*graduate student*)
 Zoology
The Coastal Resiliency Project
 Adviser: David Burdick

Branden Sweetser
Nicholas White
 Economics
Helios
 Adviser: Stephen Ciccone

Bud Albin Challenge Round

Wednesday, April 27
1–4 p.m.
MUB Room 330/332,
Theatre I, Theatre II

Scott Amalfi
Mathew Smith
Michael Sullivan
 Management
The Water Hub
 Adviser: Audrey Ashton-Savage

Kier Barbour
Heather Muller
 Business Administration
Bryce Kelly
 Management
Jetport Energy LLC
 Adviser: Audrey Ashton-Savage

Nicholas Blanchette
Megan Callaghan
Gretchen Eastman
 Marketing
Matthew Robinson (*graduate student*)
Regaalo—Gift Giving Made Easy
 Adviser: Peter Masucci

Daniel Bottomley
 Business Administration
Monadnock Automated Design
 Adviser: Anthony Pescosolido

Daniel Brault (*graduate student*)
Brandon Milton (*graduate student*)
Matthew Zanderigo
 Marketing
Rackk.com
 Adviser: Kholekile Gwebu

Eric Childs (*graduate student*)
Margaret Rotondo (*graduate student*)
SugarSnap Gourmet
 Adviser: Robert Gough

Anthony Cipolla
 Electrical Engineering
John DeWispelaere
 Marketing and Entrepreneurial Venture
 Creation
Matthew Gaboury
 Finance and Management
E-PROXY Inc.
 Advisers: William Hassey, Peter Masucci

Ryan Curtis (*graduate student*)
Shawn Marsh (*graduate student*)
CareerAdventure
 Adviser: Robert Gough

Catherine De Vasto (*graduate student*)
BoomerSherpa
 Adviser: Juan Florin

Mark Eadie
 Business Administration and Financial
 and Managerial Economics
Katelyn Gale
 Business Administration and Marketing
Nicholas Kornutik
 Business Administration
Atmos Inc.
 Adviser: Warren Daniel

Timothy Harmon
Nicholas Tamblyn
 Civil Engineering
Scott Olsen
 Environmental Engineering
Jessica Streitmater
 Business Administration
University Response Management
Application
 Adviser: Nancy Kinner

Lukas Kolm (*graduate student*)
Ewan Seabrook (*graduate student*)
John Trayner (*graduate student*)
Lo-Kid
 Adviser: Robert Gough
Susanne Schaller (*graduate student*)
 Zoology
Red Cat Kitchen
 Adviser: Michael Merenda

Kurt Strandson
Daniel Turcott (*graduate student*)
NewsApp
 Adviser: Juan Florin

Brian Veroneau (*graduate student*)
BrewHub
 Adviser: Robert Gough

Seacoast Reads Exhibition

Wednesday, April 27
10:30 a.m.–Noon
Memorial Union Building
Rooms 338/340

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 338/340

The Community Leadership Program is an innovative associate degree and diploma program that prepares students of all ages to work effectively within community organizations and to be active, influential citizens. This exhibition displays students' 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 Caraballo
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
Yuriy Kharin
 Electrical Engineering
Vacuum Tube Audio Amplifier
 Adviser: Michael Carter

Justin Audley
Blake Brown
Christopher Dean
Andrew Russell
Andrew Saunders
 Electrical Engineering
Wireless Hammer
 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 Thibau
 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: Jennifer Jacobs

Alyssa Birt

Animal Sciences: Bioscience and Technology

Genetic Expression of Fas in the Bovine Corpus Luteum

Adviser: David Townson

James Blackwell

Geology

Amanda Hyde (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 Hand-held 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 Charmanski

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

Phylicia 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

Phylicia 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

ElectroCAT Electric Bicycle

Adviser: Barry Fussell

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**Eric 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)

Carleen Dingman

Chemistry

Solvent Effects on Aerosol Phase Chemicals: Are Present UV/Vis Techniques Misleading?

Adviser: Margaret Greenslade

Evign Dodge

Political Science

Marlayna Lombard

English/Journalism

Christopher MacRae

History

Ella Nilsen

History and English/Journalism

Reducing Energy Consumption and Greenhouse Gases at UNH

Adviser: Cameron Wake

Kaitlyn Dugan

Chemistry

Barbara Li (Post-doctoral Research)

Synthesis of Copper(II) Complexes of Cross-Bridged Tetraamines Designed for Radiopharmaceutical Applications

Advisers: Gary Weisman, Edward Wong

Kathryn Ferreira

Mathematics

Employment Differences Among College Graduates Who Know a Second Language

Adviser: Aziz Saglam

Jonathan Fincke

Mechanical Engineering

Modeling of Two Phase Flow in a Hele-Shaw Cell

Adviser: Greg Chini

Evan Flower

Mechanical Engineering

Development of a Hydroforming Machine for Sheet Metal

Adviser: Ioannis Korkolis

James Folan III

Chemical Engineering

Highly-Expanded Porous Latex Particles

Adviser: John Tsavalas

Daniel Foley

Physics

A Novel Method for Safely and Efficiently Producing Platinum Iridium STM Tips

Adviser: Karsten Pohl

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.

**Joshua French**

Physics

Providing an Absolute Pointing Reference for the Interstellar Boundary Explorer (IBEX)

Adviser: Eberhard Moebius

Kevin Genestreti

Physics

Pressure Balance between Space Plasmas and the Earth's Magnetosphere

Advisers: Lynn Kistler, Christoforos Mouikis

Michelle Gitschier**Dana Martin****Hannah Pierce****Olivia vondenBenken**

Civil Engineering

Green Features of the New Child Study and Development Center at the University of New Hampshire

Adviser: Erin Bell

Adam Goudreau**Erin Kelley**

Civil Engineering

Structural Design for a New Child Study and Development Center

Adviser: Erin Bell

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 Streitmater

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 Ballestero

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 Capercaillie (Tetrao urogallus) 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 Kalutkiewicz

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 Miner

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 (\pm)-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
Are New England States Reducing Their Greenhouse Gas Emissions? Tracking Statewide Energy Use
 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
Steel Bridge Competition 2011
 Adviser: Raymond Cook

Steven Rzepka

Civil Engineering
An Investigation into an Alternative Calculation for the Shear Lag Factor used in Effective Net Area Calculations for the Design of Steel Tension Members
 Adviser: Raymond Cook

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

Cupole 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

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.

Brian Avery**James Bartoldus****Karen Ibey****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

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**Daniel Pepin****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

Laura Trinward

History
Manchester, New Hampshire: The Mill Girl and Religion
 Adviser: Robert Macieski

Matthew Wakim

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

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

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



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: Julie 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

Thibaut Delloue

History and Philosophy

Jacob Goodwin**Andrew Holmes****Kyle Libby****Evan Monty****Sarah Yozzo**

History

Ella Nilsen

History and English/Journalism

Panel 1—History, Change and Continuity

Adviser: Janet Polasky

Danielle Flynn

Business Administration and Media Practices

Ashley Heim

Zoology

Michael Houle

English Teaching

Robyn Keriazes

English/Journalism

Elizabeth Orłowicz

Marine and Freshwater Biology

Alexandru Panait

Sociology and History

Joseph Stanek

Finance

Panel 2—Propaganda and Film

Advisers: Marion Dorsey, Janet Polasky

Paul Goodman

History

Conditions In German WWII POW Camps

Adviser: Marion Dorsey

Robyn Keriazes

English/Journalism

Housewives at War

Advisers: Marion Dorsey, Janet Polasky

Kyle Libby

History

Smaller, Simpler, Smarter: A History of Human-Computer Interfaces

Adviser: Kurk Dorsey

Christopher Lowell

History

The Battle That Saved England

Adviser: Marion Dorsey

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



TO BE A SPONSOR OF URC



UNH Parents Association Undergraduate Research Symposium

Friday, April 29, 2011
9 a.m.–3 p.m.

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

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 Senior

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 Awel
Women's Studies and Political Science
Feminist Majority Foundation, Los Angeles, CA

Sara Espinal
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
The UNH Women's Commission, Durham, NH

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

Fileshea White
Women's Studies
Dover Permaculture Group, Dover, NH

Jayne Wilhelm
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

Après 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 336**International Affairs—
Development and Democracy in
Latin America**

Moderator: Mary Malone

Julian Bratina

International Affairs and Civil

Engineering

The Argentine Complex: When Will She Bounce Back?

Adviser: Lawrence Reardon

Katelyn Chisholm

International Affairs and Spanish

Crime, Poverty, and Safety in Costa Rica and Nicaragua

Adviser: Stacy VanDeveer

Samantha Corti

International Affairs and Political Science

Money, Crime and Corruption: What Does It Take to Undermine Democracy?

Adviser: Benjamin Cole

Charissa Eno

International Affairs and Sociology

Paco: Blowing up the Slums in Buenos Aires

Adviser: Benjamin Cole

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

Natalija Ulemek

International Affairs and Communication

Media's Contribution to Political Change in Post-Communist Russia

Adviser: Lawrence Reardon

MUB, Room 340**International Affairs—
Immigration and Discrimination
in the Mediterranean**

Moderator: Fernando Gonzales

Oluwatobiloba Afolayan

International Affairs and Communication

North Africans in Spain: Economic Success as a Sociopolitical Unreality

Adviser: Benjamin Cole

Joanna Frankie

International Affairs and Spanish

Immigration from Morocco to Spain

Adviser: Stacy VanDeveer

Kevin Kennedy

International Affairs and Political Science

Immigrants in Spain

Adviser: Stacy VanDeveer

Anna Miner

International Affairs and Spanish

Population Uprooting: Reasons for Increased Immigration to Spain

Adviser: Benjamin Cole

MUB, Room 332**International Affairs—Learning
to Hate: Immigration, Xenopho-
bia 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

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 Adewumi (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 Refu-
 gees in Costa Rica*
 Adviser: Stacy VanDeveer

Adam Harr

International Affairs and Linguistics
*Legitimate Language: French and Euro-
 pean 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 321

**Multidisciplinary Session 1:
 Exploring the Social World**

Moderator: Catherine Moran

Molly Driscoll

European Cultural Studies
*Constructing Civic Identity: Boston’s
 City Hall*
 Adviser: Jeffery Diefendorf

Kelly Martin

Communication
*Opportunities and Consequences:
 Globalization, Media, and the
 Dominican Republic*
 Adviser: Michael Albrecht

Bethany Schmidt

Sociology
*Impressions of the Prison Rape Elimina-
 tion Act: Wardens’ Attitudes Toward, and
 Implementations of, the PREA*
 Adviser: Karen Vangundy

MUB, Room 302

**Multidisciplinary Session 2:
 Human Health Issues**

Moderator: Brent Bell

Karla Armenti (Department of Health and
 Human Services, State of N.H.)

Sarah Distefano

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

MUB, Room 207**Multidisciplinary Session 3:
Issues in Psychology**

Moderator: William Stine

Eva-Molly Dunbar

Psychology

Effectiveness of Eating Concerns Mentoring Program

Adviser: Victoria Banyard

Andrew Kitt

Psychology

Temporal Limits of Perceived Rotation in the Venetian Blind Effect: Eye Dominance Through Luminance and Contrast Modulation

Adviser: William Stine

Patrick Noonan

Psychology

Venetian Blind Effect: Cancelling Dynamic Geometric Disparities Using Contrast and Luminance

Adviser: William Stine

Kyle Tarbell

English

Film and Psychopathology

Adviser: Delia Konzett

MUB, Rockingham Lounge**Rhetoric of the Photograph**Moderator and Adviser:
Michael Jackson**Amanda Adams**

Communication

*Kisses in War***Kendra Mack**

Communication

*Photo Frames as Prison Walls: The Rhetorical Value of Identification Photographs***Lindsey Poisson**

Communication

*The Evolution and Manipulation of War Photography***Kylie Rivers**

Jessica Skalinski

Communication

*Punctums Galore: An Audience Centered Notion of the Punctum***Brittany Trahan**

Communication

*The Genres of UFO Photography***MUB, Room 304****The Many Faces of French
Studies at UNH**Moderator and Adviser:
Barbara Cooper**Laura Angers**

International Affairs and French

*The Origins of the AOC Designation***Nicole Marino**

International Affairs and French

*Marie-Antoinette: 18th Century Fashionista***Benjamin Phinney**

French and Russian

*Dubuffet in Translation***Paige Root**

French and Spanish

*Translation: The Second Sex***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 Dezenzo

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 Fetzter,
 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

Karilyn 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 Heleen

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

Chelsea Tanous

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

Parents Association Undergraduate Research Symposium

Oral Presentations Session B

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

MUB, Rockingham Lounge

12:30–3 p.m.

Comm-entary: The Student Journal of Communication, 2011 Edition Event

Comm-entary is the University of New Hampshire's annual student journal of communication, founded in 1981. Students in Communication or other disciplines may participate. The journal is an excellent way for prospective majors to preview the type of projects that students work on in advanced courses.

Moderator and Adviser:
Melissa Deem

Brittany Adelhardt
Megan Boselli
Chelsey Canavan
Paige Clairmont
Lindsey Comeau
Sara Coppola
Tara Durbano
Brittany Hartnett
Jessica LaCroix
Kendra Mack
Katelyn Madden
Kelly Martin
Jake Nevrla
Stephanie Raddock
Christopher Spencer
Laura Yegge
Communication

Danielle Flynn
Business Administration and
Media Practices

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 Clergy Act*
Adviser: Mardi Kidwell

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

MUB, Room 340

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

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 203

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

Ericka Dupervil

Undeclared

Revisiting This Bridge: Why Race Matters in Collaborative Writing

Adviser: Courtney Marshall

Jamal Jones

Undeclared

Revisiting This Bridge: Why Race Matters in Collaborative Writing

Adviser: Courtney Marshall

Sara Smith

English

Racist Donkey, Sexy Fish: Gender, Race, and their Portrayal in American Film Animals

Adviser: Delia Konzett

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

Connor Strobel

Political Science and Philosophy

The Failed U.S. Response to Imperialism and Colonialism in China

Adviser: Lawrence Reardon

MUB, Room 332**International Affairs—
Bridges to Nowhere: State
Projects and Investments in
Comparative Perspective**

Moderator: Robert Mohr

Courtney ArrigoInternational Affairs and Spanish
Spanish Universities: A Worthwhile Investment

Adviser: Benjamin Cole

Levi ByersInternational Affairs and Civil
Engineering*Drilling for Oil in the Amazon*

Adviser: Stacy VanDeveer

Christine KratzInternational Affairs and Tourism Plan-
ning and Development*Olympic Size Dreams and Nightmares:
An Analysis of the Impacts of Hosting the
Olympic Games*

Adviser: Benjamin Cole

Patrick LogueInternational 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

Alisha BurnsInternational Affairs and Communication
*Kidnapping, Bombs, and Underwear:**Yemen in Mainstream Media*

Adviser: Benjamin Cole

Caroline CenerizioInternational 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 MarcotteInternational 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 DelcambreInternational 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 LeBlancInternational 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 Sex-
ist Side of HIV/AIDS*

Adviser: Benjamin Cole

Oana TutuianuInternational Affairs and Linguistics
and Chemistry*Chivalry or Chauvinism and its
Reemergence in Spain*

Adviser: Benjamin Cole

Abbey WhiteInternational 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 DeanInternational Affairs and Sociology and
Justice Studies*China's Housing Bubble: To Pop or Not
To Pop?*

Adviser: Lawrence Reardon

Heather LakeInternational Affairs and Spanish
Indigenous Poverty in Southern Mexico

Adviser: Lawrence Reardon

Joshua RichardsInternational Affairs and Anthropology
*Get Rich, Have Less Kids, Plant More
Trees: Rural-Urban Disconnect in China*

Adviser: Lawrence Reardon

Sasa TangInternational Affairs and Political Science
*Understanding State and Non-State Inter-
actions: A Case Study of Tanzania*

Adviser: Benjamin Cole

Sara TatnallInternational 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 AngersInternational Affairs and French
*Legality of the Roma Gypsy Expulsions
from France*

Adviser: Stacy VanDeveer

Theodore BrackettInternational Affairs and Civil
Engineering*The Sustainable French and Us*

Adviser: Benjamin Cole

Sarah CattinInternational Affairs and Political Science
*France & Rwanda: A Supportive to a
Severed Relationship*

Adviser: Benjamin Cole

Sarah FeehanInternational Affairs and English
*The Obscurity of Japanese Politics and How
It Led to the Passage of Bill 156*

Adviser: Stacy VanDeveer

Katherine PavoneInternational Affairs and History
*The Mafia: A Continued Plague Upon the
Modern Italian State*

Adviser: Stacy VanDeveer

MUB, Room 304**Multidisciplinary Session 4:
From Biochemistry to Sign
Language**

Moderator: Dovev Leung-Levine

William AltenburgPhilosophy and Biochemistry
*The Nature of Free Will: Its Origin in the
Biothermodynamics of Living Systems*

Adviser: Willem De Vries

Abigail BoduchBiochemistry
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

Kara Kelly-Martin

Communication Sciences and Disorders
American Sign Language versus Cued Speech
 Adviser: Nicole Dobson

Joseph Miller

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

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: Jeffery 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

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

Nonie Cobb
 Kacie Connal
 Undeclared
The Effects of Being Raised by a Teen Mother
 Adviser: Brent Bell

Ryan Fyfe

Molly Gaffey
 David Thompson
 Undeclared
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

James Golden

Lindsey Judge
 Benjamin Kelley
 Undeclared
Power of the Mind
 Adviser: Brent Bell

Ronnie Harris

Cori Rees
 Kinesiology

David Tanner

Marketing
Effects of Drinking and Drug Use on College Athletes versus Non-Athlete College Students
 Adviser: Brent Bell

Kailey McKenna

Kinesiology
What are the Risks Associated with Texting for College Students?
 Adviser: Brent Bell

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

Alyssa Birt

Animal Sciences: Bioscience and Technology
Genetic Expression of Fas in the Bovine Corpus Luteum
 Adviser: David Townson

Jonathan Blair**Gregory Bruno****Lauren Gardner****Aida Margolin****Molly Newbury**

Kinesiology
An Examination of Factors Involved in the Hiring of NCAA Assistant Coaches
 Adviser: Heather Barber

Walter Bubley

Animal Sciences: Bioscience and Technology

Eian Prohl

General Biology
*Are Gelatinases Present in the Plasma of the Spiny Dogfish Shark, *Squalus acanthias*?*
 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

Sticky Tomatoes: Production of Barnacle

Glue in Tomato Plants

Adviser: Subhash Minocha

Rajtilak Majumdar (graduate student)

Ashley Matthews

Nutritional Sciences

Miraculous Tomatoes: Optimizing the Pro-

duction 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 Autobiographi-

cal 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
English

Claire McCahan
Music

Amanda Pelchat
English Teaching

Nick Reid
English/Journalism
Alexandra Sargent
Political Science

Jillian Stackhouse
English and History
ENGL 694B: The Medieval Masqueraders

John Bender
Music and English

Michael Hatton
Elizabeth Liguori
Thomas Selinka
Emily Sullivan
Dillon Welch
English

Vincent Spadafora
English/Journalism
ENGL 756: Chaucer's Dronkelewes

Andrew Brady
Andrew Doyle
Hannah Perreault
Annie Eliza Stevens
English

Robert Fontaine
English/Journalism

Siobhan Smith
English Literature
ENGL 756: Le Jardin de la Poésie

Alicia Conn
Kathryn Losik
English Literature
Andrew Dionne
Alyssa Lofaro
English Teaching
Margaret Lubanko
Kinesiology and English
Erin Simpson
Earth Sciences
Kyle VanEtten
Classics and English
ENGL 694B: The Wild Things

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

Lauren Petraitis
English
Violence Against Women in the Partition of India
Adviser: Sandhya Shetty

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 States' 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 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

New Hampshire's First Congressional District

Adviser: Dante Scala

Kaitlyn Dowling

Political Science

Yes We Can: Leading the Next Generation

Adviser: Susan Siggelakis

Patrick Marvin

Political Science

Expansion of the American Financial Crisis

Adviser: Lionel Ingram

Brooks Payette

Political Science

Prepared for the Perfect Storm

Adviser: Dante Scala

David Turner

Political Science

Florida's U.S. Senate Race

Adviser: Dante Scala

MUB, Room 321**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

Amanda King

Family Studies

Being Different: How Attitudes and Values Toward Diversity Impact Bullying in Elementary Schools

Adviser: John Nimmo

Matthew Richards (UNH McNair Scholar)

Kinesiology

The Impact of the CSNH Coaching Education Program on Coaching Efficacy

Adviser: Karen Collins

Chelsea Tanous

Social Work

How Military Affiliation Effects Students' Experiences in College: A Comparative Study

Adviser: Robert Jolley

Natalie Thomas (UNH McNair Scholar)

Mathematics

The Influence of State Standards on Lesson Design

Adviser: Timothy Fukawa-Connelly

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

Rajtilak Majumdar (graduate student)*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

MUB, Room 336**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

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

Benjamin Tibbetts

Music Theory

Border Crossing

Adviser: William Kempster

Kelly Hathorne

Barry Santos

English

Sarah Miranda

Theatre

Night Word Music X

Adviser: Thomas Payne

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

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

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.



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

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

Laura Jarvis

Psychology

Family Matters: The Effect of Family Structure and Parenting Factors on Adolescent Rule-violating Behavior
Adviser: Ellen Cohn

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

Teresa Ware

Psychology

Children's Use of Autobiographical Memories in Solving Social Problems
Adviser: David Pillemer

Lesley White

Psychology

Depression and Neuroticism as Predictors of Consumption of Chocolate and Other Comfort Foods: Possible Self Medication
Adviser: Rebecca Warner

Honors English Undergraduate Research Conference

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

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

Philosophy Department Undergraduate Research Conference

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

Christopher Cogswell

Chemical Engineering and Philosophy
*Technological Determinism and the
 Bloodless Revolution*

Advisers: Willem De Vries,
 Nickolas Smith

Sean Matthews

Philosophy

*A Response to Marx's Critique on Religion:
 A Suggestion for a Better Diagnosis of the
 Core Problem*

Adviser: Nickolas Smith

Yourai Mol

Humanities

*W.V.O. Quine and the Two Dogmas of
 Empiricism*

Adviser: Willem De Vries

Colin Piekarski

Philosophy

The Commodification of Education

Adviser: Nickolas Smith

Tailer Ransom

Philosophy

*Relevance of Maxian Thought in Modern
 Ecology*

Adviser: Willem De Vries

Conor Stokes

Philosophy

*Forgiveness and Justice for the Repentant
 Offender*

Adviser: Timm Triplett

Ryan Sullivan

Philosophy

*The Divine Two-Step: How God May Allow
 Gratuitous Natural Evil*

Adviser: David Hiley

Joshua Thibeault

Philosophy

Justice and Disabilities

Adviser: Nickolas Smith

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 Theory

Four Vignettes for Woodwind Quintet:

Scenes from Summer

Adviser: Christopher Kies

Brett Gallo

Music Theory

Wachträume for Oboe and Percussion

Adviser: Lori Dobbins

Jeffrey Heim

Music Theory

Suite for Woodwind Quintet

Adviser: Michael Annicchiarico

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

Ciara Dimou

Kristen Gazda

General Biology

The Effects of Novel Lamprey RFamide

Peptides in Petromyzon marinus (Sea

lamprey) Neuroendocrine System

Adviser: Stacia Sower

Nicolette Gagnon

Environmental Science: Ecosystems

Tracing Nitrogen Movement at the Organic

Dairy Farm

Adviser: Andrew Ouimette

Kristen Getchell

Biochemistry

Megan Thompson (graduate student)

Genetics

*Characterizing the Phenotype of a PP2A**Mutant in Arabidopsis thaliana*

Adviser: Estelle Hrabak

Ryan Guidice (UNH McNair Scholar)

International Business and Economics

Sustainable Agriculture: Policy Challenges in Northern New England

Adviser: John Halstead

Keziah Katz

Ecology, Evolution and Behavior

*The Effects of Dependent Infants on the**Social Behavior of Mantled Howler**Monkeys (Alouatta palliate)*

Adviser: Michelle Scott

Elise Koob

Marine and Freshwater Biology and Environmental Conservation Studies

*Age, Growth and Maturity of Golden**Trevally (Gnathanodon speciosus) in Australian Waters*

Advisers: Shane Griffiths, Maryellen

Lutcavage

Leslie Mayo-Smith

Ecology, Evolution and Behavior

Charles Traverse (graduate student)

Microbiology

*An Adaptive Walk in a Complex Biofilm**Community*

Adviser: Vaughn Cooper

20th Annual COLSA Undergraduate Research Conference

Poster Presentations

Saturday, April 30**7:45 a.m.–2 p.m.****Huddleston Ballroom and Holloway Commons****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 Phototaxis 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

Matthew Siskey

General Biology

Multi-trophic Integrated Aquaculture

Adviser: Larry Harris

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**Stephen McKernan**

Molecular, Cellular and Developmental Biology

*A Comparison of Tide Pool Populations of**Codium fragile subsp. fragile Within the**Brave Boat Harbor Estuary, York-Kittery, ME*

Adviser: Anita Klein

Alyssa Birt

Animal Sciences: Bioscience and

Technology

*Genetic Expression of Fas in the Bovine**Corpus Luteum*

Adviser: David Townson

Joseph Bisson

Biochemistry

*Can the Nutlin3 Antagonist of Human**Mdm2 Promote Apoptosis of Clam**Hemocyte and Human Neuroblastoma**Cancer Cells?*

Adviser: Charles Walker

Kelly Boisvert

Ecology, Evolution and Behavior

*The Problem Solving Abilities of the**Common Raccoon (Procyon lotor)*

Adviser: Michelle Scott

Kirsten Bruell

Molecular, Cellular and Developmental Biology

Megan Thompson (graduate student)

Genetics

*Gravitropism and Auxin Distribution is**Delayed in Roots of Protein Phosphatase**2A Mutants of Arabidopsis thaliana*

Adviser: Estelle Hrabak

Walter Bubley

Animal Sciences: Bioscience and

Technology

Eian Prohl

General Biology

*Are Gelatinases Present in the Plasma of**the Spiny Dogfish Shark, Squalus**acanthias?*

Adviser: Paul Tsang

Lam Bui

Zoology

*Behavior of Invasive Green Crabs Carcinus**maenas Exposed to Different Light Sources*

Adviser: Larry Harris

Sophia Burke

Environmental Science: Ecosystems

*Are Extremophile Biofilms Limited by**Nitrogen? Determination of Ammonium in**Acid Mine Drainage and its Implications**for Life at Low pH*

Adviser: Linda Kalnejais

Tyler Burks

Molecular, Cellular and Developmental Biology
Embryonic Bursal Gene Expression in Chicken Lines Selected for Differential Antibody Response is Altered by Testosterone Exposure
 Adviser: Robert Taylor

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

Jennifer Dezenzo

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

Christopher DiCrocce

Molecular, Cellular and Developmental Biology

Katelyn Gagne

General 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 Townson

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

Daniel Merselis

Molecular, Cellular and Developmental Biology
*Ontogeny of Na⁺/K⁺ ATPase in Early Larval Rainbow Smelt, *Osmerus mordax**
 Adviser: David Berlinsky

Stephen Dunn

Molecular, Cellular and Developmental Biology
A Study of Src: Tracing the Evolution of a Cancer Gene
 Advisers: R Daniel Bergeron, John Collins, W. Kelley Thomas

Andraya Ehrlich

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

Crystal Ellis (graduate student)

Molecular, Cellular and Developmental Biology

Jordan Stinson

Microbiology
The Effects of Disturbance on Burkholderia cenocepacia Biofilm Communities
 Adviser: Vaughn Cooper

Ryan Finethy

Biochemistry
Quantitative Analysis of Histone Post-translational Modifications Resulting from the DNA Damage Response
 Adviser: Feixia Chu

Bridget Foley

Zoology
Mitochondrial DNA Variation in the New England Cottontail
 Adviser: Adrienne Kovach

David Fournier

Computer Science
Rate and Pattern of Mutation in rRNA Repeats of Diverse Eukaryotes
 Advisers: R Daniel Bergeron, W. Kelley Thomas

Scott Gabreski

Marine and Freshwater Biology
Isolation and Culture of the Gonial Cells of the Green Sea Urchin; Their Potential Use in Studies of Factors Initiating Annual Gametogenesis
 Adviser: Charles Walker

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.

Joshua Gerry

General Biology

Allison Nahin

Biochemistry

Timothy Stillwell

Biochemistry

TaylorAnn Sarro

Molecular, Cellular and Developmental Biology

Mutagenesis of Estrogen Receptor Alpha Phosphorylation Sites

Adviser: Andrew Laudano

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

Jade Golden

Daniel Mulhern

Biochemistry

Is the Mitochondrial Heat Shock Protein, Mortalin, Involved in Cytoplasmic Sequestration of p53 in Human Neuroblastoma and Colon Carcinoma Cell Lines?

Adviser: Charles Walker

Victoria Goodheart

General Biology and Medical Laboratory Science

The Biochemical and Physiological Effects of Caffeinated Beverages, Especially Energy Drinks, on the Physical and Emotional Health of Young Adults

Adviser: Dennis Bobilya

Mitchell Granoff

Biochemistry

Isolating Proteins and Testing for Presence in Translation Initiation Complexes

Adviser: Clyde Denis

Kristen Greene

Animal Sciences: Pre-veterinary Medicine
The Effect of Molasses or Cornmeal on Milk Production and Nitrogen Utilization of Grazing Organic Dairy Cows
Adviser: Andre Brito

Sarah Grillo

Biochemistry

Extracellular Matrix Protein Production on Porcine Aortic Smooth Muscle Cells with Diabetic Conditions

Adviser: Thomas Foxall

Jillian Hartwell

Medical Laboratory Science

Characterization of Chitin Degradation in Vibrio fischeri

Adviser: Cheryl Whistler

Lisa Heyer

Molecular, Cellular and Developmental Biology

Identification of Palmitoyl Acyltransferase Mutants in Arabidopsis thaliana

Adviser: Estelle Hrabak

Taylor Hickman

Biochemistry

Epigenetic Regulation of Histone Post-translational Modifications in Rett Syndrome

Adviser: Feixia Chu

Matthew Holub

Sarah Jamieson

Environmental and Resource Economics and EcoGastronomy Dual Major
Researching the Economic Impact of Strawberry Banke on the Portsmouth, New Hampshire Area Using The Multiplier Effect

Adviser: John Halstead

Haeleigh Hyatt

Zoology

Can Dogs Understand Human Cues Even With Distractions?

Adviser: Michelle Scott

Kyle Jenks

Marine and Freshwater Biology
Circadian Rhythms of Visual Sensitivity in the American Lobster (Homarus americanus)

Adviser: Winsor Watson

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

Balancing Economics and Ecological Values: An Application of France's Martelloscope System to New England's Northern Hardwood Forests

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 MirandaAnimal Sciences: Pre-veterinary Medicine
In Vitro Gas Profile of High and Low Sugar Alfalfa Supplemented With Molasses or Corn Meal

Adviser: Andre Brito

Ashley MirandaAnimal 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

Michael Piantedosi

Environmental Conservation Studies

and Plant 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 Phago-
cytosis 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 Cancer-
ous 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 Rota-
tional 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

**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 Polyeth-
ylene; 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

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.

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

Links to research opportunities

Centers and Institutes at UNH
www.unh.edu/research/Center for International Education
www.unh.edu/cieHamel Center for Undergraduate Research
www.unh.edu/undergrad-researchMcNair Graduate Opportunity Program
www.unh.edu/mcnairEngagement
www.unh.edu/engagementResearch 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
Whittemore 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
Lynne 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 Townson, 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
Lynne 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	Bakan, Jennifer	30, 41	Bottomley, Daniel	14	Caputo, Cheryl	17
Abbott, Christopher	16	Baldoumas, William	43	Bouchard, Robert	17	Caputo, Kara	41
Abu-Jaber, Chloe	27, 42	Baldwin, Christopher	6	Bourgoine, Amanda	14, 32	Carabello, Jonathan	16
Adams, Amanda	30	Baldwin, Ryan	44	Bourque, Benjamin	11	Carot, Victoria	24
Adams, George	24	Ballentine, Parris	16	Bousquet, Catherine	31	Carrier, Christopher	16
Adams, Jason	42	Barbour, Kier	14	Bowen, Henry	28	Carrier, Joel	17
Adams, Jean	11, 12	Barnum, Timothy	16	Bowling, Patrick	12	Cartier, Valerie	30
Adams, Lauren	12	Barrick, Elyssa	30, 41	Brackett, Theodore	35	Casey, Andrew	23
Adams, Melinda	9	Barry, Kelly	16, 17	Brady, Andrew	38	Casey, Rachel	10, 11, 12
Adelhardt, Brittany	33	Barry, Lauren	27	Bragg, Katherine	28, 33	Cash, Patrick	10, 11
Adewumi, Victoria	29	Barry, Maureen	32	Bratina, Julian	17, 28	Cassella, Laura	22
Afolayan,		Bartlett, Kurtis	16	Bratton, Allison	27	Castaldi, Nicholas	7
Oluwatobiloba	28, 37	Bartoldus, James	22, 25	Brault, Daniel	14	Cataldo, Dorothy	45
Agnelli, Caitlin	10	Bascom, Tyler	10	Breen, Sarah	8	Catano, Lauren	32
Alaka, Noel	44	Bathalon, Benjamin	12	Brefini, David	36	Cattin, Sarah	35
Alario, Ashleigh	30	Bauer, Jack	16	Brewer, Caroline	32	Cavusoglu, Gulsun	32
Albee, Robert	7	Baum, Robin	36	Brizard, Ashley	39	Celi, Christopher	7, 12
Albers, Maria	10	Beam, Samantha	17	Brody, Amanda	11	Cenerizio, Caroline	34
Alexanian, Samuel	10	Beaman, Danielle	11	Broman, Daniel	17	Cerri, Joshua	17
Alfano, Lauren	10	Beaudoin, Diane	44	Bronson, Amanda	33	Cezairli, Yunus	18
Ali, Sinor	39	Beaudoin, Elizabeth	6	Broom, Grant	12	Chamberlain, Virginia	45
Aliu, Hajrush	16	Bechis, Margarite	36, 41	Brosnahan, Kelli	6	Champlin, Michaela	14
Alix, Jonathan	16	Bedard, Matthew	16	Brouwer, Nathan	17	Chan, Michael	9
Allen, Benjamin	7	Belkin, Victoria	15	Brown, Amanda	32	Chandler, Christopher	9
Allen, Nathaniel	16	Bella-Spooner, Luke	38	Brown, Blake	16	Chaput, Gina	18, 45
Altenburg, William	35, 42	Benander, Makenzie	17	Brown, Jonathan	17	Charmanski, Kyle	18
Alvarez, Erin	6	Bender, John	38	Brown, Nicholas	10, 11	Charos, Justin	18
Alves, Daniele	10	Benoit, Ashley	38	Bruell, Kirsten	44	Chasin, Jamie	10, 11
Amalfi, Scott	14	Benton, Christopher	44	Bruneau, Christopher	42	Childs, Eric	14
Amante, Jacqueline	16, 43	Berg, Chelsea	7	Bruno, Gregory	36	Chin, Russell	13
Amaral, Miles	16	Berg, Nathaniel	10, 11	Bubley, Walter	36, 44	Chiron, Lindsey	18
Amico, Brandon	10	Bergeron, Brandon	25	Buchanan, Christopher	28	Chisholm, Katelyn	28
Anderson, Cory	16	Betro, Kristen	10	Bui, Lam	44	Cicilio, Phylicia	18
Anderson, Heather	23	Bicknell, Shayna	15, 6	Burdett, John	17	Cilley, Jonathan	10, 11
Anderson, Jeffrey	16	Birt, Alyssa	17, 36, 44	Burke, Sophia	44	Cipolla, Anthony	7, 14, 18
Anderson, Kevin	30, 36, 41	Bisson, Joseph	44	Burks, Tyler	45	Clairmont, Paige	33
Anderson, Thomas	15	Blackwell, James	17	Burns, Alisha	34	Clasby, Patrick	11
Andrews, David	16	Blair, Jonathan	36	Butler, Andrew	45	Clemence, Andrew	18
Andrews, Matthew	16	Blakeman, Meghan	40	Butterfield, Rachael	31	Cobb, Nonie	36
Angers, Laura	30, 35	Blanchette, Melissa	32	Buzinski, Lauren	17	Cogswell, Christopher	43, 18
Armenti, Karla	29	Blanchette,		Byers, Levi	17, 34	Cohen, Ilana	10
Arriel, Elyssa	15	Nicholas	10, 11, 14	Cabana, William	22	Cohn, Gideon	28
Arrigg, David	11	Boduch, Abigail	35	Cafarella, Julie	17, 35	Colbath, Erika	9
Arrigo, Courtney	34	Boghos, Nicholas	12	Cahill, Karyn	45	Cole, Gregory	16
Arsenault, Aaron	12	Bogosian, Andrew	10	Calderon, Ramon	17	Cole, John	18
Ast, Julianne	44	Boisvert, Kelly	44	Callaghan, Megan	11, 14	Coleman, Lindsey	10
Audley, Justin	16	Bolton, Daniel	11	Callahan, Parker	43	Comeau, Hayley	11
Austin, Brett	25	Bonner, Joseph	17	Cametti, Hannah	10	Comeau, Lindsey	33
Austin, Katharine	6, 15	Bonnier, Nathaniel	17	Campbell, Lauren	31, 40	Condon, Amanda	28
Avendano, Michelle	10, 11	Bonniwell, Maryn	8	Campbell, Tyler	7	Conn, Alicia	38
Avery, Brian	22	Borges, Lauren	11, 12	Canavan, Chelsey	33	Connal, Kacie	36
Aweh, Bie	27, 38	Bosco, Anthony	33	Canaway, Christopher	13	Connors, Ryan	7
Baia, Shane	16	Boselli, Megan	33	Cannon, Bradford	17	Consiglio, Michael	18

Constant, Stephanie	8	Deutsch, Jason	10	Eagleson, Lisa	22	French, Joshua	19
Conti, Matthew	25	Devine, Amanda	18	Easley, Tyler	33	French, Nicholas	13
Cooper, Alexander	37	Devine, Christopher	48	Eastman, Gretchen	10, 11, 14	Fritz, James	13
Coppola, Sara	33	DeWispelaere, John	11, 14, 17	Eddins, Kurt	9	Fritzky, William	7
Cormier, Caryn	11	Dezenzo, Jennifer	31, 45	Edmonds, Matthew	22	Fulford, Samantha	15
Cornell, Herbert	31	DiCroce, Christopher	45	Edmunds, Jonathan	12	Fuller, Amanda	32
Corsello, Joseph	18	Dietrich, Corey	18	Ehrlich, Andraya	37, 45	Fyfe, Colleen	12
Corsetti, Glee	10, 11	DiGirolamo, Matthew	7	El Mouatacim, Karim	25	Fyfe, Ryan	36
Corti, Samantha	28	Dille, Rachael	11	Ela, Miles	9	Gaboury, Matthew	8, 14
Cote, David	18	Dillon, Grant	18	Elliott, Caitlan	10	Gabreski, Scott	45
Cotnoir, Wesley	17	Dimou, Ciara	43	Elliott, Chelsea	10, 11	Gaffey, Molly	36
Couvillion, Annie Grace	24	Dingman, Carleen	19, 48	Ellis, Crystal	45	Gagne, Adam	12
Covert, Brittany	11	Dinisi, Christine	10, 11	Engle, Samantha	10, 11	Gagne, Katelyn	45
Cowart, Sarah	15	Dionne, Andrew	38	Eno, Charissa	28	Gagnon, Athena	18
Cox, Barrett	13	DiPirro, Josh	27	Espinal, Sara	27	Gagnon, Nicolette	43
Cox, Tim	10	Distefano, Sarah	29, 40	Estee, Alexandra	6	Gaillardetz, Katelin	11
Coyne, Christine	37	Dobbins-Bucklad, Jeremy	45	Evans, Matthew	22	Gale, Katelyn	10, 14
Cray, Daniel	28	Dodge, Evign	19, 39	Fall, Matthew	32	Gallagher, David	18
Cripps, Amanda	41	Dodson, Harry	22	Farley, Shanon	31	Gallagher, Erin	11
Cristaldi, Olivia	31	Doe, Eric	18	Farnham, Stephanie	10	Gallagher, Kristin	45
Crupi, Michael	37	Donahue, Kelly	10	Farrar, Alicia	11	Gallant, Benjamin	13
Cui, Yuanyuan	18	Donner, Rachel	45	Farrell, Kevin	38	Gallant, Derek	23
Cumings, Chelsea	10, 11	Dorich, Christopher	17	Febonio, Nicholas	13	Gallo, Brett	43
Cuneo, Matthew	13	Doucette, Allison	15	Feehan, Sarah	35	Galvin, Michelle	33
Curtis, Ryan	14	Douglas, Sara	41	Feldman, Dustin	10	Gamirov, Timor	29
Curtis, Tyler	18	Douston, Matthew	22	Ferguson, Ian	32	Gancarz, Lauren	33
Cyr, Steve	25	Dowling, Kaitlyn	39	Ferreira, Kathryn	19	Gapp, Georgina	10, 12
D'Alessio, Nicole	37	Doyen, Karen	31	Fidyk, Mike	23	Garcia, Camilla Leonila	17
Daigle, Matthew	18	Doyle, Andrew	38	Field, Bronwyn	38	Gardner, Lauren	36
Daigle, Peter	24	Driscoll, Molly	29	Fincke, Jonathan	19	Gargaly, Jeffrey	13
Dakowicz, Gabriel	16	Driscoll, Nicholas	9	Finethy, Ryan	45	Gargano, Matthew	11
Daloisio, Joseph	10	Duchaney, Brooke	10	Fischer, Dylan	9	Garnhart, Lydia	41
Dame, Shirley	18	Duclos, Kristin	45	Flower, Evan	19	Garron, Andre	10
Daukss, Dana	43	Dudley, John	34	Fluhr, Mariel	39	Gazda, Kristen	43
Davis, Timothy	18	Dufault, Alexa	10	Flynn, Danielle	23, 25, 33, 50	Gazzara, Peter	16
Davison, Sarah	10, 11	Duffy, Brittany	37	Flynn, Micaela	12	Gehling, Joseph	11
Day, David	33	Dugan, Kaitlyn	19	Folan, James	19	Geigley, Jay	32
De Vasto, Catherine	14	Duhamel, Melissa	42	Foley, Bridget	45	Gejay, Daniel	10
Dean, Christopher	16	Dunbar, Eva-Molly	30	Foley, Daniel	19	Genestreti, Kevin	19
Dean, Heather	35	Dunham, Jonathan	10	Foley, Mary	37, 40	George, Dylan	10, 11
DeAngelo, Michael	11	Dunn, Stephen	45	Fontaine, Robert	38	George, Leandra	32
Decato, Benjamin	18	Dupervil, Ericka	34	Fopiano, Lauren	10	Gerber-Williams, Anna	45
DeDonato, Kelli	8	Dupuis, Anna	29, 40	Forte, Justin	17	Germaske, Michael	10
DeGrace, Andrew	15	Durbano, Tara	33	Foss, Alexander	10	Gerry, Joshua	31, 37, 46
Delcambre, Zachary	35	Duspiva, Michele	17	Fournier, David	45	Gerum, Robin	8
Delloue, Thibaut	24, 25	Duve, Peter	17	Fournier, Sarah	12	Getchell, Kristen	4
Deloatch, Justin	18	Duys, Andrea	41	Frackleton, James	10	Giacalone, Scott	11
DeMarchi, Nicholas	17	Dwinell, Elizabeth	45	Frankie, Joanna	28	Giangiulio, Steven	10
Demers, Davis	13	Dwyer, Michael	10	Frazier, Katherine	45	Gibbons, Matthew	33
DeMulder, Nicholas	15	Dyer, Ryan	18	Freeman, David	8	Gibson, Andrew	23
Dennis, Rachel	6	Eadie, Mark	14	Freid, Alexander	15	Giguere, Jessica	29
Dennison, Sara	31, 41					Giguere, Michael	17
Despins, Samuel	17					Gill, Neeraj	16

Gilmore, Jason	42	Hartnett, Brittany	33	Jagelsky, Jonathan	10	Kipp, Damon	10
Gilooly, Carolyn	40	Hartwell, Jillian	46	Jamieson, Sarah	46	Kissell, Sarah	17, 20
Ginwala, Allison	28	Harwood, Eric	7, 12	Janampa, Erick	20	Kitchen, Natalie	10
Gitschier, Michelle	19	Hashmi, Sabrina	11	Jarvis, Laura	42	Kitt, Andrew	30
Glennon, Katherine	11	Haskell, Scott	10	Jarzombek, Aaron	23	Klein, Andrew	20
Godinez, Cassandra	39	Hathorne, Kelly	40	Jean, Nicholas	17	Klein, David	23
Golden, Jade	46	Hatton, Michael	38	Jefferson, Michael	20	Kolm, Lukas	14
Golden, James	36	Hayes, Chad	18	Jenks, Kyle	46	Kongmany, Andrew	18
Goldman, Emily	8	He, Runzhi	20	Jenness, Samuel	9	Koob, Elise	44
Goodheart, Victoria	46	Healy, Daniel	38	Jett, Jeffrey	47	Korman, Mallory	47
Goodman, Paul	25	Heaps, Gwynneth	8	Jimenez, Richard	39	Kornutik, Nicholas	14
Goodrich, Nathaniel	37	Heath, Skyla	32	Johnson, Corey	40	Kostek, Anthony	47
Goodwin, Jacob	25, 36	Heim, Ashley	25	Johnson, Suzanne	47	Kosugi, Takayoshi	43
Goodwin, Paul	31	Heim, Jeffrey	43	Johnson, Thomas	11, 47	Krall, Jordyn	37
Gordon, Lauren	8	Heleen, Alison	32	Johonnett, Jay	20	Kratz, Christine	34
Goudreau, Adam	19	Helprin, Morganne	13	Jones, Henry	20	Kraus, Shawn	23
Gould, Michael	48	Hembrook, Jacqueline	31, 41	Jones, Jamal	34	Kreider, Kendra	18
Granoff, Mitchell	46	Hendricks, Henri	10, 10	Jones, Jolene	32	Kurowyckyj, Dianna	9
Granucci, Jillian	10	Henriquez, Arisbel	33	Jordan, Adam	17	Kusch, Jordan	16
Gray, Jonathan	24	Henry, Lucas	16	Jordon, Kiara	47	Kuta, Erin	42
Gray, Katherine	20	Hernon, John	10, 11	Joseph, Carla	15	Kwasnik, Karrah	7, 11
Gray, Maren	31	Heyer, Lisa	46	Joseph, Laura	27	Kwiecien, Kaitlin	20
Greene, Kristen	46	Hickman, Taylor	46	Joyce, Colin	20	Labbe, Kyle	12
Greer-Carney, Janet	13	Himmer, Kory	11	Judge, Lindsey	36	LaChance, Suzanne	31, 47
Gregory, Luke	20	Hitchings, Allison	27	Kalogeropoulos, Jillian	11	LaCroix, Jessica	33
Greichen, Laura	12	Hjorth, Erica	13	Kalutkiewicz, Kyle	20	LaFond, Chadd	20
Grillo, Sarah	46	Hoang, Hao	17	Kaplan, Ashley	10	Laforet, Zachary	20
Groleau, Benjamin	13	Hodges, Taylor	10	Kasparian, Lauren	31	LaFrance, Kelly	10, 11
Grossmith, John	23	Hogan, Kelly	32	Katz, Keziah	44	Lake, Heather	35
Groves, Emma	40	Holmes, Andrew	25	Kelleher, MaryGrace	37	Lalinde, Ruben	21
Grundhoff, Rachel	11	Holub, Matthew	46	Kelley, Benjamin	36	Lamarre, Stephen	11
Guerriero, Jenna	14	Hood, Laura	20	Kelley, Colin	7	Lambert, Angela	11
Guidice, Ryan	7, 44	Hoogendoorn, Stephen	20	Kelley, Eoghan	16	Lambert, Jared	13
Gunts, Katherine	37	Horowitch, Megan	10	Kelley, Erin	19	Lane, Allison	38
Hack, Kathryn	20	Houle, Michael	25	Kelly, Bryce	14	Lang, Kirstin	37
Hall, Cedric	20	Hounsell, Kirby	11	Kelly, Joseph	16	Langkau, Taylor	48
Hall, Heather	6	Howard, Scott	48	Kelly-Martin, Kara	36	Langley, JoHannah	9
Hallam, Katie	31	Hoyt, Patrick	12	Kennedy, Kevin	28	Languirand, Justin	20
Halsey, Gregory	16, 20	Huberdeau, Karen	17	Kenny, Eric	11	Lantz, Emily	21, 39, 47
Hardy, Christopher	23	Hughes, Raeanna	18	Keriazes, Robyn	25, 34	Lantz, Katherine	21, 39, 47
Harmon, Andrew	20	Hunter, Amy	20	Kerrigan, Patrick	18	LaScala, Carlo	20
Harmon, Timothy	14, 20	Hunter, Robert	18	Ketel, Ernst	15	Lasher, Mikyla	13
Harper, Haley	18	Husband, Justin	32	Kharin, Yuriy	16	Lavallee, Kelly	12
Harr, Adam	29	Hutchings, Jonathan	32	Kilar, Patrick	16	Lavallee, Mindy	32
Harris, Bridget	9	Hwang, Seohyun	10	Kilham, Daniel	47	Laverdiere, Joshua	17
Harris, Gregory	10	Hyatt, Haeleigh	46	Kimball, Allyson	10, 12	Law, Glenn	8
Harris, Ronnie	36	Hyde, Amanda	17	Kimball, Ashley	10, 11	Law, Matthew	13
Harris, Theodore	16	Ibey, Karen	22	King, Alyssa	8	Lawlor, Benjamin	7, 13
Harris, Theodore	43, 9	Innes, Scott	22	King, Amanda	39, 40	Lawrence, Hannah	28
Harsin, Travis	37	Ireland, Helen-Ann	6	King, Brian	11	Lawrence, Jillian	7, 31
Hart, Andrew	13	Jablonski, Luke	20	King, Erin	27	Lawrence, Katherine	47
Hartley, Mireille	41	Jacobsen, David	39, 40	King, Jennifer	39	Lawrence, Katie-Ann	36
Hartley, Sara	11	Jacobson, Kaitlyn	17	Kinney, Jillian	23	Lawrence, Ryan	21

Leach, Evan	13, 17	Malnati, Emily	9, 13	Miller, Christine	42	Nilsen, Ella	19, 25
Leach, Zachery	8	Mandra, Tessa	29	Miller, Joseph	21, 36	Noble, Brittany	32
Leary, Benjamin	25	Manoogian, Alex	13	Miller, Michael	13	Noonan, Patrick	30
LeBlanc, Jessica	35	Marchi, Tahlor	12, 13	Miller, Stephen	12	Norman, Brian	10, 11
LeClaire, Shaun	25	Marcinkowski, Matthew	49	Millian, Ryan	9	Norman, Schuyler	23
Lee, Rebecca	22	Marcotte, Elizabeth	34	Milton, Brandon	14	North, Megan	6
Leger, Samuel	9	Margolin, Aida	36	Miner, Anna	28	Nowak-Solinski,	
Lenz, Gregory	28	Marinelli, Alyssa	10, 11	Minerd, Ben	21	Zygmunt	21
LeRette, Stephanie	21	Marino, Nicole	30, 34	Minton, Lindsey	10	O'Connell, Kelly	11
LeTarte, Josh	25	Marlin, Samuel	17	Miranda, Ashley	47	O'Connor, Katherine	10, 11
Letourneau, Kyle	16	Marsh, Shawn	14	Miranda, Miguel	18, 21	O'Connor, Rosilind	6
Leuchanka, Natalia	29	Marshall, Lindsey	11	Miranda, Sarah	40	O'Hearne, Gordon	10
Levesque, Catherine	35	Martin, Dana	19, 20	Mitchell, Heather	13	O'Leary, Kevin	37, 42
Levesque, Jeffrey	13	Martin, Kelly	29, 33	Mitchell, Reed	47	Olean, Danielle	37
Lewis, Heather	48	Martinez, Ryan	10	Mohammed, Aaron	34	Olsen, Scott	14, 20
Lewis, Philip	47	Marvin, Patrick	39	Mol, Yourai	43	Onett, Zachary	43
Lewis, Theresa	31	Mason, Kevin	23	Monty, Evan	25	Onos, Kristen	30, 41
Li, Barbara T.Y.	19	Masse, Addison	16	Mooney, Corey	22	Orlowicz, Elizabeth	25
Libby, Kyle	25	Massicotte, Patrick	20	Moran, Peter	21, 49	Orr, David	43
Libman, Matthew	37, 42	Mastromarino, Ryan	16	Morash, Elizabeth	7, 28	Osagiede, Amadin	21
Liguori, Elizabeth	38	Mathieson, Arthur	44	Morin, Justin	24	Osbourne, Mitchell	18
Lindgren, Noel	10	Matthews, Ashley	21, 37, 47	Morin, Matthew	16	Osgood, Cory	17
Lippincott, Alexander	16	Matthews, Sean	39, 43	Morrell, Dana	9	Oteri, Kayla	9
Litchfield, Michael	18	Mattia, Michael	10, 11	Morrell, Dana	9	Page, Kimberly	12
Liu, Xiameng	18	Maxfield, David	8	Morrill, Matthew	25	Palmatier, Elizabeth	6
Lofaro, Alyssa	38	Mayo, Laura	47	Morris, Abigail	17	Palmer, Dylan	15
Logue, Patrick	34	Mayo-Smith, Leslie	44	Morris, Amanda	42	Pamboukes, Stephen	18
Longeri, Michael	8	McAuliffe, Daniel	13	Morrison, Brian	12	Panait, Alexandru	25, 36
Lonsdale, Gregory	16	McCahan, Claire	38, 40	Morse, Sarah	11	Papanastassion,	
Lonstein, Evan	21	McCann, Alison	39	Mower, Lowell	23	Katrina	47
Loosigan, Julie	15	McCarthy, Reid	10, 12	Mower, Matthew	21	Papantones, Alex	21, 49
Loper, Jessica	37	McCarthy, Tucker	17	Moyer, David	49	Pappas, Lauren	18
Loporcaro, Christina	45	McClellan, Meaghan	13	Mulhern, Daniel	46	Paquette, Arianna	16, 21
Losik, Kathryn	38	McClintick, Brittany	11	Muller, Heather	14	Paradise, Marc	11
Lowell, Christopher	25	McConnell, Brian	18, 21	Munoz, Matthew	17	Paré, Morgan	6
Lowell, Jeffrey	8	McGrath, John	8	Murby, Amanda	47	Parker, Jonathan	10
Lubanko, Margaret	38	McGrath, Sara	6	Murphy, Bethany	29, 40	Paroline, Hannah	34
Lubniewski, Jocelyn	47	McHugh, Maureen	17	Murphy, Cristina	23	Parrott, Nicholas	20
Lumbard, Marlayna	19	McKenna, Kailey	36	Murphy, Ryan	37	Patch, Arthur	17
Lundin, Kelly	11	McKernan, Stephen	44	Murtagh, Aaron	18	Paterson, Jessica	10
Ma, Amy	37, 40, 41	McNeill, Kristen	21	Mutch, Ryan	11	Patterson, Mallorie	32
Macdonald, Ian	13	McQueen, Allison	47	Naber, Keith	23	Paul, Zachary	25
Mack, Kendra	30, 33	McRae, Andrew	17	Nahin, Allison	31, 37, 46, 47	Pavlik, Andrew	21
MacRae, Christopher	19	McVicar, Danielle	10	Nardone, Emily	10, 11	Pavone, Katherine	35
Madden, Katelyn	33	Mead, Peter	9	Navelski, Joseph	9	Payette, Brooks	39
Maffei, Kevin	25	Medina, Emely	18	Naylor, Tracy	10	Pearson, Nicholas	18
Maher, Meaghan	21	Mellen, Shannon	10, 13	Neal, Angela	37	Pederzani, Guy	16
Mailloux, Lance	47	Merisotis, Amanda	11	Nettleship, Charles	7, 8, 12	Pelchat, Amanda	38
Majcher, Jared	16	Merriken, Elizabeth	10, 11	Nevrla, Jake	24, 33	Peltokangas, Joel	7
Major, Benjamin	21	Merselis, Daniel	45	Newbury, Molly	36	Pepin, Daniel	23
Majumdar,		Meyer, Christine	7	Newkirk, Catherine	31	Percuoco, Vincent	17
Rajtilak	21, 37, 39, 47	Milano, Alyssa	49	Ngarukiye, Gaston	17	Perkins, Kevin	16
Malley, Shannon	6, 32	Mili, Gregory	13	Nichols, Katrina	32	Perreault, Hannah	38

Peta, Christian	13	Reynolds, Richele	20	Selinka, Thomas	38	Stilwell, Justin	48
Peterson, Alexandra	10	Richards, Joshua	35	Sellarole, Michael	37, 47	Stinson, Jordan	45
Peterson, Jill	11	Richards, Mark	17	Semaan, Christopher	33	Stitt, Alexander	20
Petraitis, Lauren	38	Richards, Matthew	39	Seraichick, Ian	8	Stodola, Claire	38
Phillips, Jennifer	10	Richards, Vanessa	29, 36	Seymour, Colton	25	Stokes, Conor	43
Phinney, Benjamin	30	Richardson, Rebecca	11	Shao, Lin	37, 47	Stone, Christian	15
Phipps, Christine	13	Rickert, Austin	21	Shaughnessy, Kyle	22	Strandson, Kurt	14
Piantedosi, Michael	47	Riggs, Nathan	15	Sheldon, Karilyn	31	Streitmater, Jessica	14, 20
Piekarski, Colin	43	Rivera, Nicholas	18	Shelley, Ryan	8	Striffolino, Peter	6
Pierce, Hannah	19	Rivers, Caitlin	31	Sherr, Benjamin	48	Strobel, Connor	34
Piispanen, Hillary	9	Rivers, Kylie	30	Shirtz, Raymond	13	Sullivan, Charles	18
Pinette, Sean	20	Roach, Jason	13	Shumila, Heidi	29, 40	Sullivan, Colin	8
Pisa, Rachel	21	Roach, Laura	9	Shumway, Amanda	48	Sullivan, Emily	38
Pisarek, Jenna	8, 12	Roane, James	49	Sigl, Niklas	15	Sullivan, Michael	14
Plante, Monica	20, 21, 39	Roberge, Jacqueline	42	Silva, Justin	11	Sullivan, Ryan	43
Plimpton, Hannah	32	Robichaud, Adam	13	Silver, Samuel	18	Surette, Holly	27
Poisson, Joshua	13	Robinson, Bridget	10, 11	Simione, Stacy	11	Suva, Kyle	10
Poisson, Lindsey	30	Robinson, David	21	Simmers, Benjamin	11	Sweetser, Branden	14
Poisson, Renee	27	Robinson, Matthew	14	Simon, Michael	17	Swiger, Jonathan	16
Ponio, Erroll James	23	Robles, Alexander	48	Simoneau, Joana	10, 11	Tamblyn, Nicholas	14, 20
Pope, Michael	33, 34	Rolfe, John	7, 13	Simpson, Erin	38	Tang, Sasa	35
Posternak, Jake	9	Rollins, Daniel	25	Sinclair, Samantha	22	Tanner, David	36
Postlethwaite, Timothy	21	Root, Paige	30	Sink, Sebastian	29	Tanous, Chelsea	32, 39
Pothier, Melody	31	Ross, Brittni	6	Siskey, Matthew	44	Tarbell, Kyle	30
Power, Matthew	37, 47	Ross-Raymond, Petra	10	Skalinski, Jessica	30	Tatnall, Sara	35, 38, 42
Prescott, Rowen	16	Rotondo, Margaret	14	Skog, Cheyenne	8	Taylor, Christopher	18
Prichard, Emma	29	Rouleau, Tanya	42	Slavin, Hannah	12	Taylor, Jonathan	10
Prohl, Eian	36, 44	Rousseau, Marissa	18	Smith, Dakota	18	Teal, Luke	20
Pynenburg, Travis	27	Roy, Brian	16	Smith, Emily	18	Tentas, Laura	10
Quarles, Camille	23	Roy, Joshua	18	Smith, Justin	17	Thibaudeau, Ethan	16
Quay, Kathryn	18	Runnals, David	7, 9, 12	Smith, Kaycee	10	Thibeault, Ashley	13
Quimby, Kegan	11	Russell, Andrew	16	Smith, Mathew	14	Thibeault, Joshua	43
Quinn, Devin	16	Rychert, Kevin	21	Smith, Sara	34, 38	Thomas, Natalie	39
Quinn, Patrick	34	Rzepka, Steven	21	Smith, Siobhan	38	Thomas, Thomas	13
Racine, Elizabeth	32	Sadowski, Madeline	34	Snelling, Corey	13, 17	Thompson, Brian	8
Raddock, Stephanie	33	Saia, Anthony	10	Snyder, Stacey	22	Thompson, Brittany	15
Rader, Brice	23	Sandberg, Nicholas	22	Soto, Diego	17	Thompson, David	36
Rankin, Hannah	48	SanDonato, Jodie	28	Spacone, Michael	16	Thompson, Matt	11
Ransom, Sarah	37	Santos, Barry	40	Spadafora, Vincent	38	Thompson, Megan	44, 48
Ransom, Tailer	43	Sargent, Alexandra	38	Spencer, Christopher	23, 33	Thompson, Meredith	15
Ray, Thomas	10	Sarro, TaylorAnn	31, 37, 46	Stackhouse, Jillian	38	Thompson, Shawn	17
Reddel, Jordan	21, 49	Satir, Vicente	11, 13	Standley, Matthew	22	Thomson, Courtney	10, 11
Reekie, Christopher	22	Saunders, Andrew	16	Stanek, Joseph	8, 25	Thresher, Sierra	10
Rees, Cori	36	Savani, Anthony	8	Stanwood, Melissa	32	Tibbetts,	
Reeves, Alanna	10, 11	Sceery, Sarah	7, 13	Stawarz, Joshua	22	Benjamin	24, 40, 43
Reeves, Andrew	16	Schaller, Susanne	14	Steckowych, Matthew	13	Tierney, Thomas	23
Reid, Katrina	6	Schenck, Benjamin	8	Steed, Amanda	22	Tilton, Joshua	10
Reid, Nick	38	Schmidt, Bethany	29	Stemkowski, Matthew	22	Tkowski, Ryan	11, 13
Reidy, Taylor	34	Schmidt, Zachary	17	Stephenson, Benjamin	11	Tom, Elizabeth	10
Reilly, Casey	10	Schwaegerle, Kristen	11	Stevens, Annie Eliza	38	Torbick, Joshua	6, 15
Reilly, Timothy	48	Scolamiero, Jennifer	22	Stewart, James	18	Torres, Ryan	10
Relihan, Catherine	7	Scozzari, Kara	10, 12	Stewart, Max	10	Torrey, Cameron	17
Reynolds, Cathryn	29, 40	Seabrook, Ewan	14	Stillwell, Timothy	31, 46	Tower-Richardi, Sarah	31, 42

Townsend-Curley, Morgan	15	White, Abbey	35
Trahan, Brittany	30	White, Fileshea	27
Travers, Breanna	48	White, Lesley	42
Traverse, Charles	44	White, Nicholas	14
Trayner, John	14	White, Samuel	16
Treacy, Lauren	12	Whitmore, Jessica	48
Tremblay, Justin	16	Wienke, Carick	22
Tremblay, Seth	18, 21	Wilbur, Thomas	32
Trinward, Laura	23	Wilcox, Russell	22
Troisi-Rauschenberger, Emily	48	Wile, Margaret	37
Trottier, Travis	22	Wilhelm, Jayne	27
Turcott, Daniel	14	Wilk, David	22
Turmel, Andrea	38	Wilkinson, Christine	48
Turner, Cathleen	17, 22, 35	Wilson, Joseph	17
Turner, Christine	28	Wilson, Lyssa	36
Turner, David	33, 39	Wilson, Rebecca	18, 21, 39
Turner, Vance	10	Wimsatt, Augustin	18
Tutuianu, Georgian	20, 22	Wirth, Alison	20
Tutuianu, Oana	35	Wiseman, Brittany	11
Tyler, Zachary	10	Witts, Justin	31
Ucich, Gregory	7	Wong, Leon	22
Ulemek, Natalija	28	Woodman, Patrick	16
Underwood, Amy	18	Wyman, William	48
Upchurch, Jonathan	9	Yeaton, Isaac	20
Urbano, Andrea	38	Yegge, Laura	33
Valencia, Vanessa	29	Young, Edward	10
Valickus, Robert	10, 11	Young, Matthew	22
VanEtten, Kyle	38	Yozzo, Sarah	25
Venhaus, Marc	29	Zakarian, Thomas	18, 40
Veroneau, Brian	14	Zanderigo, Matthew	11, 14
Verville, Brittany	6, 13	Zani, Alicia	17
Verville, Caitlin	11, 13	Zelenka, Adam	11
Vidal, Michael	37	Zhang, Horace	12
Visone, Anthony	18	Zilnicki, Daniel	7
vondenBenken, Olivia	19	Zoller, Jonathan	18
Waice, Heather	20	Zorawowicz, Abby	32
Wakim, Matthew	22, 23	Zuka, Zlatan	39
Walker, Rod	9	Zukas, Brian	18, 20
Walsh, Julie	10, 50		
Ward, Hannah	10		
Ward, Sarah	27		
Ward, Victoria	22		
Ware, Teresa	42		
Waters, Seth	43		
Webster, Hallie	37, 46		
Wedemeyer, Zahkary	39		
Weisert, Kelly	13		
Welch, Brittany	48		
Welch, Dillon	38		
Wells, Lauren	9		
Wesley, Samuel	16, 17		

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



“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 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.”