

UNH UNDERGRADUATE  
RESEARCH CONFERENCE

**URC**  
2010



“For me, the URC is about learning how to think on your feet, maintain confidence in what you know, and transmit your knowledge effectively to others.”

“I found it a challenging and positive experience to be pushed beyond my normal comfort zone.”



“I felt very empowered and proud of my accomplishments.”



**Undergraduate  
Research  
Conference**

April 16–24, 2010

Showcase for  
undergraduate  
research, scholarship,  
and creative  
presentations

---

## A welcome to participants and attendees

---



MARK W. HUDDLESTON



JOHN D. ABER

**W**ELCOME to our eleventh annual springtime celebration of research and discovery at the University of New Hampshire. The UNH 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. More than 900 students will present their findings at over twenty 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 necessary knowledge, skills, and confidence to pursue graduate studies or meaningful careers. The URC is a shining example of our students' success and the discovery-based education for which UNH is known.

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



---

# URC 2010 Contents

Calendar of Events	4	<b>Friday, April 23</b>	
Map	5	UNH Manchester URC—Engineering Technology Senior Project Presentations	22
<b>Monday, April 12</b>		Breakfast and Welcome with UNH Provost John Aber and UNH Parents Association Council President-elect Peter Hayden	23
Graduate Research Conference (GRC)	6	Parents Association Undergraduate Research Symposium	
<b>Tuesday, April 13</b>		Poster Presentations, Session A	23
Graduate Research Conference (GRC)	6	Oral Presentations, Session A	26
<b>Friday, April 16</b>		Poster Presentations, Session B	29
2010 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition Preview Reception	6	Oral Presentations, Session B	31
<b>Tuesday, April 20</b>		Oral Presentations, Session C	35
UNH Manchester URC Oral Presentations	6	The Naked Arts—Creativity Exposed! (Act III)	39
<b>Wednesday, April 21</b>		College of Health and Human Services Grimes Award Competition	39
Whittemore School of Business and Economics Undergraduate Research Conference	7	Honors English Undergraduate Research Conference	39
Seacoast Reads Exhibition	12	Psychology Department George M. Haslerud URC	40
Thompson School Community Leadership Program	13	Philosophy Department Undergraduate Research Conference	41
UNH Office of Community Service Student Partnerships	13	Student Composers' Concert	41
The Naked Arts—Creativity Exposed! (Act I)	14	<b>Saturday, April 24</b>	
Interdisciplinary Science and Engineering Symposium (ISE)	14	19th Annual COLSA Undergraduate Research Conference	42
UNH Manchester URC—Poster Presentations	20	<b>Events in May</b>	
<b>Thursday, April 22</b>		Chemistry Department Poster Exhibition	46
UNH Manchester URC—Cinema Arts Day	21	Whittemore School of Business and Economics Paul J. Holloway Prize University-wide Innovation-to-Market Competition, Championship Round	47
The Naked Arts—Creativity Exposed! (Act II)	22	<b>Additional Features</b>	
History Department Undergraduate Presentations	22	URC 2009 Awards of Excellence	48
		Committed to Undergraduate Research	50
		Acknowledgements	51
		Student Index	52

*All events are free and open to the public.*

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

# URC 2010 Calendar

All events are free and open to the public.

---

## Monday and Tuesday, April 12–13

**Monday, 5–7 p.m.**

**Graduate Research Conference (GRC)**  
Huddleston Ballroom

**Tuesday, 10 a.m.–4 p.m.**

**Graduate Research Conference (GRC)**  
MUB ②

---

## Friday, April 16

**6–8 p.m.**

**2010 Senior B.A. & B.F.A. Exhibition  
and M.F.A. Thesis Exhibition and  
Preview Reception**

Museum of Art, Paul Creative Arts Center  
(Exhibition runs April 17–May 21, 2010) ①

---

## Tuesday, April 20

**9 a.m.–3 p.m.**

**UNH Manchester Undergraduate  
Research Conference**  
*Oral Presentations*  
UNHM Auditorium

---

## Wednesday, April 21

**9 a.m.–6 p.m.**

**Whittemore School of Business  
and Economics Undergraduate  
Research Conference**  
MUB ②

**10:30 a.m.–Noon**

**Seacoast Reads Exhibition**  
MUB, Rooms 330/332 ②

**10:30 a.m.–Noon**

**Thompson School Community  
Leadership Program**  
MUB, Rooms 330/332 ②

**10:30 a.m.–Noon**

**UNH Office of Community Service  
Student Partnerships**  
MUB, Rooms 330/332 ②

**Noon–2 p.m.**

**The Naked Arts—Creativity Exposed!  
(Act I)**  
Museum of Art,  
Paul Creative Arts Center ①

**2–5 p.m.**

**Interdisciplinary Science and  
Engineering (ISE) Symposium**  
Kingsbury Hall ③ and Morse Hall ④

**4–6 p.m.**

**UNH Manchester Undergraduate  
Research Conference**  
*Poster Presentations*  
UNHM Auditorium

---

## Thursday, April 22

**11 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)**  
Museum of Art,  
Paul Creative Arts Center ①

**12:40–2 p.m.**

**History Department Undergraduate  
Presentations**  
MUB, Rooms 336/338 ②

---

## Friday, April 23

**8:30 a.m.–3 p.m.**

**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-elect  
Peter Hayden**  
MUB, Granite State Room ②

**9:30 a.m.–3 p.m.**

**Parents Association Undergraduate  
Research Symposium**  
MUB, Granite State Room, ②  
assigned rooms

**12:15–1 p.m.**

**The Naked Arts—Creativity Exposed!  
(Act III)**  
MUB, Strafford Room ②

**1–4 p.m.**

**College of Health and Human Services  
Grimes Award Competition**  
Pettee Hall, Room G10 ⑥

**1–4 p.m.**

**Psychology Department  
George M. Haslerud  
Undergraduate Research Conference**  
Munkland Hall, Room 115 ⑩

**1–5 p.m.**

**Honors English Undergraduate  
Research Conference**  
Hamilton Smith Hall,  
English Department ⑤

**4–8:30 p.m.**

**Philosophy Department  
Undergraduate Research Conference**  
Munkland Hall, Room G17 ⑩

**8:00 p.m.**

**Student Composers' Concert**  
Bratton Recital Hall,  
Paul Creative Arts Center ①

---

## Saturday, April 24

**7:45 a.m.–2 p.m.**

**19th Annual College of Life Sciences  
and Agriculture (COLSA) URC**  
The New England Center ⑦

---

## Friday, May 7

**3–4:30 p.m.**

**Chemistry Department  
Poster Exhibition**  
Parsons Hall, Iddles Wing ⑨

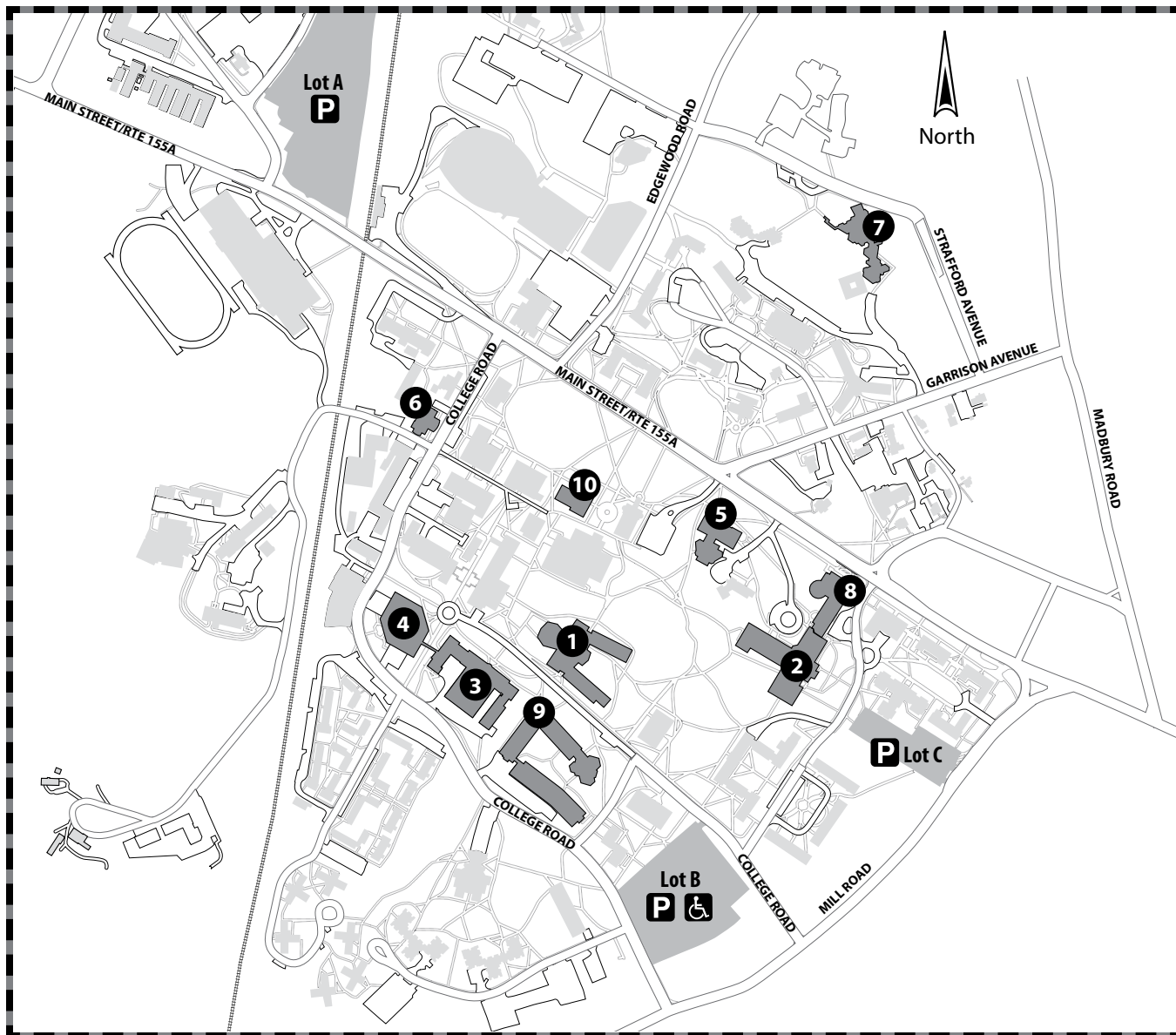
---

## Wednesday, May 12

**1–6 p.m.**

**Whittemore School of Business  
and Economics Paul J. Holloway Prize  
Championship Round**  
Holloway Commons ⑧

# Campus Map



## BUILDING KEY

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

UNH Manchester  
400 Commercial Street  
Manchester, N.H.

For directions to UNH Manchester go to  
[www.unhm.unh.edu/directions.html](http://www.unhm.unh.edu/directions.html)  
or call (603) 641-4321.

## Graduate Research Conference (GRC)

### Oral and Poster Presentations

**April 12 and 13**

**Monday, 5–7 p.m.**

**Huddleston Ballroom**

**Tuesday, 10 a.m.–4 p.m.**

**Memorial Union Building**

The Graduate Research Conference is devoted to celebrating the high quality research being conducted by graduate students at UNH and 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.

## 2010 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition Preview Reception

**Friday, April 16**

**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 Art degree candidates:*

**Cara Cabral, painting**

**Grace Cunliff, painting**

**Finnian Donovan, woodworking**

**Maggie Green, painting**

**Julie Hamel, photography**

**Michael Mackail, painting**

**Alyssa Ribitzki, painting**

### *Bachelor of Art degree candidates from the UNH Art and Art History Department, whose work will also be on view:*

**Megan Breen, photography**

**E.A. Cole, painting**

**Andrew Fox, drawing**

**Karrah Kwasnik, photography**

**Chelsea Ricciardi, photography**

**Jennifer Smith, drawing**

**Samantha Withers, printmaking**

## UNH Manchester Undergraduate Research Conference

### Oral Presentations

**Tuesday, April 20**

**9 a.m.–3 p.m.**

**UNHM Auditorium**

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

**Joshua Albair** (*UNH McNair Scholar*)  
Linguistics and Computer Information Systems

*What is the State of Evaluative Affixes in Contemporary English?*

Adviser: Rochelle Lieber

**Nicole Amichetti**

Psychology

*The Representation of the Case of H.M. in Introductory Psychology Textbooks*

Adviser: Kenneth Bell

**Christine Beehler**

Communication Arts

*Volunteers: What Attracts and What Retains Them?*

Adviser: Barbara Jago

**Michael Cochran-Boucher**

Biological Sciences

*Obesity and Pregnancy: 800 Chart Review, Based on the Presence or Absence of Four Specific Morbidity Descriptions*

Adviser: Patricia Halpin

**Natalie Glisson**

Humanities and English

*The Fire Alarm Telegraph: A Technical Revolution and Observations on the Research Process*

Adviser: Terry Savage

**Marc Langlois**

Communication Arts

*One Act Play*

Adviser: Dana Myskowski

**Selena Lucent**

Politics and Society and History  
*Stopping the Killing: The International Criminal Court and Juridical Determination of the Responsibility to Protect*  
 Adviser: Michael Contarino

**Emilea Raymond**

Communication Arts  
*Us versus Them: An Exploration of the Conflict Between Homeschooling and Public Education*  
 Adviser: Virginia Lever

**John Reale**

Business  
*The Double Oral Auction: Markets and Power*  
 Adviser: Thomas Birch

**Richard Tyson**

History  
*Manchester's Ten-hour Day Movement*  
 Adviser: Robert Macieski

## Whittemore School of Business and Economics Undergraduate Research Conference

**Wednesday, April 21**  
**9 a.m.–6 p.m.**  
**Memorial Union Building**

The Whittemore School of Business and Economics welcomes its undergraduate students to participate in an exciting research opportunity. Through original research and valuable guidance from mentors, students are able to gain deeper academic knowledge as well as professional experience. The WSBE program knows that its students strive for success, so join us in expanding our minds at this rewarding event. The URC includes a presentation of posters, oral presentations, and feedback from University and business leaders.

## Selena Lucent '10

*UNH Manchester, Politics and Society*



SELENA LUCENT'S RESEARCH looks at human rights on an international scale. She recently co-authored a paper with Professor Michael Contarino on an emerging global norm called the "Responsibility to Protect."

The concept is philosophically similar to The Rome Statute, which was the basis for creating the International Criminal Court.

Lucent and Contarino make the case that, with minor adjustments, the court could determine when a responsibility-to-protect violation is taking place. Lucent hopes such rulings would facilitate a more effective and less politicized response to international human rights violations. She intends to pursue a doctorate in political philosophy.

**MUB, Room 338/340 (9–11 a.m.)**

### ***Economics Oral Presentations***

**Moderator: Aziz Saglam**

**Siddharth Prabhakar**

International and Development Economics and Financial and Managerial Economics  
*Are There Benefits to Commercializing Microfinance? A Case Study Between SKS Microfinance and PRADAN*  
 Adviser: Michael Swack

**Siddharth Prabhakar**

International and Development Economics and Financial and Managerial Economics  
*The Effects of Social and Economic Variables on High School Drop Out Rates*  
 Adviser: Aziz Saglam

**Brian Volonte**

Statistics  
*The Great Recession: A Study of Consumption Spending and Stock Market Variability*  
 Advisers: Ernst Linder and Aziz Saglam

**Betsy Weingart**

Economics  
*The Economic Cost and Benefit of Universities Going Green*  
 Adviser: Aziz Saglam

**Benjamin Woodhouse**

Economics  
*The Effect Income Has on Demand for Imports*  
 Adviser: Aziz Saglam



**MUB, Rooms 338/340  
(11 a.m.–1 p.m.)**

**Multidisciplinary Oral  
Presentations**

Moderator: Charles Martin

Joseph Annese  
Michelle Berman  
Greggory Bowen  
Nicholas Capano  
Alan Chenard  
Jocelyn Collins  
Emily Coppin  
Danielle DeCoursey  
Johanna Deris  
Eric Desjardins  
Ashley Flewelling  
Chelsey Fraser  
Erin Gallagher  
Nicole Kenney  
Ashley Long  
Christine Macoul  
Bryan McManus  
Stuart Mumley  
Whitney Pillsbury  
Jonna Pothier  
Elisha Randall  
Kelsey Ruediger  
Danielle Russo  
Joseph Shartzter  
Stacy Simone  
Hannah Slavin  
Benjamin Stephenson  
Deanna Strickland  
Danielle Taylor  
Amanda Trivella  
Rachel Wudarczyk  
Marketing  
*Measuring and Analyzing Social  
Networking Usage and Grades Among  
College Students*  
Adviser: Charles Martin

Charles Bono  
Tracy Cable  
Matthew Casey  
John DeWispelaere  
Travis Elfreth  
Kora Forlizzi  
Sarah Fournier  
Grant Gibree  
Katherine Glennon  
Laura Greichen  
Sabrina Hashmi  
Patrick Higgins  
Megan Honey  
Kevin Lewis  
Kevin MacKenzie  
Kathryn Meikle  
Caitlin Moloney  
Tara Monroe  
Katlyn Monteiro  
Timothy Mueller  
Alexandra Neuman  
Lauren Quinn  
Elizabeth Renfer  
Peter Scanlon  
Caitlin Shea  
Matt Thompson  
Vanessa Wesnak  
Robert Wilson  
Matthew Woods  
Marketing  
*Measuring and Analyzing Social  
Networking Usage and Sleep Among  
College Students*  
Adviser: Charles Martin

**Megan Brunelle**  
Management  
*Saturday Afternoon Football:  
A Student-Centered Marketing Program*  
Adviser: Audrey Ashton-Savage

**Kasey Child**  
Entrepreneurial Venture Creation  
*Creative Destruction: Using Business to  
Reduce Taxpayer Burden*  
Adviser: Thomas Towle

**Tracy Howell**  
Accounting  
*The Future of Auditing: Liability of the  
Auditor*  
Adviser: Jacob Rose

**Molly North**  
Finance  
*Chief Executive Officer Education: Does it  
Make a Difference?*  
Adviser: Brian Bolton

**Samantha Pye**  
Marketing  
*The DePuy Spine Medical Education  
Journey: Enhancing the Medical and  
Professional Education of Surgeons*  
Adviser: William Machanic

**MUB, Room 334/336 (9–11 a.m.)**

**Multidisciplinary Poster  
Presentations**

Moderator: Audrey Ashton-Savage

Jean Adams  
Amanda Brody  
Sabrina Hashmi  
Bridget Robinson  
Kelsey Ruediger  
Devan Weed  
Marketing  
**Sarah Morse**  
Marketing and Management  
*ChildVoice International: Consumer Buyer  
Behavior Project*  
Adviser: Melissa Bishop

**Greggory Bowen**  
**Eric Desjardins**  
**Ashley Luszey**  
**Caitlin Moloney**  
**Deanna Strickland**  
Marketing  
*A Brighter Future for Mechanics: The Clip  
Light*  
Adviser: Ludwig Bstieler

**Kathryn Early**  
**Christine Meyer**  
**Jenna Rogoff**  
Hospitality Management  
*Wine Distribution Throughout New  
Hampshire*  
Adviser: Udo Schlenrich

**Jared LeClaire**

Economics

*What Makes Stock Prices Move? An Investigation into the Factors that Move the Market*

Adviser: Aziz Saglam

**Jonathan Miner**

Economics

*Changes in the Unemployment Rate and Percentage Growth in Real Output as Measured by the GNP*

Adviser: Aziz Saglam

**Andy Moore**

Economics

*The Effect of Interest Rate Change in Conventional Banking on Islamic Banks*

Adviser: Aziz Saglam

**Zoila Morales**

Economics and Women's Studies

*Is There a Relationship Between the Density of Commercial Real Estate in a Given Area and Home Property Taxes?*

Adviser: Aziz Saglam

**Aniela Pietrasz**

Economics and Mathematics

*The Influence of Fannie Mae and Freddie Mac on Housing Consumption and the Mortgage Market*

Adviser: Aziz Saglam

**Brenna Tenore**

Marketing

*Using Social Media to Enhance Traditional Media Performance*

Adviser: Peter Masucci

**MUB, Theatre I (1–6 p.m.)****Marketing Workshop Presentations**

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

Moderator: Peter Masucci

**Development of a Marketing Campaign for the General Motor's College Discount Program—Team 1**

Erin Badger

Charles Bono

Brenna Tenore

Jenna Vadala

Marketing

Adviser: Peter Masucci

**Development of a Marketing Campaign for the General Motor's College Discount Program—Team 2**

Timothy Brannelly

Casey Cardinal

Allyson Gibbs

Stacey Preston

Peter Stanieich

Marketing

Adviser: Peter Masucci

**Development of a Marketing Campaign for the General Motor's College Discount Program—Team 3**

Kathleen Burns

Lindsey Giovinnelli

Fern Strasser

Courtney Sweeney

Anthony Terlizzi

Marketing

Adviser: Peter Masucci

**Development of a Marketing Campaign for the General Motor's College Discount Program—Team 4**

Michaela DeRoche

Jonathan Hinds

Zachary Lash

Jonna Pothier

Kathryn Schmidt

Marketing

Adviser: Peter Masucci

**Development of a Marketing Campaign for the General Motor's College Discount Program—Team 5**

Kora Forlizzi

Gregory Halama

Tara Monroe

Matthew Woods

Marketing

Adviser: Peter Masucci

**Marketing Sustainable Transportation Alternatives on the UNH Durham Campus—Amtrak Team**

Jenna Cardarelli

Danielle DeCoursey

Eric Desjardins

Emily Girard

Brendon Sprinkle

Amanda Trivella

Marketing

Adviser: Peter Masucci

**Marketing Sustainable Transportation Alternatives on the UNH Durham Campus—C&J Bus Lines Team**

Johanna Deris

Nicole Kenney

Kevin MacKenzie

Lauren Quinn

Joseph Shartzter

Vanessa Wesnak

Marketing

Adviser: Peter Masucci

***Marketing Sustainable Transportation  
Alternatives on the UNH Durham  
Campus—Wildcat Transit Team***

Ariane Harter  
Ryan Mill  
Alexandra Neuman  
Cara Sandberg  
Kayla Vigneault  
Steven Zimmerman  
Marketing  
Adviser: Peter Masucci

***Marketing Sustainable Transportation  
Alternatives on the UNH Durham  
Campus—Zipcar Team***

Grant Gibree  
Kristin Kendall  
Corey Marceau  
Bryan McManus  
Danielle Neuffer  
Danielle Taylor  
Marketing  
Adviser: Peter Masucci

***Marketing the Gundalow Company  
Throughout the Piscataqua  
Maritime Region***

Anthony Azarian  
Bryan Bartlett  
Christopher Croteau  
Jessica Dusenberry  
Nicholas Filias  
Lauren Gordon  
Mark Lanciani  
Kellen Millard  
Paige Pendleton  
Whitney Pillsbury  
Ashley Seely  
Robert Wilson  
Marketing  
Adviser: Peter Masucci

***Marketing WSBE Summer School  
Courses***

Aliza Aylward  
Domenic Botticelli  
Tracy Cable  
Nicholas Capano  
Matthew Casey  
Spencer Cecchini  
Ashley Flewelling  
Stuart Mumley  
Elisha Randall  
Kelsey Ruediger  
Marketing  
Adviser: Peter Masucci

***Marketing the Launch of the  
Stay Work Play NH Website***

Joseph Annese  
Carling Belden  
Michelle Berman  
Alan Chenard  
Emily Coppin  
Garrett Cypher  
Justine Goulart  
Patrick Higgins  
Ashley Long  
Patrick Poulin  
Rachel Wudarczyk  
Marketing  
Adviser: Peter Masucci

***Town of Kittery, Maine—  
Marketing of Shopper Tram  
System at the Kittery Outlet Malls***

Allison Bickford  
Greggory Bowen  
Travis Elfreth  
Chelsey Fraser  
Caitlin Moloney  
Jaclyn Moran  
Samantha Pye  
Christina Rolli  
Marketing  
Adviser: Peter Masucci

***Town of Kittery, Maine—  
Marketing of a Water Taxi Service  
Between the Kittery Outlet Malls,  
Pepperrell Cove, and Portsmouth, New  
Hampshire***

Jocelyn Collins  
Victoria Gellatly  
Megan Honey  
Daniel Lundquist  
Stephanie Mitchell  
Katlyn Monteiro  
Timothy Mueller  
Elizabeth Renfer  
Caitlin Shea  
Marketing  
Adviser: Peter Masucci

***Town of Kittery, Maine—Marketing of  
Pepperrell Cove to Recreational Boaters***

Ashley Luszy  
Christine Macoul  
Kathryn Meikle  
Georgia Ricci  
Danielle Russo  
Peter Scanlon  
Nina Shaw  
Deanna Strickland  
Marketing  
Adviser: Peter Masucci

**MUB, Rooms 338/340 (1–3 p.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: Stephen Ciccone and Ahmad Etebari

Alexander Cugini  
Kristina Fish  
Kirsten Fournier  
Jeffrey Lowell  
Taylor MacKay  
Jessica Morse  
Jennifer Tripp  
Accounting

**Gwynneth Heaps**  
 Glenn Law  
 Ryan Shelley  
 Cheyenne Skog  
 Business Administration  
**John Leahy**  
 Chemical Engineering  
**Robert Albee**  
 Edward Lague  
 Conor O'Keefe  
 Economics  
**Nicholas Emmons**  
 Environmental and Resource Economics  
**Benjamin Allen**  
 Ryan Bergeron  
 Joseph Breda  
 Matthew Camuso  
 Adam Cohen  
 Benjamin Collins  
 Keith Corbett  
 Kelli DeDonato  
 Thomas Goodwin  
 Brittany Hill  
 Colin Kelley  
 Ryan Klapprodt  
 Nicholas Krates  
 Zachery Leach  
 Christopher Liston  
 John McGrath  
 Silas Proft  
 Jeffrey Richard  
 Thomas Routhier  
 Robert Rubino  
 Grant Wilson  
 Finance  
**Ryan Guidice**  
 International Business and Economics  
**Patrick Conroy**  
**Stephanie Constant**  
 Kelli Logan  
 Management  
**Charles Nettleship**  
 Marketing  
**Kyle Flynn**  
 Philosophy  
**Brian Volonte**  
 Statistics  
 Advisers: Stephen Ciccone and  
 Ahmad Etebari

### MUB, Rooms 330/332 (3–5 p.m.)

#### **Paul J. Holloway Prize University-wide Innovation-to-Market Poster Presentations**

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.

**Moderator: Michael Merenda**

**Jay Agarwal**  
 Chemistry  
*Versa*  
 Adviser: Thomas Towle

**Timothy Allison** (*graduate student*)  
 Business Administration  
*Luna Organics*  
 Adviser: Juan Florin

**David Arrigg**  
 Marketing  
**Andrew Welenc**  
 Management and Information Systems  
*Kalo Klocks*  
 Adviser: Goksel Yalcinkaya

**Iulia Barbu** (*graduate student*)  
 Civil Engineering  
**Keith Teeter** (*graduate student*)  
 Business Administration  
*Living Waters Inc.*  
 Adviser: Juan Florin

**Mark Bedard**  
 Management and Entrepreneurial  
 Venture Creation  
*Hocopoco*  
 Adviser: M. Billur Akdeniz

**Michelle Berman**  
**Matthew Casey**  
 Marketing and Entrepreneurial  
 Venture Creation

**Joe Cheslock** (*UNH McNair Scholar*)  
 Entrepreneurial Venture Creation

**Andrew Pieroni**  
 Civil Engineering  
*Carbo-Cat*  
 Adviser: Jeffrey Sohl

**Tatyana Bespalova** (*special student status*)  
**Silvia Moraru** (*graduate student*)  
 Business Administration  
*Star Ip TV*  
 Adviser: Jing Wang

**James Browne** (*graduate student*)  
 Civil Engineering  
*MagHammer*  
 Adviser: Charles Goodspeed

**Ming Cao** (*graduate student*)  
 Materials Science

**John Driscoll** (*graduate student*)  
 Economics

**Matthew Smith** (*graduate student*)  
 Business Administration  
*Starching*  
 Adviser: Juan Florin

**Sarah Chandler** (*graduate student*)  
 Business Administration  
*Shopping Positioning System (SPS)*  
 Adviser: Juan Florin

**Kasey Child**  
 Entrepreneurial Venture Creation

**Lisa Gutermuth**  
 International Business and Economics  
*The Green Fire Recovery Act*  
 Adviser: Devkamal Dutta

**Kevin DeRosa** (*graduate student*)  
 Business Administration  
*EZ Burn Inc.*  
 Adviser: Juan Florin

**Samantha Eaton**  
**Alexander Waitner**  
 Entrepreneurial Venture Creation

**Marcel Kozlowski**  
**Kent Walker**  
 Civil Engineering  
*Earthly Solutions*  
 Advisers: Kevin Gardner and Jeffrey Sohl

**Brian Gray**

Mechanical Engineering  
*Social Marketing Frontiers*  
 Adviser: Karen Conway

**Natalie Hicks** (*graduate student*)

Business Administration  
*Hicks Medical Molding*  
 Adviser: Juan Florin

**Timothy Horan** (*graduate student*)

Business Administration  
*Horyar Institute For Lifelong Learning*  
 Adviser: Juan Florin

**Jay Janardhan** (*graduate student*)

Business Administration  
*Proximity Devices*  
 Adviser: Juan Florin

**Danielle Kyricopoulos** (*graduate student*)

Business Administration  
*CareOne*  
 Adviser: Juan Florin

**Joe Lopez**

Management

**Scott MacGrath**

Finance  
*Movies with Messages*  
 Adviser: Stephen Ciccone

**Andrew Lundquist** (*graduate student*)

Business Administration  
*MyIdeas.com*  
 Adviser: Juan Florin

**Marc Ouellette**

Electrical Engineering

**Joshua Schaefer** (*graduate student*)

Business Administration  
*Smart Pen*  
 Adviser: Juan Florin

**Matthew Pflieger**

Management and Kinesiology

**Tiffany M Robicheau**

Management  
*Accumotion*  
 Adviser: Jun Li

**Ryan Quintal** (*graduate student*)

Business Administration  
*Wingman Marketing and Sales*  
 Adviser: Juan Florin

**Radhika Sabnis** (*graduate student*)

**Lori Taylor** (*graduate student*)  
 Business Administration  
*Good Paws*  
 Adviser: Juan Florin

**Justin Stephens** (*graduate student*)

Business Administration  
*Anything Delivered*  
 Adviser: Juan Florin

**Christina Wilson**

Management  
*Taste of the Terra*  
 Adviser: Jun Li

**Andrea Yager** (*graduate student*)

Business Administration  
*The Grange Restaurant*  
 Adviser: Juan Florin

## Seacoast Reads Exhibition

**Wednesday, April 21**  
**10:30 a.m.–Noon**  
**Memorial Union Building,**  
**Rooms 330/332**

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 1,000 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.

## Remembering Grant Cioffi



GRANT CIOFFI, who passed away in March 2010, was one of the co-founders of Seacoast Reads. His dedication to improving the literacy lives of children extended far beyond his own

community, as evidenced by his work with schools and teachers across the state as well as the work he did for many years as part of Boston's Learning Disabilities Program at Children's Hospital.

Grant's vast knowledge of how literacy is developed in children and adolescents was widely known, but those who knew Grant personally were equally struck by his gentle nature, his humility, and his compassion for others. As an associate professor of education at UNH, Grant touched the lives of everyone he taught. It is with great sadness that we say farewell to an enormously inspirational teacher, mentor, and friend.

## Thompson School Community Leadership Program

### Capstone and Research Projects

**Wednesday, April 21**  
**10:30 a.m.–Noon**  
**Memorial Union Building,**  
**Rooms 330/332**

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.

**Danielle Huntress**  
Community Leadership  
*Clothing for Children*  
Adviser: Timothy Barretto

**Richard Kennedy**  
Community Leadership  
*For Haiti Support Effort*  
Adviser: Timothy Barretto

**Corey McGuigan**  
Community Leadership  
*Dodge for Wishes*  
Adviser: Timothy Barretto

**Kristen Mosher**  
Community Leadership  
*Pay It Forward*  
Adviser: Timothy Barretto

**Catherine Plante**  
Community Leadership  
*Cornucopia Community Garden*  
Adviser: Timothy Barretto

**Charles L. Smith**  
Community Leadership  
*Howling Monkey Coffee Farms*  
*Cooperative*  
Adviser: Timothy Barretto

### Haiti Relief

**Ashley Flewelling**  
Marketing  
**Ashley Nelson**  
Communication  
*Save the Children*  
Adviser: Kate Hanson

**Ashley Greene**  
**Courtney King**  
Applied Business Management  
*Yele Haiti*  
Adviser: Kate Hanson

**Blair Heinrich**  
Community Leadership  
*World Concern*  
Adviser: Kate Hanson

**Christine Jacques**  
Community Leadership  
*Mercy Corps*  
Adviser: Kate Hanson

**Ernst Ketel**  
Community Leadership  
*Partners In Health*  
Adviser: Kate Hanson

**Aaron Klauber**  
Community Leadership  
*Doctors Without Borders/Médecins*  
*Sans Frontières*  
Adviser: Kate Hanson

**Tegan LaBarre**  
Community Leadership  
*Meds and Food for Kids*  
Adviser: Kate Hanson

**Andrew Levey**  
Community Leadership  
*American Red Cross*  
Adviser: Kate Hanson

**Laura Lonabaugh**  
Animal Sciences: Equine Sciences  
*Oxfam*  
Adviser: Kate Hanson

**Tucker MacIsaac**  
Community Leadership  
*UNICEF*  
Adviser: Kate Hanson

**Lucas Perry**  
Environmental Conservation Studies  
*CARE*  
Adviser: Kate Hanson

**Niklas Sigl**  
Community Leadership  
*Action Against Hunger*  
Adviser: Kate Hanson

**Meghan Smith**  
Undeclared  
*Beyond Borders*  
Adviser: Kate Hanson

**Jennifer Sullivan**  
**Erin White**  
Applied Animal Science  
*World Society for the*  
*Protection of Animals*  
Adviser: Kate Hanson

**Gail Winsor**  
English Teaching  
*Operation USA*  
Adviser: Kate Hanson

## UNH Office of Community Service Partnerships

**Wednesday, April 21**  
**10:30 a.m.–Noon**  
**Memorial Union Building,**  
**Rooms 330/332**

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.

Information on participants will be available at the event.

## The Naked Arts— Creativity Exposed!

### Act I

**Wednesday, April 21**  
**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.

**Cara Cabral**  
Fine Arts  
*Untitled*  
Adviser: Jennifer Moses

**Grace Cunniff**  
Fine Arts  
*A Series of Self Portraits*  
Adviser: Michael McConnell

**Julie Hamel**  
Art Studio (photography)  
*Untitled*  
Adviser: Benjamin Cariens

**Michael Mackail**  
Fine Arts (painting)  
*Searching, in Paint*  
Adviser: Benjamin Cariens

## Interdisciplinary Science & Engineering Symposium (ISE)

### Poster Presentations

**Wednesday, April 21**  
**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.

**Joshua Allen**  
**Todd Ferrell**  
**Andrew Goodale**  
**David Iani**  
**Jonathan Kasper**  
**Nicholas LaRue**  
**Ryan Malynn**  
**Joseph Muller**  
**Daniel Place**  
**Frank Radlof**  
**Thomas Raffelt**  
**Shawn Savela**  
**Eric Szumiesz**  
**Bradley Turner**  
**Craig Weeden**  
Mechanical Engineering  
*Society of Automotive Engineers—*  
*Mini Baja*  
Adviser: Robert Jerard

**Jacqueline Amante**  
Environmental Conservation  
**Allison Konkowski**  
Zoology  
**Katie Kozacka**  
**Riley Nolan**  
General Biology  
**Adrien Miller**  
Wildlife Ecology  
*Are Cyanobacteria Toxins Present in Fish*  
*Tissue During Winter?*  
Adviser: James Haney

**William Andreyckak**  
Electrical Engineering  
**Mirza Asceric**  
**Michael Bentwood**  
**Charles Bonnier**  
**Joel DeMello**  
**Anthony Giuffrida**  
**Eric Heffron**  
**Daniel Kunyz**  
**Andrew Morin**  
Mechanical Engineering  
*UNH ROV Senior Project*  
Advisers: Diane Foster and  
Francis Hludik

**Eric-Thomas Arroyo**  
**Pavel Kuznetsov**  
**Ervin Weed**  
Electrical Engineering  
*Wireless Activity Monitor*  
Advisers: Francis Hludik and  
John LaCourse

**Ashley Auger**  
**Amelia DeGrace**  
**Sean Doherty**  
**David Gaylord**  
**Stephen Mayer**  
Civil Engineering  
*University Resource Management*  
*Application*  
Adviser: Nancy Kinner

**Michael Bache**  
**Peter Bannon**  
**Katharine King**  
**Dean Lees**  
**James Rubio**  
Mechanical Engineering  
*FLoating Offshore Wind Energy (FLOWE)*  
Advisers: Barbaros Celikkol and  
M. Robinson Swift

**John Ball****Matthew Harding****Gabrielle Lapointe****Patrick Sullivan**

Mechanical Engineering

*Residential Wind Turbine—Powering the Future*

Adviser: Christopher White

**Ashley Basnight** (*guest from Elizabeth City State University*)

Mathematics

*Hurricane Impact on Trees*

Adviser: Barrett Rock

**Brett Bauer II**

Chemistry

*XPS Analysis of Renaissance-Era Ceramics and Identification of Paint Pigments*

Adviser: Arthur Greenberg

**Andrea Bedell****Dana Filoti** (*graduate student*)

Physics

*Texture Evolution of Ag (111) in Phase Segregated Ag-SiO<sub>2</sub> Magnetron Sputtered Composite Thin Films*

Adviser: James Harper

**Sarah Bajor****Mario Giroux****Laura Hood****Raeanna Hughes****Andrew Klein****Jonathan MacBride****Christopher Montigny****Nicole Nazzaro****Alexander Pape****Jason Peddle****Colin Reed****Zachary Schmidt****Gideon Spitzer-Williams****Alexander Stitt****Thomas Zakarian****Zachary Zavalianos**

Civil Engineering

**Jeremy Belanger**

Environmental Engineering

*UNH ASCE Concrete Canoe Competition*

Adviser: Ricardo Medina

**Nicholas Bencivenga**

Chemistry

*Synthesis of Novel Polymerizable Ligands**Providing -1 to 0 and +1 to +2 Charge**Transitions in a Poly-NIPA Polymer System*

Adviser: Roy Planalp

**Nick Bencivenga '10***Chemistry*

NICK BENCIVENGA'S RESEARCH may help boost efforts to make it easier and faster to detect even the tiniest traces of toxins in water supplies.

His URC project will explore a new method for testing water for dissolved metals, such as copper and lead, which are linked to cancer and other diseases.

The winner of several grants from the Hamel Center for Undergraduate Research, Bencivenga also mentors other undergraduates in chemistry. He participated in the 2009 URC as well, and earned an undergraduate research internship last summer with Merck & Co., a global, research-driven pharmaceutical developer.

**Samantha Biron**

Chemistry

*Fractionation and Quantitative Analysis of Specific Isolated Mushroom Components for Stable Isotopic Tracing Methods*

Adviser: Erik Hobbie

**Andrew Bisson****Nathan Demers****Daniel Makowicki****Katrina Maloney****Nicholas Reed**

Civil Engineering

*New ROTC Building*

Adviser: Rebekah Briggs

**Andrew Bobolas**

Geography

*Evaluation of WAVEWATCH III Wave**Height Forecasts in the Gulf of Maine*

Adviser: Mary Stampone

**Kari Bolton****Adam Kaplan****Matthew VanZile****Jordan Zapakin**

Mechanical Engineering

*Tabletop Hydroforming Machine*

Adviser: Ioannis Korkolis

**Eric Boswell****Imani Lugalla**

Mechanical Engineering

*UNH Data Center Efficiency Modeling*

Adviser: Todd Gross

**Theodore Brackett****Christopher Driscoll****Kayla Hampe****Heather Jones****John Kowalski****Jason Peddle****Brian Saari****Clecia Terrio**

Civil Engineering

*Senior Project: I-93 Exit 5 Bridge Replacement*

Advisers: Rebekah Briggs and Kevin Gardner



## May-Win Thein

*Associate Professor, Mechanical Engineering*

FOR MAY-WIN THEIN, the best thing about working with students who design, build, and race the Formula SAE car isn't that it can drive up to 120 mph, but watching the team work together throughout the year to finish the car in time for the grand unveiling at the URC.

"This is their chance to show the results of all their blood, sweat, and tears," says Thein, an URC faculty mentor. "For some of them, this project represents the culmination of four years of hard work. And to watch it all come together is so rewarding."

Thein says she learns a good deal from her URC students, who challenge her as they stretch their academic muscles to build a better racecar. During last year's URC, the team received a 2009 ISE Award of Excellence for Mechanical Engineering.



**Michael Bresnahan**  
**Thomas Campbell**  
**Timothy Desmarais**  
**Daniel Fitzgerald**  
**James Marsden**  
**Kyle O'Leary**  
**Jeffrey Ortakales**  
**Robert Winters**  
 Mechanical Engineering  
*UNH AeroCats*  
 Adviser: Christopher White

**Daniel Broman**  
**Timothy Harmon**  
**Monica Plante**  
 Civil Engineering  
*Soil Mechanics*  
 Adviser: Jo Daniel

**Jeffrey Byrne**  
**Daniel Johnson**  
**Isagani Kimball**  
 Civil Engineering  
**Alexander Costa**  
 Mechanical Engineering  
*UNH Tidal Energy Barge Design*  
 Adviser: M. Robinson Swift

**Christopher Cameron**  
**Dustan Eurieck**  
**Benjamin Hall**  
**Charles E. Smith**  
 Civil Engineering  
*Berlin Subdivision for Dillon Land Investments LLC*  
 Adviser: Cynthia Carlson

**Gina Chaput**  
 General Biology  
**Kyle Charmanski**  
 Mechanical Engineering  
**Kayla Mineau**  
 Environmental Engineering  
*Experiments to Cultivate Oil-Rich Microalgae in Municipal Wastewater*  
 Adviser: Ihab Farag

**Lindsay Chase**  
 Animal Sciences: Pre-veterinary Medicine  
*Effect of Kelp on Growth of Dairy Calves*  
 Advisers: Andre Brito and Nancy Whitehouse

**Robert Chase**  
 Civil Engineering  
*Camp Berea Renovations*  
 Adviser: Cynthia Carlson

**Noah Chinburg**  
 Civil Engineering  
*Improvements on the Pittsfield Mill Pond Dam*  
 Adviser: Kevin Gardner

**Brian Collins**  
 Physics and Mathematics  
*Spin Transport in Silicon*  
 Adviser: Jian-Ming Tang

**Sean Curran**  
 Electrical Engineering  
**Vanessa Kohler**  
**Erik Minnis**  
**Michael Perry**  
**Curtis Peterson**  
**Alex Quintal**  
 Mechanical Engineering  
*Hydrokinetic Turbine Featuring Variable Flux Generation*  
 Advisers: Kenneth Baldwin and Martin Wosnik

**David Demeo**  
 Civil Engineering  
**Meagan Wengrove**  
 International Affairs and Civil Engineering  
*Pepperrell Cove Redevelopment Feasibility Study*  
 Adviser: Cynthia Carlson

**David Demers**  
**Martin Higgins**  
**Danielle St. Jean**  
 Mechanical Engineering  
*UNH Hovercats*  
 Advisers: Barbaros Celikkol and May-Win Thein

**Nicholas Deveau**  
 Chemical Engineering  
*Study of Manual and Automatic Proton Exchange Membrane (PEM) Fuel Cell Systems*  
 Adviser: Virendra Mathur

**Daniel Donahue**

Chemical Engineering

*Waterborne In-Situ Encapsulation of an Amine Adduct for Self-Healing Coatings*

Advisers: Donald Sundberg and John Tsavalas

**Stephen Doran****Douglas MacMillan****Luke Vartuli**

Electrical Engineering

*Electric Snowmobile*

Adviser: L. Gordon Kraft

**Stephen Doran****Douglas MacMillan**

Electrical Engineering

*Ocean Thermal Energy Feasibility Study in the Piscataqua River*

Adviser: Daniel Brogan

**Christopher Dorich**

Environmental Science: Ecosystems

*How Do Albedo and Nitrogen Vary with Stand Age, Treatment, and Site Status?*

Advisers: Lucie Lepine and Scott Ollinger

**Kaitlyn Dugan****Matthew J. Young** (graduate student)

Chemistry

*Synthetic Modifications in the Preparation of Cross-Bridged Tetraamines for Radiopharmaceutical Applications*

Advisers: Gary Weisman and

Edward Wong

**Michael Dunstan****Megan Kramer****David Waterhouse**

Mechanical Engineering

*TableSat Generation II: A Limited 5-DOF**Table Top Prototype for NASA's Magnetospheric MultiScale (MMS) Mission*

Adviser: May-Win Thein

**Brendan Duttry**

Environmental Science: Ecosystems

*Atmospheric Carbon Uptake: An Assessment of Woodlands Managed by UNH*

Adviser: George Hurtt

**Christine Dzialo** (guest from Smith College)**Megan Kramer**

Mechanical Engineering

*Effect of Current Density and Zinc Content During Electrical-assisted Forming of Copper Alloys*

Adviser: Brad Kinsey

**Jason Ebner****Douglas Gerhardt****Kevin Hughes****Daniel Madnick****Dustin Moore****Michael Place****Bardhyl Qendro****Peter Stergios****Milan Vlacic****Jan Vopalensky**

Mechanical Engineering

**Christopher Loo****Joshua Moran**

Electrical Engineering

*UNH Precision Racing 2010 Formula SAE Race Car*

Advisers: Francis Hludik and

May-Win Thein

**Kacie Ferraro**

Mathematics

*Student Mathematical Understanding as a Product of the Learning Environment*

Adviser: Sharon McCrone

**Katelyn Giles**

Physics

*Upgrading the Mount Washington**Observatory Neutron Monitor*

Adviser: James Ryan

**James Graham**

Civil Engineering

*Center for Wildlife*

Adviser: Kevin Gardner

**Jonathan Grohs**

Chemical Engineering

**Rebecca Wilson**

Environmental Engineering

*Renovation, Completion, and Testing of a Biodiesel Processor*

Adviser: Ihab Farag

**Danielle Haddad**

Environmental Science: Ecosystems

*Modeling Atmospheric Deposition Across the Northeastern U.S. and Its Potential Effects on Forest Albedo*

Adviser: Scott Ollinger

**Cedric Hall** (guest from Elizabeth City State University)

Computer Science

*Survey and Analysis of Post-LGM Environment*

Advisers: Benjamin Branch and Malcolm LeCompte (ECSU)

**Kayla Hampe****Heather Jones**

Civil Engineering

*Environmental Impacts on Bridge Performance*

Adviser: Erin Bell

**Michele Heller**

Marine and Freshwater Biology

*Manual Classification of Atlantic Juvenile Blue Fin Tuna to Characterize Schooling Formation Metrics*

Adviser: Thomas Weber

**Kimberly Hislop**

Undeclared

*Using Digital Images and Spectral Reflectance to Quantify Chlorophyll Concentration in Water*

Adviser: Michael Gagnon

**Scott Hurley**

Environmental Science: Ecosystems

*Understanding a Forest's Nitrogen Status through Mushroom Collection: Can It Be Done?*

Adviser: Erik Hobbie

**James Jackson**

Computer Science

*Load-Balancing Parallel Genome Sequence Similarity Analysis*

Adviser: Philip Hatcher

**Amit Jain****Justin Woodman**

Electrical Engineering

*Dynamic Testing of Splitters and In-Line Filters with xDSL Transceivers*

Adviser: Lincoln Lavoie

**Kyle Janco**

Civil Engineering  
*Bunker Pond Dam*  
 Adviser: Kevin Gardner

**Michael Jefferson, Jr.** *(guest from*

*Elizabeth City State University)*  
 Computer Science  
*Automatic Ice Thickness Estimation from Polar Subsurface Radar Imagery*  
 Adviser: Arvin Agah (ECSU)

**Henry Jones**

Wildlife Ecology  
*Assessing the Impact of Moose Browsing on Regenerating Commercial Tree Species in Northern New Hampshire*  
 Adviser: Peter Pekins

**Adam Jordan**

**Joseph Wilson**  
 Mechanical Engineering  
*Experimental Investigation of a Stress Based Failure Criterion to Advance Sheet Metal Forming*  
 Adviser: Brad Kinsey

**Colin Joyce**

Physics  
*Excitation of Low-Frequency Waves in the Solar Wind by Newborn Interstellar Pickup Ions H<sup>+</sup> and He<sup>+</sup> as Seen by Voyager at 4.5 AU*  
 Adviser: Charles Smith

**Kyle Kalutkiewicz**

Physics and Mathematics  
*Calabi-Yau Manifold Construction For Axionic String-Inflation*  
 Adviser: Per Berglund

**Sean Kenney**

**Brian Sicard**  
**Mark Thomas**

Electrical Engineering  
*High Speed Stepped Electronic Load for Dynamic Testing of DC/DC Converters*  
 Advisers: John Canfield and Kuan Zhou

**Tyler King**

Environmental Science: Hydrology  
*Isotopic Analysis of Snowpack Meltwater*  
 Advisor: Matt Davis

**Megan Kramer**

**Aaron Williams**  
 Mechanical Engineering  
*Wave Energy Conversion Project*  
 Adviser: Christopher White

**Ryan Lashin**

**Peter Lorenz**  
 Electrical Engineering  
*Audible Tone Reproduction Via High-Voltage Arc Gap*  
 Adviser: Nicholas Kirsch

**Lauren Lazarus**

Physics and Classics  
*System Dynamics of Coupled Nonlinear Oscillators*  
 Adviser: Dawn Meredith

**Michael Leighton**

Computer Science  
*Object Image Classification: Comparison of Classifiers*  
 Adviser: Wheeler Ruml

**Xiameng Liu**

Chemical Engineering  
*Drop Formation in Co-Flowing Fluids*  
 Adviser: Nivedita Gupta

**Jennifer Luoma**

**James Melfi**  
**Allison Yost**  
 Mechanical Engineering  
*Visualization of an Oil/Water Interface in a Hele-Shaw Cell*  
 Advisers: Greg Chini and Christopher White

**Robert Mamone**

**Brett O'Connor**  
 Electrical Engineering  
*Wireless Speaker System*  
 Adviser: Richard Messner

**Mark Mankus**

Electrical Engineering

**Jason Medas**

**Joseph Pye**  
**Kenneth Roy**  
**Logan Trombley**  
 Mechanical Engineering  
*Fire-Fighting Robot—Ignivinco*  
 Advisers: Barry Fussell and Kuan Zhou

**Kamal Mohamed**

**Aaron Stewart**  
 Computer Engineering

**Kyle Maroney**

**Maximillian Reuning**  
**Amy Schwarzenberg**  
**Austin Wolfson**  
 Electrical Engineering  
*UNH Combat Robot*  
 Adviser: Francis Hludik

**Steven Mays**

Computer Engineering  
*Wi-Fi Controlled Unmanned Vehicle*  
 Adviser: Francis Hludik

**Brian McConnell**

**Dakota Smith**  
 Chemical Engineering  
*Growth of High-Lipid Microalgae in Saltwater*  
 Adviser: Ihab Farag

**Jason Medas**

Mechanical Engineering  
*Dynamic Analysis of TableSatI for NASA's Magnetospheric MultiScale (MMS) Mission*  
 Adviser: May-Win Thein

**Kyle Merkert**

Electrical Engineering  
*Microprocessor Controlled Battery Backup System*  
 Adviser: Wayne Smith

**Richard Messeder**

Physics  
*Satellite Potentials and Charged Particle Behavior in Tenuous Plasmas*  
 Adviser: Roy Torbert

**Ryan Mitchell**

**Patrick Moon**  
**Justin Pelletier**  
**Eric Picard**  
**Sean Tarbox**  
 Civil Engineering  
*UNH Steel Bridge Senior Design Project*  
 Adviser: Rebekah Briggs

**Patrick Moon**

Civil Engineering  
*Fractures and Mechanical Properties of Bone*  
 Adviser: Raymond Cook

**Madison Myers**

Geology

*Reconstructing Mount Etna's Ancient  
Magmatic Plumbing System*

Advisers: Julia Bryce and Sarah Miller

**Amadin Osagiede (UNH McNair Scholar)**

Civil Engineering

*Influence of Aftershocks on Non-Linear  
Seismic Response of Non-deteriorating  
SDOF Systems*

Adviser: Ricardo Medina

**Lee Petersen**

Physics

*Detecting Neon in the Interstellar Flow  
With IBEX-Lo*Advisers: Harald Kucharek and  
Eberhard Moebius**Russell Prescott****Joseph Ruskowski****Thomas Snow****Angus Strachan****James Woidt**

Civil Engineering

*Analysis and Repair Design of the Durham  
Reservoir Dam*

Adviser: Kevin Gardner

**Jordan Reddel**

Chemistry

*Method Development for the Determina-  
tion of Stability Constants for Novel Che-  
lating Ligands with Various Metal Cations*  
Advisers: Roy Planalp and W. Rudolf Seitz**Kevin Rose**

Computer Science

*Backtracking as Best-First Search*  
Adviser: Wheeler Ruml**Garrett Roy**

Mechanical Engineering

*Analysis of a Chemical Ionization Mass  
Spectrometer*Advisers: Barkley Sive, May-Win Thein,  
and Donald Troop**Philip Rubins**

Health Management and Policy

*Current Environmental Sustainability  
Initiatives in New Hampshire Hospitals*  
Adviser: James Lewis**Kaitlyn Steele '10***Environmental Science*

KAITLYN STEELE studied water and sedi-  
ment samples in the region to measure  
the amounts of methane (a greenhouse  
gas) they carry and release.

Her URC research will detail the  
flux of methane concentrations in local  
rivers, the Great Bay estuary, and the  
Gulf of Maine. Such work may help  
scientists target strategies to reduce  
methane emissions.

Steele plans to expand her research  
at NASA's Goddard Space Flight Center  
in Greenbelt, Maryland, over the summer.  
She hopes to pursue graduate studies at  
UNH in the fall, studying geochemical  
systems.

**Dustin Schoenbrun**

Computer Science

*FCoE Initialization Testing Procedure*  
Adviser: Mikkel Hagen**Valerie Schoepfer**Environmental Science: Soil and  
Watershed Management*Leaf Leaching as a Source of Carbon and  
Nutrients in Tropical Streams*  
Adviser: William McDowell**Matthew Senerchia**

Mathematics

*Backplane Ethernet Auto-negotiation  
Test System*  
Adviser: Jonathan Beckwith**Matravia Seymore (guest from  
Elizabeth City State University)**

Computer Science

*Influences of Shoreline Changes, Rock  
Types, Hurricanes, and Elevation on  
Pre-Contact Chowan Indian Culture*  
Adviser: Lloyd Mitchell (ECSU)**Kyle Snavelly**

Physics

*A Complete Simulation of the Silicon  
Vortex Tracker*  
Adviser: Maurik Holtrop**Joshua Stawarz**

Physics

*The Turbulent Cascade for High Cross  
Helicity States at 1 AU*  
Adviser: Charles Smith**Kaitlyn Steele**Environmental Science: Ecosystems  
*Spatial Distribution of Methane in Surface  
Water at the Land-Ocean Interface*  
Adviser: Ruth Varner**Nathan Stein**

Chemistry

*Design, Synthesis, and Characterization of  
a Persistent Nonacene Derivative*  
Adviser: Glen Miller

**Rebecca Swanwick**

Chemistry

*Macromolecular Architecture Development in Seeded Emulsion Polymerization—A Mechanistic Study*

Adviser: John Tsavalas

**Thomas Swass**

Hydrology

*The Effects of a Green Roof on Runoff, Storage, and Water Chemistry*

Adviser: John Davis

**James Tinsley**

Physics

*Studies of the Turbulent Spectrum of Interplanetary Plasma Fluctuations*

Adviser: Charles Smith

**Kent Walker**

Civil Engineering

*Stormwater Management: The Relationship Between Storm Characteristics and Pollutant Removal*

Adviser: Thomas Ballesterio

**Thaddaeus Webster**

Chemical Engineering

*Temperature Stressing of High Lipid Algae to Produce Biodiesel*

Adviser: Ihab Farag

**James Woidt**

Civil Engineering

*Queuing and Economic Analysis of Uphill Ski Traffic at New Hampshire Ski Resorts*

Adviser: Rebekah Briggs

**Joshua Wood**

Physics

*Neutron and Gamma Ray Imaging with the Gamma-Ray Experimental Telescope Assembly (GRETA)*

Advisers: Jason Legere, Mark McConnell, and James Ryan

**Bianca Young** (guest from Mount Holyoke College)

Environmental Science: Ecosystems

*The Role of Sphagnum Mosses in Methane Cycling of a Northern Peatland Fen*

Adviser: Ruth Varner

**William Rideout**

Computer Science

*Interactions Between SIP and NAT User Agents and the SIP-NAT Interoperability Test Suite*

Adviser: James Swan

## UNH Manchester Undergraduate Research Conference

### Poster Presentations

**Wednesday, April 21**

**4–6 p.m.**

**UNHM Auditorium**

The UNH Manchester 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.

**Samantha Allwood**

English

*Bob Dylan*

Advisers: Deborah Brown and Fred Metting

**Amanda Anderson**

**Amy Keating**

Communication Arts

**Ashlee Lange**

Communication Arts and Community Leadership

**Anna Carrigan**

Community Leadership and Applied Animal Science

**Elizabeth Brideau**

General Studies

**Paula VanDeWerken**

**Jacquelyn Wescott**

Undeclared

*Planet Aid*

Adviser: Kate Hanson

**Kourtney Auger**

Psychology

*Evaluation of the PALs program*

Adviser: Alison Paglia

**Erika Bagley**

English

*Bob Dylan & His Place in the Folk Revival*

Adviser: Fred Metting

**Kimberly Barthelmes**

History

*A Beautiful Place to Rest*

Adviser: Robert Macieski

**Kimberly Barthelmes**

History

*Reacting and Remembering: Life After the Holocaust*

Adviser: John Cerullo

**Danielle Beaulieu**

Biological Sciences

*The Affects of Timber Harvesting on the Massabesic Watershed*

Adviser: Stephen Pugh

**Jillian Boniface**

History

*The Correlation Between the Sanitary Issues That Were Prevalent in Manchester and the Diseases That Affected the Populace During the Years 1830–1855*

Adviser: Robert Macieski

**Shannon Boudreau**

**Sarah Jo Merriman**

Psychology

*The Elders Grow Program at Hillsborough County Nursing Home*

Adviser: Alison Paglia

**Michael Cochran-Boucher**

Biological Sciences

*Obesity and Pregnancy: Associated Morbidities*

Adviser: Patricia Halpin

**Melinda Cormier**

Business

**Meghan Friolet**

Undeclared

*The Use of Social Networking and Increased Internet Communications Creates Stronger Brand Awareness than Traditional Media Alone for Non-Profit Organizations*

Advisers: William Troy

**Erik Croto**

History and Education

*Manchester, New Hampshire's First Mills*

Adviser: Robert Macieski

**Chrissy Dobbins**

History

*History of Education in the 19th Century Manchester, New Hampshire, 1847–1857*

Adviser: Robert Macieski

**Nicole Elesi**

English

*The Possibility of Computers Understanding Human Language*

Adviser: Terry Savage

**Laura Fidler**

History and Psychology

*Crime in Early Manchester, New Hampshire*

Adviser: Robert Macieski

**Scott Frizzell**

English

*Peter, Paul & Mary*

Adviser: Fred Metting

**Jacqueline Geisheimer**

Communication Arts and English

*Ramblin' Jack Elliott: The Forgotten Link*

Adviser: Fred Metting

**Karen Handley**

Biological Sciences and Computer Information Systems

*Water Filter Microbiology*

Adviser: Lorraine Doucet

**Nathan Jensen**

History

*Origins of the Manchester Locomotive Works*

Adviser: Robert Macieski

**Bryan Lavoie**

History

*Early Manchester Politics*

Adviser: Robert Macieski

**Robert Montgomery**

History

*Birth of a City: Manchester, New Hampshire, 1840–1850*

Adviser: Robert Macieski

**John-Paul Padfield**

History

*The Foundations and Building of Ste. Marie's Church*

Adviser: Robert Macieski

**Courtney Palladino**

History

*Music, Music, Music*

Adviser: Robert Macieski

**Justin Tullgren**

Computer Information Systems and Business

*Ektron VMWare Restructure*

Adviser: Karla Vogel

**Colleen VanOnselen**

Psychology

*Decisions Program: Working with Inmates in Hillsborough County*

Adviser: Alison Paglia

**Caroline Wicks**

History

*The Morality of Women in Antebellum Manchester*

Adviser: Robert Macieski

---

## UNH Manchester Undergraduate Research Conference

---

### Cinema Arts Day

**Thursday, April 22****11 a.m.–1 p.m.****University Center, Manchester**

The UNH Manchester 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.

**Jacqueline Geisheimer**

Communication Arts and English

*Tarenella: Cinderella X Kill Bill*

Adviser: Keith Shields

**David Klein**

Communication Arts

*The Storm*

Adviser: Anthony Tenczar

**David Klein**

Communication Arts

*The Iron Maiden*

Adviser: Anthony Tenczar

**David Klein**

Communication Arts

*A Walk In The Snow*

Adviser: Anthony Tenczar

**David Klein**

Communication Arts

*Pillow Poetry*

Adviser: Anthony Tenczar

**Kevin Mason**

Communication Arts and Politics and Society

*A is for Atom*

Adviser: Anthony Tenczar

**Raymond Murphy**

Communication Arts

*Beneath The Sinews*

Adviser: Anthony Tenczar

**Ian Reddick**

Communication Arts

*Warmth from the Millyard*

Adviser: Thomas Birch

**Ian Reddick**

Communication Arts

*New Brews: The Reintroduction to Craft**Brewing in New England*

Adviser: Anthony Tenczar

## The Naked Arts— Creativity Exposed!

### Act II

**Thursday, April 22**  
**12:30–2 p.m.**  
**Museum of Art,**  
**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**  
Music  
*Speech Music: Experiments in Musicalizing Language*  
Adviser: Rob Haskins

**Victoria Carot**  
**Joseph Nelson**  
**Andrew Saladino**  
Theatre  
*Research and the Creative Process: Creating the World of Parade*  
Adviser: David Richman

**Emma Duffy-Comparone**  
Political Science and English  
*The Evolution of a Fictional Narrative: A Reading from “Marvels Sands” and Discussion*  
Adviser: Thomas Payne

**Joshua Torbick**  
Art Studio  
*Architectural Materials for Outdoor Furniture*  
Adviser: Benjamin Cariens

## History Department Undergraduate Presentations

**Thursday, April 22**  
**12:40–2 p.m.**  
**Memorial Union Building,**  
**Rooms 338/340**

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

**Michael Branley**  
History and Political Science  
*An Analysis of the Drafting and Motivations Behind the Second American Constitution*  
Adviser: J. William Harris

**Thibaut Delloue**  
History  
*Manchester’s Franco-Americans During the Great War*  
Adviser: Lucy Salyer

**Katie Fryer**  
History  
*American Soldier’s Experiences In World War I and Propaganda at Home*  
Adviser: Janet Polasky

**Jesse Gagnon**  
History and Spanish  
*Dress and Identity in Colonial Latin America*  
Adviser: Julia Rodriguez

**Reagan Grady**  
Communication  
*American Revolution*  
Adviser: Janet Polasky

**Mary Nolin**  
History  
*The Civil Rights Movement: A Cultural Revolution*  
Adviser: Janet Polasky

**Camila Pawlowski**  
History  
*The Spanish Civil War 1936–1939*  
Adviser: Janet Polasky

## UNH Manchester Undergraduate Research Conference

### Engineering Technology Senior Project Presentations

**Friday, April 23**  
**8:30 a.m.–3 p.m.**  
**University Center, Manchester**

The UNH Manchester 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.

**Cory Chamberlain**  
Mechanical Engineering  
*Dust Test Chambers*  
Adviser: Ralph Draper

**Joseph DelTrecco**  
Mechanical Engineering  
*Thermal Interface Resistances*  
Adviser: Ralph Draper

**Nicholas Druke**  
Electrical Engineering  
*Technical Evaluation of the Open CL Framework*  
Adviser: David Forest

**Lee Dutton**  
Mechanical Engineering  
*F22 Module*  
Adviser: Ralph Draper

**Peter Herrick**  
Mechanical Engineering  
*Hook and Loop Peel Performance Time Correlation*  
Adviser: Ralph Draper

**Emin Mukanovic**  
Electrical Engineering  
*Build and Evaluate DSP2 for Narrow Band Filter 0.1 MHz Spur Search Program for QA Tests on DSP2*  
Adviser: David Forest

**Gregory Riccio**

Mechanical Engineering

*Welding Analysis of Hairpin Lines 2 and 3*

Adviser: Ralph Draper

**Nathanael Williams**

Mechanical Engineering

*MAAM Drops Strapping Machine*

Adviser: Ralph Draper

## Parents Association Undergraduate Research Symposium

Welcome Breakfast with  
UNH Provost John Aber and  
Parents Association Council  
President-elect Peter Hayden

**Friday, April 23****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-elect 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.

## Poster Presentations, Session A

**Friday, April 23****9:30–10:40 a.m.****Memorial Union Building,  
Granite State Room****Elyssa Barrick****Kristen Onos** (*graduate student*)

Psychology

*Reversible Inactivation of Reuniens and**Rhomboid Thalamic Nuclei Impairs Two**Measures of Spatial Working Memory*

Adviser: Robert Mair

**Amanda Baum**

Occupational Therapy

*Promoting Social Interaction Skills During**Occupational Engagement for Adults with**Developmental Disabilities*

Adviser: Douglas Simmons

**Andrew Bobolas**

Geography

*Evaluation of WAVEWATCH III Wave**Height Forecasts in the Gulf of Maine*

Adviser: Mary Stampone

**Jade Condemi****Sara Douglas**

Psychology

**Kevin O'Leary**

Psychology and Justice Studies

*Peer and Personality Influences on**Rule-Violating Behavior: Old Enough to**Know Better But Still Too Young to Care*

Adviser: Ellen Cohn

**Natalie Delfosse**

Nutritional Sciences

*Chronic Disease Risk Factors Are Impacted**by Nutrition Education in College-aged**Adults*

Adviser: Jesse Morrell

**Stacy Farina**

Marine and Freshwater Biology

*An Examination of the Nerves Innervating**the Lateral Line of Deep-Sea and Shallow-**Water Anglerfish*

Advisers: William Howell and

Christopher Kenaley

**Emalee Fenner**

Communication Sciences and Disorders

*EEG Neurofeedback Treatment of**Cognitive and Emotional Deficits**Following Acquired Brain Injury*

Adviser: Michael Fraas

**Katie Fitzgerald** (*UNH McNair Scholar*)

Communication Sciences and Disorders

*Adults Who Stutter: The Emotions, Stress**Levels, and Stuttering Severity Levels in**Telephone and Face-to-Face Conversations*

Adviser: Michael Fraas

**Darci Jenkins**

Psychology and Justice Studies

*The Effect of Source Types on Children's**Source Monitoring*

Adviser: Michelle Leichtman

**Justin Linxweiler**

Anthropology

*Diet and Health Analysis of Late**Woodland American Indians on Burt and**Douglas Inland Lakes, Northern Michigan*

Adviser: Meghan Howey

**Amy Morgan**

Psychology

*The Effects of Hippocampal Lesions on**Contextual Cuing in Pigeons*

Adviser: Brett Gibson

**Melissa Schilke**

Psychology

*Procrastination Study*

Adviser: Barbara White

**Krista Stalzer**

Family Studies

*Survey of Educator Beliefs and School**Practices: Recess in Elementary Schools*

Adviser: Dora Chen

**Kathryn Topliff**

Nursing

*Nursing Student Willingness to Manage**Patient Pain*

Adviser: Carol Williams-Barnard

**Samantha Townsend**

Occupational Therapy

*Evaluation of Social Interaction: A**Comparison of Social Skills in Children**With and Without a Disability*

Adviser: Lou Ann Griswold



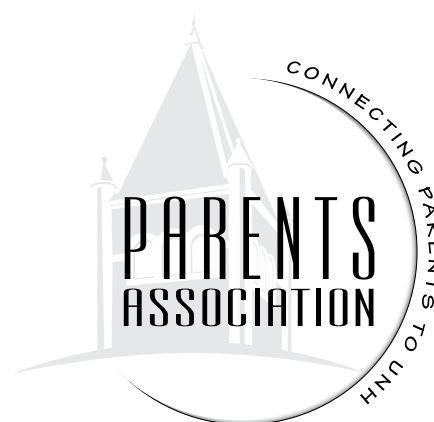


**UNH Parents Association  
Undergraduate Research Symposium  
Friday, April 23, 2010**

**9 a.m.–3 p.m.**

**H**igh-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)**. Funding 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.*



**Elizabeth Weber**

Psychology  
*The Effects of Digit Ratio and Polychronicity on Task Switching*  
 Adviser: Andrew Leber

**Matthew Wilkinson**

Psychology  
*Planning Behavior in the Pigeon: Efficiency on Single and Round Trip Tasks*  
 Adviser: Brett Gibson

**Megan Yee**

Psychology  
*Do Ultrasonic Vocalizations During Swim Stress Predict Resistance to Behavioral Depression in Rats?*  
 Advisers: Robert Drugan

## **Social Work: Extraordinary Experiences!**

**9:30 a.m.–Noon**

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 and Gretchen Bean

**Dana Albert**

Social Work  
*Creative Expression: Finding Our Voices*  
 Adviser: L. Rene Bergeron

**Sarah Andersen**

Social Work  
*College Food Pantries: When Dining Halls Are Not Affordable*  
 Adviser: L. Rene Bergeron

**Samantha Benton (UNH McNair Scholar)**

Social Work  
*Children That Need Us The Most: The Achiever Selection Process of "Friends of the Children—Boston"*  
 Adviser: L. Rene Bergeron

**Nicole Bourgoine**

Social Work  
*An Afternoon in the Life of a "New Outlook" Teen*  
 Adviser: L. Rene Bergeron

**Alissa Brady**

Social Work  
*Hand Drumming: Promoting Community and Healing*  
 Adviser: Gretchen Bean

**Samantha Brown**

Social Work and Justice Studies  
*Positive Youth Development and Residential Placements: Embracing the Opportunities for At-Risk Youth*  
 Adviser: Gretchen Bean

**Elizabeth Brownell**

Social Work and Spanish  
*Bilingual Teaching in the Classroom*  
 Adviser: Gretchen Bean

**James Childs**

Social Work  
*Somersworth Youth Connection: The Spirit Up Somersworth Campaign*  
 Adviser: Gretchen Bean

**Jessica Curry**

Social Work  
*Bullies Be Gone*  
 Adviser: L. Rene Bergeron

**Ashley Graffam**

Social Work  
*Empowering Personal Growth Through Community Resources*  
 Adviser: L. Rene Bergeron

**Rebecca Hamerstrom**

Social Work  
*Independent Living: The Benefits of the Homemaker Program*  
 Adviser: L. Rene Bergeron

**Whitley Harden**

Rachel Quarrell  
 Social Work  
*Dover Teen Center: A Positive After School Experience*  
 Adviser: Gretchen Bean

**Heather Hartshorne**

Social Work  
*The Truth About Mental Illness: Facts and Fiction*  
 Adviser: L. Rene Bergeron

**Christopher Hoerner**

Social Work  
*What's Diversion? New Heights Community Diversion Model*  
 Adviser: Gretchen Bean

**Euna Kim**

Social Work  
*Discharge Planning: What are the Needs of Released Inmates?*  
 Adviser: Gretchen Bean

**Kelly Martell**

Social Work  
*Attitudes Toward Mental Illness: A College Student Perspective*  
 Adviser: Robert Jolley

**Jenny Oien**

Social Work  
*The Road to Protecting Our Children*  
 Adviser: L. Rene Bergeron

**Erika Palleo**

Social Work  
*I'm Homeless. Now What?*  
 Adviser: L. Rene Bergeron

**Alexandra Perch-Ahern**

Social Work  
*Diversion: A Second CHANCE for Adolescents*  
 Adviser: Gretchen Bean

**Alexandra Quig**

Social Work  
*Rebuilding After A Violent Crime: Victim's Compensation*  
 Adviser: L. Rene Bergeron

**Michael Ralph**

Social Work  
*Changing Childhood Risk Factors to Emerging Adult Strengths*  
 Adviser: L. Rene Bergeron

**Kelsey Rees**

Social Work

*I Can Take Care of Myself: Self Defense as a Way to Raise Teenage Girls' Self-Esteem*

Adviser: Gretchen Bean

**Leah Rice**

Social Work

*The Road to Change: An Overview of the Change Process*

Adviser: L. Rene Bergeron

**Rebecca Rutledge**

Social Work

*The Deal with Diversion*

Adviser: L. Rene Bergeron

**Jonathan Scholl**

Social Work

*Who Decides? The Future of Consumer Directed Services*

Adviser: L. Rene Bergeron

**Sarah Scott**

Social Work

*Kids These Days: Emerging Issues in Substance Use*

Adviser: Gretchen Bean

**Victoria H. Smith**

Social Work

*The Feminist Health Center of Portsmouth Through the Years*

Adviser: Gretchen Bean

## Parents Association Undergraduate Research Symposium

### Oral Presentations, Session A

**Friday, April 23****9:30–10:40 a.m.****Memorial Union Building****MUB, Room 237**

### ***Feminism in Action: Community-based Internships and Inquiry in Women's Studies***

**Moderator: Carina Self****Sara Bibeau**

Psychology and Women's Studies

*YWCA Crisis Center, Manchester, New Hampshire*

Adviser: Carina Self

**Rachel Canova**

Family Studies and Women's Studies

*NARAL Pro-Choice NH, Concord, New Hampshire*

Adviser: Carina Self

**Ting Chin**

Sociology

*Planned Parenthood of Northern New England, Concord, New Hampshire*

Adviser: Carina Self

**Caitlin LeMay**

Psychology

*Strafford County Department of Corrections, Dover, New Hampshire*

Adviser: Carina Self

**Emily Lovell**

Political Science

*New Hampshire Women's Lobby and New Hampshire Women's Alliance*

Adviser: Carina Self

**Anne Mathe**

Sociology and Women's Studies

*Health Services, UNH, Durham, New Hampshire*

Adviser: Carina Self

**MUB, Room 321**

### ***Honors Program: U.S. and Asia (China and Korea)***

**Moderator: Chris Wasileski****Timothy Brock**

Undeclared

*The Korean War: An Armistice with No Peace*

Adviser: Lawrence Reardon

**Christina Dokopoulos**

Anthropology and Political Science

*President Truman and the Decision on Korea*

Adviser: Lawrence Reardon

**Patricia Donahoe**

International Affairs and Political Science

*American Missionary Involvement in China*

Adviser: Lawrence Reardon

**Matthew Jones**

Undeclared

*Lee Teng-hui's Famous Holiday*

Adviser: Lawrence Reardon

**Nathaniel Kaplan**

Business Administration

*A Threat to Mankind: The Deterioration of Sino-US Relations*

Adviser: Lawrence Reardon

**MUB, Room 332**

### ***International Affairs—Democracy and Political Involvement***

**Moderator: Benjamin Cole****Melanie Condon**

International Affairs and Political Science

*Chile: A Model for Stable Democracy in Latin America*

Adviser: Lawrence Reardon

**Sarah Finney**

International Affairs and Spanish

*The Collapse of the Chilean Democratic Tradition*

Adviser: Lawrence Reardon

**Lisa Gutermuth**

International Affairs and Business  
Administration  
*Activism vs. Apathy: The Evolution of  
Political Involvement*  
Adviser: Benjamin Cole

**Meghan Kayser**

International Affairs and Political Science  
*The European Union and the Democratic  
Deficit*  
Adviser: Benjamin Cole

**Kristin Keohan**

International Affairs and Spanish  
and Mathematics  
*Development and Neoliberalism in  
Nicaragua*  
Adviser: Benjamin Cole

---

**MUB, Room 334****International Affairs—  
Developing a Global Economic  
Infrastructure****Moderator: Richard England****Kimberly Farias**

International Affairs and Anthropology  
*Rural Economic Transitions: The Socio-  
Ecological Consequences of Liberal  
Economic Theory in a Subsistence  
Community*  
Adviser: Benjamin Cole

**James McAleese**

International Affairs and Political Science  
*The Prevalence of Nuclear Power in France*  
Adviser: Benjamin Cole

**Maureen McHugh**

International Affairs and Civil  
Engineering  
*Infrastructure Differences Between Spain  
and the United States*  
Adviser: Lawrence Reardon

**Amanda McManus**

International Affairs and German  
*Recycling Systems in Austria and the  
United States*  
Adviser: Benjamin Cole

---

**MUB, Room 336****International Affairs—Global  
Social Problems and Solutions****Moderator: Theodore Howard****Jordan Caley**

International Affairs and Spanish  
*Narcos versus the Nation: Drug-related  
Violence in Mexico*  
Adviser: Lawrence Reardon

**Rachel Kelly-Martin**

International Affairs and Kinesiology  
*Comparing Education: Ghana and  
Paraguay*  
Adviser: Benjamin Cole

**Sarah Strosahl**

International Affairs and Music  
Education  
*On the Border: Domestic Abuse in Mexico*  
Adviser: Lawrence Reardon

**Danielle Vasan**

International Affairs and Communication  
*Spain and the Bologna Plan: A Modern  
Day Controversy*  
Adviser: Lawrence Reardon

**Courtney Wright**

International Affairs and Political Science  
*Organized Crime in the Italian  
Mezzogiorno*  
Adviser: Lawrence Reardon

---

**MUB, Room 330****International Affairs—  
Nationalism, Discrimination,  
and Xenophobia****Moderator: Jeannie Sowers****Rudy Benik**

International Affairs and Russian  
*Extreme Xenophobia in Post-Soviet Russia*  
Adviser: Lawrence Reardon

**Bethany Brace**

International Affairs and Spanish  
*English Supremacy: Why Spain Enacted  
Dual Language Education*  
Adviser: Benjamin Cole

**Bridget Farmer**

International Affairs and Political Science  
*French Xenophobia Towards Muslims*  
Adviser: Benjamin Cole

**Madlena Pesheva**

International Affairs and Recreation  
Management and Policy  
*Violation of Roma Human Rights in  
Eastern Europe*  
Adviser: Lawrence Reardon

**Kayla Timmons**

International Affairs and Communication  
and Linguistics  
*Italian Discrimination Against the Muslim  
Population*  
Adviser: Benjamin Cole

---

**MUB, Room 338****International Affairs—  
The Cost and Benefits of  
Economic Development****Moderator: Lionel Ingram****Xiomara Alban**

International Affairs and Spanish  
*Trouble in Paradise: Ecotourism in  
Costa Rica*  
Adviser: Lawrence Reardon

**Sarah Lemelin**

International Affairs and Communication  
*Reality Tourism and Improving  
Low-Income Housing*  
Adviser: Benjamin Cole

**Andrew Pratt**

Political Science  
*Trade Liberalization as India's Choice in  
the Global Economy*  
Adviser: Lionel Ingram

**Rebecca Smith**

International Affairs and Business  
Administration  
*Environmental Policy and NGOs in China*  
Adviser: Benjamin Cole

## Tyler King '10

### Hydrology

TYLER KING is researching how snow-pack contributes to regional aquifers. Using stable isotope analysis, his URC project shows how it's possible to trace snowmelt as it infiltrates and recharges groundwater. After graduation, King intends to pursue a graduate degree in water resource management and to dedicate himself to the field of equitable public water supply systems.



### Meagan Wengrove

International Affairs and Civil Engineering

*Upstream to Downstream: Water Quality in Mayagüez, Puerto Rico*

Adviser: Lawrence Reardon

### MUB, Room 304

### Media Images

Moderator: Joshua Meyrowitz

### Daniel Dostoler

Communication

*Not So Black and White: An Analysis of the Grammar Variables Presented in Sports Illustrated*

Adviser: Joshua Meyrowitz

### Emily O'Neill

Communication

*American Beauty: Ordinary Plot with Extraordinary Grammar Variables*

Adviser: Joshua Meyrowitz

### Jocelyn Ouellette

Communication

*Italian-American Stereotypes in Television: Gangsters, Mothers, Sex Symbols, and Fessos*

Adviser: Joshua Meyrowitz

### Kimberly Rogers

Communication

*All the Fun of College, None of the Education, and Other Lies Told by Hollywood*

Adviser: Joshua Meyrowitz

### MUB, Room 233

### Multidisciplinary Session 1

Moderator: Christopher Kies

### Elizabeth Beaudoin

Art History and Art Studio

*Falling Behind, But Perfecting a Style: Finding a Place in History for Artist William Bouguereau*

Adviser: Rebecca Karo

### Katie David

Classics and History

*Protecting the Fundamentals of European Culture During World War II*

Adviser: Nicoletta Gullace

### Kirstin Striker

English

*Translating the Poetry of Hans Lodeizen from Dutch to English*

Adviser: Martin McKinsey

### Eric Wind

Political Science

*Thomas Jefferson in Neoclassical Architecture, Using Architectural History to Evaluate the Statesman*

Adviser: Rebecca Schwartz

### MUB, Room 302

### Multidisciplinary Session 2

Moderator: Molly Doyle

### Sophie Ellis

Wildlife Ecology

*Grazing Techniques in the Doro Nawas Conservancy in Namibia, Africa*

Adviser: Peter Pekins

### Krysten Finefrock

Health Management and Policy

*Role of a Community's Ecology in Effectively Communicating Environmental Health Risks to Diverse Refugee Populations*

Adviser: Rosemary Caron

### Danah Hashem

Hom Sharma

Chemical Engineering

*Nanofiltration Membrane Stabilization of Bio-oil*

Adviser: Ihab Farag

### Daniel Perrinez

Marine and Freshwater Biology

*Lipid Profile of Micro-Algae Used in Biodiesel Production*

Adviser: Ihab Farag

### Thaddaeus Webster

Chemical Engineering

*Temperature Stressing of High-Lipid Algae to Produce Biodiesel*

Adviser: Ihab Farag

**MUB, Room 207****Multidisciplinary Session 3****Moderator:** Michael Middleton**Tiffany Black**

Anthropology

*'Girl's Night Out': An Ethnography of**Women's Music-Use*

Adviser: Teresa Raczek

**Kara Caputo****Melissa Waker**

Psychology

*Blur and the Venetian Blind Effect with**Luminance Disparities*

Adviser: William Stine

**Kara Caputo****Melissa Waker**

Psychology

*Blur and the Venetian Blind Effect with**Contrast Disparities*

Adviser: William Stine

**Joe Cheslock** (UNH McNair Scholar)Entrepreneurial Venture Creation and  
Management*The Relationship Between Missionary  
Organizations and Corporate Donors*

Adviser: Carl Lindblade

**MUB, Room 340****Performing Gender in the  
Contemporary United States****Moderator:** Melissa Deem**Samantha Bell**

Communication

*The World's First Pregnant Man*

Adviser: Melissa Deem

**Julie Cassetina**

Communication

*Cross-Dressing: A True Gender Bender*

Adviser: Melissa Deem

**Kaitlyn Ramsay**

Communication

*Performing Maternity: Limiting the Role  
of the Individual Woman in Abortion  
Discourses*

Adviser: Melissa Deem

**Jenna Simmons**

Communication

*Cross-dressing: Fashion Statement or  
Something More?*

Adviser: Melissa Deem

**MUB, Rockingham Lounge  
1–3 p.m.****Comm-entary**

*Comm-entary* is the University of New Hampshire's annual student journal of communication, founded in 1981. Articles are "blind-reviewed" by a student editorial board, that is, the editors do not know the names of the authors of submitted work until after an article has been accepted for publication. Any communication major, as well as any other undergraduate student, may submit material for consideration and possible publication. The journal is also an excellent way for prospective majors to preview the type of projects that majors work on in advanced courses.

**Moderator:** Melissa Deem**Melissa Alves****Samantha Bell****Chelsey Canavan****Julie Cassetina****Nina DiCenso****Reagan Grady****Cathy Harwood****Ashley Kelley****Ashley Lavoie****Kelsey Loveday****Kendra Mack****Samantha Mick****Hannah Morin****Ashley Powers****Kaitlyn Ramsay****Kimberly Scheibel****Victoria L. Smith****Melissa Spicer****Kathleen Trombly****Laura Yegge**

Communication

**Jayde Huxtable**

English/Journalism

**Kayla Timmons**

International Affairs and

Communication and Linguistics

Adviser: Melissa Deem

**Parents Association  
Undergraduate Research  
Symposium****Poster Presentations,  
Session B****Friday, April 23****10:50 a.m.–Noon****Memorial Union Building,  
Granite State Room****Jordan Anderson****Jon Bonneau****Joshua Torr**

Kinesiology

*An Assessment of Stress and Burnout  
Among High School Athletic Directors*

Adviser: Heather Barber

**Kevin Anderson**

Psychology

*The Role of Norepinephrine in Reward  
Learning: Evidence from a Lesion Study  
of the Orbitofrontal Cortex*

Adviser: Jill McGaughy

**Ashley Auger****Amelia DeGrace****Sean Doherty****David Gaylord****Stephen Mayer**

Civil Engineering

*University Resource Management  
Application*

Adviser: Nancy Kinner

**Elizabeth Beaudoin**

Art History and Art Studio

*Sarah Wyman Whitman—A New England  
Artist*

Adviser: Mara Witzling

**Lindsay Bergmann**

Nursing

*A Qualitative Study of TASO's Home-Based HIV Counseling and Testing Program in Rural Uganda*

Advisers: Gene Harkless and Carol Williams-Barnard

**Emma Carroll****Stephanie Lanza**

Sociology

*Male and Female College Students' Motivations to Attend the Gym or Not*

Adviser: Catherine Moran

**Lindsay Chase**Animal Sciences: Pre-veterinary Medicine  
*Effect of Kelp on Growth of Dairy Calves*

Advisers: Andre Brito and Nancy Whitehouse

**Kimberly Deane**

Classics

*New Evidence on Ancient Olympic Athletes*

Adviser: Stephen Brunet

**Ashli Franck**

Nutritional Sciences

*Farm to Food Bank*

Adviser: Joanne Burke

**Heather Froehlich**

English and Linguistics

*Native and Adopted Prefixes in English Morphology: A Comprehensive Study of Locative Prefixes in English Word Formation*

Adviser: Rochelle Lieber

**Cassandra Guerra**

Zoology

*Social Intelligence in Asian Elephants Elephas maximus: Object Choice Tasks*  
Adviser: Michelle Scott**Autumn Henley**

Occupational Therapy

*The Use of the Behavioral Assessment for Dysexecutive Syndrome in Adolescents and Young Adults with Prodromal Signs of Psychosis*

Adviser: Kerryellen Vroman

**David Houle**Psychology and International Affairs  
*Personality Image Archive: Personality in the Face*

Adviser: John Mayer

**Kathleen Keating**

Molecular, Cellular and Developmental Biology

**Lin Shao** (graduate student)

Plant Biology

*Regulation of Polyamine Gene Expression in Arabidopsis thaliana*

Adviser: Subhash Minocha

**Kie Kuwabara** (graduate student)

Psychology

**Tanya Rouleau**

Major: Psychology and Sociology

*Children's Use of Autobiographical Memories During Social Problem-solving*

Adviser: David Pillemer

**Andre Littlefield**

Biochemistry

*Understanding Adipocyte-Mediated Angiogenesis*

Adviser: Deena Small

**Tsion Mamo** (UNH McNair Scholar)

Psychology

*Providing Negative Feedback to Highly Insecure Individuals*

Adviser: Edward Lemay

**Rebecca Misra**

Psychology

*Digging Deeper Into the Medial Temporal Lobe: Does Aging Impact Cortical Layers Differently?*

Adviser: Jill McGaughy

**Kaitlyn Mortimer**Communication Sciences and Disorders  
*Technology and Nonverbal Communication: The Relationship Between Text-based Communication and Tone of Voice Perception*

Adviser: Penelope Webster

**Christina Patenaude**

Health Management and Policy

*Role of HIV Education in the Perceptions of the Disease Among College Students*

Adviser: Semra Aytur

**Alicia Perry**

Nursing

*Relationship Among Perfectionism and Daily Hassles on Headache in Undergraduate Nursing Students*

Adviser: Joanne Samuels

**Allison Reilly**

Nursing

*Cultural Reform in Acute Care: Learning from Australia's "Improving the Culture of Hospitals" Project*

Adviser: Gene Harkless

**Paige Smith**

Occupational Therapy

*The Things Kids Do: Exploring Relations Among Occupations, Weight, Stress, and Health*

Adviser: Barbara White

**Hailey Sullivan**

Occupational Therapy

*"You don't come home from war. You come home with war." The American Veteran Re-Integration Experience Post Deployment to Iraq or Afghanistan*

Adviser: Kerryellen Vroman

**Aarron Winter** (UNH McNair Scholar)

Psychology

*Personality in the Face*

Adviser: John Mayer

**Evelyn Yuen**

Nutritional Sciences

*Physical Activity and Bone Health of College Students*

Adviser: Jesse Morrell

## Parents Association Undergraduate Research Symposium

### Oral Presentations, Session B

**Friday, April 23**  
**10:50 a.m.–Noon**  
**Memorial Union Building**

#### MUB, Room 340

### **Global Governance and Political Threats to Security**

**Moderator:** Emily Cole

**Mary Elizabeth Clancy**  
Political Science  
*AIDS in the Developing World*  
Adviser: Alynna Lyon

**Jacqueline Lewis**  
Political Science  
*Prospects for Peace: Student Perceptions  
of Transitional Justice in Post-Genocide  
Rwanda*  
Adviser: Lawrence Reardon

**Sarah McLeod-Warrick**  
Political Science  
*Zionist Extreme Ideologies: The West Bank  
Barrier and Regional Security*  
Adviser: Alynna Lyon

**Chelsea Moyer**  
International Affairs and Political Science  
*The International Criminal Court and the  
United States*  
Adviser: Alynna Lyon

**Francesca Prince**  
Political Science  
*Failed States: Causes, Effects, and  
Solutions*  
Adviser: Alynna Lyon

#### MUB, Room 302

### **Honors in Communication Session 1**

**Moderator:** Danielle Pillet-Shore

**Alex Armenakis**  
Communication and Political Science  
*Generation Virtual Connect*  
Adviser: Danielle Pillet-Shore

**Heather Atwater**  
Communication  
*The Development of the Department Store  
and How it Has Affected American  
Consumerism*  
Adviser: Danielle Pillet-Shore

**Gillian Barbato**  
Communication  
*Rhetorical Science: The Organic Craze*  
Adviser: Danielle Pillet-Shore

**Kimberly Rogers**  
Communication  
*First Impressions in Business Settings*  
Adviser: Danielle Pillet-Shore

#### MUB, Room 338

### **International Affairs—Global Financial, Economic and Employment Problems**

**Moderator:** Robert Mohr

**Colleen Connors**  
International Affairs and Spanish  
*Costa Rica and the Impact of Nicaraguan  
Immigration*  
Adviser: Lawrence Reardon

**Eva Jacobson**  
International Affairs and Political Science  
*The Positive Impact of Immigration on  
Spanish Society*  
Adviser: Lawrence Reardon

**Eric Murphy**  
International Affairs and German  
*Unemployment in Europe's Largest  
Economy: Germany*  
Adviser: Lawrence Reardon

#### **Justin Schubert**

International Affairs and Business  
Administration and German  
*Big Bank, Small Country: Switzerland, the  
Financial Crisis, and EU Membership*  
Adviser: Benjamin Cole

#### **Brittany Weaver**

International Affairs and Political Science  
*Italy in Debt*  
Adviser: Lawrence Reardon

#### MUB, Room 330

### **International Affairs— Power and Stability**

**Moderator:** Stacey VanDeveer

**Amanda Flitter**  
International Affairs and  
English/Journalism  
*The Argentine Question: Why Didn't  
Argentina Become a Superpower?*  
Adviser: Benjamin Cole

**Dimitri Kalinin**  
International Affairs and Russian  
*Developing Weltanschauung of Russian  
Diplomats*  
Adviser: Lawrence Reardon

**Sophia Weeks**  
International Affairs and Political Science  
*Defining Democracy: Is Cuba a Contender?*  
Adviser: Lawrence Reardon

**Rachel Wells**  
International Affairs and Political Science  
*Mitigating Security Risks of the 2012 Euro  
Cup*  
Adviser: Benjamin Cole

**Jessica Wilson**  
International Affairs and Spanish  
*Comparative Analysis of Political Stability  
in Central America*  
Advisers: Benjamin Cole and Janet Gold



**MUB, Room 332****International Affairs—  
Struggling with Ethnicity and  
Regionalism****Moderator:** Jeff Sherman**Elizabeth Carson**International Affairs and Hospitality  
Management*Taiwan's Struggle with National and  
Ethnic Identity*

Adviser: Lawrence Reardon

**Spencer Kenyon**

International Affairs and English

*Ethnic and Cultural Identity: The Root  
of Western European Nationalism and  
Armed Resistance*

Adviser: Lawrence Reardon

**John Lennon**

International Affairs and Spanish

*Strong Regionalism in Spain*

Adviser: Lawrence Reardon

**Wegene Wells-Bogue**

International Affairs and Political Science

*The State of Ethnic Federalism in Ethiopia*

Adviser: Lawrence Reardon

**Jenna Zullo**

International Affairs and Psychology

*The Decline of Nationalism in France*

Adviser: Lawrence Reardon

**MUB, Room 336****International Affairs—The Role  
of the Entrepreneur Around the  
World****Moderator:** Lionel Ingram**Patrick Cambiasso-Helfer**International Affairs and Business  
Administration*A History of Angel Groups and Their  
Impact on European Public Policy*

Adviser: Lawrence Reardon

**Corey Fong**

International Affairs and Russian

*Crime and Punishment: A Brief Look  
into Police Corruption in the Russian  
Federation*

Adviser: Lawrence Reardon

**Ryan George**International Affairs and Business  
Administration*Paying Purinsu for Praise: Japan's  
Self-Perpetuating Cycle*

Adviser: Benjamin Cole

**Tise Havi**International Affairs and Business  
Administration*Halt Production! Decline of Manufacturing  
in New Hampshire*

Adviser: Lawrence Reardon

**Margarita Komarova**

International Affairs and French Studies

*The Lack of Entrepreneurial Activity in  
France*

Adviser: Lawrence Reardon

**MUB, Room 334****International Affairs—  
Two Taboo Topics—Religion  
and Politics****Moderator:** Michele Dillon**Elizabeth Aleo**

International Affairs and Psychology

*From Tradition to Transition: Spain's  
Relationship with the Catholic Church*

Adviser: Lawrence Reardon

**Samantha Bowen**

International Affairs and Communication

*Islam and the French State*

Adviser: Lawrence Reardon

**Kaitlin O'Brien**

International Affairs and English

*The Rise of Islamic Fundamentalism  
in Morocco*

Adviser: Benjamin Cole

**Jonathan Yankum**

International Affairs and Spanish

*Religious Tolerance in Spain*

Adviser: Benjamin Cole

**MUB, Room 237****Multidisciplinary Session 4****Moderator:** Catherine Moran**Jennifer Baker****Morgan Desilio****Sara Douglas****Laura Jarvis**

Psychology

**Alissa Fulford****Benjamin Stewart**

Psychology and Justice Studies

*Adolescent Narratives About Rule-  
violating Behavior: Because Everyone's  
Doing It*

Adviser: Ellen Cohn

**Colleen Hunt****Amanda Tenedios**

Sociology and Justice Studies

*Illicit Use of Adderall on College Campuses*

Adviser: Catherine Moran

**Meaghan McCusker**Health Management and Policy and  
Women's Studies*The Correlation of Alcohol, Other Drugs,  
and Sexual Abuse: A Look at New  
Hampshire College Students*

Adviser: Robert McGrath

**Courtney Stevens** (Winner of the 2010Discovery Program Award for Outstanding  
Research on Health)

Psychology

*A Day Reconstruction Method Study of  
Mood Benefits from Exercise*

Adviser: Rebecca Warner

**MUB, Room 321****Multidisciplinary Session 5****Moderator:** Sharyn Potter**Allison Collopy**

Linguistics

*The Future of Multilingualism in the  
United States*

Adviser: Mary Clark

**Karin Hakala**

Sociology and Spanish

*The Implications of Learning English on Family Dynamics Among Hispanic Immigrants*

Adviser: Sharyn Potter

**Sean Myers**

English

*Shakespeare's Hamlet Re-Written From Claudius and Gertrude's Perspective*

Adviser: Thomas Payne

**Sean Myers**

English

*Horses, Dragons, and Sexual Imagery in Edmund Spenser's Faerie Queene, Book I*

Adviser: Douglas Lanier

**Mirielle Rouillard**

Sociology

*Television's Portrayal of Women and Resulting Sexual Health Messages*

Advisers: Jean Elson and Sharyn Potter

**Shelby Whittet**

European Cultural Studies and English

*The Representation of Minorities in Contemporary European Cinema*

Adviser: Matthias Konzett

**MUB, Room 304****Multidisciplinary Session 6**

Moderator: Dovev Levine-Leung

**Amanda Cornelissen**

Nursing

*An Exploration of the Knowledge, Skills, and Attitudes of Nurses Caring for Children Who Have Experienced Abuse*

Adviser: Pamela Dinapoli

**Sarah Distefano**

Health Management and Policy

*Management of Lead Poisoning in Adults*

Adviser: Rosemary Caron

**Andrew Hennessy**

Health Management and Policy

*Social Media Use in New England Hospitals*

Adviser: Robert McGrath

**Chris Keeley '10***Environmental Conservation Studies*

SINCE SEPTEMBER 2009, CHRIS KEELEY has interned at the University Office of Sustainability, collecting data for the Sustainability Tracking, Assessment, and Rating System (STARS). The program measures campus sustainability at UNH in three overarching categories: education and research, operations, and planning, administration and engagement.

His URC project will show the results of his research, and demonstrate why UNH is considered a national leader in the area of sustainability.

**Rachel Kralian** (Winner of the 2010*Discovery Award for Outstanding Research on Health)*

Kinesiology

*Visual Acuity, Balance Control and Walking Automaticity in Elderly Women*

Adviser: Dain LaRoche

**Hoan Nguyen** (UNH McNair Scholar)

Psychology

*Implications of Stress on Child's Cognitive Performance on the Tower of Hanoi Task in Children*

Adviser: Barbara White

**MUB, Room 233****Multidisciplinary Session 7**

Moderator: Molly Doyle

**Jacqueline Lewis**

Political Science

*Ethno-Nationalism in Rwanda, Sri Lanka, and Kosovo*

Adviser: Mary Malone

**Michael Cochran-Boucher**

Biological Science

*An 800 Case Cohort Study Documenting Associated Morbidity and BMI in Pregnant Women*

Adviser: Patricia Halpin

## Cord Whitaker

*Assistant Professor of English*

SOON AFTER HE ARRIVED to teach at UNH last year, Cord Whitaker saw how the URC could help bring literature alive for his students—and for audiences who attend their URC performance: Dramatic Innovations: Students Present Drama Based on Pre-1800 English Literary Classics.

This year, nearly 40 students are writing, directing, and performing four one-act plays for the April 23 event. They create the plays by combining themes from three major texts of the period. As they research the project, the students also discover how the authors drew on earlier works to inspire their own.

It's not always easy performing in front of a live audience, but the process draws students into their research in more powerful ways, Whitaker says.

"Literature is a living, breathing thing, and students who don't regularly perform get to inhabit that organism for a few moments during the URC," Whitaker says. "It's not only literature for which performance is important. Students in all disciplines learn the value of presenting their work with style, clarity, and class. As a teacher, it is my goal for students to realize that knowledge means very little unless it is shared, and shared well."



### Siobhan Whalen

Anthropology and Sociology  
*Wife of a Soldier, Widowhood in the Shadow of a Martyr: Constructions of Identity, Control, and Hero-Worship Among Rajasthani Army Widows*  
Adviser: Teresa Raczek

### MUB, Strafford Room

#### **Multidisciplinary Session 8**

**Moderator:** Jennifer Borda

#### **Sabrina Clark**

Communication  
*Citizens United vs. FEC: Corporations as Persons*  
Adviser: Jennifer Borda

#### **Amanda Dibble**

Anthropology  
*Agriculture and Agrochemical Use Among the Q'eqchi' Maya of the Southern Peten, Guatemala*  
Adviser: Robin Sheriff

#### **Logan Seely**

Sociology  
*The Effects of Micro-Lending on Social Roles*  
Adviser: Rebecca Glauber

#### **Paula Teichholtz**

Marine and Freshwater Biology  
*Recruitment Preferences of Tunicates Settling onto Blue Mussel Shells*  
Adviser: Larry Harris

#### **Matthew Young**

Physics  
*Statistical Study of Ultra-Low Frequency Pc1-2 Wave Propagation Characteristics in the High Latitude Ionospheric Waveguide*  
Adviser: Marc Lessard

### MUB, Strafford Room

#### **Sports and the Disciplining of Gender, Sex, and Sexuality**

**Moderator:** Melissa Deem

#### **Nina DiCenso**

Communication  
*Corey Johnson: A Football Captain and a Gay Male*  
Advisers: Melissa Deem and Mardi Kidwell

#### **Aaron Mohammed**

Communication  
*Institutionalized Homophobia: Homosexuality in the Realm of Aesthetic Masculinity*  
Adviser: Melissa Deem

#### **Kayla Timmons**

International Affairs and Communication and Linguistics  
*Intersexuality in Women's Sports: The Case of Caster Semenya*  
Adviser: Melissa Deem

### MUB, Room 207

#### **Sustainability Session I**

**Moderators:** Sara Cleaves and Jason Whitney

#### **Jeremy Belanger**

Environmental Engineering  
*UNH Office of Sustainability Internship*  
Adviser: Jason Whitney

#### **John Greene**

Environmental Conservation Studies  
*Sustainability in New Hampshire Government: Working with New Hampshire's Climate Collaborative to Implement the State's Climate Action Plan*  
Advisers: Sara Cleaves and Jason Whitney

**Christopher Keeley**

Environmental Conservation Studies  
*The Sustainability Tracking, Assessment,  
 and Rating System (STARS)*

Adviser: Sara Cleaves

**John Reed**

Environmental Engineering  
*Design and Analysis of High Efficiency  
 Housing on UNH Campus*

Adviser: Kevin Gardner

## Parents Association Undergraduate Research Symposium

### Oral Presentations, Session C

**Friday, April 23**

**1:40–2:50 p.m.**

**Memorial Union Building**

**MUB, Room 237**

### ***Case Studies in the Rhetoric of Local Public Problems***

Moderator: Michael Jackson

**Lynette Boutin****Jessica Cockerham****Jessica LaCroix****Aaron West**

Communication

*Neglect as Strategy? The Problem of  
Graduate Student Housing at UNH*

Adviser: Lawrence Prelli

**Sabrina Clark****Hope Fortier****Camille Quarles****Kelley Stenberg**

Communication

*A Problem Without Remedy? Under-aged  
Drinking at UNH*

Adviser: Lawrence Prelli

**Dane Miller****John Shea****Simon Woods**

Communication

*Making the Best of a Bad Situation:  
Managing Conflict Over Business Disrup-  
tions in Portsmouth, New Hampshire*

Adviser: Lawrence Prelli

**MUB, Room 336**

### ***Chinese Economic and Military Expansion***

Moderator: Sean Coughlin

**Jeffrey Anderson**

Geology

*Income Inequality in China*

Adviser: Lawrence Reardon

**Jeffrey Brunelle**

History and Political Science

*People's Republic at Sea: The Growth of the  
Chinese Navy*

Adviser: Lawrence Reardon

**John Lennon**

International Affairs and Spanish  
*China's Reasoning for Joining the  
Korean War*

Adviser: Lawrence Reardon

**Bryan Noonan**

Justice Studies and Political Science

*Causes of Economic Inequality in  
Communist China*

Adviser: Lawrence Reardon

**MUB, Room 233**

### ***Contemporary Politics in Latin America***

Moderator: Julia Rodriquez

**Samantha Corti**

International Affairs and Political Science  
*Safe But Fearful: Public Insecurity in  
Costa Rica*

Adviser: Mary Malone

**Teri Hatch**

Political Science

*Divorced from the Past? An Analysis of  
the New Chilean Divorce Law*

Adviser: Mary Malone

**Jeffrey Moyer**

Political Science and Justice Studies

*Executive Removal in Honduras and  
the U.S.*

Adviser: Mary Malone

**MUB, Theatre I**

### ***Dramatic Innovations: Students Present Drama Based on English Literary Classics***

Moderator: Cord Whitaker

**Gianna Spadaro**

Anthropology and International Affairs

**Rebecca Cummings****Mickey Fisher****Cally Forsyth****Craig Hooker****Robert Jenkins****Catherine Kolnaski****Ju Lin****Amanda Pelchat****Funmi Oyekunle****Michaela Powers****Kyle VanEtten****Jessica Wong**

English

**Chloe Abu-Jaber**

English and Justice Studies

**Andrew Gilbert****Luke Bella-Spooner****Lauren Howland****Eliza Mackintosh****Max Tedford**

**Makisha Timothy**  
English/Journalism

**Connor Barry**  
English/Journalism and Justice Studies

**Emma Floyd**  
English/Journalism and Sociology

**Renee Poisson**  
**Romulo Valdez**  
English Literature

**Laci Bailey**  
**Jordan Ciaraldi**  
**Emily Dube**  
**Risa Hoffman**  
**Michele Millers**  
**Eleni Papanikolau**

**Jade Wilcox**  
**Gail Winsor**  
English Teaching

**Tracey Hoagland**  
English Teaching and Business  
Administration

**Charles Arena**  
General Biology  
**Rebecca Bennett**  
**Benjamin Boisvert**  
**Destiny Camire**  
**Nathan Mann**  
**Christopher Milmore**  
Undeclared  
Adviser: Cord Whitaker

## MUB, Room 321

### ***Ethnic and Political Violence in China***

**Moderator: Sarah Gormady**

**Shannon Bailey**  
Political Science  
*The Rise of Social Unrest in China*  
Adviser: Lawrence Reardon

**Thomas Lamb**  
Political Science  
*Zhou Enlai and Chinese Political Purges*  
Adviser: Lawrence Reardon

**Chelsea Moyer**  
International Affairs and Political Science  
*Root Causes of Ethnic Violence: Uighur Muslims in Xinjiang Province*  
Adviser: Lawrence Reardon

## MUB, Room 334

### ***Feminist Political Theory***

**Moderator: Jing Huang**

**Tegiye Birey**  
Political Science and Women's Studies  
*A Feminist Examination of French Immigration Laws*  
Adviser: Marla Brettschneider

**Tiffany Black**  
Anthropology  
*Ellen Gruenbaum's Feminist Political Theory: Defining a Non-Culturally Imperial Feminist Activism*  
Adviser: Marla Brettschneider

**Hilary Greene**  
Women's Studies  
*Abortion and Autonomy*  
Adviser: Marla Brettschneider

**David Jacobsen**  
Political Science and Women's Studies  
*Imperial Whore*  
Adviser: Marla Brettschneider

**Allison Rich**  
Political Science and Sociology  
*The Effect of Middle Class Values on Gender Expression and Sexual Orientation*  
Adviser: Marla Brettschneider

## MUB, Room 340

### ***Global Governance and Political Threats to Security***

**Moderator: Emily Cole**

**Mary Elizabeth Clancy**  
Political Science  
*AIDS in the Developing World*  
Adviser: Alynna Lyon

**Jacqueline Lewis**  
Political Science  
*Prospects for Peace: Student Perceptions of Transitional Justice in Post-Genocide Rwanda*  
Adviser: Lawrence Reardon

**Sarah McLeod-Warrick**  
Political Science  
*Zionist Extreme Ideologies: The West Bank Barrier and Regional Security*  
Adviser: Alynna Lyon

**Chelsea Moyer**  
International Affairs and Political Science  
*The International Criminal Court and the United States*  
Adviser: Alynna Lyon

**Francesca Prince**  
Political Science  
*Failed States: Causes, Effects, and Solutions*  
Adviser: Alynna Lyon

## MUB, Room 302

### ***Honors in Communication Session 2***

**Moderator: Danielle Pillet-Shore**

**Brianne Baity**  
Communication  
*Eating Cake: Does Social Media Provide Advertisers a Means to Eat Their Cake and Have It too?*  
Adviser: Danielle Pillet-Shore

**Alissa Mendes**  
Communication  
*Individual Deception Refigured in Relational Terms: A Critique of Traditional Views of Deception in the Social Science Field*  
Adviser: John Lannamann

**Kaitlyn Ramsay**  
Communication  
*Deconstructing the Dream: The Impact of Home Ownership Rhetorics in Relation to Race and Class*  
Adviser: Danielle Pillet-Shore

**Rachel Schlacter**  
Communication  
*Implications of Social Media as a Form of Interpersonal Communication*  
Adviser: Danielle Pillet-Shore

**MUB, Room 338****Honors Program: U.S. and Asia  
(Japan and Southeast Asia)****Moderator:** Chris Wasileski**Molly James**

Psychology

*Becoming an Imperial Power: The United States and the Philippines*

Adviser: Lawrence Reardon

**Laura Roach**

Environmental and Resource Economics

*Islamic Extremism: Undermining a Fundamentalist Movement in Indonesia*

Adviser: Lawrence Reardon

**Kurt Steiner**

Business Administration

*America's Economic Relationship with Japan in the 1980s*

Adviser: Lawrence Reardon

**Zachary Towle**

Political Science and Philosophy

*On Burning a Bridge: The U.S. Failure at Democracy in South Vietnam*

Adviser: Lawrence Reardon

**Stephanie Weiner**

Undeclared

*My Lai Mayhem: The Men Behind the Massacre*

Adviser: Lawrence Reardon

**MUB, Room 332****Interpreting Website****Photographs: Barstool Sports****Moderator:** Mardi Kidwell**Sarah Coneeny****Patrick DeBiasi****Kelsey Loveday****Samantha Mick****Hannah Morin****Michael Sorensen****Andrew Wagner**

Communication

Adviser: Mardi Kidwell

**Erin Thesing '10***Anthropology*

WITH THE SUPPORT of a Summer Undergraduate Research Fellowship, Erin Thesing conducted fieldwork with adolescent refugees in a New Hampshire high school in a small, ethnically homogeneous city. Using proven research methods, she studied how adolescent refugees negotiate their identities in the new culture.

Her URC project will also show how the refugees help create adaptive strategies within the school culture. Thesing's research fills an important gap in the anthropological literature on refugee and immigrant education and social adjustment, the majority of which focuses on students in urban, multicultural schools and cities.

After graduation, she will teach at an elementary school in Philadelphia with Teach for America.

**MUB, Room 330****Legacies of Second-Wave  
Feminism in Contemporary  
Culture and Cinema****Moderator:** Jennifer Borda**Caroline Berry**

Communication

*Women in the Workplace, Gender Discrimination, and North Country*

Advisers: Jennifer Borda and

Mardi Kidwell

**Erin Havener**

Communication

*Gender Equality in the Military and the Rhetoric of G.I. Jane*

Adviser: Jennifer Borda

**Stephanie Papadogiannis**

Communication

*Women's Traditional Roles and Higher Education in Mona Lisa Smile*

Adviser: Jennifer Borda

**Jennifer Poggi**

Communication

*Pro-Choice vs. Pro-Life: The Political and Ethical Battle*

Adviser: Jennifer Borda

**Kayla Timmons**

International Affairs and Communication and Linguistics

*Discourses of Feminism and Reproductive Rights in If These Walls Could Talk*

Adviser: Jennifer Borda

## Corey Johnson '11

*Business Administration*



Corey Johnson developed a tool in 2009 that helps small towns keep track of the energy they use and the related greenhouse gas emissions. With support from a Summer Undergraduate Research Fellowship, Johnson worked with eight communities last summer to gather utility data and create energy inventories—a key step in helping them to reduce energy bills and carbon pollution.

Johnson's research was completed in collaboration with Carbon Solutions New England and Clean Air-Cool Planet.

### MUB, Room 340

#### **Multidisciplinary Session 9**

**Moderator:** William Stine

**Jay Agarwal**

Chemistry

*On the Role of Sacrificial Donors in the Catalytic Reduction of CO<sub>2</sub> by Ru(II)-Re(I) Supramolecular Complexes*

Advisers: Gonghu Li and Howard Mayne

**Melody Chapin**

Music

*Discoveries of Brazilian Art Song*

Adviser: Jenni Cook

**Kevin Koski**

Kinesiology

*The Effect of Acute Endurance Exercise or Strength Training on Arterial Stiffness*

Adviser: Tim Quinn

**Erica Millett**

Kinesiology

*Ankle Strength and Stiffness Predict Range of Motion During Walking in Older Adults*

Adviser: Dain LaRoche

**Kevin Rose**

Computer Science

*Backtracking as Best-First Search*

Adviser: Wheeler Ruml

**Erin Thesing**

Anthropology

*"I Am Refugee; I Am Who I Am:"*

*Adolescent Refugees' Social Integration and Identity Shaping in a Small New Hampshire High School*

Adviser: Robin Sheriff

### MUB, Strafford Room

#### **Multidisciplinary Session 10**

**Moderator:** Catherine Moran

**Heather Dean**

International Affairs and Sociology and Justice Studies

*Sex and the College Experience*

Adviser: Catherine Moran

**Sarah Leonard** (UNH McNair Scholar)

Psychology

*Resiliency, Self-Efficacy, Locus of Control, and Substance Use in College Students*

Adviser: Carolyn Mebert

**Kelly Martell**

Social Work

*Examining College Students' Attitudes Toward Mental Illness and Help-Seeking Behaviors*

Adviser: Robert Jolley

**Stephen Rivard**

Humanities and Geography

*Accepting Sexuality in Kushner's Angels in America*

Advisers: Blake Gumprecht and Catherine Peebles

**Sasa Tang**

International Affairs and Political Science

*Education in Sub-Saharan Africa: A Comparative Country Study*

Adviser: Lawrence Reardon

**MUB, Room 304****Sustainability Session II**

**Moderators:** Sara Cleaves and Jason Whitney

**Sibley Blum**

Environmental Conservation Studies  
*Electronic Equipment Wiping and Disposal for the Sustainability Internship Program*  
Adviser: Jason Whitney

**John Doyle**

Environmental Conservation Studies  
*Sustainability Internship Program: Forest Service*  
Adviser: Jason Whitney

**Sarah Jacobson**

Nutritional Sciences and Ecogastronomy  
**Michelle Laffoon**  
Marketing

**Hillary Thomas**

Environmental Conservation Studies  
*Sustainable Food: Seacoast Eat Local Internship*  
Adviser: Sara-Zoe Patterson

**Corey Johnson**

Business Administration  
*Taking STOCC: Reducing Municipal Greenhouse Gas Emissions and Saving Taxpayer Dollars*  
Adviser: Cameron Wake

**Ashley Obara**

English and Business Administration  
*Sustainability Internship Program: Growing the Green Card*  
Adviser: Jason Whitney

**MUB, Room 207****The Politics of Sex and Change in America**

**Moderator:** Susan Siggelakis

**Kaitlyn Dowling**

Political Science  
*Yes We Can: The Rhetoric of Adaptive Leadership in Barack Obama's Campaign to Change America*  
Adviser: Susan Siggelakis

**Emma Duffy-Comparone**

Political Science and English  
*Sex and the City: Puncturing Femininity in a Post-Feminist Climate*  
Adviser: Susan Siggelakis

**Thomas Parisi**

Political Science  
*Persuading and Entertaining the Nation: American Propaganda Films of World War II*  
Advisers: Delia Konzett and Susan Siggelakis

**The Naked Arts—Creativity Exposed!****Act III**

**Friday, April 23**

**12:15–1 p.m.**

**Memorial Union Building,  
Strafford Room**

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.

**Melody Chapin**

Music  
*Discoveries of Brazilian Art Song*  
Adviser: Jenni Cook

**Allison Hadwen**

Theatre  
*Using Theatre to Depict What the Ugandan People have Endured*  
Adviser: David Richman

**Garrett Quinn**

English  
*Inspiration and the Process of Creating a Short Story: The Blue-Throated Macaw*  
Adviser: Thomas Payne

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

**Friday, April 23**

**1–4 p.m.**

**Pettee Hall G-10**

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.

**Honors English Undergraduate Research Conference**

**Friday, April 23**

**1–5 p.m.**

**Hamilton Smith, Rooms 128/129**

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.

**Kristin Brodeur**

English  
*How the University Press of New England is Adjusting to the Changing Publishing World*  
Adviser: Sarah Sherman



**Anne Dignard**

English Teaching  
*Interdisciplinary Studies: Integrating English and Mathematics*  
 Adviser: Mary Clark

**Heather Froehlich**

English and Linguistics  
*Native and Adopted Prefixes in English Morphology: A Comprehensive Study of Locative Prefixes in English Word Formation*  
 Adviser: Rochelle Lieber

**Erin Gormley**

English  
*Assia Djebar: Writing Women & Death in French Algeria*  
 Adviser: Sandhya Shetty

**David Jacobsen**

Political Science and Women's Studies  
*Imperial Whore*  
 Adviser: Diane Freedman

**Alexander Joy**

English and Philosophy  
*American Existentialism: Comparative Study of Lovecraft and Camus*  
 Adviser: Marco Dorfsman

**Cameron Kittle**

English  
*How Our Reading Habits are Affected by Our Digital Nation*  
 Adviser: Lisa Miller

**Kirsten Lindquist**

English and Environmental Conservation Studies  
*Nature Writing in the Popular Media: Verlyn Klinkenborg and the Promise of Artful Environmentalism*  
 Adviser: Diane Freedman

**Sean Myers**

English  
*Shakespeare's Hamlet Re-Written from Claudius and Gertrude's Perspective*  
 Adviser: Thomas Payne

**Sean Myers**

English  
*Horses, Dragons, and Sexual Imagery in Edmund Spenser's Faerie Queene, Book I*  
 Adviser: Douglass Lanier

**Lindsey Phelan**

English and Justice Studies  
*Crime and Punishment in Harry Potter*  
 Adviser: James Krasner

**Katie Samwell**

English and Art History  
*A Small Place: Lithuania's Struggle Captured in Memoir*  
 Adviser: Sandhya Shetty

**Kirstin Striker**

English  
*Translating the Poetry of Hans Lodeizen from Dutch to English*  
 Adviser: Martin McKinsey

## Psychology Department George M. Haslerud Undergraduate Research Conference

**Friday, April 23**

**1–4 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.

**Jaime Baraiolo**

Psychology and Justice Studies  
*Blame It On Your Mother: How Prenatal Protein Malnutrition Impacts Prefrontal Cortex*  
 Adviser: Jill McGaughy

**Rachel Cain**

Psychology and French  
*Is He ADHD or a Normal Adolescent? A Rat Model of Cognition Enhancement with Strattera*  
 Adviser: Jill McGaughy

**Brooke Clarkson**

Psychology and English  
*Personality Perception Through Facebook Profile Pictures*  
 Adviser: Zorana Ivcevic

**Angela Couse**

Psychology  
*Children's Memory Talk about a Science Learning Event*  
 Adviser: Michelle Leichtman

**Ashley Doukas (UNH McNair Scholar)**

Psychology  
*Examining Episodic Memory Use on Science Exam Questions: A Think-Aloud Study*  
 Adviser: Michelle Leichtman

**Perry Dripps**

Psychology  
*"I'm Not Mad, I'm Just Hurt:" Why Relationship Commitment Reduces Antisocial Behavior Following Rejection*  
 Adviser: Edward Lemay

**Brendan Everett**

Psychology  
*Assessment of Training with vOICE Vision Technology Over Time*  
 Adviser: Andrew Leber

**Jason Frazier**

Psychology  
*Individual Differences Among Rule-Violating Adolescents*  
 Adviser: Ellen Cohn

**Darci Jenkins**

Psychology and Justice Studies  
*The Effect of Source Types on Children's Source Monitoring*  
 Adviser: Michelle Leichtman

**Michelle Kelly**

Psychology  
*Culture and Autobiographical Memory*  
 Adviser: Zorana Ivcevic

**Kaitlin Lounsbury**

Psychology  
*The Role of Cell Phones in Internet-Facilitated Sex Crimes Against Youth: Findings from the Second National Juvenile Online Victimization Study (N-JOV2)*  
 Adviser: Kimberly Lema

**Amy Morgan**

Psychology

*The Effects of Hippocampal Lesions on Contextual Cuing in Pigeons*

Adviser: Brett Gibson

**Courtney Stevens** (Winner of the 2010*Discovery Program Award for Outstanding Research on Health)*

Psychology

*A Day Reconstruction Method Study of Mood Benefits from Exercise*

Adviser: Rebecca Warner

**Bethany Wakeman**

Psychology

*Attitudes Toward Relational Aggression:**Effects of Privacy and Internet Use*

Adviser: Ellen Cohn

**Elizabeth Weber**

Psychology

*The Effects of Digit Ratio and Polychronicity on Task Switching*

Adviser: Andrew Leber

**Matthew Wilkinson**

Psychology

*Planning Behavior in the Pigeon: Efficiency on Single and Round Trip Tasks*

Adviser: Brett Gibson

**Megan Yee**

Psychology

*Do Ultrasonic Vocalizations During Swim Stress Predict Resistance to Behavioral Depression in Rats?*

Adviser: Robert Drugan

## Philosophy Department Undergraduate Research Conference

**Friday, April 23****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.

**Christopher Cogswell**

Chemical Engineering and Philosophy

*Humor and Freedom*

Advisers: Willem De Vries and

David Hiley

**Griffen Fletcher**

Mathematics

*Morality in Modern Society*

Adviser: Nickolas Smith

**Kyle Flynn**

Philosophy

*The Neoclassical Model and Climate Change Policy*

Adviser: David Hiley

**Alexander Joy**

English and Philosophy

*Dialetheic Logic: A Contradiction in Terms?*

Adviser: Paul McNamara

**Laura LaPlante**

Philosophy and Economics

*The Capabilities Approach and Public Education in New Hampshire*

Adviser: David Hiley

**Jonathan Meadows**

Philosophy and Humanities

*Rule-governed Language*

Adviser: Willem De Vries

**Conor Stokes**

Philosophy

*The Ethics of Tragedy*

Adviser: Drew Christie

**Andrew Trudo**

Philosophy

*Nietzsche's Elusive Will to Power*

Adviser: Willem De Vries

**Laura Truman**

Philosophy

*Reason, Freedom, and Faith: An**Existential Study of Dostoevsky and Nietzsche*

Adviser: Charlotte Witt

**Sarah Turner**

Women's Studies

*The Technological Embodiment of the Incarcerated Female*

Advisers: Marla Brettschneider and

Courtney Marshall

**Kelly Walsh**

Philosophy and English

*Modernity: Secularization and a Sense of the Moral Self*

Adviser: David Hiley

## Student Composers' Concert

**Friday, April 23****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.

**George Adams**

Music

*Study For Two Pianos*

Adviser: Michael Annicchiarico

**William Baldoumas**

Music

*Undectet*

Adviser: Michael Annicchiarico

**Andrew Cote**

Music Education

*A Movement for Winds and Percussion*

Adviser: Michael Annicchiarico

**Dalita Getzoyan**

Music Theory

*Two Worlds Collide—A Flute and Piano Composition*

Advisers: Michael Annicchiarico and Christopher Kies

**Jeffrey Heim**

Music Theory

*Suite for Trombone and Orchestra*

Adviser: Michael Annicchiarico

**Lucas Miller** (*graduate student*)

Music Education

*Brass Quintet #1*

Adviser: Christopher Kies

**Zachary Onett**

Music Theory

*Program for Keyboard*

Adviser: Christopher Kies

**David Orr**

Performance and Music Theory

*A Hero's Tale*

Adviser: Michael Annicchiarico

**Kelsey Parrillo**

Music Education

*Sonata in F Major*

Adviser: Michael Annicchiarico

**Benjamin Tibbetts**

Music Theory

*"Stopping by Woods on a Snowy Evening"*

Adviser: Christopher Kies

## 19th Annual COLSA Undergraduate Research Conference

Student presentations at the Annual COLSA URC are based on research conducted in any of the college's departments and run the full gamut of research found in the college, 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.

### Oral Presentations

**Saturday, April 24**  
**8:45–10:30 p.m.**  
**New England Center**

**Allisan Aquilina-Beck** (*graduate student*)**Scott Kavanaugh**

Biochemistry

**Caryn MacDonald**

Molecular, Cellular and Developmental Biology

*Functional Studies with Two Novel Type-II GnRH Receptors in the Sea Lamprey, a Basal Vertebrate*

Adviser: Stacia Sower

**Scott Hurley**

Environmental Science: Ecosystems

*Understanding a Forest's Nitrogen Status through Mushroom Collection: Can It Be Done?*

Adviser: Erik Hobbie

**Rebecca Riding**

Molecular, Cellular and Developmental Biology

**Megan Thompson** (*graduate student*)

Plant Biology

*Detecting Interaction Between PP2A C Subunit Genes and PP2A-Interacting Proteins in Arabidopsis thaliana*

Adviser: Estelle Hrabak

**Valerie Schoepfer**

Environmental Science: Soil and

Watershed Management

*Leaf Leaching in Tropical and Temperate Ecosystems*

Advisers: Gretchen Gettel and

William McDowell

**Grace Smarsh**

Zoology

*Patterns of Visitation and Animal Use of Termite Mounds*

Adviser: Michelle Scott

**Paula Teichholtz**

Marine and Freshwater Biology

*Recruitment Preferences of Tunicates**Settling onto Blue Mussel Shells*

Adviser: Larry Harris

## 19th Annual COLSA Undergraduate Research Conference

### Poster Presentations

**Saturday, April 24**  
**10:30 a.m.–Noon**  
**New England Center**

**Usaila Ahmad****Matthew MacKenzie**

Biochemistry

**Allison Baldio**

Molecular, Cellular and Developmental Biology

*The Invasiveness of Grateloupia turuturu*

Adviser: Anita Klein

**Noel Alaka**

Molecular, Cellular and Developmental Biology

*The Effect of Temperature on the Identification of Photorhabdus asymbiotica Mutants Defective in Motility or Altered Surface Properties*

Adviser: Louis Tisa

**Jacqueline Amante**

Environmental Conservation

**Allison Konkowski**

Zoology

**Katie Kozacka****Riley Nolan**

General Biology

**Adrien Miller**

Wildlife Ecology

*Are Cyanobacteria Toxins Present in Fish Tissue During Winter?*

Adviser: James Haney

**Tyler Andrews** (guest from Colorado State University)**Sophie Ellis** (graduate student)

Wildlife Ecology

*Grazing Techniques in the Doro Nawas Conservancy in Namibia, Africa*

Adviser: Jennifer Sheridan

**Allisan Aquilina-Beck** (graduate student)**Takayoshi Kosugi** (graduate student)

Biochemistry

**Kristen Gazda****Zachary Hauser**

General Biology

*Novel Lamprey RFamide Peptides and Brain Gonadotropin-Releasing Hormones-I,II-and-III*

Adviser: Stacia Sower

**Amy Beliveau**

Nutritional Sciences

*Phytonutrients in Microgreens*

Adviser: Joanne Curran-Celentano

**Patrick Benoit**

Molecular, Cellular and Developmental Biology

**Geoffrey Gyles**

General Biology

**Andrew Mailloux**

Marine and Freshwater Biology

*The Restraining and Tagging of Anarchichas lupus*

Adviser: Elizabeth Fairchild

**Caryn MacDonald '10***Molecular, Cellular, and Developmental Biology*

CARYN MACDONALD is researching the hormones of sea lampreys, and a key hormone receptor involved in cellular function.

The eel-like fish make ideal research subjects because their hormone systems share similarities with those in higher vertebrates, including humans.

"Hormones are interesting, because almost every process that goes on in your body is somehow controlled by hormones," says MacDonald, who received a grant last year to pursue her research in Sweden.

**Patrick Benoit**

Molecular, Cellular and Developmental Biology

*The Effects of Pigment Dispersing Hormone on the Motor Programs Expressed by the Isolated Ventral Nerve Cord of Limulus polyphemus*

Adviser: Winsor Watson

**Trevor Bland**

Biochemistry

*How General Chemistry Students Perceive Their Ability and Exam Performance*

Adviser: Christopher Bauer

**Kristopher Block**

Wildlife Ecology

*Ecology and Behavior of Nuisance Black Bears in New Hampshire*

Adviser: Peter Pekins

**Nathan Boire**

Biochemistry

*Nuclear Factor Kappa Beta and Atherosclerosis*

Adviser: Thomas Foxall

**Shana Bouvier**

Microbiology

*Identifying Genetic Tools for Novel Stone-Dwelling Actinobacteria*

Adviser: Louis Tisa

**Kirsten Bruell**

Molecular, Cellular and Developmental Biology

**Megan Thompson** (graduate student)

Plant Biology

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

Adviser: Estelle Hrabak

**Hannah Bullock****Holli Rowedder** (graduate student)

Microbiology

*Biological Control: Efficiency of Entomopathogenic Nematodes Retaining Photorhabdus temperata Mutants*

Adviser: Louis Tisa

## John Greene '10

*Environmental Conservation Studies*



JOHN GREENE is presenting twice at this year's URC. First, he'll detail his research as an intern with the UNH Sustainability Internship Program.

Next, he'll outline his work in Brussels, Belgium last summer, where he studied the European Union's approach to reducing greenhouse gas emissions. His overseas work was supported with a Summer Undergraduate Research Fellowship. Find out how he developed recommendations for a cap-and-trade system to curb carbon pollution in our country.

### Audra Chaput

Ecology, Evolution and Behavior  
*Courtship or Combat? How Male Siamese Fighting Fish Communicate in Mixed-Sex Social Environments and the Effect of Nest Possession on Their Display Behavior*  
Adviser: Michelle Scott

### Lindsay Chase

Animal Sciences: Pre-veterinary Medicine  
*Effect of Kelp on Growth of Dairy Calves*  
Advisers: Andre Brito and Nancy Whitehouse

### Alexandra Contosta (graduate student)

#### Brian Godbois

Environmental Science: Soil and Watershed Management  
*The Effects of Soil Warming and Nitrogen Deposition on Soil Water Quality*  
Adviser: Serita Frey

### Ian Cormier

Microbiology  
*Combining Chaotropic and Nitric Oxide Compounds for Optimal Release of Bacteria from Produce*  
Adviser: Stephen Torosian

### Amanda Craig

#### Molly Hunt

Animal Sciences: Pre-veterinary Medicine and Wildlife Ecology

#### Rachel Holt

#### Gina Soule

#### Samantha Werner

Animal Sciences: Pre-veterinary Medicine  
*Skeleton Articulation*  
Adviser: Richard French

### Michelle Crupi

Animal Sciences: Pre-veterinary Medicine  
*What is Your Diagnosis?*  
Adviser: Richard French

### Alexander Cubberley

Biochemistry  
*p53 and the Microtubule Array in HCT116 Colorectal Cancer Cells*  
Adviser: Charles Walker

### Melanie D'Andrea

#### Jordan Morelli

General Biology  
*Identifying Palmitoyltransferase Mutants in Arabidopsis thaliana*  
Adviser: Estelle Hrabak

### Natalie Delfosse

Nutritional Sciences  
*Chronic Disease Risk Factors Are Impacted by Nutrition Education in College-Aged Adults*  
Adviser: Jesse Morrell

### Christopher Dorich

Environmental Science: Ecosystems  
*How Do Albedo and Nitrogen Vary with Stand Age, Treatment, and Site Status?*  
Advisers: Lucie Lepine and Scott Ollinger

### Jeffrey Dvorak

Environmental Science: Ecosystems

### Samuel Merker

#### Andrew Middleton

Environmental Conservation Studies  
*The Effect of Invasive Mammal Exclusion on Terrestrial Insect Communities in New Zealand*  
Adviser: Ria Brejaart

### Crystal Ellis (graduate student)

Microbiology

### Rachel Staples

Medical Laboratory Science  
*Evolvability of Burkholderia cenocepacia Biofilm Specialists*  
Adviser: Vaughn Cooper

### Stacy Farina

Marine and Freshwater Biology  
*An Examination of the Nerves Innervating the Lateral Line of Deep-Sea and Shallow-Water Anglerfish*  
Advisers: William Howell and Christopher Kenaley

**David Fournier**

Computer Science

*Intra-Genomic Diversity in the Ribosomal Repeat Arrays of Nematodes*

Advisers: R. Daniel Bergeron and W. Kelley Thomas

**Kristin Garabedian****Michelle Walsh** (graduate student)Marine and Freshwater Biology  
*Development of the Digestive Tract in Juvenile Winter Flounder, Pseudopleuronectes americanus*

Adviser: William Howell

**Jason Goldstein** (graduate student)**Kirby Johnson**

Zoology

*Developing Two Lab-Based Methods for Assessing Early-Stage Egg Fertilization in American Lobster*

Adviser: Winsor Watson

**John Greene**

Environmental Conservation Studies

*European Union Carbon Cap and Trade: Lessons and Applications for an American Market*

Adviser: Stacy VanDeveer

**Danielle Haddad**

Environmental Science: Ecosystems

*Modeling Atmospheric Deposition Across the Northeastern U.S. and its Potential Effects on Forest Albedo*

Adviser: Scott Ollinger

**Ian Hanley**

Wildlife Ecology

*A Comparison of Habitat Features of New England Cottontails and Snowshoe Hares*

Adviser: John Litvaitis

**Norman Hassell III**

Microbiology

*Determining the Role of Siderophore in Vibrio-Euprymna Symbiosis: Iron Acquisition vs. Oxidative Stress*

Adviser: Cheryl Whistler

**Maureen Healey****Paige Mooney**

Marine and Freshwater Biology

*The Deadliest Catch: Population Density and Characteristic Study of the Invasive Species, Carcinus maenas (Green Crab)*

Adviser: Elizabeth Fairchild

**Michele Heller**

Marine and Freshwater Biology

*Manual Classification of Atlantic Juvenile Blue Fin Tuna to Characterize Schooling Formation Metrics*

Adviser: Thomas Weber

**Haeleigh Hyatt**

Zoology

*Orchid Propagation: Seed Germination in Cattelya and Keiki Induction in Phalaenopsis*

Adviser: Estelle Hrabak

**Erik Janicki** (graduate student)**Brandye Michaels** (graduate student)

Microbiology

**Katherine Pereira**

Biochemistry

*Developing Biological Control Agents—The Role of Biofilm in Photorhabdus*

Adviser: Louis Tisa

**Katie Jennings**

General Biology

*Studies of Tissue Dynamics During the Fast Phase of the Venus Flytrap Closure*

Adviser: Wayne Fagerberg

**Jenny Jing**

International Affairs and Biochemistry

*Defining the Relationship Between Tetraploidy and Leaf Morphology in Transgenic Strawberry Plants*

Advisers: Thomas Davis and Qian Zhang

**Kathleen Keating**

Molecular, Cellular and Developmental Biology

**Lin Shao** (graduate student)

Plant Biology

*Regulation of Polyamine Gene Expression in Arabidopsis thaliana*

Adviser: Subhash Minocha

**Amanda Kuzmick**

General Biology

**Rajtilak Majumdar** (graduate student)

Plant Biology

*Polyamine Biosynthesis and the Effect of Stress in Plants*

Adviser: Subhash Minocha

**Amy Lamb**

Environmental Science: Ecosystems

*Compost as an On-Farm Resource: Conditions for Optimizing Heat Generation and Greenhouse Gas Emissions*

Adviser: John Aber

**Katherine Lantz**

Medical Laboratory Science

*Inexpensive Production of Enzymes For Use in Enzyme Replacement Therapy: Using Tobacco as a Bioreactor*

Adviser: Subhash Minocha

**Samantha Lee** (UNH McNair Scholar)

Zoology

*The Degree of Impact that Changes in Temperature and Salinity Have on Lobsters*

Adviser: Winsor Watson

**Andre Littlefield**

Biochemistry

*Understanding Adipocyte-Mediated Angiogenesis*

Adviser: Deena Small

**Caryn MacDonald**

Molecular, Cellular and Developmental Biology

*Evolutionary Studies of the Neuropeptide Y System in Vertebrates*

Adviser: Stacia Sower

**Ben Marcek**

Marine and Freshwater Biology

*Mangrove Pneumatophores as Ecosystem Engineers and Their Effect on the Retention of Hormosira banksii and Recruitment of Associated Fauna*

Advisers: Charles Walker, Paul Gribben (University of Technology, Sydney, Australia), and Jeb Byers (University of Georgia)

**Aymin Mediouni****Michael O'Hara, Jr****Benjamin Seiler**

Microbiology

*Assessing Methods to Inactivate DNA Molecules*

Advisers: Aaron Margolin and Stephen Torosian

**Rachel Mixon**

General Biology and Classics

*Fungal Evolution and Nutritional Ecology of the Hygrophoraceae Clade Using Stable Isotope Analysis*

Adviser: Erik Hobbie

**Eric O'Keefe**

Environmental Conservation Studies

*Patterns of Regionally Based Governance in Both Pre-Colonial and Contemporary Times in the Great Lakes Region*

Adviser: Mimi Becker

**Daniel Perrine**

Marine and Freshwater Biology

*Lipid Profile of Micro-Algae Used in Biodiesel Production*

Adviser: Ihab Farag

**Valerie Schoepfer**

Environmental Science: Soil and

Watershed Management

*Leaf Leaching as a Source of Carbon and Nutrients in Tropical Streams*

Adviser: William McDowell

**Kelsey Silfvenius**

Environmental and Resource Economics

*Under the White, Isn't So Green: How a Vulnerable Ski Industry is Taking Steps Towards Sustainability*

Adviser: John Halstead

**Joshua Smith**

General Biology

*Growth and Microscopy of Swine**Endothelial Cells on Microcarrier Beads*

Adviser: Thomas Foxall

**Jaclyn Sullivan**

Molecular, Cellular and Developmental Biology

*Reactivating Wild-type p53 in Animal Cancer*

Adviser: Charles Walker

**Casey Tobin**

Molecular, Cellular and Developmental Biology

*Localization of Neurons Containing the Period Clock Protein (PER) and the Pigment-Dispersing Hormone (PDH) in the Brain of the American Horseshoe Crab, Limulus polyphemus*

Adviser: Winsor Watson

**Charles Traverse**

Microbiology

*Evolutionary Genetics of Biofilm Adaptation and Diversification in**Burkholderia cenocepacia*

Adviser: Vaughn Cooper

**Anthony Troiano, Jr.**

Microbiology and Classics

*Adaptive Mutations for Life in Biofilms in an Opportunistic Pathogen*

Adviser: Vaughn Cooper

**Anna Tyzik**

Medical Laboratory Science

*A Killer in the Water? Environmental Vibrio cholerae Confirmed in the Great Bay Estuary*

Advisers: Vaughn Cooper, Steve Jones, Brian Schuster (graduate student), and Cheryl Whistler

**Elizabeth Willey**

Environmental Science: Ecosystems

*The Effects of Forest Fragmentation on the Abundance and Body Condition of the Red Backed Salamander (Plethodon cinereus)*

Advisers: Kimberly Babbitt and Daniel Hocking

**Evelyn Yuen**

Nutritional Sciences

*Physical Activity and Bone Health of College Students*

Adviser: Jesse Morrell

---

**Chemistry Department  
Poster Exhibition**

---

**Friday, May 7****3–4:30 p.m.****Parsons Hall, Iddles Wing**

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

**Jay Agarwal**

Chemistry

*On the Role of Sacrificial Donors in the Catalytic Reduction of CO<sub>2</sub> by Ru(II)-Re(I) Supramolecular Complexes*

Advisers: Gonghu Li and Howard Mayne

**Brett Bauer II**

Chemistry

*XPS Analysis of Renaissance-Era Ceramics and Identification of Paint Pigments*

Adviser: Arthur Greenberg

**Nicholas Bencivenga**

Chemistry

*Synthesis of Novel Polymerizable Ligands Providing -1 to 0 and +1 to +2 Charge Transitions in a Poly-NIPA Polymer System*

Adviser: Roy Planalp

**Samantha Biron**

Chemistry

*Fractionation and Quantitative Analysis of Specific Isolated Mushroom Components for Stable Isotopic Tracing Methods*

Adviser: Erik Hobbie

**Michelle Kass**

Chemistry

*Gas Chromatograph Analysis of Trace Gas Samples from Barrow, Alaska*

Advisers: Howard Mayne and Barkley Sive

**Jordan Reddel**

Chemistry

*Method Development for the Determination of Stability Constants for Novel Chelating Ligands with Various Metal Cations*

Advisers: Roy Planalp and W. Rudolf Seitz

**Gayathri Sridhar**

Chemistry

*A Study of Zn(II) Ternary Complexes with Cross-bridged Cyclen*

Adviser: Edward Wong

**Nathan Stein**

Chemistry

*Design, Synthesis, and Characterization of a Persistent Nonacene Derivative*

Adviser: Glen Miller

**Ryan Sylvia**

Chemistry

*Investigating Effects of Co-Monomers and Reaction Conditions on the Lower Critical Solution Temperature (LCST)*

Adviser: W. Rudolf Seitz

## Whittemore School of Business and Economics Paul J. Holloway Prize

### University-wide Innovation-to-Market Competition Championship Round

**Wednesday, May 12****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.



---

## URC 2009 Awards of Excellence

The Undergraduate Research Conference (URC) distributed thirty-six cash awards and sixteen tuition scholarships to students for outstanding presentations at the 2009 URC.

Cash awards totaled \$6,700, and tuition scholarships totaled \$10,000. Sponsors included the following University offices and departments: The Parents Association, the Office of the Vice President for Student and Academic Services, the Institute for the Study of Earth, Oceans, and Space, the New Hampshire Space Grant Consortium, the College of Engineering and Physical Sciences, the Environmental Research Group, the College of Life Sciences and Agriculture, the College of Engineering and Physical Sciences Alumni Association, the Center for International Education, the University of New Hampshire-Manchester, and Phi Beta Kappa Society.

Go to the URC Web site for a full list of students, their major and advisor(s) along with links to their award-winning presentations:

[www.unh.edu/urc/2009/awards.html](http://www.unh.edu/urc/2009/awards.html)

### The following presenters received awards of excellence:

Timothy April '09  
Dylan Fransway '09  
Jesse Taylor '09  
*Home Power Monitoring*

David Bornstein '09  
*The Loss of the Breton Language*

Matthew Borowski '09  
Carin Campbell '09  
Michael DeGaetano '09  
David Garneau '09  
Benjamin Lewis '09  
Philippe Lord '09  
Keith Matthews '09  
Eric McKenzie '09  
Kurt Raisanen '09  
Brendan Rickard '09  
Jeremy Seiferth '09  
Derek Smith '09  
Joshua Spaulding '09  
Kyle Tierney '09  
*Formula SAE Car*

Brianna Brothers '10  
Steven Cole '10  
Harry Dodson '11  
*Building a Database Application System to Manage Donations for the YWCA of Manchester*

Anna Bruning '09  
*Euskal Herria: A Filmic Exploration of Basque Identity and Culture*

Diana Chiang '09  
*Successful Measures of Peacekeeping: Does Peacekeeping Work?*

Claire Churchill '09  
*Jules Simon: sans colère et sans amertume*

Erica Clemens '09  
*SASS in the School System*

Samantha Costa '09  
*Sexual Harassment and Sexual Assault Protocol Project*

Jessica Dennis '09  
*How Tourism Changed Spain's Economy*

Stacy Farina '10  
*Winter Flounder Stock Enhancement: Examining the Onset of Wild Weaning in Pellet-Reared Fish*

Colleen Flaherty '09  
*Poverty and Democracy: Peru Revisited*

Marie Gakuba '09  
*Never Again: A Promise Yet to be Fulfilled*

Sarah Gormady '09  
*The Carnal Economy: Sex for Sale on the Global Marketplace*

Lauren Gurschick '09  
*A Descriptive Study of Team-Based Well-Child Care in the Netherlands*

Sauwai Hung '09  
*Somatic Growth of Juvenile Green Sea Urchins Fed Artificial Feeds of Varying Nutritional Composition*

Katrina Ingraham '09  
*A Life Between: Reflections of Immigrant Culture in Modern German Cinema*

Sheila Jarnes '10  
*The Secret Lives of Roses*

Corey Johnson '11  
*Sustainability—Small Town Carbon Calculator*

Olivia Karpinski '09  
*Pre-Participation Athletic Screening Forms in New England Colleges*

Allison Krause '09  
*Political Balance: Partisan Politics in the Spanish and Italian Transition to Democracy*

Julie Langevin '10  
*A Study of Speech Perception: The Psychological Reality of the Obligatory Contour Principle*

---

**Jacqueline Lewis '10**

*Anticipating Genocide: The Case of Rwanda*

**Jennifer McArdle '09**

*Why Do Militant Movements Renounce Their Paramilitary Wings?*

**Brian McKenney '09**

*Corporate Image Making through Pseudo-Communication: The Case of the New Hampshire Beer Distributors and Dover's Youth to Youth Student Advocacy Group*

**Andrew McKernan '09**

*Christ or Lenin: To Whom Should One Construct a Monument?*

**Aimee Milliken '09**

*The Experiences of Nurses Using Rapid Response Teams*

**Katharine Mooney '09**

*That's What He Said: Expanding Education Around Men's Sexual Decision Making*

**Stephen Morgan '09**

*Soil Consistency Limits: The Portable Liquid Limit Device*

**Johanna Murphy December '08**

*Holy Oil and Water: The Economics of a Theocratic Nation*

**Raymond Murphy '10**

*Working Class Stiffs (film)*

**Jared Murray '09**

*Median Polish Algorithm for Automated Anomaly Detection in Sensor Networks*

**Morgan O'Neill '09**

*Air-Sea Carbon Flux During Hurricanes*

**Morgan O'Neill '09**

*Precision Pointing in the Sky for IBEX  
Interstellar Flow Observations-Use of the Moon with the IBEX-Lo Star Sensor*

**Catherine Plante '12**

*Volunteer Best Practices*

**Elizabeth Reny '09**

*The Rhetoric of Retail: Understanding the Function of Retail Therapy*

**Heather Ridge '09**

*Fair Trade: Small-Scale Coffee Farmers in Costa Rica*

**Brittany Rittenberry '09**

*Human Trafficking: A Thriving Black Market Service*

**Cem Savoglu '09**

*The Cyprus Problem and Turkey's Accession to the European Union*

**Alex Scarelli '10**

*Art Show (screenplay)*

**Melissa Schilke '10**

*Procrastination Study on Stress Levels*

**Valerie Schoepfer '10**

*Leaf Leaching as a Source of Carbon and Nutrients in Tropical Streams*

**Kathryn Shriver '09**

*Xenophobia and the Plight of Spain's Immigrants*

**Charlotte Todd '09**

*UNH-S.T.A.R.S. Sustainability Tracking Assessment and Rating System*

**Calvin Vaillancourt '09**

*College Outdoor Orientation Program Sustainability*

**Vassili Vorotnik '09**

*Enzymatic Transformation of a Natural Antioxidant*

**Eric Wind '10**

*Thinking About Congress*

# Committed to Undergraduate Research

**ENGAGEMENT IN RESEARCH:** For those students who get involved, it's the defining factor of a UNH undergraduate education. And it is exactly what you will see at this week's URC. The conference is an annual celebration of the remarkable research and learning between motivated undergraduates and active faculty researchers here at UNH.

This student-faculty collaboration is the backbone of the UNH research experience. It begins in the classroom with research-intensive coursework, but exists everywhere across campus and beyond. Look around and you'll find undergraduates in faculty labs, teaming up with their teachers to find solutions that benefit society. You'll see them in UNH's many living labs such as the greenhouses, the farms, and the Child Study and Development Center; or at one of more than 40 centers and institutes dedicated to studying a wide range of issues, where undergraduates conduct research alongside experts in their fields. In UNH theatres, studios, and recital halls, our creative arts students explore the intellectual processes behind their works.

Nourishing these undergraduate-faculty relationships is UNH's **Hamel Center for Undergraduate Research**, which gives students the opportunity to make research and creative explorations a more formal part of their academic experience. Each semester, dozens of students from varied academic disciplines apply for grants and fellowships from the center's Undergraduate and International Research Opportunities Programs (UROP and IROP). The funds enable them to embark on collaborative research projects with faculty mentors, and to learn the key elements of any research project—from proposal and budget to research and presentation of results to peers. Many of the students presenting here this week conducted their research using UROP and IROP grants.

The **McNair Graduate Opportunity Program** also fosters student-faculty collaboration. As a graduate school preparation program, McNair includes an intensive research component. Students may design a research project, receive funds to implement the project, take a research methods course, participate in writing skills workshops, and have the opportunity to present their findings at the UNH McNair Program Summer Research Symposium, among other activities.

In addition, the **Research and Discover Program** offers a series of two summer internships to eligible students—the first summer at UNH, the second at NASA Goddard Space Flight Center. Research and Discover interns work alongside environmental scientists on the groundbreaking discoveries underway at the UNH Institute for the Study of Earth, Oceans, and Space, such as investigating the effects of human activities on the Earth, including the causes and effects of global climate change and deforestation; studying dynamic processes in the Earth, oceans, and atmosphere using remote sensing, GIS, computer models, and other state-of-the-art tools; and exploring chemical, physical, and biological oceanography.

This direct participation in meaningful research is one of the unique characteristics of a UNH education, where students, together with faculty, push back the frontiers of knowledge.

## **How to get involved in undergraduate research at UNH:**

- talk to a favorite professor, faculty adviser, or teaching assistant;
- visit the UNH Hamel Center for Undergraduate Research, which sponsors student research projects at home and abroad;
- pay attention to department bulletin boards and Web sites, which often post job openings in UNH labs or departments where students can work on actual, ongoing research projects;
- take a research-intensive course, such as INCO 590 "Student Research Experience."

## ***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](http://www.unh.edu/inquiryjournal)

## **Links to research opportunities**

Centers and Institutes at UNH  
[www.unh.edu/research/](http://www.unh.edu/research/)

Center for International Education  
[www.unh.edu/cie](http://www.unh.edu/cie)

Hamel Center for Undergraduate Research  
[www.unh.edu/undergrad-research](http://www.unh.edu/undergrad-research)

McNair Graduate Opportunity Program  
[www.unh.edu/mcnair](http://www.unh.edu/mcnair)

Engagement  
[www.unh.edu/engagement](http://www.unh.edu/engagement)

Research and Discover Summer Internship Program in Earth Sciences  
[www.eos.sr.unh.edu/ResearchAndDiscover/](http://www.eos.sr.unh.edu/ResearchAndDiscover/)

University Honors Program  
[www.unh.edu/honors-program](http://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 2010 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  
Sigma Nu Fraternity  
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, Anthony Savani '12 and Megan Zerega '10  
Web Solutions  
Wildcat Properties  
Whittemore School of Business & Economics Marketing and Advertising Class (Brenna Tenore, Team Leader, and her team of hard-working student volunteers)

## Thanks to the 2010 URC Planning Committee (and the many individuals who served on numerous subcommittees)

Martha Barker, Co-Chair, URC Communications subcommittee;  
Senior Graphic Designer, Editorial & Creative Services  
Brent Bell, Assistant Professor, Department of Kinesiology  
Jennifer Borda, Associate Professor, Department of Communication  
Kelly Calhoun, Director, Alumni Programs, Alumni Association  
Janet Cass, Co-Chair, Parents Association Undergraduate Research Symposium; Director, UNH Parents Association  
Sara Cleaves, Associate Director, University Office of Sustainability  
Lynne Cooper, Co-Chair, Parents Association Undergraduate Research Symposium; Program Coordinator, Office of the Senior Vice Provost for Engagement and Academic Outreach  
Courtney DePalma, Chair, Oral Communications subcommittee; Director, Connors Writing Center  
Molly Doyle, Program Associate, Hamel Center for Undergraduate Research  
Tammy Goldberg, Director, Finance & Administration, Office of the Senior Vice Provost for Research

Jim Graham, Co-Chair, URC Communications subcommittee;  
Writer, Editorial & Creative Services  
Rob Haskins, Chair, Naked Arts; Associate Professor, Department of Music  
Lynnette Hentges, Manager, Program and Proposal Development, Office of Sponsored Research  
Estelle Hrabak, Chair, COLSA URC; Associate Professor, Department of Molecular, Cellular & Biomedical Sciences  
Erica Johnson, Director, InterOperability Lab  
Pamela Libby, Chair, Outreach subcommittee; Director, Donor Relations, UNH Advancement  
Peter Masucci, Co-Chair, WSBE URC; Adjunct Professor, Department of Marketing, Whittemore School of Business and Economics  
Robert McGann, Director, UNH Admissions  
Michael Merenda, Co-Chair, WSBE URC; Professor, Department of Management  
Cari Moorhead, Chair, GRC; Associate Dean, Graduate School  
Edward Mueller, Director, University Writing Programs  
Dan Reagan, Chair, UNHM URC; Associate Dean, UNH Manchester  
Lawrence Reardon, Associate Professor, Department of Political Science  
Mark Rubinstein, Vice President, Student & Academic Services  
Ellen Ruggles, Senior Administrative Assistant, UNH Manchester  
Lisa Townson, Chair, Evaluation subcommittee; Assistant Director, Cooperative Extension  
Jill Twomey, Director, Annual Fund, UNH Advancement  
Ruth Varner, Co-Chair, ISE Symposium; Research Assistant Professor, Complex Systems Research Center, Institute for the Study of Earth, Oceans and Space  
Cameron Wake, Chair, URC Planning Committee; Senior Faculty Fellow, Office of the Senior Vice Provost for Engagement and Academic Outreach; and 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

## 2010 URC Event Coordinators

Michael Annicchiarico, Student Composers' Concert  
Tim Barretto and Kate Hanson, Thompson School of Applied Sciences, Community Leadership Program  
Janice Chadwick, Psychology Department George M. Haselrud URC  
Lynne Cooper and Cameron Wake, Parents Association Undergraduate Research Symposium (PAURS)  
Marianne Fortescue, UNH Office of Community Service Partnerships  
Rob Haskins, The Naked Arts – Creativity Exposed!  
Estelle Hrabak, 19th 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 & Championship Round Competition  
Cari Moorhead and graduate assistants Marco Thompson and Miranda Fillebrown, Graduate Research Conference  
Dan Reagan and Ellen Ruggles, UNH Manchester Undergraduate Research Conferences  
Cindi Rohwer, Chemistry Department Poster Exhibition  
Lucy Salyer, History Department URC  
Astrida Schaeffer and Catherine Mazur, Senior B.A., B.F.A., and M.F.A. Exhibition Preview Reception  
Sarah Sherman, Honors English Undergraduate Research Conference  
Ruth Varner and Debra Williams, Interdisciplinary Science and Engineering (ISE) Symposium  
Neil Vroman, College of Health and Human Services (CHHS) Grimes Award Competition  
Kelly Walsh, Philosophy Department URC

# Student Index

Abu-Jaber, Chloe	25	Barry, Connor	36	Brackett, Theodore	15	Chenard, Alan	8, 10
Adams, George	22, 41	Barthelmes, Kimberly	20	Brady, Alissa	25	Cheslock, Joe	11, 29
Adams, Jean	8	Bartlett, Bryan	10	Branley, Michael	22	Child, Kasey	8, 11
Agarwal, Jay	11, 28, 46	Basnight, Ashley	15	Brannelly, Timothy	9	Childs, James	25
Ahmad, Usaila	42	Bauer, Brett	15, 46	Breda, Joseph	11	Chin, Ting	26
Alaka, Noel	42	Baum, Amanda	23	Breen, Megan	6	Chinburg, Noah	16
Albair, Joshua	6	Beaudoin, Elizabeth	28, 29	Bresnahan, Michael	16	Ciaraldi, Jordan	36
Alban, Xiomara	27	Beaulieu, Danielle	20	Brideau, Elizabeth	20	Clancy, Mary Elizabeth	31, 36
Albee, Robert	11	Bedard, Mark	11	Brock, Timothy	26	Clark, Sabrina	34, 35
Albert, Dana	25	Bedell, Andrea	15	Brodeur, Kristin	39	Clarkson, Brooke	40
Aleo, Elizabeth	32	Beehler, Christine	6	Brody, Amanda	8	Cochran-Boucher, Michael	6, 20
Allen, Benjamin	11	Belanger, Jeremy	15, 34	Broman, Daniel	16	Cockerham, Jessica	35
Allen, Joshua	14	Belden, Carling	10	Brown, Samantha	25	Cogswell, Christopher	41
Allison, Timothy	11	Beliveau, Amy	43	Browne, James	11	Cohen, Adam	11
Allwood, Samantha	20	Bell, Samantha	29	Brownell, Elizabeth	25	Cole, Edmondson	6
Alves, Melissa	29	Bella-Spooner, Luke	35	Bruell, Kirsten	43	Collins, Benjamin	11
Amante, Jacqueline	14, 43	Bencivenga, Nicholas	15, 46	Brunelle, Jeffrey	35	Collins, Brian	16
Amichetti, Nicole	6	Benik, Rudy	27	Brunelle, Megan	8	Collins, Jocelyn	8, 10
Andersen, Sarah	25	Bennett, Rebecca	36	Bullock, Hannah	43	Collopy, Allison	32
Anderson, Amanda	20	Benoit, Patrick	43	Burns, Kathleen	9	Condemi, Jade	23
Anderson, Jeffrey	35	Benton, Samantha	25	Byrne, Jeffrey	16	Condon, Melanie	26
Anderson, Jordan	29	Bentwood, Michael	14	Cable, Tracy	8, 10	Coneeny, Sarah	37
Anderson, Kevin	29	Bergeron, Ryan	11	Cabral, Cara	6, 14	Connors, Colleen	31
Andreyckak, William	14	Bergmann, Lindsay	30	Cain, Rachel	40	Conroy, Patrick	11
Annese, Joseph	8, 10	Berman, Michelle	8, 10, 11	Caley, Jordan	27	Constant, Stephanie	11
Aquilina-Beck, Allisan	42, 43	Berry, Caroline	37	Cambiasso-Helfer, Patrick	32	Contosta, Alexandra	44
Arena, Charles	36	Bespalova, Tatyana	11	Cameron, Christopher	16	Coppin, Emily	8, 10
Armenakis, Alex	31	Bibeau, Sara	26	Camire, Destiny	36	Corbett, Keith	11
Arrigg, David	11	Bickford, Allison	10	Campbell, Thomas	16	Cormier, Ian	44
Arroyo, Eric-Thomas	14	Birey, Tegiye	36	Camuso, Matthew	11	Cormier, Melinda	20
Asceric, Mirza	14	Biron, Samantha	15, 46	Canavan, Chelsey	29	Cornelissen, Amanda	33
Atwater, Heather	31	Bisson, Andrew	15	Canova, Rachel	26	Corti, Samantha	35
Auger, Ashley	14, 29	Black, Tiffany	29, 36	Cao, Ming	11	Costa, Alexander	16
Auger, Kourtney	20	Bland, Trevor	43	Capano, Nicholas	8, 10	Cote, Andrew	42
Aylward, Aliza	10	Block, Kristopher	43	Caputo, Kara	29	Couse, Angela	40
Azarian, Anthony	10	Blum, Sibley	39	Cardarelli, Jenna	9	Craig, Amanda	44
Bache, Michael	14	Bobolas, Andrew	15, 23	Cardinal, Casey	9	Croteau, Christopher	10
Badger, Erin	9	Boire, Nathan	43	Carot, Victoria	22	Croto, Erik	20
Bagley, Erika	20	Boisvert, Benjamin	36	Carrigan, Anna	20	Crupi, Michelle	44
Bailey, Laci	36	Bolton, Kari	15	Carroll, Emma	30	Cubberley, Alexander	44
Bailey, Shannon	36	Boniface, Jillian	20	Carson, Elizabeth	32	Cugini, Alexander	10
Baity, Brianne	36	Bonneau, Jon	29	Casey, Matthew	8, 10, 11	Cummings, Rebecca	35
Bajor, Sarah	15	Bonnier, Charles	14	Cassetina, Julie	29	Cunniff, Grace	6, 14
Baker, Jennifer	32	Bono, Charles	8, 9	Cecchini, Spencer	10	Curran, Sean	16
Baldio, Allison	42	Boswell, Eric	15	Chamberlain, Cory	22	Curry, Jessica	25
Baldoumas, William	41	Botticelli, Domenic	10	Chandler, Sarah	11	Cypher, Garrett	10
Ball, John	15	Boudreau, Shannon	20	Chapin, Melody	38, 39	D'Andrea, Melanie	44
Bannon, Peter	14	Bourgoine, Nicole	25	Chaput, Audra	44	David, Katie	28
Baraiolo, Jaime	40	Boutin, Lynette	35	Chaput, Gina	16	Dean, Heather	38
Barbato, Gillian	31	Bouvier, Shana	43	Charmanski, Kyle	16	Deane, Kimberly	30
Barbu, Iulia	11	Bowen, Gregory	8, 10	Chase, Lindsay	16, 30, 44	DeBiasi, Patrick	37
Barrick, Elyssa	23	Bowen, Samantha	32	Chase, Robert	16		
		Brace, Bethany	27				

DeCoursey, Danielle	8, 9	Elfreth, Travis	8, 10	Gibbs, Allyson	9	Hauser, Zachary	43
DeDonato, Kelli	11	Ellis, Crystal	44	Gibree, Grant	8, 10	Havener, Erin	37
DeGrace, Amelia	14, 29	Ellis, Sophie	28, 43	Gilbert, Andrew	35	Havi, Tise	32
Delfosse, Natalie	23, 44	Emmons, Nicholas	11	Giles, Katelyn	17	Healey, Maureen	45
Delloue, Thibaut	22	Eurieck, Dustan	16	Giovinelli, Lindsey	9	Heaps, Gwynneth	11
DelTrecco, Joseph	22	Everett, Brendan	40	Girard, Emily	9	Heffron, Eric	14
DeMello, Joel	14	Farias, Kimberly	27	Giroux, Mario	15	Heim, Jeffrey	42
Demeo, David	16	Farina, Stacy	23, 44, 48	Giuffrida, Anthony	14	Heinrich, Blair	13
Demers, David16		Farmer, Bridget	27	Glennon, Katherine	8	Heller, Michele	17, 45
Demers, Nathan	15	Fenner, Emalee	23	Glisson, Natalie	6	Henley, Autumn	30
Deris, Johanna	8, 9	Ferraro, Kacie	17	Godbois, Brian	44	Hennessy, Andrew	33
DeRoche, Michaela	9	Ferrell, Todd	14	Goldstein, Jason	45	Herrick, Peter	22
DeRosa, Kevin	11	Fidler, Laura	21	Goodale, Andrew	14	Hicks, Natalie	12
Desilio, Morgan	32	Filius, Nicholas	10	Goodwin, Thomas	11	Higgins, Martin	16
Desjardins, Eric	8, 9	Filoti, Dana	15	Gordon, Lauren	10	Higgins, Patrick	8, 10
Desmarais, Timothy	16	Finefrock, Krysten	28	Gormley, Erin	40	Hill, Brittany	11
Deveau, Nicholas	16	Finney, Sarah	26	Goulart, Justine	10	Hinds, Jonathan	9
DeWispelaere, John	8	Fish, Kristina	10	Grady, Reagan	22, 29	Hishop, Kimberly	17
Dibble, Amanda	34	Fisher, Mickey	35			Hoagland, Tracey	36
DiCenso, Nina	29, 34	Fitzgerald, Daniel	16	Graffam, Ashley	25	Hoerner, Christopher	25
Dignard, Anne	40	Fitzgerald, Katie	23	Graham, James	17	Hoffman, Risa	36
Distefano, Sarah	33	Fletcher, Griffen	41	Gray, Brian	12	Holt, Rachel	44
Dobbins, Chrissy	21	Flewelling, Ashley	8, 10, 13	Green, Margaret	6	Honey, Megan	8, 10
Doherty, Sean	14, 29	Flitter, Amanda	31	Greene, Ashley	13	Hood, Laura	15
Dokopoulos, Christina	26	Floyd, Emma	36	Greene, Hilary	36	Hooker, Craig	35
Donahoe, Patricia	26	Flynn, Kyle	11, 41	Greene, John	34, 44, 45	Horan, Timothy	12
Donahue, Daniel	17	Fong, Corey	32	Greichen, Laura	8	Houle, David	30
Donovan, Finnian	6	Ford, William	35	Grohs, Jonathan	17	Howell, Tracy	8
Doran, Stephen	17	Forlizzi, Kora	8, 9	Guerra, Cassandra	30	Howland, Lauren	35
Dorich, Christopher	17, 44	Forsyth, Cally	35	Guidice, Ryan	11	Hughes, Kevin	17
Dostoler, Daniel	28	Fortier, Hope	35	Gutermuth, Lisa	11, 27	Hughes, Raeanna	15
Douglas, Sara	23, 32	Fournier, David	45	Gyles, Geoffrey	43	Hunt, Colleen	32
Doukas, Ashley	40	Fournier, Kirsten	10	Haddad, Danielle	17, 45	Hunt, Molly	44
Dowling, Kaitlyn	39	Fournier, Sarah	8	Hadwen, Allison	39	Huntress, Danielle	13
Doyle, John	39	Fox, Andrew	6	Hakala, Karin	33	Hurley, Scott	17, 42
Dripps, Perry	40	Franck, Ashli	30	Halama, Gregory	9	Huxtable, Jayde	29
Driscoll, Christopher	15	Fraser, Chelsey	8, 10	Hall, Benjamin	16	Hyatt, Haeleigh	45
Driscoll, John	11	Frazier, Jason	40	Hall, Cedric	17	Iani, David	14
Druke, Nicholas	22	Friole, Meghan	20	Hamel, Julie	6, 14	Jackson, James	17
Dube, Emily	36	Frizzell, Scott	21	Hamerstrom, Rebecca	25	Jacobsen, David	36, 40
Duffy-Comparone, Emma	22, 39	Froehlich, Heather	30, 40	Hampe, Kayla	15, 17	Jacobson, Eva	31
Dugan, Kaitlyn	17	Fryer, Katie	22	Handley, Karen	21	Jacobson, Sarah	39
Dunstan, Michael	17	Fulford, Alissa	32	Hanley, Ian	45	Jacques, Christine	13
Dusenberry, Jessica	10	Gagnon, Jesse	22	Harden, Whitley	25	Jain, Amit	17
Dutton, Lee	22	Gallagher, Erin	8	Harding, Matthew	15	James, Molly	37
Duttry, Brendan	17	Garabedian, Kristin	45	Harmon, Timothy	16	Janardhan, Mrutyunjaya	12
Dvorak, Jeffrey	44	Gaylord, David	14, 29	Harter, Ariane	10	Janco, Kyle	18
Dzialo, Christine	17	Gazda, Kristen	43	Hartshorne, Heather	25	Janicki, Erik	45
Early, Kathryn	8	Geisheimer, Jacqueline	21	Harwood, Cathy	29	Jarvis, Laura	32
Eaton, Samantha	11	Gellatly, Victoria	10	Hashem, Danah	28	Jefferson, Michael	18
Ebner, Jason	17	George, Ryan	32	Hashmi, Sabrina	8	Jenkins, Darci	23, 40
Elesi, Nicole	21	Gerhardt, Douglas	17	Hassell, Norman	45	Jenkins, Robert	35
		Getzoyan, Dalita	42	Hatch, Teri	35	Jennings, Katie	45

Jensen, Nathan	21	Kramer, Megan	17, 18	Lorenz, Peter	18	McManus, Bryan	8, 10
Jing, Jenny	45	Krates, Nicholas	11	Lounsbury, Kaitlin	40	Meadows, Jonathan	41
Johnson, Corey	38, 39, 48	Kunyz, Daniel	14	Loveday, Kelsey	29, 37	Medas, Jason	18
Johnson, Daniel	16	Kuwabara, Kie	30	Lovell, Emily	26	Mediouni, Aymin	45
Johnson, Kirby	45	Kuzmick, Amanda	45	Lowell, Jeffrey	10	Meikle, Kathryn	8, 10
Jones, Heather	15, 17	Kuznetsov, Pavel	14	Lucent, Selena	6, 7	Melfi, James	18
Jones, Henry	18	Kwasnik, Karrah	6	Lugalla, Imani	15	Mendes, Alissa	36
Jones, Matthew	26	Kyricopoulos, Danielle	12	Lundquist, Andrew	12	Merker, Samuel	44
Jordan, Adam	18	LaBarre, Tegan	13	Lundquist, Daniel	10	Merkert, Kyle	18
Joy, Alexander	40, 41	LaCroix, Jessica	35	Luoma, Jennifer	18	Merriman, Sarah Jo	20
Joyce, Colin	18	Laffoon, Michelle	39	Luszey, Ashley	8, 10	Messeder, Richard	18
Kalinin, Dimitri	31	Lague, Edward	11	MacBride, Jonathan	15	Meyer, Christine	8
Kalutkiewicz, Kyle	18	Lamb, Amy	45	MacDonald, Caryn	42, 43, 45	Michaels, Brandye	45
Kaplan, Adam	15	Lamb, Thomas	36	MacGrath, Scott	12	Mick, Samantha	29, 37
Kaplan, Nathaniel	26	Lanciani, Mark	10	MacIsaac, Tucker	13	Middleton, Andrew	44
Kasper, Jonathan	14	Lange, Ashlee	20	Mack, Kendra	29	Mill, Ryan	10
Kass, Michelle	46	Langlois, Marc	6	Mackail, Michael	6, 14	Millard, Kellen	10
Kavanaugh, Scott	42	Lantz, Katherine	45	MacKay, Taylor	10	Miller, Adrien	14, 43
Kaysner, Meghan	27	Lanza, Stephanie	30	MacKenzie, Kevin	8, 9	Miller, Dane	35
Keating, Amy	20	LaPlante, Laura	41	MacKenzie, Matthew	42	Miller, Lucas	42
Keating, Kathleen	30, 45	Lapointe, Gabrielle	15	Mackintosh, Eliza	35	Millers, Michele	36
Keeley, Christopher	33, 35	LaRue, Nicholas	14	MacMillan, Douglas	17	Millett, Erica	38
Kelley, Ashley	29	Lash, Zachary	9	Macoul, Christine	8, 10	Milmore, Christopher	36
Kelley, Colin	11	Lashin, Ryan	18	Madnick, Daniel	17	Mineau, Kayla	16
Kelly, Michelle	40	Lavoie, Ashley	29	Mailloux, Andrew	43	Miner, Jonathan	9
Kelly-Martin, Rachel	27	Lavoie, Bryan	21	Majumdar, Rajtilak	45	Minnis, Erik	16
Kendall, Kristin	10	Law, Glenn	11	Makowicki, Daniel	15	Misra, Rebecca	30
Kennedy, Richard	13	Lazarus, Lauren	18	Maloney, Katrina	15	Mitchell, Ryan	18
Kenney, Nicole	8, 9	Leach, Zachery	11	Malynn, Ryan	14	Mitchell, Stephanie	10
Kenney, Sean	18	Leahy, John	11	Mamo, TSION	30	Mixon, Rachel	46
Kenyon, Spencer	32	LeClaire, Jared	9	Mamone, Robert	18	Mohamed, Kamal	18
Keohan, Kristin	27	Lee, Samantha	45	Mankus, Mark	18	Mohammed, Aaron	34
Ketel, Ernst	13	Lees, Dean	14	Mann, Nathan	36	Moloney, Caitlin	8, 10
Kim, Euna	25	Leighton, Michael	18	Marceau, Corey	10	Monroe, Tara	8, 9
Kimball, Isagani	16	LeMay, Caitlin	26	Marcek, Ben	45	Monteiro, Katlyn	8, 10
King, Courtney	13	Lemelin, Sarah	27	Marden, Amelia	35	Montgomery, Robert	21
King, Katharine	14	Lennon, John	32, 35	Maroney, Kyle	18	Montigny, Christopher	15
King, Tyler	18, 28	Leonard, Sarah	38	Marsden, James	16	Moon, Patrick	18
Kittle, Cameron	40	Levey, Andrew	13	Martell, Kelly	25, 38	Mooney, Paige	45
Klapprodt, Ryan	11	Lewis, Jacqueline	31, 33, 36, 49	Mason, Kevin	21	Moore, Andy	9
Klauber, Aaron	13	Lewis, Kevin	8	Mathe, Anne	26	Moore, Dustin	17
Klein, Andrew	15	Lin, Ju	35	Mayer, Stephen	14, 29	Morales, Zoila	9
Klein, David	21	Lindquist, Kirsten	40	Mays, Steven	18	Moran, Jaclyn	10
Kohler, Vanessa	16	Linxweiler, Justin	23	McAleese, James	27	Moran, Joshua	17
Kolnaski, Catherine	35	Liston, Christopher	11	McConnell, Brian	18	Moraru, Silvia	11
Komarova, Margarita	32	Littlefield, Andre	30, 45	McCusker, Meaghan	32	Morelli, Jordan	44
Konkowski, Allison	14, 43	Liu, Xiameng	18	McGrath, John	11	Morgan, Amy	23, 41
Koski, Kevin	38	Logan, Kelli	11	McGuigan, Corey	13	Morin, Andrew	14
Kosugi, Takayoshi	43	Lonabaugh, Laura	13	McHugh, Maureen	27	Morin, Hannah	29, 37
Kowalski, John	15	Long, Ashley	8, 10	McLeod-Warrick, Sarah	31, 36	Morse, Jessica	10
Kozacka, Katie	14, 43	Loo, Christopher	17	McManus, Amanda	27	Morse, Sarah	8
Kozlowski, Marcel	11	Lopez, Joe	12			Mortimer, Kaitlyn	30
Kralian, Rachel	33					Mosher, Kristen	13

Moyer, Chelsea	31, 36	Pendleton, Paige	10	Reed, Nicholas	15	Schwarzenberg, Amy	18
Moyer, Jeffrey	35	Perch-Ahern, Alexandra	25	Rees, Kelsey	26	Scott, Sarah	26
Mueller, Timothy	8, 10	Pereira, Katherine	45	Reilly, Allison	30	Seely, Ashley	10
Mukanovic, Emin	22	Perrinez, Daniel	28, 46	Renfer, Elizabeth	8, 10	Seely, Logan	34
Muller, Joseph	14	Perry, Alicia	30	Reuning, Maximillian	18	Seiler, Benjamin	45
Mumley, Stuart	8, 10	Perry, Lucas	13	Ribitzki, Alyssa	6	Senerchia, Matthew	19
Murphy, Eric	31	Perry, Michael	16	Ricci, Georgia	10	Seymore, Matraviva	19
Murphy, Raymond	21, 49	Pesheva, Madlena	27	Ricciardi, Chelsea	6	Shao, Lin	30, 45
Myers, Madison	19	Petersen, Lee	19	Riccio, Gregory	23	Sharma, Hom	28
Myers, Sean	33, 40	Peterson, Curtis	16	Rice, Leah	26	Shartzter, Joseph	8, 9
Nazzaro, Nicole	15	Pfleger, Matthew	12	Rich, Allison	36	Shaw, Nina	10
Nelson, Ashley	13	Phelan, Lindsey	40	Richard, Jeffrey	11	Shea, Caitlin	8, 10
Nelson, Joseph	22	Picard, Eric	18	Rideout, William	20	Shea, John	35
Nettleship, Charles	11	Pieroni, Andrew	11	Riding, Rebecca	42	Shelley, Ryan	11
Neuffer, Danielle	10	Pietrasz, Aniela	9	Rivard, Stephen	38	Sicard, Brian	18
Neuman, Alexandra	8, 10	Pillsbury, Whitney	8, 10	Roach, Laura	37	Sigl, Niklas	13
Nguyen, Hoan	33	Place, Daniel	14	Robicheau, Tiffany	12	Silfvenius, Kelsey	46
Nolan, Riley	43, 44	Place, Michael	17	Robinson, Bridget	8	Simione, Stacy	8
Nolin, Mary	22	Plante, Catherine	13, 49	Rogers, Kimberly	28, 31	Simmons, Jenna	29
Noonan, Bryan	35	Plante, Monica	16	Rogoff, Jenna	8	Skog, Cheyenne	11
North, Molly	8	Poggi, Jennifer	37	Rolli, Christina	10	Slavin, Hannah	8
Nygren, Tracey	33	Poisson, Renee	36	Rose, Kevin	19, 38	Smarsh, Grace	42
O'Brien, Kaitlin	32	Pothier, Jonna	8, 9	Rouillard, Mirielle	33	Smith, Charles E.	16
O'Connor, Brett	18	Poulin, Patrick	10	Rouleau, Tanya	30	Smith, Charles L.	13
O'Hara, Michael	45	Powers, Ashley	29	Routhier, Thomas	11	Smith, Dakota	18
O'Keefe, Conor	11	Powers, Michaela	35	Rowedder, Holli	43	Smith, Jennifer	6
O'Keefe, Eric	46	Prabhakar, Siddharth	7	Roy, Garrett	19	Smith, Joshua	46
O'Leary, Kevin	23	Pratt, Andrew	27	Roy, Kenneth	18	Smith, Matthew	11
O'Leary, Kyle	16	Prescott, Russell	19	Rubino, Robert	11	Smith, Meghan	13
O'Neill, Emily	28	Preston, Stacey	9	Rubins, Philip	19	Smith, Paige	30
Obara, Ashley	39	Prince, Francesca	31, 36	Rubio, James	14	Smith, Rebecca	27
Oien, Jenny	25	Proft, Silas	11	Ruediger, Kelsey	8, 10	Smith, Victoria H.	26
Onett, Zachary	42	Pye, Joseph	18	Ruskowski, Joseph	19	Smith, Victoria L.	29
Onos, Kristen	23	Pye, Samantha	8, 10	Russo, Danielle	8, 10	Snavely, Kyle	19
Orr, David	42	Qendro, Bardhyl	17	Rutledge, Rebecca	26	Snow, Thomas	19
Ortakales, Jeffrey	16	Quarles, Camille	35	Saari, Brian	15	Sorensen, Michael	37
Osagiede, Amadin	19	Quarrell, Rachel	25	Sabnis, Radhika	12	Soule, Gina	44
Ouellette, Jocelyn	28	Quig, Alexandra	25	Saladino, Andrew	22	Spadaro, Gianna	35
Ouellette, Marc	12	Quinn, Garrett	39	Samwell, Katie	40	Spicer, Melissa	29
Oyekunle, Funmi	35	Quinn, Lauren	8, 9	Sandberg, Cara	10	Spitzer-Williams, Gideon	15
Padfield, John-Paul	21	Quintal, Alex	16	Savela, Shawn	14	Sprinkle, Brendon	9
Palladino, Courtney	21	Quintal, Ryan	12	Scanlon, Peter	8, 10	Sridhar, Gayathri	47
Palleo, Erika	25	Radlof, Frank	14	Schaefer, Joshua	12	St Jean, Danielle	16
Papadogiannis, Stephanie	37	Raffelt, Thomas	14	Scheibel, Kimberly	29	Stalzer, Krista	23
Papanikolau, Eleni	36	Ralph, Michael	25	Schilke, Melissa	23, 49	Stanieich, Peter	9
Pape, Alexander	15	Ramsay, Kaitlyn	29, 36	Schlacter, Rachel	36	Staples, Rachel	44
Parisi, Thomas	39	Randall, Elisha	8, 10	Schmidt, Kathryn	9	Stawarz, Joshua	19
Parrillo, Kelsey	42	Raymond, Emilea	7	Schmidt, Zachary	15	Steele, Kaitlyn	19
Patenaude, Christina	30	Reale, John	7	Schoenbrun, Dustin	19	Stein, Nathan	19, 47
Pawlowski, Camila	22	Reddel, Jordan	19, 46	Schoepfer,		Steiner, Kurt	37
Peddle, Jason	15	Reddick, Ian	21	Valerie	19, 42, 46, 48	Stenberg, Kelley	35
Pelchat, Amanda	35	Reed, Colin	15	Scholl, Jonathan	26	Stephens, Justin	12
Pelletier, Justin	18	Reed, John	35	Schubert, Justin	31	Stephenson, Benjamin	8



Stergios, Peter	17	Trudo, Andrew	41	Wilson, Christina	12
Stevens, Courtney	32, 41	Truman, Laura	41	Wilson, Grant	11
Stewart, Aaron	18	Tullgren, Justin	21	Wilson, Jessica	31
Stewart, Benjamin	32	Turner, Bradley	14	Wilson, Joseph	18
Stitt, Alexander	15	Turner, Sarah	41	Wilson, Rebecca	17
Stokes, Conor	41	Tyson, Richard	7	Wilson, Robert	8, 10
Strachan, Angus	19	Tyzik, Anna	46	Wind, Eric	28, 49
Strasser, Fern	9	Vadala, Jenna	9	Winsor, Gail	13, 36
Strickland, Deanna	8, 10	Valdez, Romulo	36	Winter, Aarron	30
Striker, Kirstin	28, 40	VanDeWerken, Paula	20	Winters, Robert	16
Strosahl, Sarah	27	VanEtten, Kyle	35	Withers, Samantha	6
Sullivan, Hailey	30	VanOnselen, Colleen	21	Woidt, James	19, 20
Sullivan, Jaclyn	46	VanZile, Matthew	15	Wolfson, Austin	18
Sullivan, Jennifer	13	Vartuli, Luke	17	Wong, Jessica	35
Sullivan, Patrick	15	Vasan, Danielle	27	Wood, Joshua	20
Swanwick, Rebecca	20	Vigneault, Kayla	10	Woodhouse, Benjamin	7
Swass, Thomas	20	Vlacic, Milan	17	Woodman, Justin	17
Sweeney, Courtney	9	Volonte, Brian	7, 11	Woods, Matthew	8, 9
Sylvia, Ryan	47	Vopalensky, Jan	17	Woods, Simon	35
Szumiesz, Eric	14	Wagner, Andrew	37	Wright, Courtney	27
Tang, Sasa	38	Waitner, Alexander	11	Wudarczyk, Rachel	8, 10
Tarbox, Sean	18	Wakeman, Bethany	41	Yager, Andrea	12
Taylor, Danielle	8, 10	Waker, Melissa	29	Yankum, Jonathan	32
Taylor, Lori	12	Walker, Kent	11, 20	Yee, Megan	25, 41
Tedford, Max	35	Walsh, Kelly	41, 51	Yegge, Laura	29
Teeter, Keith	11	Walsh, Michelle	45	Yost, Allison	18
Teichholtz, Paula	34, 42	Waterhouse, David	17	Young, Bianca	20
Tenedios, Amanda	32	Weaver, Brittany	31	Young, Matthew	34
Tenore, Brenna	9, 51	Weber, Elizabeth	25, 41	Young, Matthew J.	17
Terlizzi, Anthony	9	Webster, Thaddaeus	20, 28	Yuen, Evelyn	30, 46
Terrio, Clecia	15	Weed, Devan	8	Zakarian, Thomas	15
Thesing, Erin	37, 38	Weed, Ervin	14	Zapakin, Jordan	15
Thomas, Hillary	39	Weeden, Craig	14	Zavalianos, Zachary	15
Thomas, Mark	18	Weeks, Sophia	31	Zimmerman, Steven	10
Thompson, Matt	8	Weiner, Stephanie	37	Zullo, Jenna	32
Thompson, Megan	42, 43	Weingart, Betsy	7		
Tibbetts, Benjamin	42	Welenc, Andrew	11		
Timmons,		Wells, Rachel	31		
Kayla	27, 29, 34, 37	Wells-Bogue, Wegene	32		
Timothy, Makisha	36	Wengrove, Meagan	16, 28		
Tinsley, James	20	Werner, Samantha	44		
Tobin, Casey	46	Wescott, Jacquelyn	20		
Topliff, Kathryn	23	Wesnak, Vanessa	8, 9		
Torbick, Joshua	22	West, Aaron	35		
Torr, Joshua	29	Whalen, Siobhan	34		
Towle, Zachary	37	White, Erin	13		
Townsend, Samantha	23	Whittet, Shelby	33		
Traverse, Charles	46	Wicks, Caroline	21		
Tripp, Jennifer	10	Wilcox, Jade	36		
Trivella, Amanda	8, 9	Wilkinson, Matthew	25, 41		
Troiano, Anthony	46	Willey, Elizabeth	46		
Trombley, Logan	18	Williams, Aaron	18		
Trombly, Kathleen	29	Williams, Nathanael	23		

“I participated in one of the largest URCs. It was amazing! Now I can use this experience to boost my résumé and get a leg up when applying for jobs.”



“Seeing the other students’ research and how enthusiastic they were about a wide variety of topics inspired me.”



“It allowed us to feel like real scientists and to see how our small research projects really are an important contribution to the research community.”

