Welcome to our weeklong celebration of undergraduate research at the University of New Hampshire. Now in its eighth year, the UNH Undergraduate Research Conference (URC) showcases the remarkable work of our students and their faculty mentors. We take pride in their efforts.

Undergraduate research and discovery are hallmarks of a University of New Hampshire education. Extraordinary learning opportunities vary from field studies and empirical research to outreach scholarship and creative works. Our students have the valuable opportunity to partner with faculty and discover the intricacies of their disciplines firsthand, thereby enriching the academic experience and gaining essential skills for pursuing graduate study and meaningful careers. There are also benefits for the faculty, who report that the teamwork essential to these efforts strengthens instruction and lays the groundwork for future challenges.

This conference provides University of New Hampshire undergraduates with a professional venue to present their important research findings. We encourage you to read their posters, listen to their presentations, and ask questions of the student researchers. You will be impressed with their answers and the depth and breadth of their knowledge and understanding.

Sincerely,

J. Bonnie Newman, Interim President

John D. Aber, Vice President for Research
Measuring the value of the Undergraduate Research Conference

Last year, the UNH Undergraduate Research Conference (URC) evaluation committee asked URC participants to complete a survey in order to gain more insight into the URC student experience.

Responses indicated student participation in undergraduate research was a highlight of their undergraduate experience at UNH and had a significant and positive effect on their post-graduate experience.

URC participation increased student confidence and presentation skills, and in many cases influenced their graduate school and/or career choices. Participants also reported a sense of pride in being able to plan, implement, and report their research to peers, faculty and family members. For many, it was one of the more memorable experiences of their undergraduate career. One student stated: “Sharing my research at the URC and talking with those who attended allowed me to expand certain ideas of my project, giving it greater depth and helping to determine its importance in the bigger picture.”

The students overwhelmingly attributed the success of their research and the resulting URC presentation to collaboration with a faculty mentor. One student wrote: “My faculty mentor has been the most influential person in my undergraduate career. He has provided me with more experience, knowledge, and opportunity than any class could offer. I am completely indebted to him for his support and confidence.”

The students also reported that faculty mentors play an important role in providing connections and opportunities for students to enter graduate programs or the job market.

The survey showed that the Undergraduate Research Conference brings the research experience full circle by providing a professional venue for students to present their work and engage in thoughtful discussions with other members of the University community.

“My faculty mentor has been the most influential person in my undergraduate career. He has provided me with more experience, knowledge, and opportunity than any class could offer. I am completely indebted to him for his support and confidence.”

Excerpted from the manuscript under review titled Intellectual Growth for Undergraduate Students and Faculty: Evaluation Results from an Undergraduate Research Conference, authored by Sharyn Potter, Eleanor Abrams, and Lisa Townson.
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All events are free and open to the public.

Accessibility accommodation requests may be directed to Lynne Cooper at (603) 862-1997.
Thursday, April 19
10 AM–4 PM
Graduate School Research Conference
MUB, Strafford Room

Friday, April 20
6–8 PM
2007 Senior B.A. and B.F.A.
Exhibition and Preview Reception
The Art Gallery, Paul Creative Arts Center

Monday, April 23
8 AM–5 PM
UNH Manchester URC—Engineering Technology Senior Project Presentations
UNHM Auditorium

Tuesday, April 24
11 AM–1 PM
UNH Manchester URC—Oral Presentations
UNHM Auditorium

12:40–2 PM
History Department Undergraduate Presentations
Horton Social Sciences Center

Wednesday, April 25
10:30 AM–noon
Seacoast Reads Exhibition
MUB, Rooms 330, 332, 334

10:30 AM–noon
Thompson School Community Leadership Program
MUB, Rooms 330, 332, 334

10:30 AM–noon
UNH Office of Community Service Partnerships
MUB, Rooms 330, 332, 334

11 AM–2 PM
Thompson School Student Showcase
Stacey’s at Cole Hall

2–5 PM
Interdisciplinary Science and Engineering Symposium (ISE)
Morse Hall Atrium

4–6 PM
UNH Manchester URC—Poster Presentations
UNHM Auditorium

8 PM
The URC, in partnership with the MUB Current Issues Lecture Series, presents an evening with John McQuaid
Pulitzer Prize winner and author of Path of Destruction: The Devastation of New Orleans and the Coming Age of Superstorms, John McQuaid delivers the keynote address, “Are we ready for the environmental threats of the 21st century?”
Memorial Union Building

Thursday, April 26
11 AM–1 PM
UNH Manchester URC—Film Presentations
UNHM Auditorium

3:30–6:30 PM
The Naked Arts—Creativity Exposed
Hennessy Theatre, Paul Creative Arts Center

Friday, April 27
9 AM
Breakfast with UNH Interim President J. Bonnie Newman and Vice President for Research John Aber
MUB, Granite State Room

9:30 AM–2:30 PM
Vice President’s University-wide Symposium
MUB, Granite State Room, various rooms

12:30–3:30 PM
School of Health and Human Services Grimes Award Competition
Pettee Hall

ADDITIONAL EVENTS

Wednesday, May 2
8 AM–2:30 PM
Mary Louise Fernald Nursing Research Symposium
MUB, Strafford Room

Friday, May 4
2:30–4 PM
Chemistry Department Poster Exhibition
Parsons Hall, Iddles Wing

Wednesday, May 9
8 AM–2 PM
Whittemore School of Business and Economics Paul J. Holloway Business Plan Competition
Holloway Commons

All events are free and open to the public
Campus Map

BUILDING KEY
1. Paul Creative Arts Center
2. Horton Hall
3. Memorial Union Building (MUB)
4. Cole Hall, TSAS
5. Morse Hall
6. Hamilton Smith Hall
7. Pettee Hall
8. Conant Hall
9. New England Center
10. Holloway Commons
11. Parsons Hall

UNH Manchester
400 Commercial Street
Manchester, N.H.
For directions to UNH Manchester go to www.unhm.unh.edu/directions.html or call (603) 641-4321.
URC—Engineering Technology Senior Project Presentations

MONDAY, APRIL 23
8 AM–5 PM
UNHM Auditorium

The Engineering Technology Program presents the 30th 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.

B.F.A. degree candidates:

Jason P. Bombaci, Painting
Maggie Cedarstrom, Painting & Drawing
Christopher Hobbs, Painting & Drawing
Ryan Murphy, Painting
Nathaniel Raymond, Printmaking & Drawing

This exhibit runs from April 21 through May 19 (closed May 3–7).

Cindy Burrows
Major: Engineering Technology
Concept Development of a Portable Test Cart for Automated Testing of Industrial Chillers Featuring National Instruments’ Modules with LabView Software
Adviser: Ralph Draper

Mike Cristiano
Major: Engineering Technology
Bead Flattenner-reeengineering and Design
Adviser: Ralph Draper

Tyler Ducet
Trevor Mann
Major: Engineering Technology
Pruurani Reader Board
Adviser: Ralph Draper

Philip Dyer
Major: Engineering Technology
VoiceAnnounce® Caller ID for Mobile
Adviser: Ralph Draper

Stephen Estevanovich
Jeremy Richardson
Major: Engineering Technology
NIST Synchronized Clock
Adviser: Ralph Draper

Christopher McCutcheon
Major: Engineering Technology
Technical Operations Data Collection
Adviser: Ralph Draper

Nathan Ndajeh
William Pepler
Major: Engineering Technology
Multiple Channel Temperature Measuring Interface
Adviser: Ralph Draper

Stany Nepa
Major: Engineering Technology
Replacement Vibra Continuity Tester
Adviser: Ralph Draper

Philip Percoski
Major: Engineering Technology
Automated Insulation Resistance Testing
Adviser: Ralph Draper
Javier Philbrick  
Major: Engineering Technology  
*Returnable Reel CLAMP*  
Adviser: Ralph Draper

Christopher Price  
Major: Engineering Technology  
*Performance Enhancing Circuit for Pneumatic Valves*  
Adviser: Ralph Draper

Ken Thompson  
Major: Engineering Technology  
*Hindsight VNIC Integration*  
Adviser: Ralph Draper

James Woody  
Major: Engineering Technology  
*Hindsight-alarm*  
Adviser: Ralph Draper

Matthew Paterson  
Major: English  
*Interning Outdoors*  
Adviser: Fred Metting

Tali Rojem  
Major: Communication Arts  
*Communication, Power, and the Tutor/Tutee Relationship*  
Adviser: Patrice Mettauers

Sean Tandy  
Major: History  
*The Hutchinson Family Singers and American Protest Song*  
Adviser: Robert Macieski

Elizabeth McFadden  
Major: History  
*Living on the Edge: The Staffordshire Moorlands Pan and Life Along Hadrian’s Wall*  
Adviser: Gregory McMahon

David Palange  
Major: History  
*Your Loving Sons: American Warfare Through the Eyes of New England Soldiers*  
Adviser: J. William Harris

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**History Undergraduate Research Conference**

**TUESDAY, APRIL 24**

**12:40 – 2 PM**

**Horton Social Sciences Center, Room 204**

*At this event, the History Department hosts a panel of undergraduate history majors who present research projects from their academic classes, research seminars, and Honors theses.*

Emily Fekete  
Major: History  
*Geographic Literacy Among Students at the University of New Hampshire: Fall 2006*  
Advisers: J. William Harris and Alasdair Drysdale

Tara Goulet  
Major: History  
*“Power to the People!” Socialist Visions in The Black Panther Party and The U.S. Prison Movement*  
Advisers: J. William Harris and Lucy Salyer

Dan Jasinski  
Major: History  
*The Severing of the Relationship Between the Catholic Church and the French State*  
Adviser: Lucy Salyer

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**Office of Community Service Partnerships**

**WEDNESDAY, APRIL 25**

**10:30 AM – NOON**

**Memorial Union Building, Rooms 330, 332, 334**

*This display showcases the work of student service organizations and student groups engaged in community and service-learning projects throughout the year. These activities range from spring break service trips to community dinners.*

Magdalene Balz  
Major: Communication Sciences and Disorders  
*Alternative Spring Break-Project Eden*  
Adviser: Julie Tracy

Lena Collins (English)  
*Cormac Griffin (Environmental Conservation Studies)*  
*Elizabeth Joseph (English) UNH Community Dinners*  
Adviser: Reverend Larry Brickner-Wood

Kristin Cowalski (Occupational Therapy)  
*Richard Palazzoli (English)*  
*Carly Prisby (Nursing) Alternative Spring Break-Nazareth Farm*  
Adviser: Julie Tracy

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**UNH Manchester—Oral Presentations**

**TUESDAY, APRIL 24**

**11 AM – 1 PM**

**UNHM Auditorium**

*The oral presentations are formal scholarly lectures and/or multimedia presentations reflecting students’ research interests.*

Rayne Coleman  
Major: Sign Language Interpretation  
*“Could You Pass the Salt?” Comparing Politeness Strategies of American Sign Language Users and English Speakers*  
Adviser: Jack Hoza

James Galipeault  
Majors: Psychology and Communication Arts  
*Illness Management and Recovery: An Evidence-based Mental Health Program*  
Adviser: Gary Goldstein

Devon Mercer  
Major: History  
*Obedience Only to God: The Trial of Susan B. Anthony*  
Adviser: Jack Resch
Seacoast Reads Exhibition

WEDNESDAY, APRIL 25
10:30 AM–NOON
Memorial Union Building, Rooms 330, 332, 334

Through the Seacoast Reads program, UNH students from all academic disciplines tutor elementary school children in reading and writing. Twice weekly, volunteers head into schools and after-school programs across the Seacoast to work with children. Seacoast Reads is one of the largest service organizations on campus. Since 1998 nearly 1,000 UNH students have volunteered for the program.

UNH students serving Children in New Hampshire Schools
Advisers: Grant Cioffi, John Carney, and VISTA coordinator Kristin Haskell

Thompson School Community Leadership Program

WEDNESDAY, APRIL 25
10:30 AM–NOON
MUB, Rooms 330, 332, 334

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.

Portfolio Presentations

Jeremy Bourgeois
Jessica Carter
Bryan Dwyer
Nicole Finitsis
Oliver Fisher
Christopher Forbes
Melissa Morris
Brian Reed
Alicia Swain

Major: Community Leadership
Adviser: Kate Hanson

Interdisciplinary Science & Engineering Symposium

WEDNESDAY, APRIL 25
2–5 PM
Morse Hall Atrium

The ISE symposium showcases 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. The program includes a poster session, remarks from university leaders, refreshments, and an awards ceremony.

For the second consecutive year, guest presenters from Elizabeth City State University (ECSU) in Elizabeth City, North Carolina enrich the ISE event. We are pleased to welcome

Katrina Nunes (Biochemistry)
Gail Spaien (Non degree)
Karrissaann Taylor (Horticultural Technology)
Leah Volckmann (Horticultural Technology)
Horticultural Technology Student Floral Designs: Tropical Designs Advisers: John Hart, Rene Gingras, and Dana Sansom

Katie Roy
Major: Food Services Management
Our Heritage
Adviser: Eugene Alibrio

Michael Simmons
Major: Forest Technology
Determining the Feasibility of a UNH Sugarhouse
Adviser: Matthew Chagnon

continued on page 10
Mission: Marketing

How does an aerospace expert find himself teaching college level marketing?

For Peter Masucci, adjunct professor at UNH’s Whittemore School of Business and Economics (WSBE), it was a unique trajectory.

A Massachusetts native and only child of first-generation Italian Americans, Masucci attended Boston Public Schools, then received a bachelor of science degree in aerospace engineering from Boston University. He went to work for NASA as a project engineer, and when NASA’s Cambridge office closed due to budget cuts, headed to Downey, Cal. to work for North American Aviation (which later became Rockwell International), the NASA contractor that designed and built the Apollo spacecraft.

There, he worked on “crew systems” for several Apollo and Skylab missions—designing and building changes to the spacecraft based on feedback from the astronauts. Alan Sheppard, for example, would need to find and use various command module items during flight. He and his crew would communicate to engineers back on Earth how easily or uneasily they could retrieve and stow the items. Masucci and other engineers took notes and then built changes to the spacecraft to accommodate the crew’s needs for future missions.

As the Apollo program waned, Masucci and his wife decided to move back east and he began exploring the non-engineering side of his aerospace experience. He landed a position in Digital Equipment Corporation’s (DEC) product marketing organization.

“In some ways what I did at Rockwell was similar to product marketing,” Masucci explains. “I was the person positioned between the company and the customer.” This, he describes, sketching the image of an hourglass on its side, “is the essence of marketing.” The company represents one end of the hourglass, the customer the other. “Marketing is what happens in the middle.”

After 13 years in various senior marketing and management positions at the multi-billion dollar company, he sought new challenges with several small, pre-IPO start-ups during the high-tech sector’s heydays in the 1990s.

From corporation to classroom

It was about the time he and his wife began contemplating a permanent move to Maine that Masucci envisioned teaching as his next career. With 30 years of real-world marketing experience, in the classrooms of UNH’s McConnell Hall he teaches undergraduate- and graduate-level courses such as Principles of Marketing, Advertising and Integrated Marketing Communications, Marketing Management, and various other courses.

Masucci is the current guiding light behind WSBE’s signature experiential course—Marketing Workshop. Seniors taking this class have worked on marketing campaigns for real clients ranging from corporate giants such as Citibank, Starbucks, and Bausch and Lomb, to local small businesses, nonprofits, and campus organizations.

“Marketing Workshop was a great real-world application of what we’ve spent the last four years learning,” says one former participant.

Masucci is turning heads. But not just from marketing industry leaders whose initiatives benefit from the involvement of his students. In 2006, he received the WSBE Adjunct Faculty Excellence in Teaching award.

“I love my work,” he says. “I am very, very lucky to work alongside these smart, energetic young people.”

His students feel lucky, too. And they tell him so. Comments on Masucci’s faculty evaluations read like this: “Peter is awesome!” “He more than lives up to his great reputation among students.” “This was the best marketing course I’ve ever taken!” “He gets us excited about learning.”

At this week’s Undergraduate Research Conference, no fewer than 99 of Masucci’s students will present their work on the various marketing workshop campaigns of the 2006–2007 academic year. Check them out at the Vice President’s University-wide Symposium on Friday, April 27 at the MUB.
these undergraduates and their faculty mentors who collaborate with UNH researchers in a productive research and educational partnership.

Eman Akam (McNair Scholar)
Major: Chemistry
Encapsulation of Fullerene [C60] in SWCNT Using Microwave Irradiation Chemistry
Adviser: Glen Miller

Michael P. Allard
Major: Mechanical Engineering
Improving Spatial Ability
Adviser: Brad Kinsey

Michael P. Allard
Major: Mechanical Engineering
Students Without Borders—Helping Niger
Advisers: Jenna Jambeck and Kevin Gardner

Stephanie Allard
Major: Biology
Determination of Presence of Prostaglandins After Introduction of Daucus carota in Danio Rerio
Adviser: Charlie Cox

Melissa Allen
Major: Psychology
Calcium Oxalate as an Indicator of Stress at Two Sites on Mount Moosilauke
Adviser: Barry Rock

Robert Ano (Electrical Engineering)
Steve Geiger (Mechanical Engineering)
Matthew Low (Mechanical Engineering)
Robert Lumpkins (Mechanical Engineering)
Erick Michaud (Mechanical Engineering)
David Woodworth (Mechanical Engineering)
UNHubless Engineering
Adviser: Todd Gross

John Welch
Major: Civil Engineering
UNH Dam Project
Adviser: Kevin Gardner

Daniel Banakos (Mechanical Engineering)
Aydin Berhumoglu (Electrical Engineering)
Jeffrey Nichols (Computer Engineering)
Jeffrey Ojala (Computer Engineering)
Daniel Reynolds (Electrical Engineering)
UNH Fire Fighting Robot
Adviser: Barry Fussell

Chris Bancroft (Electrical Engineering)
Matt Jamrog (Computer Engineering)
Lucas Liamatainen (Electrical Engineering)
Chris Sabato (Computer Engineering)
Robert Sandler (Electrical Engineering)
Katie Schwarzenberg (Undeclared)
Mu Chair
Adviser: John LaCourse

James Baril
Joseph Sager
Major: Electrical Engineering
Backplane Ethernet Transceiver
Adviser: Michael Carter

Aaron Beckner
Tim Buzinski
Dan Cedrone
Eric Hansen
Austin Kennedy
Rody Lageson
Travis Parker
Geoff Sanford
Luke Silk
Jesse Sipple
Major: Civil Engineering
Proposed Expansions and Improvements to Pease International Airport
Adviser: Kevin Gardner

Jean Beland (Electrical Engineering)
Michael Farrar (Computer Engineering)
Smart Spotter
Adviser: Allen Drake

Brandon Bell
Marcus Proctor
Major: Mechanical Engineering
UNH Precision Racing—Formula-SAE
Advisers: May-Win Thein and Gerald Sedor

Christopher Black (Physics and English)
Hyomin Kim (Graduate Student in Systems Design Engineering and Mechanical Engineering)
Marc Lessard (Faculty)
Paul Riley (Research Project Engineer)
Building and Installing Ground-Based Sensors to Study PiIB Pulsations in the Region of a Polar Cusp
Adviser: Marc Lessard

Ashley Bolbrock
Major: Earth Sciences
Sources and Mechanisms for Carbon Delivery to the Deep Sea: Biological Station M, Monterey Fan, California
Adviser: Joel Johnson

Amanda Brown
Major: Physics
Effects of Composition on Microstructure in Gold-Silica Composite Thin Films
Adviser: James Harper

Amanda Brown
Don Carlson
Dana Filoti
Major: Physics
Dependence of Crystal Orientation on Composition in Silver-Silica Composite Thin Films
Adviser: James Harper

Gregory Brown (special guest from Elizabeth City State University)
Major: Computer Science
Correlations Between the Concentrations of Chlorophyll a in Surface Waters and Dissolved Oxygen in Bottom Waters of the Northern Gulf of Mexico
Advisers: Linda Hayden and Jinchun Yuan (ECSU)

Adam Bungert
Major: Physics
Case Based Chemistry/Physics Problems for a Comprehensive Chemistry, Physics, and Biology Curriculum
Adviser: Charlie Cox

Bryce Carmichael (special guest from Elizabeth City State University)
Major: Computer Science
Robotic Simulation
Adviser: Linda Hayden (ECSU)
Jon Carrier
Tyler Clark
Tomas Elder
Major: Electrical Engineering
G.h.s Message Transmitter
Adviser: Michael Carter

Jason Carroll (Physics)
Engy Henen (Electrical Engineering)
Audio Amplifier
Adviser: John LaCourse

Jason Carroll
Major: Physics
Practical Consequences of Penetrating Radiation for Space Flight Instrumentation
Advisers: Antoinette Galvin and Mark McConnell

Anne Carson
Majors: English and Psychology
The Effect of Tar Spot on Norway and Sugar Maples
Adviser: Barry Rock

George Clark (Physics)
Morgan O’Neill (Physics and Political Science)
Star Sensor Flight Calibration and Data Analysis for the Interstellar Boundary Explorer (IBEX)
Adviser: Eberhard Moebius

Benjamin Clarke
Ilya Karnauk
Colin Sad
Adam Sayer
Major: Electrical Engineering
Class-D Electrostatic Speaker Amplifier
Adviser: Allen Drake

Andrew Clements (Environmental Engineering)
Lisa Damiano (Environmental Engineering)
Tiffany D’Amour (Business Administration)
Kathy Dietz (Business Administration)
Shawn Dupont (Business Administration)
Christopher Getman (Business Administration)
Steve Granese (Civil Engineering)
Michael Olson (Environmental Engineering)

Jessica Tokson (Environmental Engineering)
Bret Toliviisa (Environmental Engineering)
Ed Viel (Environmental Engineering)
Amalia Wasiski-Kuhn (Environmental Engineering)
2006–07 UNH WERC Project—Microbial Fuel Cells
Adviser: Jenna Jambeck

David Connaughton
Major: Chemical Engineering
In Situ Transesterification of Microalgal Oil
Adviser: Ihab Farag

Dana Coolbroth
Stephen Evans
Eric Grenier
Chad O’Conner
Corey St. Sauver
Brad Sullivan
Sara Tasker
Chris Williams
Stephen Zaskey
Major: Civil Engineering
Cowell Stadium Improvements
Adviser: Kevin Gardner

Sam Corliss
Andrew Elliott
Major: Electrical Engineering
Embedded Computer Controlled Hydroponics Greenhouse
Adviser: Frank Hludik

Tim Corrigan
James Hughes
Timothy Northrup
Ryan O’Mahony
Jill Sanctuary
Major: Civil Engineering
Pedestrian Traffic at the Page School in West Newbury, N.H.
Adviser: Kevin Gardner

Benjamin Cota
Christopher Robert
Derek Russell
James Sherrard
Brian Smith
Major: Civil Engineering
Portsmouth Hotel and Conference Center
Adviser: Kevin Gardner

Kristopher Cui
Major: Chemical Engineering
ASTM Biodiesel Gas Chromatograph
Testing and Automation of Biodiesel Processor
Adviser: Ihab Farag

Brian Darnold
Nicole Guyette
Ryan Haley
Anthony Loubier
Jonathon Morency
Christie Urban
Major: Civil Engineering
Jackson’s Landing Park Upgrade Design
Adviser: Kevin Gardner

Andrew Dawley (Mechanical Engineering)
Zachary Gorri (Mechanical Engineering)
Peter Palen (Mechanical Engineering)
Buba SanYang (Mechanical Engineering)
Tim Schuyler (Mechanical Engineering)
Ducted Wind Turbine
Adviser: Joseph Klewicki

Katelyn Dolan
Major: Environmental Conservation Studies
Pan-Arctic Temperatization: A Preliminary Study of Future Climate Impacts on Agriculture Opportunities in the Pan-Arctic Drainage System
Advisers: Charles Vorosmarty and Richard Lammers

Walter Durack
Joseph Sperry
Major: Civil Engineering
Beneficial Use of Recycled Materials in a Concrete Mixture
Adviser: David Gress

Angela Kuehn (Microbiology)
Stephen Perros (Biochemistry and Molecular Biology)
Katie Szymanska (Microbiology)
The Role of Evolutionary History in Adaptation to New Environments: Experimental Evolution of the Burkholderia cenocepacia Complex
Advisers: Vaughn Cooper and Crystal Ellis (graduate student)
Alethea Evangelou (Mechanical Engineering)
Justin Farrell (Mechanical Engineering)
Adam Filion (Mechanical Engineering)
Philip Gagnon (Mechanical Engineering)
Kristen Kelso (Mechanical Engineering)
Joseph Marston (Mechanical Engineering)
Kyle McLaughlin (Mechanical Engineering)
Michael Ramsey (Computer Engineering)
Michael Roux (Mechanical Engineering)
Matthew Royce (Computer Engineering)
Michael Siopis (Mechanical Engineering)
Hovercraft
Adviser: May-Win Thein

Justin Farrell
Wayne St. Pierre
Major: Mechanical Engineering
High Strain Rate Microforming
Adviser: Brad Kinsey

TreAsia Fields (special guest from Elizabeth City State University)
Major: Mathematics
Creation of a Google Map of Local Remote Globe Sites Using Data Visualization
Adviser: Linda Hayden (ECSU)

Kaiem Frank
Lee Smalls (special guests from Elizabeth City State University)
Major: Computer Science
Estimating Antarctic Firn Average Emissivity Trends at the Ski Hi Automatic Weather Station
Adviser: Linda Hayden (ECSU)

Janine Fraschetti
Major: Earth Sciences
The Timing and Chemical Characterization of a Possible Toba Ash Occurrence in the Bay of Bengal, Offshore India
Adviser: Joel Johnson

Owen Friend-Gray
Major: Environmental Engineering
Activation of Black Phosphate Rock for Heavy Metal Adsorption
Adviser: Jeffrey Melton

Michelle Garnsey
Major: Chemistry
Hydrogenation of Single Walled Nano Tubes
Adviser: Glen Miller

Stephanie Grainger
Major: Chemical Engineering
Study of Pilot Plant Acetone Use Reduction
Adviser: Ihab Farag

Michael Howley
Major: Geology
Laurentide Ice Sheet Recession Recorded in a Late-Wisconsin Proglacial Lake in the Contoocook River Basin, Southern New Hampshire
Adviser: Joseph Licciardi

Joseph Iuliucci
Major: Chemical Engineering
Tin-Silver Metal Particle Electrocodeposition for Lead-free Electronics Packaging
Adviser: Dale Barkey

Joe Kiley
Jonathan Zink
Major: Computer Engineering
Carpal Tunnel Syndrome Early Warning System
Adviser: John LaCourse

Heather Larivee
Major: Environmental Sciences
Adsorption of Phosphorus by Apatite Phosphate Rock—A Potential Solution to Freshwater Eutrophication
Adviser: Kevin Gardner

Jerome Leafe
Christian Torres
Major: Mechanical Engineering
Dirty Leafle Designs
Adviser: Igor Tsukrov

Gary Lemay
Chris Robert
Major: Civil Engineering
UNH ASCE Concrete Canoe
Adviser: Jo Daniel

Benjamin MacBride
Major: Physics
Turbulence of the Solar Wind
Adviser: Charles Smith

Kyle McLaughlin
Major: Mechanical Engineering
Detector Housing for Angular Detecting Inclined Sensor
Adviser: James Connell

Samuel Meehan
Major: Physics
Testing String Theory from the Perspective of Cosmology
Adviser: Per Berglund

Matthew Minuti (Electrical Engineering)
Christopher Rappa (Computer Engineering)
Flexible Communications
Adviser: John LaCourse

Jerome Mitchell (special guest from Elizabeth City State University)
Major: Computer Science
Using Active and Passive Microwave Records for Detecting Firn Characteristics in Greenland: A New Indication of Melt
Adviser: Linda Hayden (ECSU)

Carlee Moser
Major: Mathematics
Vector-borne Disease Mapping: EEE in New Hampshire
Adviser: Ernst Linder

Brian Patenaude (Physics and Mathematics)
Seth Quarrier (Physics)
Flexible Digitally Controlled SPM Electronics
Adviser: Karsten Pohl

Paul Pepler
Major: Environmental Sciences
Denitrification at Burley-Demeritt Farm, Lee, N.H.
Adviser: Matt Davis

Emmanuel Pitia
Major: Chemical Engineering and Business Administration
Biodiesel Fuel from Jatropha
Adviser: Ihab Farag

Emmanuel Pitia
Major: Chemical Engineering and Business Administration
Latex Particles Size versus Morphology
Adviser: Donald Sundberg
Jasmin Rivers  
Illiana Thomas  
Tiwana Walton  
(special guests from Elizabeth City State University)  
Major: Computer Science  
*Developing Standards and Practices for Digitizing and Archiving Multimedia Material from within the Undergraduate Research Experience Program and Other Associated Programs*  
Advisers: Linda Hayden and Jeff Wood (ECSU)

Brittany Sanctuary  
Major: Geography  
*Interannual Variability in the Timing and Amount of Allergenic Pollen in New England Over the Last Decade*  
Advisers: David Brown and Cameron Wake

Andrew Spivack  
Majors: History and Geography  
*Trends in Heavy Precipitation Events Across Northern New England*  
Adviser: David Brown

Alison Spruce  
Major: Geology  
*Paleomagnetic Analysis of the Chickaloon Formation Ashes: Implications for Dating the Paleocene-Eocene Boundary*  
Adviser: Will Clyde

Valerie Stucker  
Major: Chemistry  
*Isotopic Labeling Traces Fungal Metabolism in Phospholipid Fatty Acids*  
Adviser: Erik Hobbie

Jeff Tessein  
Major: Physics  
*Interplanetary Turbulence Parameters at 1 AU*  
Adviser: Charles Smith

Vassili Vorotnikov  
Major: Chemical Engineering  
*Automated Detection and Analysis of Interplanetary Shocks*  
Adviser: Charles Smith

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**JULIE WIGGIN ’07**  
Health Management and Policy  
School of Health and Human Services  
Faculty Mentor: Assistant Professor Robert McGrath

### Women and body image

**As a female**, I have been exposed to the effects that body image have on myself and other women. I am fascinated by the idea that some women are extremely comfortable with their appearance, while others struggle daily with their self-image.

I believe there are certain factors associated with body image that most people are aware of such as the media, familial relationships, and peer relationships. Apart from these and other factors that may influence whether women develop a negative or positive body image, I am interested to see if certain personality characteristics may contribute to how women feel about themselves.

How is it that some women surrounded by these factors maintain a positive body image, while the same factors negatively affect others? These questions led me to ask whether a person’s level of hardiness or resilience actually has a mitigating effect against developing a negative body image. By hardiness I mean a combination of characteristics, such as personality and social support, from which they draw when faced with adversity.

I have hypothesized that there will be a positive relationship between hardiness and positive body image. I am extremely interested to see what the results of my questionnaire will be.

**Talk to Julie about her results at the Vice President’s Symposium on April 27, 10:50 a.m.–noon at the MUB’s Granite State Room.**
SHAWN ALLAIRE ’07
Communication Arts
UNH Manchester
Faculty Mentor: Assistant Professor Skip Tenczar

Reel time

For this year’s URC film screening, Bryan Connington and I will show three short films, Breakdown, Quiet Time, and Jump to Conclusions.

We made Breakdown last semester and it has probably been our most challenging film produced yet. It took the work of Bryan (camera), Steve Whalen (director), and me (producer). The script called for nighttime scenes and we were forced to maneuver around many technical issues such as lighting with power converters, compliance from the town hall, and noise factors. Fortunately, everything went as planned we were able to get through the project fairly well.

The other two films we will show, Quiet Time and Jump to Conclusions, are the shorter of the three films. Quiet Time gave us an opportunity to try out various camera angles which we had not used before. We also worked a lot with sound editing for this film using the new Final Cut program in our video lab.

We made Jump to Conclusions during one class period! Three people worked on this project including Bryan, Steve Bowles, and me. This has been our darkest piece yet in terms of drama and humor. We hope people will appreciate it for what it is.
Troy Maynard
Major: Communication Arts
WMUR Internship—Entering the Production Field
Adviser: Skip Tenczar

Michelle Mitchell
Major: History
“AME,” A Referential Database of the City of Manchester, New Hampshire 1818–1850
Adviser: Robert Macieski

Kristen Montour
Major: Psychology
Women’s Experiences of Sexual Harassment in Self-Help Groups and Substance Abuse Treatment
Adviser: Alison Paglia

Francoise Morison
Major: Biology
Adviser: Sarah Kenick

Cold War
Aidan Ankarberg
Major: History
Adviser: Robert Macieski

Frank Deschenes
Major: History
Adviser: Robert Macieski

Marina Ilyuk
Major: History
Adviser: Robert Macieski

Kathleen Joyce-Page
Major: History
Adviser: Robert Macieski

Jacqueline Quintal
Major: History
Entertaining the Cold Way
Adviser: Robert Macieski

Amanda Sinotte
Major: History
Adviser: Robert Macieski

Jeffrey Sojka
Major: History
Adviser: Robert Macieski

Religion and Civic Life in America
Aaron Boucher
Major: Humanities
Secular Humanism, Faith, and Science: The Debate Over Intelligent Design
Adviser: John Resch

Amy Barclay
Major: Humanities
The Clash of Science and Religion: Embryonic Stem Cells
Adviser: John Resch

Danielle Boutin
Major: Humanities
The Scopes Trial: The Clash of Evolution and Creationism
Adviser: John Resch

Revolution and Democracy
Bruce Benard
Major: History
The Dred Scott Case: American Democracy and the Anti-Slavery Movement, 1857–1858
Adviser: John Resch

Michael Brunelle
Major: History
Case Studies in American Public Education: Horace Mann and the State of New Hampshire v. Claremont Case
Adviser: John Resch

John Clair
Major: History
The Millerites and Millennialism: 1841–1850
Adviser: John Resch

Ryan Kimball
Major: History
Adviser: John Resch

Larry Habel
Major: History
Nat Turner Rebellion: Public Response and Virginia Slavery Debate, 1831–1832
Adviser: John Resch

Amanda Massahos
Major: History
Public Response to the Amistad Case, 1839–1842
Adviser: John Resch

Michelle Mitchell
Major: History
Manchester, N.H., 1840–1850: The Public Record
Adviser: John Resch

Jamie Ray
Major: History
Adviser: John Resch

Jonathan Sandlin
Major: History
Democracy and the West: The Admission of Utah in the Union
Adviser: John Resch

Amanda Sinotte
Major: History
Public Response to John Brown’s Raid on Harper’s Ferry, 1859–1860
Adviser: John Resch

Jeffery Sojka
Major: History
The Civil Rights Act of 1866
Adviser: John Resch
An evening with John McQuaid

WEDNESDAY, APRIL 25
8 PM
Memorial Union Building, Granite State Room

The URC, in partnership with the MUB Current Issues Lecture Series, presents an evening with John McQuaid

Pulitzer Prize winner and author of *Path of Destruction: The Devastation of New Orleans and the Coming Age of Superstorms*, John McQuaid delivers the URC keynote address, “Are we ready for the environmental threats of the 21st century?”

Reserve free tickets at www.unh.edu/urc.

UNH Manchester Film Presentations

THURSDAY, APRIL 26
11 AM–1 PM
UNHM Auditorium

The film presentations at UNH Manchester are part of the communication arts program, in which students complete introductory and advanced course work in video production, scriptwriting, audio production, film aesthetics, and documentary production. The student films illustrate their work at different stages in the curriculum.

Shawn Allaire
Bryan Connington
Major: Communication Arts
Quiet Time
Adviser: Skip Tenczar

Naked Arts—Creativity Exposed!

THURSDAY, APRIL 26
3:30–6:30 PM
Hennessy Theatre, Paul Creative Arts Center

(Reception to follow in The Art Gallery)

Samantha Cistulli
CJ Lewis
Aaron Sharff
Major: Theatre
Deconstructing Woyzeck
Advisers: David Richman and David Kaye

Tucker Sansom Cummings (Theatre and History)
Michael D’Errico (Music Education)
Lily Finnigan-Allen (Art History)
Nathan Horton (Music)
Kelsey Keenan (Art Studio)

Artistic Improvisations: A Cross-Discipline Creative Process
Advisers: David Kaye, Rob Haskins, and Jennifer Moses

Michael D’Errico
Major: Music Education
Wildstyle Metaphysics: The Compositional Process of the Hip-Hop DJ
Adviser: Rob Haskins

Lauri Lannan
Major: Art Studio
Photographic Progression
Adviser: Jennifer Moses

Brian Miner
Major: Music Education
Fostering Children’s Musical Creativity
Adviser: Susan Hatfield

Katharine Mock
Major: Art Studio
Exposed: Art, Media, and the Lost Boys
Adviser: Jennifer Moses
Megan O’Connor  
Major: Theatre  
*Inaction in Action*  
Advisers: Deborah Kinghorn, David Kaye, and David Richman

Alexandra Ross-Raymond  
Majors: Studio Art and Women’s Studies  
*Homage to Paula Modersohn-Becker, A Studio Study of Women and Self Portraits in Germany*  
Adviser: Jennifer Moses

Ashley VandeBogart  
Major: Theatre  
*Reflections of Electra*  
Adviser: David Kaye

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**Breakfast with UNH Interim President J. Bonnie Newman and Vice President for Research John Aber**

**FRIDAY, APRIL 27**  
9–9:30 AM  
Memorial Union Building, Granite State Room

This informal gathering gives students and attendees an opportunity to visit with Interim President Newman and Vice President for Research Aber. Newman and Aber will provide a preview of the large University-wide event that follows breakfast—the Vice President’s Symposium.

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**ASHLEY VANDEBOGART ’07**  
*Theatre and Dance*  
College of Liberal Arts  
Faculty Mentor: Associate Professor David Kaye

**Emanating Electra**

Electra is mad. Her mother killed her father because he sacrificed Electra’s sister so the Greek ships could smoothly sail to Troy. Electra is so hurt and angry that she and her brother, Orestes, devise a plan to kill their mother and her lover!

The subject of my research, the Greek tragedy heroine Electra, is seen as the epitome of the angst-ridden teenage girl. But she is so much more than that. She has so much passion, heart, love, resentment, and yes, anger. At the URC, I will bring Electra to life through a series of monologues and scenes from the many plays written about her.

At the end of the show I will tie all the different emotions together with a scene from a play called “Curse of the Starving Class” written by Sam Shepard. This scene introduces a new Electra character, a little girl named Emma who brings Electra’s angst full circle to live again in someone else.

See Ashley’s portrayal of Electra at The Naked Arts—Creativity Exposed! event on Thursday, April 26, 3:30–6:30 p.m. at the Hennessy Theatre, Paul Creative Arts Center.
Vice President’s University-wide Symposium

Poster Presentations: Session A

FRIDAY, APRIL 27
9:30–10:40 AM
Memorial Union Building, Granite State Room

Melissa Allen
Major: Psychology
Calcium Oxalate as an Indicator of Stress at Two Sites on Mount Moosilauke
Adviser: Barry Rock

Christopher Anason
Major: Mechanical Engineering
Studying the Effects of Road Salt Spray and Runoff on the Foliage and Growth of White Pines
Advisers: Steve Hale and Barry Rock

Magdalen Balz
Major: Communication Sciences and Disorders
Evaluation of a Community-based Day Facility for Adults with Acquired Brain Injury
Adviser: Michael Fraas

Karinne Brobst (Psychology and Justice Studies)

Maria Crossman (Psychology)

Danielle DiFranco (Psychology and Justice Studies)

Allyssa Lanza (Psychology)
An Implicit Measure of Victim/Perpetrator Responsibility: The Effect of Reputation
Adviser: Ellen Cohn

Jodi-Ann Burey (McNair Scholar)

Michael Simmons ’07
Forest Technology
Thompson School of Applied Science
Faculty Mentor: Professor Matthew Chagnon

Tapping in

UNH boasts more than 3,800 acres of forestland, including special pockets of sugar maples. With my research project I set out to determine the feasibility of a UNH maple sugaring operation.

Using forest-sampling methods, I determined the number of taps that the UNH Woodlands sugar maples could support. Using that number and the physical layout of the sampled sugar maple stands, I researched the appropriate types of collection and production systems.

See Mike’s results at the Thompson School’s Student Showcase on Wednesday, April 25, 11 a.m.—2 p.m. at Stacey’s in Cole Hall.
Emily Carter
Major: Psychology
Verb Tense as a Predictor of Reader Reactions to Autobiographical Narratives
Adviser: David Pillemer

Lindsey Connell
Major: Social Work
Sexually Transmitted Diseases
Adviser: Robert Jolley

Jenna Darling
Major: Psychology
Why You Can’t Teach an Old Rat New Tricks: How Cholinergic Lesions to the Temporal Lobe Mimic Aging
Adviser: Jill McGaughy

Katelyn Dolan
Major: Environmental Conservation Studies
Pan-Arctic Temperatization: A Preliminary Study of Future Climate Impacts on Agriculture Opportunities in the Pan-Arctic Drainage System
Advisers: Richard Lamers and Charles Vorosmarty

Robert Gilbert
Major: Health Management and Policy
No Money, No Mission: The Importance of Charity Care Programs
Adviser: James Lewis

Nichole Guenard
Major: Psychology
Sexually Explicit Advertisements: Does Belief in Rape Myth Differ?
Adviser: Ellen Cohn

Kara Judson
Major: Biology
Examination of Fas Aggregation on Bovine Luteal Cells: Influences of Cytokerratin 8/18 (CK8/18) Intermediate Filaments
Adviser: David Townson

Ginny King
Major: Nutritional Sciences
Bone Health in the College-Age Population
Adviser: Jesse Morrell

Alice Kirega (McNair Scholar)
Major: Biology
Cloning Human Interleukin-2
Adviser: Stephen Torosian

Lisa Landry
Major: Nursing
The Experience of Childbirth in China: A Direct Observational Study
Advisers: Gene Harkless and Carol Williams-Barnard

Stacey Lynch
Major: Social Work
Harbor Schools and Family Services: Group Homes
Adviser: Robert Jolley

Sarah Marcoux
Major: French Studies
La Torture: Examining the Battle of Algiers as a Human Rights Failure
Adviser: Claire Malarte-Feldman

Troy Maynard
Major: Communication Arts
WMUR Internship—Entering the Production Field
Adviser: Skip Tenczar

Caitlin Mussey
Major: Nursing
The Lived Experience of an Unplanned Cesarean Section
Advisers: Lynette Ament and Carol Williams-Barnard

Nichole Phelan
Major: Social Work
Child Abuse and Neglect: The Triad of Influence
Adviser: Robert Jolley

Jennifer Ryan
Major: Social Work
New Outlook Teen Center
Adviser: Robert Jolley

Elizabeth Summers
Major: Sociology
Video Game Violence and Its Effects Upon Violence in Reality
Adviser: Catherine Moran

Iris Tavarez (McNair Scholar)
Major: Sociology
Success Stories: Factors that Influenced Ten Latina Students’ Decision to Attend College
Adviser: Eve Spangler (Boston College)

Sarah Vandevekter
Major: Biology
Biological Applications of Chemistry through Case-Based Learning
Adviser: Charlie Cox

Ashley Ward
Major: Psychology
Bystander Attitudes: Sexual and Intimate Partner Violence
Adviser: Victoria Banyard

Sarah Wright
Major: Sociology
Sexual Abstinence Among College Students
Adviser: Jean Elson

Explorations of Social Work Practice Through Service Learning

Amanda Agnelli
Major: Social Work
Head Start’s Utilization of Parents in Policy Councils
Adviser: L. Rene Bergeron

Catlin Basile
Majors: Social Work and Spanish
Is Your Life Filled With Healthy and Positive Relationships?
Adviser: L. Rene Bergeron

Kelly Byron
Major: Social Work
Navigating Your Way Through Health Care
Adviser: L. Rene Bergeron

Stacey Calhoun
Majors: Social Work and Spanish
Lifelong Family Connections
Adviser: L. Rene Bergeron
Vice President’s University-wide Symposium

Oral Presentations: Session A

Friday, April 27
9:30–10:40 AM

Memorial Union Building

MUB, Room 203

Screening the American Dream in Sports Films

Moderator: Beverly James

Lesley Angellis
Major: Communication
Masculine Identity in Mystery, Alaska
Adviser: Beverly James

Joseph Botelho
Major: Communication
It’s Not the Size of the Bull in the Rage: It’s the Size of the Rage in the Bull
Adviser: Beverly James

Jillian Craig
Major: Communication
Adding Femininity to Sports in a League of Their Own
Adviser: Beverly James

Stephanie Heuter
Major: Communication
Overcoming Adversity: The Struggle to ‘Girlfight’
Adviser: Beverly James

Luke Kyle
Major: Communication
Self-Determination and Hope: The Cornerstones of a Miracle
Adviser: Beverly James

Katie Madormo
Major: Communication
Overcoming Adversity in Rudy
Adviser: Beverly James

Lauren O’Connor
Major: Communication
The Eternal Optimist: Violet Brown in National Velvet
Adviser: Beverly James

Jamie Rauscher
Major: Communication
Friday Night Lights: American Values in Small Town Football
Adviser: Beverly James

Nicholas Travalini
Major: Communication
Silencing the Critics: ‘Rocky’ as the Ultimate Underdog
Adviser: Beverly James

Vice President’s University-wide Symposium

Oral Presentations: Session A, Continued

MUB, Room 207

Multidisciplinary Session I:
The Virgin, Feminism, and Black Worldliness

Moderator: TBA

Brian Rebholtz
Major: Anthropology
Behold the Virgin: Examining the Interpretation and Negotiation of the Sacred in Marian Apparitions
Adviser: David Frankfurter

Rachel Ummberger
Major: History and Women’s Studies
Anti-Feminist Rhetoric of a Feminist
Adviser: Marla Brettschneider

Morgan Wilson (McNair Scholar)
Major: History
“The Negro Problem Became a World Problem”: Imagined Communities of Black Worldliness and the 1945 Moment
Adviser: Davarian Baldwin (Boston College)

MUB, Room 233

Understanding Communities in Flux

Moderator: Sharyn Potter

Jessica Bean
Major: Sociology
The Effects of Sociodemographic Variations and Strain on the Self-Concept of Rural Single Mothers
Adviser: Heather Turner

Shannon Byrne (Sociology and Justice Studies)

Shauna Mahoney (Sociology)

Jamie Morrill (Sociology)
The Effects of Coerced Treatment for Problem Drinkers on Relapse Rates
Adviser: Sharyn Potter

Kiley Flanagan (Sociology)

Brien Leary (Sociology and Justice Studies)
The Knowledge University of New Hampshire Students Have on Immigration
Adviser: Priscilla Reinertsen
Go ahead. Get ahead.

Forty-four percent of New Hampshire high school graduates do not go directly to college. My classmates and I in the Whittemore School’s Marketing Workshop are working to change that.

“Go ahead. Get ahead.” (GaGa for short) is a marketing campaign intended to promote the attractiveness and attainability of a college education to young adults who are undecided about whether or not to attend college after graduating from high school.

Developing GaGa required a lot of research. We conducted focus groups with high school students to learn everything we could about our target market. Then we created marketing collateral based on that research and tested the collateral with more high school students. The process paid off. When we presented the campaign and prototypes to our client, the University System of New Hampshire (USNH), reactions were overwhelmingly positive. In fact, through USNH, our work attracted the interest of the New York Times foundation, which offered to fund the trial phase of the campaign.

Students in this semester’s Marketing Workshop are bringing the campaign to implementation. I feel extremely privileged still to be a part of this project as a teaching assistant for this class.

Until GaGa, I did not realize how much I enjoyed research. I now know that research is a fundamental component for ensuring success. It is fun, exciting, and sometimes challenging, but always rewarding.

Hear more about Ashley’s work on the GaGa campaign at the Vice President’s University-wide Symposium on Friday, April 27, 10:50 a.m.–noon in the MUB, room 302.
Hamel Center for Undergraduate Research:
Marketing the Center to WSBE Students and Faculty

Moderator: Peter Masucci

Benjamin Brown
Kiryl Harris
Andrew Letendre
Kyle Marini
Seth Minard
Major: Business Administration
Adviser: Peter Masucci

Starbucks Coffee: Measuring and Affecting Loyalty of Coffee Drinkers

Moderator: Peter Masucci

Jill Dolan
Kimberly Gee
Michael Giurleo
Kevin Grady
Tyler Kelley
Teresa McNamara
Jennifer Natsios
Matthew Simpson
Major: Business Administration
Adviser: Peter Masucci

MUB, Room 332

Multidisciplinary Session II: Athletes, Outdoor Orientation, Speech, and Music

Moderator: TBA

Lia Barros
Major: Nursing
The College Athlete’s Perception of the Athlete’s Susceptibility to Alcohol Use
Advisers: Pam DiNapoli and Carol Williams-Barnard

Stephen Calcavecchia, Jr.
Major: International Affairs and Linguistics
Sounding Gay: An Acoustic Analysis of Gay Male Speech
Adviser: Naomi Nagy

Mark Diederer
Branden Vigneault
Major: Kinesiology
A National Census of College Outdoor Orientation Programs
Adviser: Brent Bell

Brian Miner
Major: Music Education
Fostering Musical Creativity in the Elementary Music Classroom
Adviser: Susan Hatfield

MUB, Room 330

Post-Communist Search for Security

Moderator: Irina Trubetskova

Michael P. Allard
Major: Mechanical Engineering
Struggling for Peace, Security and Democracy: Eastern Europe After the Cold War
Adviser: Lawrence C. Reardon

Lesley Collier
Majors: International Affairs and Political Science
Communism West of the Iron Curtain: Il Partito Comunista Italiano
Adviser: Lawrence C. Reardon

Caitlin Johansen
Majors: International Affairs and Sociology
The Start of Something New: The 1956 Hungarian Revolution and their Journey to Independence
Adviser: Lawrence C. Reardon

Susannah Pratt
Majors: International Affairs and Political Science
A Country on the Move: Overlooked Realities of Rural to Urban Migration in China
Adviser: Lawrence C. Reardon

MUB, Room 334

Terrorism, Crime, and Corruption

Moderator: Frank McCann

Emma Brown
Majors: International Affairs and Psychology
Crime and Corruption in Present Day Italy
Adviser: Lawrence C. Reardon

Morgan Kyrka
Majors: International Affairs and History
The Flow of Immigrants from Africa to Spain and Beyond: Political, Economic, and Cultural Concerns
Adviser: Lawrence C. Reardon

Carolyn Preston
Majors: International Affairs and Anthropology
‘Reconquista’: Andalusian Fears of a Culture Invasion
Adviser: Lawrence C. Reardon

Mary Undercoffler
Majors: International Affairs and Family Studies
A Prosperous Haven or Another Place of Hardship? Immigration in Spain
Adviser: Lawrence C. Reardon
Andrew Genung
Majors: International Affairs and Anthropology
*Pushing Back Shadows: A Bloody Struggle on a Shining Path*
Adviser: Lawrence C. Reardon

Laura Kash
Majors: International Affairs and Political Science
*The Revolutionary Mystique and Terrorism in Contemporary Italy: The Face of Terror Foretold by the Red Brigades*
Adviser: Lawrence C. Reardon

Alex LeBaron
Majors: International Affairs and Political Science
*Pursuing Pinochet: How to Arrest a Chilean Dictator*
Adviser: Lawrence C. Reardon

Sara Sohm
Majors: International Affairs and Political Science
*Cosa Nostra: Understanding Sicily's Foremost Criminal Organization*
Adviser: Lawrence C. Reardon

MUB, Room 338

**Growing Out of Poverty**

Moderator: Fred Kaen

Nicole Chalifoux
Majors: International Affairs and Political Science
*Conflicts of a Unified Nation: The Hidden Differences Disparaging Northern and Southern Italy*
Adviser: Lawrence C. Reardon

Elizabeth Perez
Majors: International Affairs and Spanish
*Combating Poverty in Spain*
Adviser: Lawrence C. Reardon

Kathryn Striffolino
Majors: International Affairs and Political Science
*Paying for History: The Spanish Economic Route*
Adviser: Lawrence C. Reardon

Juliet Tarantino
Majors: International Affairs and Anthropology
*Profitable Business, Worthless Language: Commercial Success and Rejection of Tradition in Otavalo, Ecuador*
Adviser: Lawrence C. Reardon

Pajika Voravittayathorn
Majors: International Affairs and Political Science
*Living a Higher Life: The Aftermath of the Economic Reforms in China*
Adviser: Lawrence C. Reardon

MUB, Room 340

**Political Science: Civil Society at Home and Abroad**

Moderator: Jeannie Sowers
Discussant: Dovev Levine-Luong

Laura Carpenter
Major: Political Science
*Wind: Bringing Renewable Energy Home*
Adviser: Jeannie Sowers

Caitlin Dixon
Katie Kunhardt
Major: Political Science
*Wetlands Conservation: An Integrated Study of International, National, and Local Laws and Practices*
Adviser: Jeannie Sowers

Colleen Flaherty
Major: Political Science
*Democracy without Citizens? Assessing Civil Society in Chile*
Adviser: Mary Malone

Alexandra Varga
Majors: International Affairs and Environmental Conservation Studies
*Water Privatization: the Struggle for the Right to Water in a Capitalist Society*
Adviser: Jeannie Sowers

Vice President’s University-wide Symposium

**Poster Presentations: Session B**

Friday, April 27
10:50 a.m.–Noon
Memorial Union Building, Granite State Room

Rebecca Blaine
Major: Nursing
*Young Men’s Attitudes Towards Breastfeeding*
Advisers: Gene Harkless and Carol Williams-Barnard
Sandy Chu (McNair Scholar)
Major: Psychology
Video Games and their Effects on Mental Rotation and Hostility
Adviser: Susan Menees (Boston College)

Alicia DeSando
Major: Social Work
Hobbs House Help Center
Adviser: Robert Jolley

Emily Duynstee
Major: Sociology
Non-Medical Use of Prescription Drugs on College Campuses: Student Use of Adderall and Ritalin
Adviser: Sharyn Potter

Grace Festin (McNair Scholar)
Major: Chemistry
Synthesis of Fluoro Tyrosine Inhibitors
Adviser: Steve Bruner (Boston College)

Loreen Fournier
Major: Biochemistry and Molecular Biology
Mechanism of Estrogen Receptor Alpha and Her2 Heterodimerization in Human Breast Carcinoma Cells
Adviser: Andrew Laudano

Kelley George
Major: Undeclared
Study of Daphnia
Adviser: Steve Hale

Tara Goulet
Major: History
"Power to the People!" Socialist Visions in the Black Panther Party and the U.S. Prison Movement
Advisers: J. William Harris and Lucy Salyer

Bonnie Graham
Major: Psychology
The Serial Positon Effects Found in “The Euclidean Distance Estimation vs. Word Recognition Memory” Exploratory Study
Advisers: John Limber and Anne Gilman (graduate student)

Jennifer Herman
Major: Nursing
Well Child Health Care in Wales
Adviser: Gene Harkless

Kirsten Hildonen
Major: History
The Spies Who Saw Through Me
Adviser: Robert Macieski

Christina Holman
Major: Social Work
Families in Transition Employment and Job Training Program
Adviser: Robert Jolley

Ariel Hudson
Major: Animal Sciences
Role of Cytokeratin 8/18 Intermediate Filaments in the Bovine Corpus Luteum: Protection Against Fas Ligand-Induced Apoptosis?
Adviser: David Townsend

Melissa Jeffers
Major: Health Management and Policy
Assessing Emergency Preparedness in New Hampshire’s Hospitals
Adviser: Robert McGrath

Jessica Jolin (Kinesiology)
Hannah Lally (Kinesiology and Communication)
West Virginia University’s Adventure-Based Orientation: A Qualitative Analysis of Student’s Post-Trip Essays
Adviser: Brent Bell

Triet Le (McNair Scholar)
Major: Chemical Engineering
The Effect of Process Parameters on Electrodeposited Copper-Indium-Gallanium-Diselenide (CIGS) Films
Adviser: Dale Barkey

Lindsay Martel
Major: Nursing
The Challenges and Rewards of Working as a Direct Care Provider in the United States and Guatemala
Advisers: Joyce Cappiello and Carol Williams-Barnard

Allison Mazerall
Major: Psychology
Does Distance Estimation Accuracy Improve Over Multiple Attempts?
Advisers: John Limber and Anne Gilman (graduate student)

Cathryn Minshall
Major: Sociology
Student Attachment
Adviser: Catherine Moran

Michelle Mitchell
Major: History
“AME,” A Referential Database of the City of Manchester, New Hampshire 1818–1850
Adviser: Robert Macieski

Heather Noyes
Major: English
Nature as Teacher
Adviser: Michael Andrew

Laura Palombo
Major: Kinesiology
The Effects of a Long Distance Run on Creatine Kinase Levels 24, 48, and 72 Hours Post-run
Advisers: Allison Sigler and Timothy Quinn

Richard Paul (McNair Scholar)
Major: Geology
Water Quality at the Cambridge, Massachusetts Drinking-Water Supply System
Adviser: Rudolph Hon (Boston College)

Bligh Reynolds
Major: Psychology
Impact of Hypothermia on Intermittent Swim Stress Induced Deficit in Spatial Learning in Rats
Adviser: Robert Drugan

Joshua Sapochetti
Major: History
The Shaping of American Identity and the Impact of Television
Adviser: David Watters

Tarah Snee
Major: Sociology
The Washington Center for Internships and Academic Seminars
Advisers: Paula DiNardo and Catherine Moran

Megan Sullivan (McNair Scholar)
Major: Psychology
Professionals’ Knowledge of the Psychopathic Construct: Are Clinicians Bound by the DSM IV Criteria?
Advisers: Susan Boatright and Robert Eckstein (University of Rhode Island)
SHARYN POTTER
Associate Professor

Affecting change

On Saturday mornings, many parents take their kids to soccer games, swim meets, or Tumble Tots. Sharyn Potter and her spouse load their daughters into the backseat of the car and drive across the Seacoast asking neighbors to post signs for their favored political candidate. When a neighbor agrees to post a yard sign, six-year-old Mira and three-year-old Lilia get an M&M candy.

“It’s everyone’s responsibility and privilege to work together for change,” Potter says.

Potter deploys the same grassroots approach to her research collaborations—getting the results on the street to affect policy and/or people.

As a sociologist, “I am interested in the application of research to make social change,” Potter says.

Potter helped lead the development and evaluation efforts of a first-of-its-kind bystander poster campaign aimed at challenging community members to play a role in helping end violence against women. In the posters, bystanders ponder their role in situations where violence is imminent, and ultimately choose to intervene. Based on follow-up evaluations to measure the effectiveness of the campaign, Potter and collaborators determined that those who had viewed the posters had a greater awareness about sexual violence. Other institutions have since expressed interest in adopting the campaign.

Most recently, Potter and other UNH researchers collaborated on the first-ever survey of New Hampshire women to measure the prevalence of sexual violence and domestic violence in the state. Working with the New Hampshire Coalition Against Domestic and Sexual Violence and the New Hampshire Department of Public Health, they surveyed 508 Granite State women. The findings were profound: nearly one in four have experienced a completed sexual assault in their lifetime. Last month, Potter and colleagues released these numbers in a press conference at the N.H. Attorney General’s office. Potter says state and organizational leaders will use the results to help improve services and prevention programs for victims and would-be perpetrators.

Potter strives for change on campus by serving on the University’s Sexual Harassment and Rape Prevention Program (SHARPP) advisory board—a position she’s held for eight years. And she serves as codirector of the UNH Prevention Innovations Center, the only university center in the country focused exclusively on preventing violence against women on college campuses.

Potter’s make-an-impact philosophy translates to the classroom. In her biennial internship class, students go into community organizations and develop projects that help fill their needs. For Melissa Mangold ’07, an internship at A Safe Place, a crisis center providing services to survivors of domestic abuse, prompted her to study violence within the college-age population for her senior University Honors Program thesis.

This week, Mangold and other Potter protégés share what they’ve discovered. At the Undergraduate Research Conference, they will disseminate results from studies ranging from dating abuse and problem drinker relapse rates, to student use of the prescription drugs Adderall and Ritalin for non-medical purposes.

“The UNH Undergraduate Research Conference is an integral part of the UNH undergraduate experience,” says Potter. Over the past six years, she has mentored more than a dozen student presenters and has been an active member of the URC planning committee. In addition, Potter chairs the two-year-old URC evaluation committee, which designs, administers, and evaluates a survey of URC participants and faculty mentors to measure the effectiveness of the conference experience. (See related story page 2.)

“Presenting at the URC gives students self-confidence,” Potter says. “And it’s good for parents to see how their son or daughter has grown intellectually.”

“Plus, it gets their work out there where it has an opportunity to make an impact.”
Vice President’s University-wide Symposium

Oral Presentations: Session B

FRIDAY, APRIL 27
10:50 A.M. – NOON
Memorial Union Building

MUB, Room 203

Taking it on in Communication: Photography, Humor, Music, and Sports

Moderator: Mardi Kidwell

Lindsey Charles
Major: Communication
And Nothing but the Truthiness: How The Daily Show and The Colbert Report’s Rhetoric of Humor Has Revitalized Public Debate
Adviser: Jennifer Borda

Adrian Kerrison
Major: Communication
The Three People You’ll Meet at a Hockey Game
Adviser: Mardi Kidwell

Rachel Umberger
Major: Communication
The Morality of Aesthetics: Using Robert Pirsig’s Metaphysics of Quality to Objectively Evaluate Music
Adviser: Michael Jackson

Matthew Willis
Major: Communication
The Burning Monk Photograph: Iconic Requirements
Adviser: Michael Jackson

MUB, Room 207

Multidisciplinary Session I: Shklovsky, Profiles, and Hadrian’s Wall

Moderator: TBA

Benjamin Clemenz-Allen
(McNair Scholar)
Major: English
Awakening (an) Aesthetic: Contextualizing Viktor Shklovsky’s Ostranenie in Lyn Hejinian’s My Life
Adviser: Ruth Jennison (UMass Amherst)

Mark Kilens
Major: Tourism Planning and Development
Linking Market Valued Community Skill Profiles with Corporate Outsourced Functions to Identify Financially Attractive Sourcing Targets
Adviser: Lyndon Goodridge

Elizabeth McFadden
Major: History
Living on the Edge: The Staffordshire Moorlands Pan and Life Along Hadrian’s Wall
Adviser: Gregory McMahon

MUB, Room 233

Multidisciplinary Session II: Popular Culture, Healthcare, and Pedagogy

Moderator: Beverly James

Adam Donovan
Major: Communication
A Narrative Analysis of Television’s One Hour Drama: A Case Study of Lost, 24 and The O.C.
Adviser: Beverly James

Sarah Henson
Major: Health Management and Policy
Women in Health Care Management: A Struggle to the Top
Adviser: Leslie MacLeod

Troy Maynard
Major: Communication Arts
Survivor—the Ultimate “Survivor” of Popular Culture
Adviser: Skip Tenczar

Christa Ricker
Major: Kinesiology
Transitioning to College Using Different Pedagogical Approaches
Adviser: Brent Bell

MUB, Rockingham Lounge, 3rd floor

Women’s Studies Works: Demonstrations of Community Activism

Moderator: Mary M. Moynihan

Brittany Fecteau
Major: Women’s Studies
Adviser: Mary M. Moynihan

Sarah LoPresti
Major: Sociology
Adviser: Mary M. Moynihan

Katia Mathieu
Major: Women’s Studies
Adviser: Mary M. Moynihan

Amanda Potter
Major: Sociology
Adviser: Mary M. Moynihan
<table>
<thead>
<tr>
<th>CARLI STEVENSON</th>
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<td>Major: Women's Studies</td>
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<td>Adviser: Mary M. Moynihan</td>
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**MUB, Room 302**

*Go Ahead, Get Ahead (GaGa)*  
Part-2: Influencing High School Students to Aspire to Attend College  
**Moderator: Peter Masucci**

- Brett Berger
- Jeffrey Blake
- Ashley Busa
- Megan Call
- Daniel Epner
- Hannah Fisher
- Shauna Moran
- Kathleen Petroff
- Meghan Pritchard
- Taylor Schwab
- Kristina Seid
- Amy Surles

Major: Business Administration  
Adviser: Peter Masucci

**New York Times: Marketing Entrepreneurship Week USA Event**  
**Moderator: Peter Masucci**

- Sheena Foye
- Jessica Gardner
- Michael Giovinelli
- Andrew Hinds
- Karlee Horan
- Emily King
- Jenna Mauer
- Jaime Pruzansky
- Katie Scheier

Major: Business Administration  
Adviser: Peter Masucci

**MUB, Room 321**

*Political Thought*  
**Moderator: TBA**

- David Afonso

Major: Political Science  
*A Critical Assessment of Simone de Beauvoir’s The Second Sex*  
Adviser: Marla Brettschneider

- Phil Brand

Majors: Political Science and Economics  
*The End of History as the Road to Servitude*  
Adviser: Warren Brown

**MUB, Room 330**

*Protest, Movements, Power, and Change*  
**Moderator: Funso Afolayan**

- Kathryn Daly

Major: Environmental Conservation Studies  
*How French Culture has Shaped Nuclear Energy Policy*  
Adviser: Nicoletta Gullace

<table>
<thead>
<tr>
<th>ELYSE JOHNSON</th>
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| Majors: International Affairs and Spanish  
Expelling Dictatorial Influences from Chilean Education  
Adviser: Nicoletta Gullace |

**MUB, Room 332**

*Tradition and Modernity: The Politics of Change in the 20th Century*  
**Moderator: Ted Howard**

- Alexandra Baldwin

Majors: International Affairs and Art History  
*The Dawn of Modernism*  
Adviser: Nicoletta Gullace

- Julia Blumenfeld

Major: Geography  
*Concrete Coast: Impact of Mass Tourism in Southern Spain*  
Adviser: Nicoletta Gullace

- Derek Hubbard

Majors: International Affairs and Spanish  
*CAFTA: Reasons for Resistance*  
Adviser: Nicoletta Gullace

- Christine Leonard

Major: Occupational Therapy  
*Pragmatic Progress: Islamic Feminism in Contemporary Egypt*  
Adviser: Nicoletta Gullace
An appetite for apatite

My research involves the adsorption of heavy metals and organic contaminants by a sedimentary rock known as apatite. Due to its unique structure and chemical properties, apatite can adsorb contaminants like a sponge, but hold on to them like a rock. It’s an amazing product that could be used for cleaning up contaminated areas such as old factories, tanneries, and riverbeds. This research is important because it can take a river, for example, that is completely unusable and unsafe and transform it into one where people can swim and fish again. Or an old, condemned factory site could be transformed into a playground or park.

I sort of stumbled into this research during my freshman year, but now I can’t imagine being at school and not being a part of it. I really love the fact that the work I do holds the potential to help people and make a difference for the environment. I am studying to be an environmental engineer and those last two stated reasons are exactly why. It’s also exciting that the work I am doing is unique and fresh and that patents are in the making around the work I am doing.

It feels nice to be working on a problem where the solution is not in the back of a textbook, but somewhere in my mind and my research just waiting to be discovered.

Molly Messenger
Majors: International Affairs and Anthropology
Tanzania: A Case of Forced Migration
Adviser: Nicoletta Gullace

MUB, Room 334

Insiders and Outsiders: Language, Immigration, and the Problem of Inclusion in Europe
Moderator: Lori Hopkins

Lauren Fowler
Majors: International Affairs and History
Catalan Identity and a Fight for Independence
Adviser: Nicoletta Gullace

Corinna Gilson
Major: Political Science
Running Blind: The Intractable Conflict of E.T.A.
Adviser: Nicoletta Gullace

Julia Nudelman
Majors: International Affairs and English
The Immigration Issue in Spain
Adviser: Nicoletta Gullace

Jessica Williams
Major: Linguistics
Slouching Towards Babel: Language Policy, Linguistic Identity, and Social Cohesion in the European Union
Adviser: Nicoletta Gullace
MUB, Room 336

Law, Crime, and the Problem of Violence

Moderator: Kurk Dorsey

Myra Khan
Majors: International Affairs and Communication
The Weight of Words: The Construction and Implications of Genocide Discourse in Bosnia and Sudan
Adviser: Nicoletta Gullace

Fiona Mokry
Majors: International Affairs and Sociology
The Mafia’s Rise to Power: How it Happened and Why it was Accepted
Adviser: Nicoletta Gullace

Shaun Seaman
Majors: International Affairs and Tourism Planning and Development
Street Violence in Spain
Adviser: Nicoletta Gullace

James Sutherland
Majors: International Affairs and History
Clandestine Collaboration or Catalyst of Controversy?
Adviser: Nicoletta Gullace

Candice Turner
Majors: Political Science and Russian
Law in the Russian Federation: Positive Changes and a Hopeful Future
Adviser: Nicoletta Gullace

MUB, Room 338

Shared Living Environment

Moderator: Alan Ray

Jillian Dur
Majors: International Affairs and Spanish
We Treat, Jesus Heals: Christian Influences on Healthcare in Madagascar
Adviser: Lawrence C. Reardon

Nicole Eckert
Majors: International Affairs and Communication
Adviser: Lawrence C. Reardon

Nikki Nichols
Majors: International Affairs, Linguistics, and Political Science
Here Comes the Bride—Have a Smoke: Why Tobacco is Killing Spain
Adviser: Lawrence C. Reardon

Laura Plummer
Majors: International Affairs and Spanish
Madre e hijo: Abortion Politics and the Lives of Mexican Women
Adviser: Lawrence C. Reardon

Nic Tanner
Majors: International Affairs and Spanish
Tata’s Regime: Human Rights Violations in Augusto Pinochet’s Chile
Adviser: Lawrence C. Reardon

MUB, Room 340

Political Science: Conflict, Famine, and Refugees

Moderator: Alynna Lyon

Lesley Collier
Majors: International Affairs and Political Science
The United States’ Changing Perception of Threat: The China Case
Adviser: Lawrence C. Reardon

Liz Kyriacou
Majors: International Affairs and Political Science
International Refugee Crisis: The Global Response to the Darfur Conflict
Adviser: Lawrence C. Reardon

Alicia Shotwell
Majors: Political Science and Philosophy
A Study of Increased Nuclear Tensions Between the United States and North Korea
Adviser: Lawrence C. Reardon

Emily Soderman
Majors: International Affairs and Political Science
Famine in Niger: Give Aid or Stay Out?
Adviser: Lawrence C. Reardon

Vice President’s University-wide Symposium

Oral Presentations: Session C

FRIDAY, APRIL 27
1:15–2:25 PM
Memorial Union Building

MUB Theatre I

PC Connection: Marketing Career Opportunities

Moderator: Peter Masucci

Gregory Aiken
Katie Clark
Christopher Cybart
Eric Dandurant
Amanda Delanoy
Benjamin Goodwin
Paige Kinsley
Gregory Pliska
Heather Rackley
Stephen Sakellar
Derek Smyrl
Major: Business Administration
Adviser: Peter Masucci
UNH Alumni Association:
Marketing to Current Students
Moderator: Peter Masucci
Brenna Brink
Amy Demers
Kristen Favorza
Katerina Karametros
Kristin O'Connor
Cheryl Penaskovic
Chris Romanello
Courtney Sinclair
Meagan Southmayd
Joseph Stoba
Major: Business Administration
Adviser: Peter Masucci

Bausch & Lomb: Increasing Awareness and Demand for LASIK Surgery
Moderator: Peter Masucci
Stacy Caler
Christene Carbone
Jenny Doane
Kevin Ebert
Josh Francis
Stacy Gorman
Kaitlyn Grant
Hilary Hamilton
Shaun Kellogg
Michelle Kenney
Samantha Kussman
Erin Marshall
Tim Masullo
Janine McCarl
Casey Morrissey
Devon Morrow
Chelsea Moynihan
Kimberly Nasser
Megan Reilly
Krista Sherburne
Elissa Sneider
Katherine Sullivan
Justin Toy
Jenna Voci
Major: Business Administration
Adviser: Peter Masucci

Matthew Joyce
Majors: International Business, Political Science, and Economics
Replacing the United States Rifle, Caliber 5.56mm, M16 and the United States Pistol, Caliber 9mm, M9 and the Resulting Effects on the Small Arms Industry of the United States
Adviser: Bill Machanic

Alice Sheehan
Major: Economics
Bringing up Incentives: A Look at the Determinants of Poverty
Adviser: Edinaldo Tebaldi

Devon Thomas (McNair Scholar)
Major: Anthropology
Doctrinal Conflict within the Episcopal Church
Adviser: Stephan Reyna

MUB, Room 330

Multidisciplinary Session I:
Nature, Politeness, Hip-Hop, and Biodiesel
Moderator: TBA
Rayne Coleman
Major: Sign Language Interpretation
“Could You Pass the Salt?” Comparing Politeness Strategies of English Speakers and American Sign Language Users
Adviser: Jack Hoza

Kristopher Cui
Major: Chemical Engineering
ASTM Biodiesel Gas Chromatograph Testing and Automation of Biodiesel Processor
Adviser: Ihab Farag

Michael D’Errico
Major: Music Education
Wildstyle Metaphysics: The Composition-al Process of the Hip-Hop DJ
Adviser: Rob Haskins

Heather Noyes
Major: English
Nature as Teacher
Adviser: Michael Andrew

MUB, Room 332

Multidisciplinary Session II:
Poverty, Aspiration, Geographic Literacy, Religion, and Guns
Moderator: TBA
Connie Chu (McNair Scholar)
Majors: Economics and Mathematics
Parent, Peer, and Teacher Expectations on Student Aspirations
Advisers: Cliff Brown (UNH) and Linda Bui (Brandeis University)

Emily Fekete
Majors: History and Geography
Geographic Literacy Among Students at the University of New Hampshire: Fall 2006
Advisers: Alasdair Drysdale and J. William Harris

Silas Archambault
Major: Sociology
Social Interaction on Facebook
Adviser: Sharyn Potter

Valerie Hooper
Major: Sociology
The Effect of Television Families on Real-world Family Perceptions and Satisfaction
Adviser: Catherine Moran

Skye MacKay
Major: Sociology and Justice Studies
College Students’ Knowledge, Attitudes, and Behaviors Surrounding HIV/AIDS
Adviser: Catherine Moran

Melissa Mangold
Majors: Sociology and Justice Studies
Dating Abuse in College Relationships: A Qualitative Study
Adviser: Sharyn Potter
School of Health and Human Services
Grimes Award Competition

FRIDAY, APRIL 27
12:30–3:30 PM
Pettee Hall

Jack and Marianna Grimes and family endowed the funds for this celebration of excellence in undergraduate research. The oral presentation competition includes finalists who have been selected by School of Health and Human Services faculty after rigorous scientific review of written proposals. Information on participants will be available at this event.

Honors English
Undergraduate Research Conference

FRIDAY, APRIL 27
1–5 PM
Hamilton Smith Hall, Room 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 URC provides these students and students in the linguistics program with the opportunity to share their work with fellow students, professors, and families. The presentations include original poetry, autobiographical writing, journalism, and scholarship on literary texts from several different centuries.

Stephen Anthony Calcavecchia
Majors: International Affairs and Linguistics
Sounding Gay: An Acoustic Analysis of Gay Male Speech
Adviser: Naomi Nagy

NICHOLAS PERROS ’07
Biochemistry
College of Life Sciences and Agriculture
Faculty Mentor: Professor Rick Cote

Eye on vision

My research focuses on the molecular basis of vision. Our retinas consist of two types of photoreceptor cells—rods and cones—which allow us to see in dim and bright lights, respectively. I am studying an enzyme located in rod photoreceptors known as phosphodiesterase-6 (PDE6). The PDE6 enzyme triggers the first events in vision, and its regulation is vital for propagating the nerve impulse telling our brain that light has been detected. While the light activation of PDE6 is well understood, less is known about how PDE6 is turned off, particularly in bright light conditions. A novel rod cell protein called Glutamic Acid-Rich Protein-2 (GARP2) has recently been found to bind to PDE6 with high affinity. How GARP2 might function to regulate PDE6 activation/inactivation is not understood, and is the subject of my research. This work will enhance our knowledge of the visual signaling pathway in photoreceptors, and is medically relevant to understanding retinal diseases such as retinitis pigmentosa.

Talk with Nick at the 16th annual COLSA URC on Saturday, April 28, 7:45 a.m.–2 p.m. at the New England Center.
North and South - A Dilemma in the Online World

Adviser: Susan Hertz

Tiffany Leigh Heineman
Major: English
The Book Tour: Exploring the Intersection between Fiction and Non-Fiction
Adviser: Margaret-Love Denman

Harry Lund
Major: English Literature
"A Wonderer’s Repose": The Spiritual Life in Charlotte Bronte’s Jane Eyre
Adviser: James Krasner

Michael Luz
Major: English Literature
Performative Identity and Authenticity in The Great Gatsby
Adviser: Sarah Sherman

Courtney Elizabeth McMullen
Major: English
Issues of Gender Identity in Edith Wharton’s Novels
Adviser: Sarah Sherman

Maureen Reilly
Major: English
Exploring the Relationship between the Aesthetic and Terrorism
Adviser: Sandhya Shetty

Emily Bolton
Major: Psychology
Defining Unwanted Sexual Experiences and Consent
Adviser: Victoria Banyard

Evan Brooks
Major: Psychology
The Effects of “Friendly Type” Formatting on Reading Comprehension Tests
Adviser: John Limber

Emily Carter
Major: Psychology
Verb Tense as a Predictor of Reader Reactions to Autobiographical Narratives
Adviser: David Pillemer

Rachel Costa
Major: Psychology
The Use of Feature and Geometry Information During a Two-Dimensional Task Improves with Development
Advisers: Brett Gibson and Michelle Leichtman

James Guckin
Major: English
The Rapture Trees Feel: A Collection of Poetry
Adviser: MeKeel McBride

Jim Paul Wood
Major: Linguistics
People are Talking Differently in New Hampshire
Adviser: Naomi Nagy

Psychology
George M. Haslerud Undergraduate Research Conference
FRIDAY, APRIL 27
1–4 PM
Conant Hall, Room 101
The George M. Haslerud Undergraduate Research Conference, named for the late professor emeritus of psychology, recognizes and celebrates undergraduate research conducted by psychology students.

Emily Bolton
Major: Psychology
Defining Unwanted Sexual Experiences and Consent
Adviser: Victoria Banyard

Evan Brooks
Major: Psychology
The Effects of “Friendly Type” Formatting on Reading Comprehension Tests
Adviser: John Limber

Emily Carter
Major: Psychology
Verb Tense as a Predictor of Reader Reactions to Autobiographical Narratives
Adviser: David Pillemer

Rachel Costa
Major: Psychology
The Use of Feature and Geometry Information During a Two-Dimensional Task Improves with Development
Advisers: Brett Gibson and Michelle Leichtman

Abigail Noyce
Major: Psychology
Aperture Effects on Texture and Perspective Depth Cues
Adviser: William Stine

Bligh Reynolds
Major: Psychology
Impact of Hypothermia on Intermittent Swim Stress Induced Deficit in Spatial Learning in Rats
Adviser: Robert Drugan

Lyndsay Schneiderman
Majors: Biology and Psychology
Cholinergic Modulation of Sensory-Guided Responding in Central Thalamus
Adviser: Robert Mair

Ashley Ward
Major: Psychology
Bystander Attitudes: Sexual and Intimate Partner Violence
Adviser: Victoria Banyard
Philosophy Undergraduate Research Conference

FRIDAY, APRIL 27
4–8:30 PM
Memorial Union Building, Rooms 330, 332

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. Presentations are followed by a brief question-and-answer period. All are welcome and sincerely encouraged to attend. Refreshments will be served.

Robert Fisher
Majors: Philosophy and History
Kant and Immortality
Adviser: Willem deVries

Kraig Lamper
Majors: Philosophy and Music
Kant’s Thing in Itself
Adviser: Willem deVries

Trevor Mauck
Majors: Philosophy and Political Science
Hume and Morality
Adviser: Willem deVries

Patrick Ryan
Major: Philosophy
The Myth of Technological Progress
Adviser: David Hiley

David Samra
Major: Philosophy
Must the Cosmological Argument Depend Upon the Ontological Argument?
Adviser: Nicholas Smith

Marc Sklar
Major: Philosophy
Democracy is a Dinosaur
Adviser: Timm Triplett

Hannah Varn
Majors: Philosophy and English
Regulative Ideals: A Practical Approach to Global Warming
Adviser: Willem deVries

16th Annual COLSA Undergraduate Research Conference

SATURDAY, APRIL 28
7:45 AM–2 PM
New England Center, Great Bay Room

Student presentations at the 16th annual COLSA URC showcase the research results from various COLSA departments. This broad spectrum of work—from field studies and genomics to developmental and molecular biology—includes many projects conducted in foreign countries. This event is sponsored by the College of Life Sciences and Agriculture Dean’s Office and Departments, the Office of Academic Affairs, the Vice President for Research, the Office of Sponsored Research, and the UNH Hamel Center for Undergraduate Research.

Jay Agarwal
Major: Biology
Aether Student Assessment
Adviser: Charlie Cox

Stephanie Allard
Major: Biology
Monitoring Feeding Rates of Algae Intake of Microcystis aeruginosa and Nanochloropsis in Mussels from Silver Lake and Lake Ossipee with a Multiparameter Probe
Adviser: James Haney

Marissa Ambrosi
Major: Environmental and Resource Economics
Impacts of Ecotourism: An Economic, Social, and Environmental Analysis of Central America
Adviser: John Halstead

Elisabeth Antanavich
Major: Biochemistry and Molecular Biology
Determining the Effect of Limonene-3-H Alleles on Peppermint Oil Production in Mint Plants
Adviser: Thomas Davis

Christopher Beninati
Major: Biology
Development of Biology-related, Case-based Problems for Chemistry Lectures and Assessment
Adviser: Charlie Cox

Susan Boisvert
Major: Biology
Iron Sequestration by Siderophore in Vibrio fischeri: Role in Symbiosis
Adviser: Cheryl Whistler

Jacob Borgeson
Major: Wildlife Management
Evaluation of Protocol and Conditions Associated with Genetic Tagging of Black Bears in Northern New Hampshire
Adviser: Pete Pekins

Jan Boyer
Major: Biology
Density Dependence in Larval Wood Frogs
Adviser: Kimberly Babbitt

Jill Brelsford
Major: Microbiology
A Stressful Lifestyle: The Need for Two Paralogous Stress Response Regulators in the Bacterial Symbiont Vibrio fischeri
Adviser: Cheryl Whistler

Katelyn Cassidy
Major: Microbiology
A Study of the Endosymbiont Bacterial Communities Found within Caulerpa: Spatial Location and Quantification
Advisers: Wayne Fagerberg and Louis Tisa
Robert Citorik  
Jong Yu  
Major: Microbiology  
Effects of Probiotics and Organic Acids on Toxin Production in Escherichia coli O157:H7  
Adviser: Frank Rodgers

Lena Collins  
Major: Biology  
The Effect of the Invasive Seaweed, Caulerpa taxifolia, on Native Species Interactions in St. George’s Basin, Australia  
Adviser: James Byers

Kathryn Daly  
Major: Environmental Conservation Studies  
Case Studies in Sustainable Agriculture: How Small Farms Can Be Successful  
Adviser: Mimi Becker

Michelle Desrosiers  
Major: Biology  
Distribution and Abundance of Early Successional Shrubland Birds in Powerline Rights-of-way  
Adviser: James Taylor

Nicole DiManno  
Major: Zoology  
The Plight of Vernal Pool Amphibians  
Adviser: Kimberly Babbitt

Katelyn Dolan  
Major: Environmental Conservation Studies  
Pan-Arctic Temperatization: A Preliminary Study of Future Climate Impacts on Agriculture Opportunities in the Pan-Arctic Drainage System  
Advisers: Charles Vorosmarty and Richard Lammers

Dustin Elwood  
Major: Biochemistry and Molecular Biology  
Autophagy Versus Growth of Sea Urchin Nutritive Phagocytes—Differential Control by a Complex of Proteins  
Adviser: Charles Walker

Maire Folan  
Major: Biology  
The Effect of Flame Retardants on a Biochemical Marker for Obesity  
Adviser: Gale Carey

Jennifer Forcina  
Major: Medical Laboratory Science  
Interactions in Neutrophils Between Bcl-2 Family of Proteins and Stx-2 Produced by Escherichia coli O157:H7  
Adviser: Frank Rodgers

Loreen Fournier  
Major: Biochemistry and Molecular Biology  
Mechanism of Estrogen Receptor-a and Her2 Heterodimerization in Human Breast Carcinoma Cells  
Adviser: Andrew Laudano

Adam Gourley  
Major: Environmental and Resource Economics  
Optimizing the 4000 Footers  
Advisers: John Halstead and Doug Morris

Caitlin Hamer  
Major: Biology  
Local Variation and Trait-mediated Indirect Interactions of Nucella lapillus  
Adviser: James Byers

Cheryl Harary  
Major: Zoology  
In Vitro Analysis of Bluefin Tuna Stomach Content  
Advisers: Molly Lutcavage and John Logan (graduate student)

Stephen Hennigar  
Major: Nutritional Sciences  
The Potential Link Between the Exposure to Environmental Pollutants and Preference for Sweet-Tasting Fluids and Obesity in Rats  
Adviser: Anthony Tagliaferro

Ariel Hudson  
Major: Animal Sciences  
Role of Cytokeratin 8/18 Intermediate Filaments in the Bovine Corpus Luteum: Protection Against Fas Ligand-induced Apoptosis?  
Adviser: David Townsend

Alison Hudson  
Major: Animal Sciences  
Effect of Prostaglandin F2a on Tissue Inhibitors of Matrix Metalloproteinase Expression in the Bovine Corpus Luteum  
Adviser: Paul Tsang

Kara Judson  
Major: Biology  
Examination of Fas Aggregation on Bovine Luteal Cells: Influences of Cytokeratin 8/18 (CK8/18) Intermediate Filaments  
Adviser: David Townsend

Alisha Kennell  
Major: Zoology  
Spatial Learning Cues and Acquisition Time in Two Rodent Species Occupying Different Habitats (Microtus pennsylvanicus and Peromyscus leucopus)  
Adviser: Michelle Scott

Tye Kindinger  
Major: Zoology  
Evolutionary Adaptations of Daphnia pulex in Peripheral Rock Pools on the Isles of Shoals, Maine: Effects of Salt Concentration and Ultraviolet Radiation  
Adviser: James Haney

Tye Kindinger  
Major: Zoology  
Effects of Habitat Diversity on Catch per Unit Effort of Chelonia mydas and Eretmochelys imbricata Populations in South Caicos, Turks and Caicos Islands, British West Indies  
Adviser: James Haney

Ginny King  
Major: Nutritional Sciences  
Bone Health of the College-age Population  
Adviser: Jesse Morrell

Elisabeth Kispert  
Major: Biochemistry and Molecular Biology  
Sources of Knowledge and Attitudes Toward Human Papillomavirus (HPV) Vaccine Among Female College Students at the University of New Hampshire  
Advisers: Rosemary Caron and Robert McGrath
Avery Krein  
Major: Animal Sciences  
Sensory Cues that Initiate Conspecific Aggression in Male Red-backed Salamanders (Plethodon cinereus)  
Adviser: Michelle Scott

Angela Kuehn (Microbiology)  
Stephen Perros (Biochemistry and Molecular Biology)  
Katie Szymanska (Microbiology)  
The Role of Evolutionary History in Adaptation to New Environments: Experimental Evolution of the Burkholderia cenocepacia Complex  
Advisers: Vaughn Cooper and Crystal Ellis (graduate student)

Amanda LaVoie  
Major: Biology  
The Effect of Human Land Use Practices on the Wildlife Dispersal Area in Southern Mbirikani Group Ranch, Kenya  
Adviser: Moses Okello (Center for Wildlife Management, School for Field Studies, Kenya)

Monique Lessard  
Major: Biochemistry and Molecular Biology  
Estrogen Receptor-α Blocker  
Adviser: Andrew Laudano

Keith Morley (Biochemistry and Molecular Biology)  
Charles Traverse (Microbiology)  
Beyond Darwin: Gaining Insight into Mutational Effects through the Removal of Natural Selection  
Adviser: Vaughn Cooper

Benjamin Orcheski  
Major: Biochemistry and Molecular Biology  
Towards the Determination of Sex Expression in Strawberry  
Adviser: Thomas Davis

Nicholas Perros  
Major: Biochemistry and Molecular Biology  
The Regulation of Phosphodiesterase-6 by Glutamic Acid-Rich Protein-2  
Adviser: Rick Cote

Holli Pinard  
Major: Animal Sciences  
Calf Starter Chemical and Physical Characteristics as They Relate to Overall Performance  
Adviser: Peter Erickson

Stephan Pirnie  
Major: Biology  
Introduction of Phytochelatin Synthase: Creating a Phytochelater  
Adviser: Subhash Minocha

Kristen Rauwerdink  
Major: Biochemistry and Molecular Biology  
Formation and Study of [60] Fullerene Nanowhiskers and Nanotubes  
Adviser: Glen Miller

Brian Schuster  
Major: Microbiology  
You Can Teach an Old Dog New Tricks: Revitalizing Penicillin Enrichment for Mutant Generation  
Adviser: Cheryl Whistler

Gwen Stewart  
Major: Nutritional Sciences  
Visual and Biochemical Assessment of the Color Change in Egg Yolk Following Lutein and Zeaxanthin Supplements  
Adviser: Joanne Curran-Celentano

Joy Stronk  
Major: Biology  
Effects of Depth and Salinity on the Behavior of the Horseshoe Crab, Limulus polyphemus  
Adviser: Winsor Watson

MacKenzie Stuart  
Major: Tourism Planning and Development  
Identification of Potential Job Linkages Between “American Citizen Skill-Groups” and Businesses Currently Engaged in Domestic and International Outsourcing  
Adviser: Lyndon Goodridge

Paul Sweeney  
Major: Biochemistry and Molecular Biology  
Positional Cloning of the Hydroxyurea-Sensitive hus2 Mutant in Arabidopsis thaliana  
Adviser: Kevin Culligan

Frederick Ta  
Major: Biology  
Use of the G-I-G Model as a Basis for Improving Student Problem Solving in the Chemistry Classroom  
Adviser: Charlie Cox

Derek Thibault  
Major: Biochemistry and Molecular Biology  
Isolation of Arabidopsis thaliana Palmitoyltransferase Mutants  
Advisers: Aaron Argyros and Estelle Hrabak

Jennifer Towle  
Major: Biochemistry and Molecular Biology  
Bio-adhesion: Search for Vitronectin in Caulerpa  
Adviser: Wayne Fagerberg

Heather Tucker  
Major: Nutritional Sciences  
The Maasai-Elephant Conflict  
Adviser: Andrew Conroy

Chelsea Vario  
Major: Nutritional Sciences  
Chronic Nitrogen Additions Affect Aboveground Sporocarp Diversity in Hardwood Stand  
Adviser: Serita Frey

Marjorie Wainwright  
Major: Nutritional Sciences  
Long-term Exposure to Flame Retardants and Insulin Sensitivity of Fat Cells  
Adviser: Gale Carey

Jennifer Walsh  
Major: Biology  
Identification of Sharp-tailed Sparrow Species Using Genetic Techniques  
Adviser: Adrienne Kovach
Student Composers’ Concert

SATURDAY, APRIL 28
8 PM
Bratton Recital Hall,
Paul Creative Arts Center

The UNH Student Composers’ Concert is an annual event featuring the compositions of undergraduate and graduate students in the Department of Music. The music is newly-composed and is almost exclusively performed by fellow music students.

Diane Anderson
Major: Music Studies (Composition)
Wind Trio
Adviser: Lori Dobbins

Adam Davila
Major: Music
The Dirty Rag
Adviser: Lori Dobbins

Andrew Greene
Major: Music Performance
Strength and Beauty
Adviser: Michael Annicchiarico

Ben Mafera
Major: Music Education
5 Limericks of Edward Lear
Adviser: Michael Annicchiarico

John Mehrmann
Major: Music Performance
Music for Hands, Marimbas, and Vibraphone (2006); Variations on a Theme in D Minor (2006); Music Keyboards and Percussion (2007)
Advisers: Chris Kies and Lori Dobbins

Timothy Miles
Major: Music
Two Songs and The Winter’s Nights
Adviser: Michael Annicchiarico

Scott Thibodeau
Major: Music Education
Quintet I
Adviser: Andrew Boysen

Mary Louise Fernald Nursing Research Symposium

WEDNESDAY, MAY 2
8 AM–2:30 PM
Memorial Union Building,
Strafford Room

The Mary Louise Fernald Nursing Research Symposium is a program of scholarly presentations by undergraduate Honors students and graduate students.

Lia Barros
Major: Nursing
The College Athlete’s Perception of the Athlete’s Susceptibility to Alcohol Use
Advisers: Pam DiNapoli and Carol Williams-Barnard

Rebecca Blaine
Major: Nursing
Young Men’s Attitudes Towards Breastfeeding
Advisers: Gene Harkless and Carol Williams-Barnard

Lisa Landry
Major: Nursing
The Experience of Childbirth in China: A Direct Observational Study
Advisers: Gene Harkless and Carol Williams-Barnard

Lindsay Martel
Major: Nursing
The Challenges and Rewards of Working as a Direct Care Provider in the United States and Guatemala
Advisers: Joyce Cappiello and Carol Williams-Barnard

Caitlin Mussey
Major: Nursing
The Lived Experience of an Unplanned Cesarean Section
Advisers: Lynette Ament and Carol Williams-Barnard

Chemistry Department Poster Exhibition

FRIDAY, MAY 4
2:30–4 PM
Parsons Hall, Iddles Foyer

This 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.

Matthew Buchanan
Major: Chemistry
Adviser: Charles Zercher

Hee Yeon Cho
Major: Chemistry
Graphite-Sensitized Microwave Flash Pyrolysis
Adviser: Richard Johnson

Michael Dunn
Major: Chemistry
Modifications of Tripodal Ligands Based on the TAMEPYR and TACHPYR Framework
Adviser: Roy Planalp

Michelle Garnsey
Major: Chemistry
Hydrogenation of Single Walled Nano Tubes
Adviser: Glen Miller

Allison Greene
Major: Chemistry
Fragmentation Mechanisms of Carbohydrates in ESI Mass Spectrometry
Adviser: Richard Johnson

Sarah Huckins
Major: Chemistry
Structural Analysis of Glycosphingolipids
Adviser: Steven Levery

Jeffrey Kirkland
Major: Chemistry
The Enhancement of Ozone Chemistry in a General Chemistry Curriculum
Adviser: Christopher Bauer
Whittemore School of Business and Economics
Paul J. Holloway
Business Plan Competition

WEDNESDAY, MAY 9
8 AM–2 PM
Holloway Commons

The Paul J. Holloway Business Plan Competition is an integral part of the undergraduate experience at the Whittemore School. Students are required to research and prepare business plans, which they present to a panel of industry leader judges. Prizes are awarded for the most feasible and fundable plans for starting, acquiring, or expanding a business venture.

Information on participants will be available at this event.
Star-studded breakfast

Eight stars of student research represented the University at the UNH Legislative Breakfast in Concord on April 4. An annual spring event, the breakfast brings the New Hampshire General Court together with some of UNH’s finest student researchers to discuss their work and findings.

This year’s participants represented the diverse array of research underway at UNH in all disciplines, from biology and history, to nursing, earth science, and beyond.

Many of these students are presenting at this week’s Undergraduate Research Conference. Ask them about their experience in Concord.

2007 Legislative Breakfast Presenters

Lisa Bedford ’06
Gilmanton, N.H.
The Relationship Between Biological Rhythms in Horseshoe Crabs

Jacob Borgeson ’08
Gilford, N.H.
Building a Better Bear Trap? Genetic Tagging of Black Bears in Northern New Hampshire

Michael Howley ’08
Salem, N.H.
Laurentide Ice Sheet Recession in Southern New Hampshire

Lisa Landry ’07
Bow, N.H.
The Experience of Childbirth in China: A Direct Observational Study

Joseph McGuiness ’07
Somersworth, N.H.
Quitting for Life: Group Smoking Cessation

Michelle Mitchell ’07
Nashua, N.H.
In Search of the Yankee Farm Girls turned Mill Operatives

Abigail Noyce ’07
Newmarket, N.H.
Optical Illusions Based on Motion

David Palange ’07
Londonderry, N.H.
Your Loving Sons: American Warfare Through the Eyes of New England Soldiers
URC 2006 Awards of Excellence

Last year, the UNH Undergraduate Research Conference distributed more than $23,000 in scholarships and grants to student participants for their award-winning work. The following undergraduates received scholarship Awards of Excellence.

Nicholas Adams ’06
Jenna Darling ’07
The Effects of Norepinephrine and Dopamine in Remediating Selective Attention Deficits

Magdalen Balz ’07
Electronic Journal Writing: Communicative Freedom for Adults with Brain Injury

Lisa Bedford ’06
The Influence of Endogenous Circadian and Circatidial Clocks on Horseshoe Crab (Limulus polyphemus) Locomotion

Andrew Begley ’06
Disintegration: Ross Barnett, the Kennedys, and the Politics of Integration at Ole Miss

Michael Borrelli ’06
George Clark ’08
Morgan O’Neill ’09
Design and Testing of the Star Sensor for the Interstellar Boundary Explorer

Jeremy Bourgeois ’09
Brian Reed ’08
Cornucopia Food Basket Project

Jessica Cawley ’06
Investigating the Ways the Irish Learn Music

Molly Cooper ’06
Bad Girls: Romantic Feminine Rebellion in Renaissance Drama

Scott Crawford ’06
Jonathan Oppelaar
FFT Component Project

Emily Demers ’06
Female Monster: Eileen Wournos and the Transgressions of Public Sexuality

Emily Duynstee ’07
Non-medical Use of Prescription Drugs on College Campuses

Roger Eichorn ’06
Theories of Historical Knowledge

Roger Eichorn ’06
Philosophy and Common Life: Skeptical Crisis or Dogmatic Crisis?

Sarah Eisenlord ’06
The Effects of Warming on Soil Microbial Metabolism

Engineers without Borders
Engineers without Borders Project

Michelle Giguere ’06
The Censorship has Sailed: Spanish Media and Democracy

Sarah Grieve ’06
Nicole Young ’06
Cytokeratin 8/18 Intermediate Filaments and their Role in Regression of the Bovine Corpus Luteum.

Jasmine L. Harris
Shawn M. Laplante
Hannah R. Onoroski
Film: Assimilation

Kristin Harris ’06
Financing the Evolutionary Machine: Capitalist Ideology and Social Darwinism in Zola’s The Ladies Paradise and Dreiser’s Sister Carrie

Courtney Hazleton ’06
The Preservation of Tradition in an Increasingly Globalized World

Andre Hoehl ’06
Integration and Cultural Tension in the German Turkish Community

Mark Joseph ’06
Can Kant Accommodate Supererogation?

Gina Lalli ’06
Highlighting the Margins: Empowerment and Engagement I

Gina Lalli ’06
Gender Attitudes Among Men and Women at UNH

Kraig Lamper ’06
Fluxus as Fragmentation and Continuity

Nora Larkin ’06
Changing Ethnic Identities in Post-National Germany: A Study of Turkish-German Literature, Politics and Society

Meghann McCluskey ’06
Politics and Film: A Focus on Freedom Political

Heather Moulton ’07
Using Site Occupancy to Assess Population Health of Hochstetter’s Frogs (Leiopelma hochstetteri) in the Kokako Management Area

Jonathan Nguyen ’06
Fracture Testing for the Evaluation of Self-healing Composites

Catherine E. Overson ’06
Perinatal Loss: Its Challenges to Nurses and Educators

Brenton Paoloella ’06
Identifying Components of the Circadian Clock that may Entrain Germ-line Stem Cell Mitosis in the Green Sea Urchin (Strongylocentrotus drobachiensis)

Stephan Pirnie ’06
Evan Jordan ’06
Harnessing the power of an invasive species: creating a bioremediator out of purple loosestrife

Sarah Raymond ’06
Crime Deception and the Misleading of the American Public

Matthew Reno ’06
Regional Stagnation: The Undermodernization of Southern Spain

Jessica J. Santos ’06
Senior Seminar Project: Internship at BAE Systems

Mark Santos ’06
Transnasal Delivery of a GnRH Analog in Miniature Swine

Satya Sardonicus ’07
Circulating Concentration of Interleukin-18 Binding Protein in Obese and Non-obese, Asthmatic and Non-asthmatic Women

Alice Sheehan ’06
CAFTA: An Intelligent Choice?

Michael Simmons ’06
Interactive Computer Demonstration of Geographic Information Systems Software (ArcView) and NH’s GRANIT Database

Katie Smith ’06
A Nuclear Iran?

Nathan Smith ’06
When Do Terrorists Attack?

Courtney Strait ’06
Highlighting the Margins: Empowerment and Engagement II

Mary Veronica Vandoloski ’06
Verb Tense as a Predictor of Listener’s Reactions to Autobiographical Narratives

Andrew VanHoogenstyn ’06
The Effects of Intermittent Cold Water Swim Stress on Navigational Learning and Memory

Kelly Vogel ’06
Reproductive Rights for Chinese Women

Ashley Ward ’07
The Effects of Victim and Perpetrator Reputation on Physical Distance: Do Individual Differences Matter?

Anna Weaver ’06
EPR Spectroscopy for the Forensic Analysis of Glass

Kristen Woodruff ’06
Girls Gone Wild: Academic Culture and the Reinvigoration of the College Coed

These awards were made possible by the generous sponsorship of the following University offices and departments: The Office of the Vice President for Student and Academic Services, the Hamel Center for Undergraduate Research, the Institute for the Study of Earth, Oceans, and Space, the New Hampshire Space Grant Consortium, the College of Engineering and Physical Sciences, the UNH Parents Association, the Environmental Research Group, and the Center for International Education.
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 New England 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. 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 & 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.

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.”

The students you will meet at URC ’07 are exploring police corruption in Bangkok, studying the effects of flame retardants on obesity, developing wind turbines and biodiesel fuel, and composing their own music. 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.
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. The third volume, now online, features works on Slovakian communism and democracy, the Latin American tradition of Quinceañera, and the American toad.

Last summer, using a grant from the UNH International Research Opportunities Program (IROP), senior Laura Louise Plummer spent nine weeks in Puerto Rico studying the custom of Quinceañera. Here’s an excerpt from her Inquiry article “Quince Años: The Transition to Womanhood in Puerto Rican Culture.”

In some Spanish-speaking countries in the Americas, a girl’s fifteenth birthday, called the Quinceañera, is a sacred and time-honored rite of passage. The word “Quinceañera” is made up of the Spanish words for “fifteen” and “years,” and can refer to both the celebration and the woman turning 15. The Quinceañera has roots in ancient indigenous ceremonies as well as the European debutante ball, which was introduced during the Spanish colonization of Latin America in the 1500s. Every country (and indeed every individual girl) celebrates the Quinceañera uniquely. What remains constant across cultures, however, is that the Quinceañera is meant to represent a girl’s transition to womanhood.

Read more at www.unh.edu/inquiryjournal.

Links to research opportunities

Centers and Institutes at UNH
http://www.unh.edu/research/centers

Center for International Education
www.unh.edu/cie

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

McNair Graduate Opportunity Program
www.unh.edu/mcnair

Outreach and Research Opportunities
www.unh.edu/outreach/opportunities.html

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

University Honors Program
www.unh.edu/honors-program
Reaping the benefits of research

Former student researcher brings UNH experience to career

Beth (Gagnon) Daly ’02 admits she’s ambitious. One need only glance at her curriculum vitae for proof. Three degrees, six awards, five published reports, and a hefty dose of public service commitments, memberships, and work experience. And she graduated only five years ago.

Daly is a communicable disease epidemiologist at New Hampshire’s Division of Public Health Services in Concord. She manages the investigation and surveillance of food-borne disease outbreaks, such as salmonella.

When the bagged spinach debacle broke last year, she tracked for cases in New Hampshire, conducting interviews with patients whose symptoms, as reported by their doctors, pointed to food-borne illness.

Although it was Daly’s strong interest in science that first brought her toward disease investigation, she points out the sociological, psychological, behavioral health, biological, and economic factors in the public health realm. “What I like about working in this field is that it’s so multidisciplinary.”

At UNH, Daly received both a B.S. in zoology and a B.A. in English. She first became interested in epidemiology while taking a class with Jeffrey Salloway, professor of health management and policy at UNH. She indulged that interest in Africa, studying community perceptions, control activities, and health-seeking behavior for malaria in Tanzania, a project Daly, herself, created and executed using a grant from UNH’s Hamel Center for Undergraduate Research, which funds student research projects. After nine weeks in Dar es Salaam, she went on to report her research findings at the National Undergraduate Research Conference in Washington, D.C., which she describes as “good exposure.”

The experience helped Daly nail down her interests. “I was sending away for graduate school materials while in Tanzania,” she says. Ultimately, Daly decided on Emory University’s master of public health program. There, she found herself ahead of her classmates. “Many had studied abroad, but none had conducted research abroad at the undergraduate level,” she says. “I was lucky that UNH had a program for undergraduates. Most people don’t have that opportunity until graduate school.”

Elizabeth Gagnon Daly ’02
Epidemiologist, Acting Chief of Communicable Disease Surveillance Section
N.H. Division of Public Health Services
Acknowledgments

The UNH Undergraduate Research Conference has grown to become a signature event at the University and an annual highlight of the spring semester. 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 folks and thank them for helping make URC ’07 happen.

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Center for International Education
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College of Engineering and Physical Sciences Alumni Association
College of Life Sciences and Agriculture
Dave Zamansky, MUB Current Issues Lecture Series
Elizabeth Parmalee ’07 (URC 2007 Evaluation Project)
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
Office of the Vice President for Research
Office of the Vice President for Student and Academic Services
Phi Beta Kappa
The University Honors Program
University Hospitality Services
UNH Marine Programs
UNH Media Relations (Erika Mantz)
UNH Parents Association
UNH Photographic Services
URC Interns Marie Grossiman ’10 and Megan Zerega ’10
Web Solutions

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Mike Annicchiarico, Student Composers’ Concert
Janice Chadwick, Psychology George M. Haslerud URC
Grant Cioffi, Seacoast Reads Exhibition
Lynne Cooper, Vice President’s University-wide Research Symposium
Jane Dufresne, Mary Louise Fernald Nursing Research Symposium
Wayne Fagerburg, 16th Annual COLSA URC
Marianne Fortescue, UNH Office of Community Service Partnerships
Cynthia Giguere, Thompson School Undergraduate Student Showcase
Elizabeth Hageman, Honors English Undergraduate Conference
Kate Hanson, Thompson School Community Leadership Program
David Kaye, The Naked Arts: Creativity Exposed!
Jennifer Moses and Catherine Mazur, Senior B.A. and B.F.A. Exhibition Preview Reception
Cynthia Nizzari-McClain, WSBE’s Paul J. Holloway Business Plan Competition
Dan Reagan, UNH Manchester URC
Cindi Rohwer, Chemistry Department Poster Exhibition
Lucy Salyer, History Department URC
Ruth Varner, Interdisciplinary Science and Engineering Symposium
Hannah Varn ’07, Philosophy URC
Neil Vroman, School of Health and Human Services Grimes Award Competition
Are we ready for the environmental threats of the 21st century?

Find out from John McQuaid
author of Path of Destruction: The Devastation of New Orleans and the Coming Age of Superstorms

Wednesday, April 25, 8 p.m.
Granite State Room
Memorial Union Building (MUB)
University of New Hampshire

What is causing huge storms such as Hurricane Katrina, and is the U.S. government prepared for future catastrophic weather events?

The UNH Undergraduate Research Conference and MUB Current Issues Lecture Series are proud to present an evening with investigative journalist and Pulitzer Prize winner John McQuaid.

Book signing to follow lecture.

Tickets required. Reserve free tickets at www.unh.edu/urc or call (603) 862-1997.

Doors open at 7:30 p.m. Parking is available in B-lot.

For accessibility accommodation requests, contact Lynne Cooper at (603) 862-1997. For TTY calls only, call (800) relay-nh.