

Undergraduate Research Conference Showcase for undergraduate research, engagement, scholarship, and creative presentations

April 12-27, 2013



'Having the opportunity to share my academic and professional achievements with my parents was fantastic. I hope it gave them something to show for their investment in my future!"

"I will use many of the skills I learned in class in the future and throughout my career."







"The undergraduate research experience is one of the main reasons I chose to attend UNH. I gained real-life experience that you just cannot get in a classroom alone."

## **URC 2013**

## A welcome to participants and attendees



MARK W. HUDDLESTON



JOHN D. ABER

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

What began as a University-wide effort in the spring of 2000 has blossomed into an annual tradition that puts UNH students in the spotlight. Our conference is one of the largest and most diverse in the nation, and this year marks another record in participation. More than 1,300 students will present their findings at both the Durham and Manchester campuses, and represent academic achievements in every college and school.

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

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

Sincerely,

MARK W. HUDDLESTON, PRESIDENT

JOHN D. ABER, PROVOST

## **Inquiry, Discovery, and Engagement:**

## The UNH Undergraduate Research Conference



Julie E. Williams



LYNNE D. COOPER

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

This year, more than 1,300 UNH students mentored by more than 325 UNH faculty members will present their research and scholarship. Presentations will represent many disciplines as well as multidisciplinary learning communities where empirical research, engaged scholarship, and creative scholarship result.

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

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

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

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

LYNNE D. COOPER, CHAIR, URC PLANNING COMMITTEE

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All events are free and open to the public.

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

## **URC 2013** Calendar

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

Friday, April 12

6-8 p.m.

2013 Senior B.A. & B.F.A. Exhibition and M.F.A. Thesis Exhibition and Preview Reception

Paul Creative Arts Center **(6)** Museum of Art (Exhibition runs April 13–May 17, 2013)

Monday & Tuesday, April 15-16

Monday 5-7 p.m.

Graduate Research Conference (GRC)
Poster Presentations

Huddleston Hall Ballroom (1)

Tuesday 9 a.m.-3 p.m. Graduate Research Conference (GRC) Oral Presentations

Holloway Commons (2)

Tuesday, April 23

10 a.m.-2 p.m.

UNH Manchester Undergraduate Research Conference

**Oral Presentations** 

**UNHM Auditorium** 

Wednesday, April 24

10:30 a.m.-Noon

Thompson School Community Leadership Program

Memorial Union Building (3)

Rooms 334/336

10:30 a.m.-Noon

UNH Office of Community Service Partnerships

Memorial Union Building (3)

Noon-2 p.m.

The Naked Arts—Creativity Exposed! (Act I)

Paul Creative Arts Center (6) Museum of Art

Noon-2 p.m.

Paul College of Business and Economics University-wide Paul J. Holloway Prize Innovation-to-Market Competition Charles & Miriam Nelson Poster Round Peter T. Paul College (12)

2-5 p.m.

Interdisciplinary Science and Engineering (ISE) Symposium

Kingsbury and Morse Halls (8 & 9)

3:30-6 p.m

UNH Manchester Undergraduate Research Conference Poster Presentations

**UNHH** Auditorium

Thursday, April 25

10 a.m.-1 p.m.

UNH Manchester Undergraduate Research Conference

Cinema Arts Day

UNHM Auditorium

12:30-2 p.m.

The Naked Arts—Creativity Exposed! (Act II)

Paul Creative Arts Center **(6)** Hennessy Theatre

12:30-2 p.m.

History Department Undergraduate Presentations

Memorial Union Building (3) Rooms 332, 338, and 340

5:30-7:30 p.m.

Thompson School Undergraduate Student Showcase

Cole Hall (Stacey's) (11)

Friday, April 26

8 a.m.-5p.m.

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

Noon-5p.m

UNH Manchester Undergraduate Research Conference Technology Day Computing Technology Poster Presentations

UNHM Pandora Mill

10 a.m.-1:30 p.m

Paul College of Business and Economics Undergraduate Research Conference Peter T. Paul College (12)

9-9:30 a.m.

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

Granite State Room

9:30 a.m.-3 p.m.

Parents Association Undergraduate Research Symposium Poster and Oral Presentations

Memorial Union Building (3)

12:15-1 p.m

The Naked Arts—Creativity Exposed! (Act III)

Memorial Union Building (3) Strafford Room

1:30-4 p.m.

College of Health and Human Services Grimes Undergraduate Research Competition

Pettee Hall, G-10 (10)

1:30-5 p.m.

Psychology Department George M. Haslerud Undergraduate Research Conference

Murkland Hall, Room 115 (5)

2-6 p.m.

Honors English Undergraduate Research Conference

Hamilton Smith Hall **(4)** English Department

4-8:30 p.m.

Philosophy Department Undergraduate Research Conference

Murkland Hall G17 (5)

8 p.m.

Student Composers' Concert

Paul Creative Arts Center (6) Bratton Recital Hall

Saturday, April 27

7:45 a.m.-2 p.m.

22nd Annual College of Life Sciences and Agriculture (COLSA)

Undergraduate Research Conference Huddleston Hall Ballroom (1)

and Holloway Commons (2)

Friday, May 3

3–4 p.m.

Chemistry Department Poster Exhibition

Parsons Hall, Iddles Lobby (7)

Wednesday, May 9

12:30-6 p.m.

Peter T. Paul College of Business and Economics

University-wide

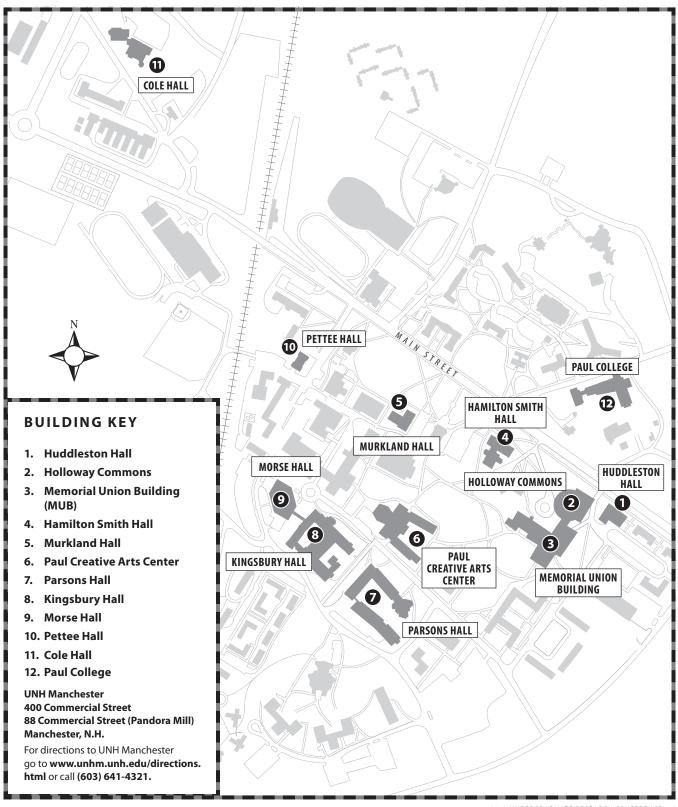
Paul J. Holloway Prize

Innovation-to-Market

**Championship Round** 

Holloway Commons (2) Squamscott Room

## **URC 2013** Campus Map



# 2013 Senior B.A., B.F.A. & M.F.A. Exhibition and Preview Reception

Friday, April 12 6–8 p.m. Museum of Art Paul Creative Arts Center

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

Bachelor of Fine Arts degree candidates:

#### Sarah Archer

Fine Arts, Ceramics Adviser: Benjamin Cariens

#### Kathleen Brewster

Fine Arts, Drawing & Painting Adviser: Grant Drumheller

#### Sarah Brewster

Fine Arts, Drawing & Printmaking Adviser: Grant Drumheller

#### Cara Copeland

Fine Arts, Painting Adviser: Craig Hood

#### Mary Duke

Fine Arts, Ceramics Adviser: Jennifer Moses

#### **Addie Fisher**

Fine Arts, Photography Adviser: Julee Holcombe

#### **Emily Holland**

Fine Arts, Ceramics Adviser: Scott Schnepf

#### Sophia Lupi

Fine Arts, Photography Adviser: Maryse McConnell

#### Loren Marple

Fine Arts, Painting Adviser: Craig Hood

#### Samuel Rheaume

Fine Arts, Painting Adviser: Craig Hood

#### Paige Smith

Fine Arts, Painting Adviser: Scott Schnepf

#### **Brenna Thompson**

Fine Arts, Photography Adviser: Julee Holcombe

# **Graduate Research Conference (GRC)**

### **Poster Presentations**

Monday, April 15 5–7 p.m. Huddleston Ballroom

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

# Graduate Research Conference (GRC)

### **Oral Presentations**

Tuesday, April 16 9 a.m.–3 p.m. Holloway Commons

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

## UNH Manchester Undergraduate Research Conference

## **Oral Presentations**

Tuesday, April 23 10 a.m.–2 p.m. University Center Manchester

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

#### Zahra Essa

Biological Sciences What's in Your Water? Adviser: Patricia Halpin

#### Josiane Gasana

Health Management and Policy Military Drug Use in Vietnam Adviser: John Resch

#### Stephen Gibson Scott Webster

Biological Sciences The Killer That Doesn't Kill: HIV on the Immune System

Adviser: Patricia Halpin

#### **Ryan Haggerty**

History

McCarthy and the Threat of Subversion Adviser: John Resch

#### **Ryan Haggerty**

History

The Kansas-Nebraska Act and Reaction in the City of Manchester, New Hampshire Adviser: Robert Macieski

#### **Thomas Hobbs**

History and Political Science Freedom of Speech, the Dennis Case, and Assessment Adviser: John Resch

#### **Thomas Hobbs**

History and Political Science

Dams, Property Rights, and Environmental

Awareness in Southern New Hampshire
during the late 18th and 19th Centuries

Adviser: Robert Macieski

#### **Thomas Hobbs**

History and Political Science WWII and the Environmental Degradation of Europe Adviser: John Cerullo

#### **Aaron Kinne**

Biological Sciences
Environmental Impact and Physical
Growth of the UNH at Manchester
Vertical Garden
Adviser: Patricia Halpin

#### Valerie LaRochelle

Undeclared
Origins of the National Defense
Highway System
Adviser: John Resch

#### Alexander Larochelle

Biological Sciences
Vietnam War and the Media—Walter
Cronkite
Adviser: John Resch

#### Olivia Marchioni

**Business** 

Teenagers: 1950's Adviser: John Resch

#### Elizabeth Mason Rosanyi Rivera

Communication Arts
Higher Education as a Path to Success
Adviser: Anthony Tenczar

#### **Justin Ross**

Biological Sciences Someone Call 911! The Important Steps to Follow in an Emergency Advisers: Patricia Halpin, Stephen Pugh

#### Sean Schmidenberg

History

Post Tito Yugoslavia: Transitional Justice

or Genocide

Adviser: John Cerullo

## Thompson School Community Leadership Program

# Capstone Projects and Portfolios

#### Wednesday, April 24 10:30 a.m.-Noon Memorial Union Building 334/336

The Community Leadership Program is an innovative associate degree and diploma program that prepares students of all ages to work effectively within community organizations and to be active, influential citizens. This exhibition displays students' leadership portfolios and highlights significant community projects and partnerships.

#### Leah Burke

Community Leadership Seacoast Reads Capstone Project Adviser: Timothy Barretto

#### Morgan Curley

Community Leadership Buoy-bat for Baseball Adviser: Timothy Barretto

#### Maggi Hanson

Community Leadership Waysmeet Capstone Project Adviser: Timothy Barretto

#### Jeffrey Lutz

Community Leadership Elsa's Slow Shuffle Adviser: Timothy Barretto

#### Erin McKane

Community Leadership Play For Paws Adviser: Timothy Barretto

#### Gabrielle Moen

Community Leadership Community Leadership Collaborative Adviser: Timothy Barretto

#### Nicholas Pelrine

Community Leadership The ORYA Hockey Clinic Adviser: Timothy Barretto

#### Margaret Saliba

Community Leadership
Volunteering with Adults with
Developmental Disabilities on the
UNH Campus
Adviser: Timothy Barretto

#### Niklas Sigl

Community Leadership Todd's 5K Adviser: Timothy Barretto

# **UNH Office of Community Service Partnerships**

#### Wednesday, April 24 10:30 a.m.–Noon Memorial Union Building

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

# The Naked Arts — Creativity Exposed

### Act I

Wednesday, April 24 Noon-2 p.m. Museum of Art Paul Creative Arts Center

This event exposes the inner creative process of artists working in various disciplines. Presenters will describe the process, research, and other creative aspects undertaken to bring an artistic creation from initial inspiration to the stage or gallery. This may include a performance or excerpts from their work to illustrate their creative scholarship.

#### Sarah Archer

Fine Arts

Cosmos in Clay

Advisers: Jennifer Moses, Leah Woods

#### Cara Copeland

Fine Arts
The Still Life and Art History
Adviser: Jennifer Moses

#### Addie Fisher

Fine Arts

Photography

Adviser: Jennifer Moses

#### Loren Marple

Fine Arts
The Closeness of Distance: A Study in
Shape and Color
Adviser: Jennifer Moses

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

# Charles & Miriam Nelson Poster Competition

Wednesday, April 24 12–2 p.m. Paul College, Room G35

This poster competition gives all teams entered in the Holloway Prize Innovation-to-Market Competition an opportunity to showcase their research into entrepreneurship. Teams have three minutes to present their business idea, followed by three minutes of Q and A with the judges.

#### **Shawn Amburg**

Entrepreneurial Studies and Management *U-Cycle* 

Adviser: Jay Berman

## Paul Annand

Marketing

#### **Hannah Shoer**

Management and Marketing

#### Stephen Wolfenden

Finance and Management The Aspire Golf Course Adviser: Warren Daniel

#### Ethan Ash

Marketing

#### Kristopher Caron

Management and Finance

#### Joshua Hunt

Management and Spanish

Adviser: Warren Daniel

#### Jessica Barbone

Finance and Management

#### Dana Magnant

Management

Riah: At-Home Hair Care Adviser: William Hassey

#### **Chelsey Bauer**

Management

#### **Ashley Gelinas**

Management and Accounting

#### Isabelle Poulin

Finance and Management

#### **Zachary Racine**

Marketing Sweet Nothings

Adviser: William Hassey

#### Ryan Belanger

Management

#### Joseph Franciosa

Undeclared

#### Daniel Imbriaco

Marketing and Management

#### Kelli King

Accounting and Management
Massachusetts Institute of Athletic
Performance

Adviser: William Hassey

#### Jonathan Boghigian

Kevin Walker

Marketing and Management

#### **Matthew Dario**

Christopher Vahey

Management Bid and Dine

Adviser: William Hassey

#### **Raymond Boghos**

Entrepreneurial Studies and Management Boghos Properties

Adviser: Jay Berman

#### Geoffrey Bonewald

Management and Finance

#### Dana Haas

#### Jennifer Sheehan

Management

#### Nicolas Palmisano

Finance and Management

**JobHawk** 

Adviser: Larry Spera

#### Laura Brooks

Accounting and Management

#### Calleigh Garland

Management

#### Alexander Hatch

Management and English Literature

ImproveU

Adviser: Warren Daniel

**Garrett Buckley** 

Finance

Jaclyn Daigneault Michael Duncan

Ryan Stevens

Management

GoBudz

Adviser: William Hassey

**Andrew Burger** 

Psychology

James Scott

Biology

Collegejetski.com Adviser: Sanjeev Jha

**Craig Burgon** 

**Andrew Fuller** 

Ellyse Guihan

Management

James Osten

Finance and Management

Campus Connection

Adviser: William Hassey

**Bradley Calabro** (graduate student)

Adam Palmer (graduate student)

DIYhub.co

Adviser: M. Billur Akdeniz

Kendra Carlson

**Entrepreneurial Studies** 

Online Restaurant Consulting

Adviser: Jay Berman

Ryan Catalano

Entrepreneurial Studies

Stephen Maurice

Finance

Catalano Oyster Company

Adviser: Fiona Wilson

Paul Chiarantona

Entrepreneurial Studies and Political

Science

Green Home Technologies

Adviser: Jay Berman

**Ashley Clifford** 

Marketing

iDorm

Adviser: Robert Gough

**Haley Clough** 

Biomedical Science *Mobile Operations*Adviser: Joyce Stone

Christopher Cober

John Doisneau

Marketing

Hangr

Adviser: Robert Gough

**Robert Cormier** 

Management and Marketing

Jenna Gao

**Gregory Poggi** 

Management

Nature's Alley—Interactive Natural and

Organic Food Market

Adviser: Warren Daniel

**Chad Darcy** 

Jeffrey White

**Entrepreneurial Studies** 

Samuel Magnant

Finance

Real Time Inventory: Efficient Logistics

for the Small Business World

Advisers: Jay Berman, Robert Gough

**Mark Deschenes** 

Benjamin Tasker

Health Management and Policy

Leo Sutera

**Economics** 

Genetically Modifying a Bee

Advisers: William Hassey, Leslie MacLeod

**Edward Donovan** 

**Environmental Conservation Studies** 

**Edward LaVilla** 

Physics

Marie-Elaine Lepine

**Brady Page** 

Entrepreneurial Studies and Management

Marlee O'Neil

Entrepreneurial Studies and Philosophy SunDensation: Modified Solar Distillation

Unit

Adviser: Jeffrey Sohl

**Courtney Firestine** 

**Entrepreneurial Studies** 

**Bradley Maxfield** 

Entrepreneurial Studies and Finance

Peter Maxfield

Entrepreneurial Studies and Marketing

The Variety Pack

Adviser: Jay Berman

**Tyler Foote** 

International Business and Economics

and Management

Levels

Adviser: Jay Berman

Jillian Galli (graduate student)

**Iryna McCauley** (graduate student)

Natasha Robinson (graduate student)

Megan Murphy (graduate student)

Conscious Clean Adviser: Marc Sedam

Chakravarthy Gavini (graduate student)

**Brian Macaulay** (graduate student)

Slawomir Mielewczyk (graduate student)

Daniel Mamede (graduate student)

Computer Information Systems

Parents Time Saver

Adviser: Ludwig Bstieler

Troy Goliber

Finance

Kasandra Michajlov

Alexandra Robichaud

Marketing

Campus Closet

Adviser: Warren Daniel

David Grenaldo

Entrepreneurial Studies and Finance

Grenaldo Grocer

Adviser: Jay Berman

Megan Houstle

Entrepreneurial Studies and Management

Major Works

Adviser: Robert Gough

**Zachary Hutton** 

Entrepreneurial Studies and Finance

Team Wheelhouse

Adviser: Robert Gough

Erin Jackson

EcoGastronomy and Entrepreneurial

Studies

Dry Technology Business Plan:

Revolutionizing the Textiles Market

Adviser: Robert Gough

PETER T. PAUL COLLEGE OF BUSINESS AND ECONOMICS HOLLOWAY COMPETITION, CONTINUED

Kelly Johnson

Marketing

Joseph LaBombard

Management

Sarah MacLellan

Marketing and Management

UTradeN

Adviser: Warren Daniel

Noah Kabbara

Entrepreneurial Studies and Finance

Perfect Present Adviser: Jay Berman

Yuriy Kharin (graduate student)

**Jeffrey Lapak** (graduate student)

Advance Apparel Adviser: Marc Sedam

**Craig Litherland** (graduate student)

Novel Aneurysm Clip With Zero Image

Adviser: Robert Gough

Zechao Liu

Economics

Talker

Adviser: John Merenda

**Dylan Manz** 

Marketing and Entrepreneurial Studies

RFID Student Cards Adviser: Jay Berman

Kristin Mayo

Marketing

Kristin's Gourmet Gluten-Free Bakery Café

Adviser: Robert Gough

Ashleigh McCarthy

Finance and Management

Sean Reagan

Marketing

**Madison Sweeney** 

Michael Verrochi

Management

The Heat-O-Matic Coffee Mug

Adviser: William Hassey

Geoffrey Mishkin

Nicholas Neville

Cameron Saulnier

Undeclared

Andrea Nash

**Economics** 

Jamaican Relief

Adviser: Audrey Ashton-Savage

Samuel Nute

Marketing and Entrepreneurial Studies

Urban Eats

Adviser: Jay Berman

James Osten

Finance and Management

Nightlife App

Adviser: William Hassey

**Phillip Parsons** 

Entrepreneurial Studies and Finance

Northern Resort Cabins Adviser: Jay Berman

Jeremy Patnaude

**Entrepreneurial Studies** 

Timber-Frame Screen Houses

Adviser: Jay Berman

**Sean Peters** 

**Entrepreneurial Studies** 

Rent Right

Adviser: Jay Berman

Joel St. Jean

Joshua Tozier

Tianlin Wu

Undeclared

**Craig Tyer** 

Economics

Tanzanian Sustainable Irrigation Project

Advisers: John Merenda

**Kurt Steiner** 

**Entrepreneurial Studies** 

The Brew House

Adviser: Jay Berman

Robert Verreault

**Entrepreneurial Studies** 

Late Night Shuttle Bus

Adviser: Jay Berman

**Evan Williams** 

Finance and Entrepreneurial Studies

Downtown Diner

Adviser: Jay Berman

**Parker Woolley** 

Undeclared

Green Guard Hats Adviser: Diane Devine

**Taylor Wright** 

**Entrepreneurial Studies** 

Wright Windows and Pressure Washing

Adviser: Jay Berman

## **Interdisciplinary Science & Engineering** Symposium (ISE)

## **Poster Presentations**

Wednesday, April 24 2-5 p.m. **Kingsbury Hall and Morse Hall** 

The ISE symposium welcomes and encourages scientific presentations from undergraduate students in all colleges and departments. The event features undergraduate research that contributes to or benefits from an interdisciplinary science and engineering perspective. Students have an opportunity to interact with peers and gain professional experience presenting research. Attendees learn more about research and educational opportunities in science and engineering at UNH. The program will include a poster session, refreshments, and an awards ceremony.

#### **Odin Achorn**

Chemistry

Folding of Synthetic Polymer Chains Using Radically Exchangeable Alkoxyamines

Adviser: Erik Berda

**Travis Adams** Megan Hamilton

Sonja Pape

Civil Engineering Impact of Laboratory Aging Method on

Properties of Asphalt Concrete

Adviser: Jo Daniel

Travis Adams

Civil Engineering

Demand-controlled Ventilation Using Cell

Phone Signal Occupancy Detection

Adviser: Tat Fu

**Christopher Alix** 

**Justin Nash** William Wilkinson

**Electrical Engineering** 

Electromagnetic Accelerator

Adviser: Kent Chamberlin

#### Nathan Alix

Electrical Engineering RFID Fish Tracker Adviser: Michael Carter

Christopher Allen Jennifer Barrett Patrick L'Heureux Matthew Morganelli

**Curtis Richards**Civil Engineering

Wooden Rollercoaster Track Design

Adviser: Erin Bell

Michael Allen Ashton Cherry Adam Woodman

Mechanical Engineering *TurboJet Engine* 

Turbojet Engine

Adviser: Christopher White

#### Zachary Angelini Alyson Packhem

Environmental Engineering
Oxidation and Biofiltration to Remove Low
Levels of Pharmaceuticals and Personal
Care Products From Water Supplies
Adviser: James Malley

#### Joshua Armstrong Nathaniel Fuller Corey Rumph

Mechanical Engineering *Lignocellulosic Ethanol Biorefinery*Adviser: Christopher White

#### **Brittany Artale**

Chemical Engineering
Adhesion of Rolling Cancer Cells to E-Selectin Along the Interior of a Microchannel
Adviser: Adam St. Jean

Nicholas Aubut William Holmes Abigail Jenkins

Mechanical Engineering QuadSat B for the NASA Magnetospheric MultiScale (MMS) Mission

Adviser: May-Win Thein

Eric Bajor Peter Brigham Amy Emmons Evan Jones

Mechanical Engineering Ski Design and Fabrication Adviser: Todd Gross Madelyn Ball

Rebecca Cole

**Duncan Cromwell** 

Ye Deng (graduate student)

Per Lindgren

Travis Maser

Nicholas Sullivan

Chemical Engineering

Novel Enzyme Catalysts for Transesterification of Waste and Non-edible Oils

Adviser: Palligarnai Vasudevan

Charles Bardwell Ronak Bhatia James Flynn

Civil Engineering

Analysis of Erosion and Accretion of Soil Near the Bulk Heads and Jetties in Hampton and Seabrook New Hampshire Advisers: Jennifer Jacobs, Chris Parrish,

Shachak Pe'eri

#### **Stephan Barkley**

Chemistry

Polymer-based Indicators Adviser: W. Rudolf Seitz

Samuel Batton Patrick Kennedy Timothy Schroeder

Electrical Engineering Software Defined Cellular Base Station

Adviser: Nicholas Kirsch

Joshua Beaudet Michael Klempa

Electrical Engineering

SAS Test Tool Adviser: W Miller

Andrew Beland Chloe Garrage Gregory Kopanski James Popovitch Timothy Roemer

**Timothy Roemer**Mechanical Engineering
Artificial Mitral Valve Flow Dynamics

Kyle Beland Jeremy Bibeau Christopher Gagnon Jacob Landry

Mechanical Engineering Offshore Wind Turbine Array Adviser: Martin Wosnik

Adviser: Christopher White

Kristen Berube Matthew Lavigne Stephen Racca Martin Ritsch

Mechanical Engineering
Continuous Bending Under Tension
Advisers: Brad Kinsey, Ioannis Korkolis

#### Drummond Biles

Mechanical Engineering
Development of an Optical Calibration
Facility at an Auroral Research Station
Adviser: Marc Lessard

Drummond Biles

Ryan Carlson Benjamin Gardell George Hotton Michael Lorenzo Sean McCann Newell Moser Trevor Mutch

Alexander Rich Michael Stevens

Goran Vidic Tyler Young

Mechanical Engineering

Thomas Kimsey Kyle Steike

Electrical Engineering Society of Automotive Engineers

Formula-1 Race Car Adviser: Todd Gross

Brendan Bishop

 $Wenxin\ Du\ (\textit{graduate student})$ 

Matthew Sullivan

Matthew Yeager (graduate student)

Chemical Engineering

Vanadium Oxide Nanomaterials for

Supercapacitor Anode Adviser: Xiaowei Teng

Jonathan Bishop Justin Cannon Matthew Goepfert Michael Tucci

Information Technology
Federated Shibboleth Single Sign on

Adviser: Scott Valcourt

INTERDISCIPLINARY SCIENCE AND ENGINEERING SYMPOSIUM (ISE), CONTINUED

Eryka Black Timothy Osborn Matthew Wilkening

Mechanical Engineering
Memorial Bridge Hydrokinetic Power
Generation: GHT & VFG
Adviser: Kenneth Baldwin

**Christopher Blais** 

Chemical Engineering
Drop Deformation and Breakup Through
a Sudden Constriction
Adviser: Nivedita Gupta

**Braden Blanchette** 

Electrical Engineering Water Flow Meter Network in the Great Bay

Adviser: Nicholas Kirsch

Frederick Bloy

Environmental Engineering Solid, Sediment, and Groundwater Remedial Design Project Advisers: Jean Benoit, Robert Henry

Christopher Boamah-Mensah

Mechanical Engineering Lungs Project Adviser: Greg Chini

Daniel Bolan

Computer Science Rendering Adaptive Resolution Data Models

Adviser: Daniel Bergeron

Cameron Borgal

**Electrical Engineering** 

Brian Gray Shane Hedlund Collin Huston Sheldon McKinley Frederik Meissner Joseph Paulo

NASA USLI Rocket Competition Adviser: May-Win Thein

**Kyle Bouchard** 

Music Education

Brenna Cahill Undeclared

**Tiffane Cormier** 

Communication and English

**Emily Donnery** 

International Affairs and Anthropology

William Morrison

English

**Harmanpreet Singh** 

Biomedical Science

Peter Wilkinson

Environmental Conservation Studies Expanding UNH's Climate Action Plan: Saving Money and Reducing Emissions Adviser: Cameron Wake

Nathaniel Bradley Jason Coombs Michael Kaminski Clayton Niemiec Civil Engineering

National Geo-wall Competition Advisers: Jean Benoit, Majid Ghayoomi

Elizabeth Brady (graduate student)

Kelsey Packard Chemistry

Austin Gregoire

Undeclared

Understanding the Whirlpool Process in the Beer Brewing Industry by Monitoring Iso-Alpha-Acid Concentration

Adviser: Sterling Tomellini

William Breen Tyler Janowski

**Alexander Schwartz** 

Computer Science Robotic Block Sorting Adviser: Wheeler Ruml

Benjamin Briggs Matthew McCluskey

Electrical Engineering
Closed Loop Current Sensor
Adviser: Kent Chamberlin

Victoria Brisson Frederic Lusky Ann Sager

**Environmental Engineering** 

**Evan Davenport**Civil Engineering

Rainwater Catchment System in Uganda

Adviser: Thomas Ballestero

Cameron Brochu Daniel O'Donnell

Civil Engineering
Gilford, N.H. Bridge Reconstruction
Adviser: Charles Goodspeed

Christopher Brown

Scott Champagne

Graham Conforti

Dean Goodale

Stephen Griffin

Lane O'Connor

Spencer Yergeau

Mechanical Engineering

Jonathan Crockett

Galen Farrar

Electrical Engineering

Derek Dupuis Gregory Warner

Computer Science

Peter Oliver Boris Yakubenko

Computer Engineering

UNH Remotely Operated Underwater

Vehicle (ROV)

Advisers: W. Thomas Miller,

M. Robinson Swift, May-Win Thein

Sean Brown

**Mary Donlon** 

Tristan Donovan

Amanda Green

James Halsey

Jonathan Tatone

Civil Engineering

Steel Bridge Team

Adviser: Charles Goodspeed

Stephen Brown Thalia Valkanos

**Environmental Engineering** 

**Ethan Cote** 

Civil Engineering

Mitigation of Greenhouse Gas Emissions Advisers: Kevin Gardner, Paul Kirshen,

Alison Watts

Sophia Burke

**Environmental Sciences** 

Acoustic Monitoring of Ebullitive Flux From a Mire Ecosystem in Subarctic

Sweden

Adviser: Ruth Varner

Taylor Burton Ethan Carrier Maxwell Cooper Tyler Fenton Taylor Fittro Patrick Horrigan

Civil Engineering *I-93/Exit 5 Bridge Over N.H. Route 28*Advisers: Robert Henry, Ricardo Medina

#### Elizabeth Cardin

Chemical Engineering GC-MS Analysis of Extracted Hydrocarbons From Oil Shale by Pyrolysis Conditions

Adviser: Jillian Goldfarb

Shaun Caron David Kurtz Paul Madea

Mechanical Engineering
Wave Energy at the Isles of Shoals
Advisers: Kenneth Baldwin,
M. Robinson Swift

Timothy Cava Anthony Coderre Logan Mower Douglas Nickerson Cameron Wichland

Chemical Engineering
Detect the CO2 Generation During the
Electro-oxidation of Ethanol
Adviser: Xiaowei Teng

Aidan Cecchetti Elizabeth Christmas James Flood Brianna Wentworth

Environmental Engineering
Design of Pressurized Diffused Aeration
Systems to Remove THMs From Selected
Springfield, MA Distribution Water Mains
Adviser: Michael Collins

Aidan Cecchetti

Environmental Engineering
Evaluation of a Proposed Model for THM
Removal in Drinking Water Treatment
System Storage Tanks Using Spray Aeration
Adviser: Michael Collins

Ana Celaya (graduate student)

Pablo Yangali

Chemical Engineering

The Study of Pyrolysis Reactions of Biomass-coal Blends Using a Chromatog-

*raphy-mass Spectrometry.* Adviser: Jillian Goldfarb

Joshua Chabot Michael Johnson Joseph Kelley

Mechanical Engineering
NASA Magnetospheric MultiScale (MMS)

Mission TableSat 1C Adviser: May-Win Thein

Ian Chase

Environmental Sciences Snow Albedo and Snowpack Density

Adviser: Serita Frey

Robert Chase Civil Engineering

Rising Sea Level Impacts on Road Infrastructure in Coastal New Hampshire Advisers: Jo Daniel, Jennifer Jacobs, Paul Kirshen

Robert Chase Connor Western

Civil Engineering
Kingsbury-Parsons Pedestrian Bridge
Adviser: Raymond Cook

Giorgi Chikhradze Ian Dorsey Joseph Miller

Information Technology IPv6 to IPv4 Translation Adviser: Scott Kitterman

Thomas Chingas William Finneran Erik Poulin Devon Smith

**Devon Smith**Civil Engineering
Cass Pond Dam Rehabilitation
Advisers: Thomas Ballestero,
Grace Levergood (NHDES)

Phylicia Cicilio

Chemical Engineering Octanol/Water Partitioning Coefficients of PCB Mixtures for Environmental Fate and Transport

Adviser: Jillian Goldfarb

**Chad Civello** 

Physics

How Well Can the Heavy Photon Search

Discover True Muonium? Adviser: Sarah Phillips

James Clifford Thomas Garvey Antoine Procyk

Mechanical Engineering

Timothy Gerade

Electrical Engineering Nicolas Grauel

Computer Science

UNH LunaCats—NASA Lunabotics

Mining Competition Adviser: May-Win Thein

**Ethan Cline** 

Physics

Characterization of Silicon Microstrip
Detectors With an Infrared Laser
Advisers: Maurik Holtrop, Sarah Phillips

Jesse Coburn

Physics

The Solar Wind Turbulent Energy Cascade

Adviser: Charles Smith

Stephen Collister Brett Goldman

Mechanical Engineering

Evaluation and Characterization of the Fluid Dynamics Within a Circular Flume

Adviser: Diane Foster

Zachary Cook Adam Downey Aaron Lecomte Meredith Swanson

**Tina Tomaszewski** Electrical Engineering

GPS Peripheral Navigational Aid

Adviser: Andrew Kun

James Cooper Civil Engineering

Alanna Gerton

International Affairs and Civil Engineering

Tanya Miller

**Emily Polychronopoulos** 

Civil Engineering

Residential Flood Protection Adviser: Charles Goodspeed

#### INTERDISCIPLINARY SCIENCE AND ENGINEERING SYMPOSIUM (ISE), CONTINUED

Ryan Cornelissen Lloyd Cornell Nicholas Dellacava

Civil Engineering
NHTI North Parking Lot
Adviser: Jo Daniel

**Matthew Coronis** 

Computer Science

Kavin Kang

**Electrical Engineering** 

Andrew Lapointe Matthew Mann Brendyn Miller

Mechanical Engineering
NASA Magnetospheric Multiscale
Mission—Tablesat IID
Adviser: May-Win Thein

**Jackson Corson** 

Computer Science Wireless 802.11 Automation Framework Adviser: Mikkel Hagen

Benjamin Couture Kyle Foster Willy Vasquez-Morales

Information Technology
Climate Control Project

Adviser: Tat Fu

Melissa Cripps

Environmental Sciences

Long-term Monitoring of Water Quality

Parameters in the Ossipee Watershed

Adviser: Michael Palace

**Justin Cullity** 

Chemical Engineering Characterization of Geobacillus Species for Industrial Use Adviser: Kang Wu

Bryan Custer Zachary Piispanen Jeremy Smith

Computer Science Robotic Navigation Utilizing the Robot Operating System (ROS)

Adviser: Wheeler Ruml

**Scott Cypher** 

Computer Science
Evaluating and Modifying a Tool for

Detecting Concurrency Errors in Java at

Runtime

Adviser: Philip Hatcher

Anthony D'Amico

Chemical Engineering
Thermal Stability of Graphene in Air
and Nitrogen
Adviser: Jillian Goldfarb

Anthony D'Amico Michael Seaman

Chemical Engineering
UNH ChemE Car
Adviser: Iillian Goldfarb

Mai-Linh Dao Civil Engineering

Sean Hanjra

Environmental Engineering and Computer Science

Charles Martens IV Adam Tirrell

Environmental Engineering Replacement of the NH Rt. 175A Bridge and Remediation of Gasoline Contaminated Soils in Plymouth, N.H.: Reexamining a Past Problem Adviser: Robert Henry

David DeLaRosa Michael Dixey

Information Technology

**Edward Mossman** 

Information Technology and Business Web Form to Email Handler
Adviser: David Blezard

Nickolas DeRossi

Computer Science

Application of Updates and Improvements to the UNH-IOL iSCSI Reference Software

Target Emulator Adviser: Robert Russell

Jessica DelGreco

Environmental Sciences
Estimating Anthropogenic Influence in
Tropical Forests Using Charcoal
Advisers: Crystal McMichael, Michael
Palace

Matthew Denaro Alexander McQuade Mark Plante

Electrical Engineering Sensor Suite for the Visually Impaired

Adviser: Wayne Smith

**Gregory DiSanto** 

Geography

Quantifying Interactions Between Stream Flow and Woody Seedlings in a Sand-bed River

Adviser: Anne Lightbody

**Gregory DiSanto** 

Geography

Precipitation Trends in Western Uganda Advisers: Joel Hartter, Mary Stampone

Sean Donnelly
Daniel Finnegan
Geoffrey Howe
Jeremy Kiefer
James Miller
Christopher Morton
Michael Saad

Matthew Schechter Mechanical Engineering Remote Controlled Airplane

Adviser: Todd Gross

Ethan Duane

Biochemistry, Molecular, and Cellular Biology Novel Antimicrobial Agents: Expression of Human Keratin 6A in Plants

of Human Keratin 6A in Plants Adviser: Subhash Minocha

Kathryn Dube

Chemistry

Selective Olefin Metathesis as Intra-chain Crosslinking Towards Nanoparticle Formation

Adviser: Erik Berda

Richard Emery William Lynch

Computer Science
Web-based Tower Defense Game
Adviser: Matthew Bemis

Eric Escobar Nathan Gendron Jason Hsu

**Electrical Engineering** 

**David Gervais** 

Mechanical Engineering
Automated PongBot

Advisers: Barry Fussell, Richard Messner

Caroline Espaillat Jared Hooper

Nathanael Rubin Information Technology

Web-based Collaborative Educational

Forum

Adviser: Hong Jin

David Estochen Jason Evancic Meagan McCowan

**Environmental Engineering** 

Stephen Uhlman

Civil Engineering
Life Cycle Analysis of the UNH Organic

Dairy Farm

Adviser: Kevin Gardner

Stephen Eustis Americo Santamaria Benjamin Sawyer Michael Spencer

Civil Engineering
UNH A-lot Parking Garage

Adviser: Raymond Cook

Justin Evans Daniel Hutchins

Information Technology

Kritiki: A Interactive Application for Conducting Critiques in the Classroom

Adviser: Mike Glidersleeve

Robert Evans Christie Sitthixay

Electrical Engineering

Edward Tan Michael Houldsworth

Computer Engineering

RFID Race Timing System for Smaller

Events

Adviser: W. Thomas Miller

Neal Faulkner

Computer Engineering Bedpan Management System Adviser: John LaCourse

**Brooke Ferry** 

Civil Engineering

I-293 Exit 6 Transportation Planning Study

Adviser: Tat Fu

Michael Figueroa Christopher Jacques

Civil Engineering
Asphalt Conditioning
Adviser: Jo Daniel

Evan Finnance Sean O'Brien Kevin Stein

Benjamin Weidmann

Mechanical Engineering Force Balance: Skier & Biker

Aerodynamics FPF Adviser: Martin Wosnik

David Fitzpatrick Stephen Passen Joseph Stiefel

Information Technology Resource Planning Website Adviser: Radim Bartos

**Justin Fleming** 

Chemistry

Synthesis and Applications of Tricyclic Bisoxaminals

Advisers: Gary Weisman, Edward Wong

Jonathan Frey

Electrical Engineering

Architecture Improvement for Secure Integrated Circuits

Adviser: Qiaoyan Yu

Maegan Gagne (graduate student) Rajtilak Majumdar (graduate student)

**Heather Wingate** 

Biology

Effects of Heavy Metals and Salt on Wild Type and High Putrescine Arabidopsis

Adviser: Subhash Minocha

Nihco Gallo David Hawk

Mechanical Engineering

Garret Healey

Mathematics

Trash Adapt: Healthier, Cleaner, Smarter Communities

Adviser: Ioannis Korkolis

Paul Galvin Shaun McCarthy

**Electrical Engineering** 

Determination of Position Estimation Error Using Low Cost Inertial Sensors

Adviser: Kent Chamberlin

Maxwell Grady (graduate student)

Darren Valovcin

Physics

 ${\it The Growth Characterization of Graphene}$ 

on Ruthenium(0001) Adviser: Karsten Pohl

Patrick Greene

Physics

Developing an On-line Space Weather

Forecast System

Adviser: Kai Germaschewski

Katherine Grzejka

Chemistry

Progress Towards 2-(Aminomethyl)-Benzenethiol for Use in Modeling Biological Metal-thiolate Bonds

Adviser: Samuel Pazicni

William Gustafson

Alexander Kachuck

Timothy O'Neil Kevin Quinn

Damon Tarry

Anthony Tonelli

Ionathon Ulrich

Theodore Withers

Mechanical Engineering

Devan Shea

Mechanical Engineering and Applied

Mathematics
Baja SAE Vehicle

Adviser: Todd Gross

**Rose Hadley** 

Chemistry and Neuroscience and

Behavior

Development of a Method to Quantitate Divalent Metal Ion Uptake of Retinal

Phosphodiesterase Enzyme 6

Adviser: Roy Planalp

Natalie Hall

Plant Biology

Protection of Arabidopsis Thaliana from

Abiotic Stressors by Putrescine Adviser: Subhash Minocha

Connor Harrison

Mechanical Engineering

Tidal Energy Demonstration Channel

Adviser: Martin Wosnik

#### INTERDISCIPLINARY SCIENCE AND ENGINEERING SYMPOSIUM (ISE), CONTINUED

#### **Stephen Harrison**

Civil Engineering

Jihyon Im

Matthew Pearsall

Bodhi Piedmont-Fleischmann

Lucie Worthen

Environmental Engineering The Dominican Republic Clean Water Senior Project

Adviser: James Malley

#### Runzhi He

Chemical Engineering Developing Natural Competence for Geobacillus

Adviser: Kang Wu

#### Christopher Hebert

Computer Science and Mathematics Using Real-time Algorithms to Improve Cooperative Pathfinding Techniques

Adviser: Wheeler Ruml

#### **Geoffrey Houle**

**Environmental Engineering** Water Quality Assessment of Georgetown, Maine

Adviser: Nancy Kinner

#### **Talcott Hubbard Matthew Lemay**

Mechanical Engineering AMSC Ic Test Streamlining Adviser: Todd Gross

#### **Brian Hurley**

Biology

**Ashley Matthews** (graduate student) Production of Neoculin (Taste Modifying Protein) in Vegetables Through Genetic Engineering

Adviser: Subhash Minocha

#### Jihyon Im

**Environmental Engineering** Removal of Nitrate From Treated Wastewater by the Method of Ion Exchange Adviser: James Malley

#### Justin Isabelle

Computer Engineering Global Range Weather Monitoring Using an Internet of Things Adviser: Andrzej Rucinski

#### Amit Jain

#### Patrick O'Bovle

**Electrical Engineering** Smart Grid in the Home Adviser: Allen Drake

Michael Jefferson (graduate student, Guest from Elizabeth City State University)

Computer Science

Survey to Detect Long-term Variability in Pine Island Bay Coastal Ice Using Archived

Landsat Imagery

Adviser: Malcolm LeCompte (ECSU)

#### Luxmy Jeyendran **Emilee Martin**

#### Rebecca Thormann

Civil Engineering

Modular School Built From Shipping

Containers

Adviser: Robert Henry

#### Julia Kallmerten

Civil Engineering Renewable Energy

Adviser: Charles Goodspeed

#### **Stacy Karthas**

Physics and Mathematics

Event Monitoring Software for the Heavy

Photon Search Experiment Adviser: Maurik Holtrop

#### **Josiah Kelsall**

#### Katherine Neumann

#### **Wesley Sousa**

Information Technology

#### **Stephen Potts**

**Economics and Information Technology** UNH Software Defined Network

Adviser: Scott Valcourt

#### **Brian Kispert**

Chemistry

Studies of Stoichiometric Monobenzylation of Cross-bridged Cyclam by SN2 Alkylation and Reductive Alkylation

Advisers: Gary Weisman, Edward Wong

#### Ashley Klink

Biology

**Rajtilak Majumdar** (graduate student)

**Lin Shao** (graduate student)

Effects of Abiotic Stress Factors on Sadenosylmethionine Decarboxylase (SAMDC) Genes on Arabidopsis Thaliana

Adviser: Subhash Minocha

#### Daniel Kramer **Joseph Landry**

Eliza Morrison

#### Erica Rochefort

Environmental Engineering Development of Affordable Oil Cleanup

for Small Farms Adviser: Nancy Kinner

#### Daniel Kupferschmid **Taylor Smith**

Civil Engineering

Memorial Bridge Turbine Design:

Structural Support Adviser: Erin Bell

#### Edward LaVilla

Physics

The EPI-Lo Concept Instrument Response to Incident Electrons, Modeled Using EGS4 Advisers: James Connell, Clifford Lopate

#### Amanda Lade

Chemical Engineering Hydrothermal Processing of Biomass:

Conversion of Brewing Byproducts to Renewable Energy at Redhook Brewery

Adviser: Iillian Goldfarb

#### Sean Laman Jared Ogden

**Electrical Engineering** Class D Amplifier Adviser: Richard Messner

#### Leslie Lamarche

Physics

Integration of the UNH Data into the Neutron Monitor Database

Adviser: James Ryan

#### Anne Lamontagne

Physics

Improving Detection Efficiency of a Space-based Ion Mass Spectrum Analyzer Adviser: Mark Popecki

Ryan Lawrence (Guest from Elizabeth City State University)

Chemistry

Light Effects on Chamber Measurements of Methane and Carbon Dioxide Fluxes and their Isotopologues in a sub-Arctic Mire Adviser: Ruth Varner

#### Adam Leone

Computer Science

#### **Travis Royer**

Computer Engineering

Project 54: Instrumented Steering Wheel

Adviser: Andrew Kun

#### Melissa Lever

Chemistry

Chemical vs Physical Activation Methods for Producing Carbon Adsorbents From

*Olive Mill Waste* Adviser: Jillian Goldfarb

#### Zachery Levesque

Luigi Pasto

**Jacob Therrien** 

**Kimberly Worcester** 

Mechanical Engineering

### Jonathan Nappi

Jeffrey Puzzo

Computer Engineering

#### Justin Remillard

Computer Science

Asteroid Mitigation Project Adviser: May-Win Thein

#### Samuel Levin Scott Shidlovsky

Computer Science

Federated Movie Search Presentation

Adviser: Matthew Bemis

#### Erik Lindgren

Physics

Statistical Analysis of Electromagnetic Ion Cyclotron (EMIC) Waves and Their Correlation to the 11-year Solar Cycle

Adviser: Marc Lessard

#### **Evan Locke**

Civil Engineering

B-lot Parking Garage

Adviser: Raymond Cook

#### **Brian Madore**

Geology

Morphometric Analysis of Ribbed Moraines Revealed by LiDAR Data in the Seacoast Region of New Hampshire Adviser: Joseph Licciardi

#### Kadina Mazic

Biochemistry, Molecular, and Cellular Biology The Effect of pH on the Charge of a Monoclonal Antibody Advisers: Dana Filoti, Thomas Laue

#### Meagan McCowan

Environmental Engineering
Method Development in Determining
Activated Carbon Content in Hydric Soils
Adviser: Kevin Gardner

#### **Hilary Miller**

Chemistry and Spanish
Benzyl Group Migration and Exchange
in Arenium Ions
Adviser: Richard Johnson

#### Kathleen Miller

Chemical Engineering Preparation of Activated Carbons From Waste Peanut Shells for Use as a Sorbent Material

Adviser: Jillian Goldfarb

#### **Timothy Mitsopoulos**

Computer Engineering Documentation for the GNAT-X Experimental Computer System Adviser: Andrzej Rucinski

#### Joshua Moberger

Electrical Engineering Development and Testing of a Balance Platform Perturbator for Research in Neuromuscular Physiology and Biomechanics

Advisers: Ronald Croce, Wayne Smith

**Derek Morris** (Guest from Elizabeth City State University)

Computer Science

Installation Requirements and Internal Processes at ECSU for the 3.6m X/L Band System, 3.7m C-band System, and 5.0m L Band Satellite Ground Stations Advisers: Linda Hayden, Je'aime Powell (ECSU)

#### Maria Paula Mugnani

Environmental Sciences

Ecosystem-vegetation Dynamics in
Sub-arctic Stordalen Mire, Sweden
Adviser: Ruth Varner

#### Sachi Nagada

Chemical Engineering Co-sleeping Mothers and Babies and Sudden Infant Death Syndrome Advisers: Russell Carr

#### Michael Nardone Ir

Chemistry

Zinc Carbenoid Reactions of Unsaturated Beta-dicarbonyls Adviser: Charles Zercher

Adviser: Charles Zercher

#### Dylan O'Ceallaigh

Computer Science

Improving Real-time Heuristic Search in

*Dynamic Domains*Adviser: Wheeler Ruml

#### Jesse O'Connor Daniel Shea Peter Somers

Computer Science *Psychohistory* 

Adviser: Matthew Bemis

#### Gabriel Paiva

Environmental Sciences
The Influence of Land Cover Dynamics on
CO2 Flux: A Case Study in Sao Jose Dos

Campos, Brazil Adviser: Michael Palace

#### Lauren Pappas

Chemical Engineering Adsorptive Properties of Activated Cocoa Shells for the Removal of Amoxicillin from Wastewater

Adviser: Jillian Goldfarb

#### Jeffrey Picard

Mathematics

Porting the Particle in Cell Code PSC to the New Intel Xeon Phi Architecture Advisers: Kai Germaschewski

#### **Shannon Poges**

Chemistry

Polyketone Acene Mimics

Adviser: Glen Miller

#### Priya Prabhakar

Information Technology

Liberty Mutual: Abend Process Job

Mapping Maintenance Project

Adviser: Richard Riepel (Liberty Mutual)

#### INTERDISCIPLINARY SCIENCE AND ENGINEERING SYMPOSIUM (ISE), CONTINUED

#### **Kelsey Price**

Chemical Engineering
Energy and Water Resource Efficient
Production of Microalgae Lipids
Adviser: Ihab Farag

## Ansel Renner

Mathematics and Economics
Dynamics and Unsustainable Practices
in the New Hampshire Fishery
Adviser: John Halstead

Alicia Reynolds (Guest from Elizabeth City State University) Mathematics Education The Impact of 2006–2012 CReSIS Summer Research Programs on Students' Choice of a STEM Related Major in College

Adviser: Darnell Johnson (ECSU)

#### **Benjamin Rogers**

Chemistry
Synthesis of P

Synthesis of Polymeric Nanostructures by the Palladium-catalyzed Sonogashira Coupling

Adviser: Erik Berda

#### **Julianne Sacco**

Mathematics Education and Spanish Definitions in Mathematics: What Do High School Students Know?

Adviser: Sharon McCrone

#### Kayla Santello

**Environmental Engineering** 

#### Priscilla Tengdin

Civil Engineering
The iPad: Love it or Leave it
Adviser: Robert Henry

#### **Daniel Sargent**

Mechanical Engineering Laser Optimization Module Adviser: F. William Hersman

#### Louis Saviano III

Environmental Sciences Physiographic and Hydrologic Characteristics of Rich and Poor Swamps in Southeast New Hampshire

Adviser: Thomas Lee

#### Mark Scimone

Neuroscience and Behavior Auditory Brain Computer Interface Using a Moving Sound Source Adviser: Andrew Leber

#### Samantha Sinclair

Geology

Reconstructing the History of Natural and Anthropogenic Sediment Inputs Behind the Former Head-of-tide Dam in the Bellamy River, Dover, N.H.

Adviser: Joel Johnson

#### Nicholas Sjostrom

Information Technology Analyzing Spoken Dialogue and Pupil Diameter on a Multi-touch Surface Adviser: Andrew Kun

#### Herbie Smith

Physics

Calabi-Yau 3-Folds as Candidates for String Theoretical Extra-dimensional Space and Their Effects on the Universe

Adviser: Per Berglund

#### Amanda St. Jean

Chemistry

The Double Chain Extension Adviser: Charles Zercher

#### Matthew Stemkowski

Statistics

Yield Criteria for Helical Solenoids Under a Magnetic Pulse

Advisers: Brad Kinsey, James Ryan

#### **Drew Stock**

Computer Engineering
Investigation of Multiple-bit Upsets for
Reliable Integrated Circuits
Adviser: Qiaoyan Yu

#### Catherine Tarushka

Mathematics Education Chosen Multiplication Methods and the Ability to Learn New Methods Adviser: Sharon McCrone

#### Meghan Tobin

Chemistry

Synthetic Approach to 5,6-Benzo-1-azabicyclo[2.2.2]octane-2-one: A Lactam Having Zero Resonance Energy

Adviser: Arthur Greenberg

#### Ian Tracy

Electrical Engineering CANopen Stack Comparison Adviser: John LaCourse

#### Victoria Ward

Environmental Sciences
Cycling of Molecular Hydrogen in
Subarctic Sweden
Adviser: Ruth Varner

#### Andrew Wells Paige Dickie

Civil Engineering
Tweeting (Dis)comfort
Adviser: Tat Fu

#### **Gregory Welter**

Geology

Paleomagnetic Polarity Reversals Across the Paleocene Eocene Thermal Maximum Adviser: William Clyde

#### **Brittany White**

Chemistry

Novel Carbocation Rearrangements of Polycyclic Compounds Adviser: Richard Johnson

#### Daniel White

Civil Engineering
Proposed Innovation Drive Bridge Design
Adviser: Robert Henry

#### Peter Wituszynski

Electrical Engineering
Intelligent HVAC Control
Adviser: Allen Drake

#### **Emily Wong**

Chemical Engineering Solution Phase Synthesis of Silver Nanowires for Printed Electronics Advisers: Dale Barkey, Xiaowei Teng

#### Jonathan Wurtz

Physics

Initial Findings for High-power DPAL Laser Simulations

Adviser: F. William Hersman

#### Jeremiah van Baren

Physics

Investigation of Pentacene Derivatives on Au(788) by Auger Electron Spectroscopy Adviser: Karsten Pohl

## UNH Manchester Undergraduate Research Conference

## **Poster Presentations**

Wednesday, April 24 3:30–6 p.m. University Center Manchester

The UNHM Poster Presentations showcase students' independent research and internship projects, service learning activities and civic engagement projects in the learning lab of the city of Manchester.

John Allebaugh Kyle Douglas Matthew Gillespie Justine Hewitt Michael Hussni Stephanie Peltak Nicole Romanuk Amanda Turni

Communication Arts

Kayla Hall

Business

High School Students and College Choice: A Community-based Research Project Adviser: Patrice Mettauer

#### Sophie Allen

Community and Environmental Planning and Sustainable Agriculture and Food

Middle East-US Relations Adviser: John Resch

#### **Kyle Bassler**

History
Cold War Counter Insurgency: The
Formation of the Green Berets
Adviser: John Resch

#### Jessica Besong

Biological Sciences Physical Therapy and All its Perks Adviser: Stephen Pugh

#### **Jessica Bissett**

Humanities

Birmingham and Civil Rights: Revolution in Public Conscience

Adviser: John Resch

#### **Ruby Booateng**

Biochemistry, Molecular, and Cellular Biology Investigating the Cytotoxicities of Human O6-Alkylgaunine-DNA Alkyltransferase (hAGT) Variants C145A and K125L Adviser: Natalia Tretyakova

#### **William Boss**

Biological Sciences
Water Turbidity—The Concealer of
Contaminants
Advisers: Patricia Halpin, Stephen Pugh

#### **Dylan Boucher**

Biological Sciences Watergate Scandal Adviser: John Resch

#### Colleen Carter

Biological Sciences

Preclinical Magnetic Resonance Imaging

Adviser: Stephen Pugh

#### David Ciampa

History

American Capitalism Pre-Civil War Adviser: Robert Macieski

#### Erin Clark

English

Discrimination of Gays and Lesbians in the Military

Adviser: John Resch

#### Josie Colbert

History

The Irish Impact on Catholicism in Manchester, New Hampshire Adviser: Robert Macieski

#### **Alexis Dagher**

Biological Sciences International Pediatric Care Adviser: Stephen Pugh

#### Ryan Gardner

Biological Sciences Analysis of Bear Pond Adviser: Stephen Pugh

#### Steven Gaughan

Psychology

#### Elias Koester

Psychology and Communication Arts Community-based Research: Program Evaluation of Boys & Girls Club Teen Center

Adviser: Alison Paglia

#### Raquel Gawron

History

Justice Denied: The Story of Emmett Till Adviser: John Resch

#### Khatira Ghafari

**Biological Sciences** 

How Raw Water is Purified for Drinking Use and as Well as Other Things Adviser: Patricia Halpin

Megan Gosselin

Psychology

Homeland Security: Public Reactions to the Patriot Act

Adviser: John Resch

#### Serena Hamelin

History

Development of Dams and the Effect on Fish Populations Between 1800–1899 Adviser: Robert Macieski

Kellie Howard

#### Biological Sciences and Psychology

Molly Miller

Biological Sciences

Shingles

Adviser: Patricia Halpin

#### Arber Isufaj

Biological Sciences Lens Production Adviser: Stephen Pugh

#### Sarina Johnston

History

Manchester Mill Girls and Labor Activism in the 1840s

Adviser: Robert Macieski

#### Norah Katile

Biological Sciences Nursing Assistants Adviser: Stephen Pugh

#### UNH MANCHESTER UNDERGRADUATE RESEARCH CONFERENCE, POSTER PRESENTATIONS, CONTINUED

**Aaron Kinne** 

**Biological Sciences** 

Environmental Impact and Physical Growth of the UNH at Manchester

Vertical Garden

Adviser: Patricia Halpin

**Christopher Kinney** 

Business

Martin Luther King; Birmingham 1963

Adviser: John Resch

Alex Kornik

Business

Counter Culture: Woodstock (1969)

Adviser: John Resch

Joseph LaBarre

Timothy Larochelle William Robidoux

Psychology

The Effects of Depth and Mask Coherence on Disappearance Frequency and Duration

*in Motion Induced Blindness* Adviser: John Sparrow

Menchu LaFlamme

**Biological Sciences** 

Internship at Manchester Water Works Laboratory: Monitoring Phosphate's

Presence in Water.

Adviser: Stephen Pugh

Michael Leriche

Humanities

Affirmative Action: The Bakke Case

Adviser: John Resch

Michael Leriche

Humanities

The Influence of Pop Culture and The

Beatles on The Soviet Union Adviser: John Cerullo

**Kaley Letendre** 

Sign Language Interpretation and English

*War Poetry: Vietnam* Adviser: John Resch

Heather Mamos Daniel Ouellette

Megan Shevenell Psychology

Community-based Research: Concord Boys

and Girls Club Program Evaluation Adviser: Alison Paglia Christina McCann

**Biological Sciences** 

Oral Pathology of the Dental Hygienist

Adviser: Stephen Pugh

**Zachary McElwain** 

**Biological Sciences** 

Soldiers in Vietnam: Internal Confusion

and the My Lai Massacre Adviser: John Resch

**Keegan McGuinness** 

Humanities

Public Portrayal of the Rise & Dissolution

 $of the \ American \ Party \ 1854-1857$ 

Adviser: John Resch

**Molly Miller** 

**Biological Sciences** 

Qualitative and Quantitative Analysis of Water Samples Along the Water Treatment

Pathway

Adviser: Patricia Halpin

Christina Minervini

Undeclared

Origins of the Cold War: Potsdam

Adviser: John Resch

**Cindy Morales** 

Biological Sciences

Colon Cancer

Adviser: Stephen Pugh

Jessica Normand

**Biological Sciences** 

Aquaponics: The Food of The Future

Adviser: Patricia Halpin

Jessica Normand

**Biological Sciences** 

The Effects of Plant Population Densities

on Growth and Yield Adviser: Patricia Halpin

Samuel O'Brien

History

The Marshall Plan and its Impact on

*Post-war Europe* Adviser: John Cerullo

Jeffrey Ouellette

Humanities

Sacco and Vanzetti: Prejudice and Injustice

*in the United States* Adviser: John Resch Donovan Pal

Biological Sciences

A Potential Pandemic: A Research on

Influenza

Adviser: Stephen Pugh

Ariana Pinette

Humanities

Martin Luther King and the Philosophy

of Non Violence Adviser: John Resch

Mitchell Planty

Biological Sciences

Cystic Fibrosis

Adviser: Stephen Pugh

**Allison Powell** 

**Biological Sciences** 

Diversity of Animals at Manchester

Cedar Swamp

Adviser: Stephen Pugh

**Thomas Rhoades** 

History

The Irish Troubles

Adviser: John Cerullo

**Christine Ritze** 

**Biological Sciences** 

Occupational Therapy

Adviser: Stephen Pugh

Rachel Roblee

Business

The Trial of Angela Davis

Adviser: John Resch

**Justin Ross** 

Biological Sciences

The Physician Assistant Career

Adviser: Stephen Pugh

Katie Sarette

**Communication Arts** 

Cold War Espionage: The Rosenberg Trial

Adviser: John Resch

Sean Schmidenberg

History

Post Tito Yugoslavia: Transitional Justice

or Genocide

Adviser: John Cerullo

Danielle Schmidt

History

Mill Girls: The Transistion from Farm Life

to Factory Life

Adviser: Robert Macieski

#### Danielle Schmidt

History

The British Punk Rock Movement

Adviser: John Cerullo

#### **Amanda Segeberg**

Humanities

Chinese Exclusion Act Adviser: John Resch

#### **Heather Smith**

Biological Sciences

The Dirty Truth Behind Getting Clean

Adviser: Sarah Prescott

#### **Devan Smithe**

Business

Johnson's Great Society: Public Response to

Medicare

Adviser: John Resch

#### Sean Stafford

History

Japanese American Internment During

World War II

Adviser: John Resch

#### Cori Steck

**Biological Sciences** 

Women's Rights: Betty Friedan, Response

to the Feminine Mystique

Adviser: John Resch

#### Nicholas Terry

Business

Response to the Invasion of South Korea

Adviser: John Resch

#### **Justin Wolbert**

History

Democracy and Race in the Trail of Tears

Adviser: John Resch

#### Justin van Kalken

History

United States Criminal Activities in the

Antebellum Period

Adviser: Robert Macieski

#### Justin van Kalken

History

Civil Rights March 1965

Adviser: John Resch

# UNH Manchester URC Cinema Arts Day

#### Thursday, April 25 10 a.m.–1 p.m. University Center Manchester

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

#### Jessica Besong

**Biological Sciences** 

Sunburns: The Damaging Effects

Adviser: Stephen Pugh

## **Kyle Charrette Joseph Collins**

Communication Arts

Documentary Profile—Double Midnight

Comics

Adviser: Anthony Tenczar

#### Joseph Collins

Communication Arts

Abduction

Adviser: Anthony Tenczar

## Alexis Dagher

Zahra Essa

#### Jehona Latifi

**Biological Sciences** 

 $ALS\ (Amyotrophic\ Lateral\ Sclerosis)$ 

Adviser: Patricia Halpin

#### **Seth Fornash**

Communication Arts

Farmor

Adviser: Anthony Tenczar

#### Khatira Ghafari

**Biological Sciences** 

Why Hair Turns Gray

Adviser: Patricia Halpin

#### Stephen Gibson Scott Webster

Biological Sciences

The Killer that Doesn't Kill: HIV on the

Immune System

Advisers: Patricia Halpin

#### Matthew Gillespie

Communication Arts

Little Red Heart

Adviser: Anthony Tenczar

#### **Justine Hewitt**

Communication Arts

On My Way

Adviser: Anthony Tenczar

#### Kellie Howard

Biological Sciences and Psychology

#### Molly Miller

Biological Sciences

Shingles

Adviser: Patricia Halpin

#### Ruth Linehan

Communication Arts

A Day At The Park

Adviser: Anthony Tenczar

#### **Ryan Liston**

Communication Arts

Cat Scratch Fever

Adviser: Anthony Tenczar

#### Zaynab Mahmod

Biology and Applied Mathematics

*Iron Deficiency Anemia* Adviser: Patricia Halpin

#### Patrick McNameeKing

Communication Arts

Haiku

Adviser: Anthony Tenczar

#### **Andres Reyes**

Communication Arts

Saving Chester

Adviser: Anthony Tenczar

#### **Justin Ross**

**Biological Sciences** 

Why Do We Sneeze?

Adviser: Patricia Halpin

# The Naked Arts — Creativity Exposed

### Act II

Thursday, April 25 12:30–2 p.m. Hennessy Theatre Paul Creative Arts Center

This event exposes the inner creative process of artists working in various disciplines. Presenters will describe the process, research, and other creative aspects undertaken to bring an artistic creation from initial inspiration to the stage or gallery. This may include a performance or excerpts from their work to illustrate their creative scholarship.

#### Julia Brush

English and Classics Let's: Poetic Thoughts Adviser: Thomas Payne

#### Sara Demos Alyssa LeBlanc

Theatre
Set and Costume Design for Old Times,
A Play by Harold Pinter
Adviser: Szu-Feng Chen

#### Katharine Jordan

Theatre *Fury* 

Adviser: David Kaye

#### Jennifer Lamontagne

Art Studio

To Know: Renewing Contemporary Religious Art Through the Figure

Adviser: Leah Woods

#### **Briana Traynor**

Theatre

The Use of Arts Integration to Enhance Differentiated Instruction in the Elementary School Classroom Adviser: Raina Ames

## History Department Undergraduate Presentations

Thursday, April 25 12:30–2 p.m. Memorial Union Building Rooms 332, 338 and 340

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

#### MUB, 340

# Government in Practice, Ideas of Government, and Governing Ideas

Moderator: Janet Polasky

#### **Iillian Stackhouse**

English and History
The After-effects of King Henry VIII's
Religious Policies
Adviser: Cathy Frierson

#### Kevin Vansylyvong

History and Philosophy *Locke's Two Tracts*Adviser: Eliga Gould

#### Benjamin Grande

History

From Covalent to Forgotten: King Philip's War and the Colonial Shift in Attitude

Adviser: Julia Rodriguez

#### Cory McKenzie

History and Philosophy
The Courts Have Been Reorganized and
Placed above the Influence of Partisanship:
New Hampshire's Unusual Tradition of
Court-clearing

Adviser: Jessica Lepler

#### John Callahan

English and History
Finding the Lost Generation: Looking
for America in the Eyes of Expatriate
American Writers Living in Paris During
the 1920's

Adviser: Julia Rodriguez

#### Ella Nilsen

History

The Implications of Power: Exploring the Decline of Congressional Foreign Policy Power Since the 1970s Adviser: Jason Sokol

#### MUB, 332

### Histories of National and Local Identity Construction in War and Peace

Moderator: Lucy Salyer

#### Maree Magliocchetti

History

"We Were a City Unto Ourselves:" A History of the Old North End of Portsmouth, New Hampshire Adviser: Lucy Salyer

#### **Timothy Brock**

History

Naturalization and Denaturalization of Radicals in the United States Adviser: Lucy Salyer

#### Alexa Price

History

The Spirit of His Men: The Development of the Lord Nelson Legend, 1805–1905 Adviser: Nicoletta Gullace

#### Lydia Gove

History

A Welcoming Mother Country or Land of White Superiority? Race and Immigration to Britain After WWII

Adviser: Nicoletta Gullace

#### Sean Hardies

History

God and Man Will Judge: British Propaganda and the Confiscation of German Colonial Africa Adviser: Nicoletta Gullace

#### **Brian Kraus**

Economics and History and Philosophy Labour Shortage and Health Reform in the Mines of the Gold Coast: A Study in Historical Linkages

Adviser: Nicoletta Gullace

#### Johnathan Murphy

History

A War of Representation: The Philippine Scouts and the Philippine Constabulary in

*the Public Eye* Adviser: Lucy Salyer

#### MUB, 338

#### History, Memory, and Justice

Moderator: Cathy Frierson

#### Robina Mitchell

History

The Pequot War

Adviser: Cathy Frierson

#### Nathan Marzoli

History

New Hampshire Civil War Soldiers and Slavery

Adviser: Cathy Frierson

#### Kerri Hunkele

Justice Studies and History Legislative Actions to End Slavery: From the Emancipation Proclamation to the Civil Rights Movement

Adviser: Cathy Frierson

#### **Rose Phipps**

History and Art History
From Slave Labor to Contract Labor:
Examining How Contracts and Labor
Worked Together in Postbellum America
Adviser: Cathy Frierson

#### **Nathaniel Frechette**

History

*Katyn: Crime and Reconciliation* Adviser: Cathy Frierson

#### **Charles True**

History

A. A. Vlasov as a Flashpoint in Russian National Identity

Adviser: Cathy Frierson

#### **Mark Torrey**

History

The Anfal Campaign and Kurdish Nationalism

Adviser: Cathy Frierson

## Thompson School Undergraduate Student Showcase

#### Thursday, April 25 5:30–7:30 p.m. Cole Hall (Stacey's)

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

#### Nicholas Lanzer

Forest Technology

The Effect of Timber Harvest Treatment on Residual Stand Growth: a Dendroecological Approach

Adviser: Michael Simmons

A full list of participants will be available at the event.

# UNH Manchester URC Technology Day

## Engineering Technology Senior Projects

Friday, April 26 8 a.m.-5 p.m. Pandora Mill Manchester

The UNHM Engineering Technology Program presents its annual Senior Project Presentation day. This event is the culmination of an academic year effort where full-time seniors formally present their projects to peers, faculty members, representatives and technical advisers of sponsoring companies, and special guests.

### **Kevin Castonguay**

#### Wendell Mejia

Mechanical Engineering Technology Universal Mold Frame Design Project Adviser: Paul Ricketts

#### Andrew Daneau Joshua Hough

Mechanical Engineering Technology Redesign of Hydropneumatic Struts Adviser: Paul Ricketts

#### John Danis

Mechanical Engineering Technology Jewell Instruments—Universal Inclinometer Adapter Adviser: Paul Ricketts

## Andrew Davenport

Mechanical Engineering Technology Electro-Chemical Machining and Parameter Optimization Adviser: Paul Ricketts

#### Paul Dube

Mechanical Engineering Technology Test and Optimization of New Valve Configuration

Adviser: Paul Ricketts

#### Robert Englehardt

Electrical Engineering Technology SRAM Test Module With FPGA
Adviser: David Forest

#### Robert Merrill IV

Mechanical Engineering Technology

Lower Lumbar Traction Machine

Adviser: Paul Ricketts

#### **Evan Morse**

Electrical Engineering Technology EMC Validation Tool Adviser: David Forest

#### Edward Pulkowski

Electrical Engineering Technology FIRSTs Team Information Matching System (TIMS)

Adviser: David Forest

#### UNH MANCHESTER ENGINEERING TECHNOLOGY, CONTINUED

#### Steven Vautour

Mechanical Engineering Technology Velcro USA Napping System Adviser: Paul Ricketts

# UNH Manchester URC Technology Day

# Computing Technology Poster Presentations

Friday, April 26, 2013 Noon–5 p.m. Pandora Mill Manchester

Scott Adie Nicholas Regan Marc Southard

Computer Information Systems Capstone Project—Capturing Experiments with SpEAK

Adviser: Michael Jonas

Saverna Ahmad Eric Beikman

**Computer Information Systems** 

Michael Marchand

Biological Sciences

Found You! A Compass to Your Friends

Adviser: Mihaela Sabin

Joshua Anderson Valerie Therrien

Computer Information Systems

Thomas Mendola

History

ReminderBinder: Social Integration of

Note Taking and To-Do Lists Adviser: Mihaela Sabin **Kevin Annis** 

Matthew Henniger Samuel Workman

Electrical Engineering Technology

Vincent Gagliardi Michael Mailloux

Computer Information Systems
Capstone Project: "Oh, Uh" Data Capture

Adviser: Michael Jonas

Eric Beikman Joseph Gallagher Thomas McCarthy

Justin Mulholland

Computer Information Systems

Joshua MacPherson Drew Mather

Electrical Engineering Technology Capstone Project—Speech Modeling:

Training & Decoding Adviser: Michael Jonas

Michelangelo Bianchi

Brian Drouin Tyler Martin

**Michael Tormos** 

Computer Information Systems

Capstone Project—On The Spot: System

Support

Adviser: Michael Jonas

Michael Brown Harry Dodson III Charles Haynes

Bego Terzimustafic

Computer Information Systems
Capstone Project—The Right Tool for

the Job

Adviser: Michael Jonas

Melissa Bruno

Undeclared

Learning Java with Greenfoot: Quoridor

Battle Royal

Adviser: Michael Jonas

Colby Chenard Sinisa Vidic

**Computer Information Systems** 

Calvin Mwangi

Politics and Society

Geography 101: Discover the World

Adviser: Mihaela Sabin

**Chad Connors** 

Computer Information Systems

Online Presence for RS Fireworks through

Interactive Web Design Adviser: Mihaela Sabin

Brian Drouin

Computer Information Systems
Refactored Relational Database to Support

Cable Services Operations Adviser: Mihaela Sabin

taviser. Williacia Sabin

Mohamed Fadlalla Michael Henenberg

Computer Information Systems

**Drew Mather** 

Electrical Engineering Technology
The Jungle: An Educational App for Kids

Adviser: Mihaela Sabin

Christian Jackson

Computer Information Systems

Cloud Services Policy Management System

Adviser: Mihaela Sabin

Tyler Martin

Computer Information Systems

Virtualization of Production Environments for Classroom Instruction and Academic

Research

Adviser: Mihaela Sabin

Brandon McLaughlin Justin Mulholland

Alex Shreenan

Computer Information Systems

Mathapalooza: Tutoring App for K-8

Students

Adviser: Mihaela Sabin

**David Meehan** 

Computer Information Systems YWCA Donation Management and

Reporting System Prototype Adviser: Mihaela Sabin

## Parents Association Undergraduate Research Symposium

Welcome Breakfast with John Aber, UNH Provost; Debbie Dutton, Vice President for Advancement and President, UNH Foundation; and Cyndy Dow, President, Parents Association

#### Friday, April 26 9–9:30 a.m. Memorial Union Building Granite State Room

This informal gathering gives students, faculty and attendees an opportunity to hear an overview before experiencing the large university-wide event that follows—the Parents Association Undergraduate Research Symposium.

## Parents Association Undergraduate Research Symposium

## Oral Presentations, Session A

#### Friday, April 26 9:30–10:40 a.m. Memorial Union Building

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

#### **MUB, Rockingham Lounge**

# Exploring Research in Anthropology I: History and Environment

Moderator: Svetlana Peshkova

#### Hillary Christopher

Anthropology

Neolithic Cheese: An Archaeological

Experiment

Adviser: Meghan Howey

#### **Courtney Mills**

Anthropology and History The Gulf of Maine Cod Crisis: What Can the Past 5,000 Years Tell Us? Adviser: Meghan Howey

#### Jillian Price

Anthropology and History Archaeology of Preparedness: Excavating UNH's World War I Training Camp Adviser: Meghan Howey

#### **Monica Stewart**

International Affairs and Anthropology The 'Doctor' and the 'Patient:' An Exploration Into the Roles Assigned Advisers: Joe Lugalla, Judy Stevens, Sara Withers

#### MUB, Room 233

# Comm-entary 2013: A Selection of Research Published in the Student Communication Journal

Moderator and Adviser: Kevin Healey

#### **Gennifer Davidson**

Communication

Setting Boundaries When Social Media is Used in Schools

#### Kayla Doyle

Communication

Religion, Spirituality, and So You Think You Can Dance

#### Elizabeth Griffith

Communication and Women's Studies Analysis of Women in Education

#### MUB, Room 338

## Comparative Environmental Politics

Moderator and Adviser: Stacy VanDeveer

#### Cassandra Biron

Political Science

Political Parties, Agenda Setting, and Implementation in the U.S. and Germany

#### Paul Chiarantona

Entrepreneurial Studies and Political Science

Vulnerability to Climate Change and National Environmental Policy Responses

#### Camilla Cooper

Communication and Political Science Green Business and Politics: Past, Present, and Future

#### Patrick McManus

Political Science

Implementation of Renewable Energy in Developing Countries

#### Andrew Obston

Political Science Changing Environmental Policies in Developing Countries

#### MUB, Room 304

## Ethnic Studies I: American Indian Literature in the 21st Century: Community Engagement through Social Media

Moderator and Adviser: Siobhan Senier

#### Raya Al-Hashmi

English/Journalism

*IdleNoMore: Twitter's True Digital Natives* 

#### **Thomas Lusted**

English

Bringing Native Musicians Online

#### Amanda Weissgerber

English

Trace DeMeyer: Indigenous Online Journalist/Publisher/Memoirist

#### MUB, Room 203

## Exploring Research in Psychology: Stress, Sex, Delinquency, and Cultural Challenges

Moderator: Dovey Levine

#### Danelis Alejo

Psychology

N.H. Immigrants' Perspectives on Their Experiences Serving as Language Brokers for Their Families

Adviser: Judith Sharkey

#### Jemmel Billingslea

Justice Studies and Psychology
The Education Aspirations of Black Males:
The Voices of Black Males
Adviser: Stephanie Bramlett

#### **Catherine Bousquet**

Psychology

All Stressed Out; The Effects of Stress, Depression and Self-Control on Adolescent Delinquency

Adviser: Ellen Cohn

#### Manuel Lopez

Psychology

Role of Self-Esteem and Need to Belong in Couples' Conflict Interactions

Adviser: Edward Lemay

#### **Allison Pendergast**

Psychology

Bad Girls; Characteristics of Middle School and High School Delinquents

Adviser: Ellen Cohn

#### Elizabeth Wible

Psychology

Incidence of Unwanted Sexual Experiences Among College Students: Gender and the

Red Zone

Advisers: Victoria Banyard, Ellen Cohn

#### MUB, Room 330

## International Affairs: Environmental Sustainability, Resource Management, and Economic Interests

Moderator: Jennifer Purrenhage

#### Rebecca Caron

International Affairs and English Flourishing After Fukushima: The Anti-Nuclear Movement in Japan Adviser: Molly Wallace

#### Michelle Chase

International Affairs and Biology All for a Bowl of Soup: A Study of the Illegal Shark Fin Trade in Costa Rica Adviser: Molly Wallace

#### Bethany Lefebyre

International Affairs and Environmental Conservation Studies

Water Knows No Bounds: Cross-Boundary Water Management Between the Autonomous Regions of Spain Adviser: Molly Wallace

#### **Duncan Nelson**

International Affairs and Geography Water for Profit: The Private Sector's Stranglehold on Chilean Water Resources Adviser: Molly Wallace

#### **Zachary Porter**

International Affairs and Tourism Planning and Development Living with Pollution in Managua, Nicaragua

Adviser: Molly Wallace

#### Eric Sales

International Affairs and Political Science Water Pressure: The Politics, Culture, and Economics Behind HidroAysen

Adviser: Molly Wallace

#### MUB, Room 332

## International Affairs: Making Ends Meet: Economic Policies, Change, and Inequality

Moderator: Jeanne Sokolowski

#### Allison Casev

International Affairs and Economics The Effects of the Economic Crisis on Higher Education in Belgium Adviser: Molly Wallace

#### Yu-Chu Cheng

International Affairs and Communication Happily Ever After? The Growth of Retirees and the U.S. Social Security System Adviser: Molly Wallace

#### **Heather Dean**

International Affairs and Sociology
The Hukou System and Inequality in China
Adviser: Molly Wallace

#### Caroline Graham

International Affairs and Political Science The Effects of the Economic Crisis on Spanish Culture Adviser: Molly Wallace

#### Poom Techasukij

International Affairs and Economics Transforming the City of Magyar: Stories Behind the Economic Liberalization Success in Hungary, 1970s–1990s Adviser: Molly Wallace

#### MUB, Room 334

## International Affairs: State Policies, Cultural Practices, Resistance, and Change

Moderator: Claire Malarte-Feldman

#### **Emily Avant**

International Affairs and English Kto Wygra Mecz? Polska! Kto? Polska! Kto? Polska! Polska! Polska!: Investigating Football Hooliganism in Poland Today Adviser: Molly Wallace

#### **Hillary Burrows**

International Affairs and Spanish ¡Olé! Bullfighting in Spain: Is It Time to Say Adiós?

Adviser: Molly Wallace

#### Casey Hagelin

International Affairs and Spanish Development Under Dictatorship: The Sección Femenina and the Spanish Women's Rights Movement Adviser: Molly Wallace

#### Matthew Iones

International Affairs and Political Science Dancing with Dragons: Musical Development as an Indicator of State Health Under Chinese Censorship Policy Adviser: Molly Wallace

#### Alyssa Taffaro

International Affairs and International **Business and Economics** Thank You for (Not) Smoking: Examining the Opposition to Spain's 2011 Anti-Smoking Legislation Adviser: Molly Wallace

#### Casper VanCoesant

International Affairs and Political Science How has IPR Enforcement Failed in Mainland China? Adviser: Molly Wallace

#### MUB, Room 336

### **International Affairs:** The Conditions Enabling **Violent Conflict and Its** Prevention/Cessation

Moderator: Funso Afolayan

#### **Louis Athanas**

International Affairs and Health Management and Policy The Cyprus Conflict: The Dog That Never Barked

Adviser: Molly Wallace

#### Patricia Donahoe

International Affairs and Political Science Waving the White Flag: Understanding why ETA Has Not Disbanded Adviser: Molly Wallace

#### Danielle Olean

International Affairs and Communication Because I Said So: Constructing Identities in Argentina's Dirty War Adviser: Molly Wallace

#### Nathaniel Petrocine

International Affairs and Political Science Guardians of the Revolution: An Examination of Military Support During the Arab Spring Adviser: Molly Wallace

#### Michael Pope

International Affairs and Political Science What Makes an Irish Dissident? Sociological Commonalities of Ex-IRA Members

Adviser: Molly Wallace

#### Matthew Willard

International Affairs and International **Business and Economics** Blowback: The Soviet Invasion of Afghanistan and the Taliban Adviser: Molly Wallace

#### **MUB, Strafford Room**

### Humanities, Art History, and the **Human Condition**

Moderator: Kathy Cataneo

#### Maisea Bailey

Art History

Redeeming the Provincial Artist: Cola dell'matrice and Works of the Early Modern Period From Ascoli Piceno, Italy

Adviser: Patricia Emison

#### Hannah Cullen

English

Contemporary American Poetry Adviser: Diane Freedman

#### Joshua Mitts

English

Reinventing Milton's Eve in Zora Neale Hurston's Their Eyes Were Watching God Advisers: Rachel Trubowitz, Reginald Wilburn

#### Avery Normandin

Biochemistry, Molecular, and Cellular Biology A Dodo at Oxford Adviser: Rebecca Karo

#### Merhawi Wells-Bogue

English/Journalism

Interviewing the Street Children of Mekelle City, Ethiopia: Their Plight and What Help Public and Private Organizations Offer Adviser: Lisa Miller

#### **Brittany Zorn**

Psychology and Women's Studies Cultivating an Entrepreneurial Spirit of Discovery: An Examination of the Development of Critical Thinking, Reading and Writing Skills in University Students Adviser: Reginald Wilburn

#### MUB, Room 321

### North Korea: Nuclear Weapons, **Economic Stagnation, and War**

Moderator: Alvina Snegach

#### William Hancock

Political Science

Exploring the Korean Border Dispute Adviser: Lawrence Reardon

#### Leonidas Ocampo

International Affairs and Political Science Economic Sanctions on North Korea Adviser: Lawrence Reardon

#### Abigail Palmatier

Economics and Political Science North Korean Proliferation Adviser: Lawrence Reardon

#### Andrew Schafer

International Affairs and Political Science The Failure of Economic Sanctions on Preventing the Continuation of North Korea's Nuclear Program Adviser: Lawrence Reardon

#### MUB, Room 302

#### **English Literature:**

## Oil and Water: Science, Politics, and Literature of the Niger Delta

Moderator and Adviser: Sandhya Shetty

#### Elizabeth Deveau

Marine, Estuarine, and Freshwater Biology and English Mangrove Destruction: Life and Loss in the Niger Delta

#### **Zachary Turgeon**

English and Philosophy and Political Science MEND and MOSOP: Civil Conflict in the Niger Delta

#### **Brian Ward**

English/Journalism
Oil and Corruption: The Effect of the Oil
Boom on Nigerian Politics

#### Merhawi Wells-Bogue

English/Journalism
The Economy of Oil: The Case of the Niger
Delta

#### MUB, Room 237

#### Studies in Spanish Syntax I

## Moderator and Adviser: John Chaston

#### **Mary Foster**

Spanish and Linguistics Allende's Zorro: Gains and Losses in Translation

#### Daniel Hagenbuch

Spanish and Biology
The Ultimate Spanish Review and Practice:
Mastering Spanish Grammar for
Confident...or Maybe Just Okay
Communication

#### Karen Hock

Spanish

Tal Vez and Quizás: When Does Maybe not Mean Maybe in Spanish?

#### Melanie Johnson

Justice Studies and Spanish Es Probable That Principal and Subordinate Verb Agreement in Spanish Noun Clauses is a Myth

#### **Julianne Sacco**

Mathematics Education and Spanish Creéa que it was Always Indicative: Mood Selection in Spanish Noun Clauses With Creer and Pensar

#### MUB, Room 340

## The Cause and Cost of China's Phenomenal Growth

Moderator: Sean Mossey

#### Nathaniel Hathorn

Political Science
The Raging Dragon: Exports, FDI, and
China's Electronic Sector
Adviser: Lawrence Reardon

#### **Marlee Stever**

Political Science
The Impact of Reforms on China Domestic
Economic Policy
Adviser: Lawrence Reardon

#### **Brian Stone**

Political Science
Regional Inequality in the People's
Republic of China
Adviser: Lawrence Reardon

#### **David Tarbox**

Political Science and Latin How China's Local and National Governments Have Used Urban Planning to Foster Economic Growth Adviser: Lawrence Reardon

#### MUB, Room 207

#### U.S. and World Politics I

Moderator: Lionel Ingram

#### Johnathan Bowler

Political Science
A Non-Nuclear Iran
Adviser: Lionel Ingram

#### **Brian Dobson**

Political Science
The Transitional Government of Egypt:
From Arab Spring to Stability
Adviser: Lionel Ingram

#### Connor Strobel

Political Science and Philosophy More the Structure Alone: A Critique of the Study of Revolutionary Movements Adviser: Jeannie Sowers

#### **Zachary Towle**

Justice Studies and Political Science The United States of Empire? Adviser: Lionel Ingram

## Parents Association Undergraduate Research Symposium

## Poster Presentations Session A

Friday, April 26 9:30–10:40 a.m. Memorial Union Building Granite State Room

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#### Victor Balaguer-Datiz

Psychology How Insecurity Spreads: Generalization Bias Contaminates Perceptions of Romantic Partners' Acceptance Adviser: Edward Lemay

#### **Casey Benner**

Justice Studies and Psychology

#### Nadine Maliakkal Shannon Zimmerman

Psychology

When Does Rule-violating Behavior Affect Peer Delinquency? Differences Between Middle School and High School Boys and Girls

Adviser: Ellen Cohn

#### **Andrew Blake**

Neuroscience and Behavior Memory Coding Properties of Prefrontal Cortical Neurons in the Rat

Adviser: Robert Mair

#### Alexandra Bourcy Crystal Cascio Sarah Maskwa

Nutrition

Guiding Stars at the UNH Dairy Bar Advisers: Gale Carey, Jesse Morrell

#### Joshua Butterworth

Kinesiology and Management

#### Nathaniel Downer Joseph Rich Cory Sinotte

Kinesiology

Examining Academic-Athletic Support and Academic Success of Student-Athletes Adviser: Heather Barber

#### Sofia Cadime

Nursing

Learning From Técnicos de Cirurgia and Enfermeiras de Saúde Materna: Understanding the Work of Nurses who Perform Essential Surgery in Mozambique Adviser: Gene Harkless

#### Brian Caluori

Political Science

#### **Rachel Shanahan**

Psychology

Timothy Vogel Tyler Weber

#### Katherine Wooten

Neuroscience and Behavior Validation of a Dithering Algorithm on an LCD

Advisers: Jenny Lang, John Sparrow, William Stine

#### Allison Caplin

Psychology

What are the Relations Among Stress Perception, Health Perception and Activity Participation in School-Aged Children? Adviser: Robert Drugan

Meredith Cashman

Meghan Craig

**Nicolas Grafton** 

Ryan Hebert

Joel Wyatt

Psychology
Who Did You T

Who Did You Tell? A Comparison of Disclosure and Potential Risk Factors of IPV Victimization Among Genders Advisers: Kristiana Dixon, Katie Edwards

#### Melissa Copeland

Psychology and Women's Studies The Impact of Sexual Violence on Women's Transition to College Adviser: Victoria Banyard

### Allison Coppenrath

John Sauerhoff Jennifer Simpson

Kinesiology

Examining the Hiring Process of Intercollegiate Assistant Coaches

Adviser: Heather Barber

#### **Hollie Couture**

Justice Studies and Sociology

#### **Amy Oldenquist**

Justice Studies and Psychology
Risky Business: Predictors of Rule Violating
Behavior in Adolescents
Adviser: Ellen Cohn

## **Christopher Cummings** (graduate student)

#### Umija Durakovic

Biochemistry, Molecular, and Cellular Biology

Regulation of the Angiogenic Inducer CCN1 by Prostaglandin F2a in Granulosa Cells

Adviser: Paul Tsang

#### Sarah Dobush

Psychology

Anger Proneness, Hostility, and Commitment in Intimate Relationships

Adviser: Edward Lemay

#### **Abigail Doherty**

Nursing

The Effect of Hourly Rounds on Pain Severity

Adviser: Joanne Samuels

#### **Danielle Dubois**

Nutrition

Binge Drinking, Blood Pressure, and Duration of Physical Activity as Risk Factors for Cardiovascular Disease in College Students Adviser: Jesse Morrell

#### **Cameron Duquette**

Wildlife and Conservation Biology An Evaluation of Managed Nesting Habitats for Turtles in Southeastern New Hampshire

Adviser: John Litvaitis

#### **Daniel Gallant**

Biomedical Science

Assessing Inflammatory Markers in Grain Fed vs. Pasture Fed Dairy Cows Adviser: Thomas Foxall

#### Evagelia Georgakilas

Nutrition

College Students' Midpoint Sleep Time and Dietary Intake

Adviser: Anthony Tagliaferro

#### Ashley Gosselin

Nursing

Nursing Simulation Experience: Self-Efficacy, State Anxiety, Locus of Control, and Simulation Effectiveness Adviser: Pamela Kallmerten

#### **Iessica Handler**

Communication Sciences and Disorders Early Developmental Markers of Autism Spectrum Disorders in Toddlers Adviser: Rae Sonnenmeier

#### Elizabeth Hebert

Neuroscience and Behavior Memory-Coding Properties of Prefrontal Cortical Neurons in the Rat Adviser: Robert Mair

#### Kimberly Kancir

Nursing

Children, Families and Orthopedic Surgery in Nepal: A Qualitative Description of Pain Care Adviser: Gene Harkless

#### PARENTS ASSOCIATION UNDERGRADUATE RESEARCH SYMPOSIUM—POSTER PRESENTATIONS: SESSION A, CONTINUED

#### Kaitlin Kirby

Nursing

Nursing Textbooks: Comparative Representations of Physicians and Advance Practice Nursing Adviser: Gene Harkless

#### Christie Mastriano Leah Tully

Nutrition

Multivitamin/Mineral Usage, Body Mass Index, and Exercise Among College Students

Adviser: Jesse Morrell

#### Jenna McCarthy

Nursing

The Relationship Between Psychosocial Challenges and Pediatric Voiding Dysfunction

Adviser: Gene Harkless

#### Megan McLaughlin

Genetics

Biofilm Ecology and Diversity Allows for Persistence After Antibiotic Treatment Adviser: Vaughn Cooper

#### David Morejon

Biochemistry, Molecular, and Cellular Biology

Indirect Effects of Beneficial Mutations Adviser: Vaughn Cooper

#### Tristan Papallo

Psychology

Do Ultrasonic Vocalizations During Intermittent Swim Stress Forecast Resilience in a Subsequent Forced Swim Test?

Adviser: Robert Drugan

#### Mallika Prabhakar

Biomedical Science Detection of Immunoglobulin A in Neonatal Calf Saliva Advisers: Nate Smith, Paul Tsang

#### **Andrew Quinn**

Nursing

New Technology on a Neuro-Epilepsy Unit Adviser: Gene Harkless

#### Michela Salusti-Simpson

Psychology

Reflections on Prevention: What do Juniors and Seniors Remember About Bystander Education on a College Campus? Adviser: Victoria Banyard

#### Rachel Schleker

Communication Sciences and Disorders Qualitative Analysis of Parents' Reports of Factors Associated With Successful Uses of AAC Devices by Their Children With Angelman Syndrome Adviser: Stephen Calculator

#### **Ashley Silva**

Nursing

Caregiving for Childhood Illness in Dominican Republic Bateys Adviser: Gene Harkless

#### Caille Souza

Health Management and Policy A Comparative Analysis of Magnet Hospital HCAP Scores Adviser: Leslie MacLeod

#### Samuel Stevens

Psychology

Trust Biases Perceptions of Romantic Partners' Hostility and Responsive Behavior

Adviser: Edward Lemay

#### **MUB, Granite State Room**

#### **Advanced Technical Writing**

Adviser: Christine O'Keefe

#### **Taylor Callahan**

English

Technical Writing Trends in Screenwriting/ Film Production

#### Benjamin Kramer

Mechanical Engineering Technical Writing: An Example of Writing and Engineering

#### Tia Lantiegne

Biochemistry, Molecular, and Cellular Biology

Technical Writing in Industrial Hygiene and Environmnetal Sciences

#### **Taylor Lawrence**

Communication

Technical Writing in the Communication Field

#### Trisha Schuman

International Affairs and Linguistics Issues in Technical Writing in Foreign Language Teaching

#### **Courtney Sharpe**

English

Technical Writing Trends in English

#### **Kara Smatt**

English

Technical Writing Trends in Magazine Publishing

#### Cassandra Spencer

Communication

Trends in Communications

## Parents Association Undergraduate Research Symposium

## Oral Presentations, Session B

Friday, April 26 10:50 a.m.–Noon Memorial Union Building

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

#### **MUB, Rockingham Lounge**

## Exploring Research in Anthropology II: History and Religion

Moderator: Eleanor Harrison-Buck

#### Joshua Beaucher

Anthropology

Protective, Medicinal, and Entheoenic Uses of Tobacco Among the Maya Advisers: Eleanor Harrison-Buck,

Meaghan Howey

#### **Evelyn French**

Anthropology

Maya Calendar and the End of the World Adviser: Eleanor Harrison-Buck

#### **Grace Kirkpatrick**

Anthropology

An Exploration of Mesoamerica Fertility

Advisers: Eleanor Harrison-Buck,

Svetlana Peshkova

#### Emma Pankey

Anthropology

Creation, Ensoulment, and Sacrifice: The Vital Role of Children in Ancient Maya

Ideology and Ritual

Adviser: Eleanor Harrison-Buck

#### MUB, Room 207

## Contemporary Latin American Politics

Moderator: Michael Cole

#### **Chandler Hull**

Political Science

Cartels, Gangs, and Mexico's War on

Drugs

Adviser: Mary Malone

#### Elizabeth Resnick

Political Science

The Washington Consensus: Neoliberalism

in Chile, Argentina, and Brazil

Adviser: Mary Malone

#### **Zachary Shobin**

Political Science

Drug Wars in Latin America: The U.S.

and Its Role in Conflict Adviser: Mary Malone

#### MUB, Room 302

#### **English Literature:**

#### **Dark Continents:**

## Illumination, Misperception, and Other Struggles for Meaning

Moderator: Reginald Wilburn

#### Alexander Braile

English Literature and Art Studio Glow and Haze: Parable, Metaphor, and the Illumination of Meaning in Joseph Conrad's Heart of Darkness Adviser: Petar Ramadanovic

#### **Shannon Goodine**

English Teaching
The Search for Identity in African

Literature

Adviser: Sandhya Shetty

#### Joshua Richardson

English

Mothers and Daughters in Aminatta Forna's Ancestor Stones

Adviser: Sandhya Shetty

#### Sawyer Theriault

English

Reality and Misperception of Self-Value: August Wilson's Use of Dramatic Plot

Structure

Adviser: Reginald Wilburn

#### MUB, Room 233

## Distinguished Research in Communication

Moderator: Kevin Healey

#### Nyomi Guzman

Communication and Women's Studies Interracial Couples in Romance Films

Adviser: James Farrell

#### Laura McGee

Communication

The Rhetorical Influence of Music on

Political Communication Adviser: Michelle Michaud

#### Danielle Olean

International Affairs and Communication *Because I Said So: Constructing Identities* 

*in Argentina's Dirty War* Adviser: Sheila McNamee

#### MUB, Room 203

## Feminism in Action: Women's Studies Internships

Moderator and Adviser: Joelle Ruby Ryan

#### Molly Branch

English/Journalism and Women's Studies Interning to Promote Campus Activism

#### Chloe Flanagan

Psychology and Women's Studies Interning for the Women's Studies Program

#### Elizabeth Griffith

Communication and Women's Studies Interning at the President's Commission on the Status of Women

#### Michael Houle

English Teaching
WildActs: Building Community Through
Social Justice Theater

### Jordan Rondinone

Women's Studies

A Voice Against Violence: Reflections on an Internship at a Safe Place

#### Sarah White

Women's Studies

The Effects of Yoga on the Stress of Female Athletes

#### MUB, Room 330

### International Affairs: Assessing Strategies for Sustainable Human Development

Moderator: Gregg Orifici

#### Megan Brabec

International Affairs and Political Science Gender Inequality in Education in Ecuador

Adviser: Molly Wallace

#### Robyn Keriazes

International Affairs and English/ Journalism

Serious Leisure: The Impact of Tourism on Indigenous Communities of Peru

Adviser: Molly Wallace

#### **Alexander Lamothe**

International Affairs and Family Studies Gardez Nous Bien: An Analysis of the International, National, and Local Interventions to Help Orphans and Vulnerable Children in Sub-Saharan Africa Adviser: Molly Wallace

#### **Catherine Lovely**

International Affairs and Spanish Is Fair Trade Fair? Looking at the Coffee Trade Between Costa Rica and the United States

Adviser: Molly Wallace

#### Sarah Perron

International Affairs and Marketing Is Ecotourism in Costa Rica Sustainable? Adviser: Molly Wallace

#### Monica Stewart

International Affairs and Anthropology Sowing the Seeds, Then Watering the Sprouts: Community Health Worker Programs in Peru

Adviser: Molly Wallace

#### MUB, Room 332

## International Affairs: Civic Participation, Political Transitions, and State Legitimacy

Moderator: Catherine D'Auteuil

#### **Emily Donnery**

International Affairs and Anthropology Las Poléticas Hoy: The Aftermath of the

*Dirty War of Argentina* Adviser: Molly Wallace

#### Alanna Gerton

International Affairs and Civil Engineering From Austerity to Prosperity: Labor

Reform in Spain Adviser: Molly Wallace

#### Elizabeth Hartigan

International Affairs and Political Science Why Participate? A Comparison of Civic Engagement in Chile and the United States

Adviser: Molly Wallace

#### Lillian McCarthy

International Affairs and Linguistics Understanding the Italian Public's Perception of Their Government Adviser: Molly Wallace

#### Stephanie Weiner

International Affairs and Political Science Nonviolence and Democratic Process: Transition in Post-Junta Argentina Adviser: Molly Wallace

#### MUB, Room 334

## International Affairs: Immigration and Demographic Change: Identity, Religion, and Inequality

**Moderator: Thomas Haines** 

#### Darrin Broadhurst

International Affairs and Russian What are the Likely Implications of a Declining Russian Population? Adviser: Molly Wallace

#### Samuel Carmichael

International Affairs and Russian The Expansion of Political Islam in Chechnya

Adviser: Molly Wallace

#### Victoria Glidden

International Affairs and Spanish Social Stratification in Spain: The Marginalization of Immigrant Cultures

Adviser: Molly Wallace

#### Patricia Malone

International Affairs and English Teaching

Teaching

A Conflict of Faith: Can France and the French-Islamic Community Reconcile

Their Differences? Adviser: Molly Wallace

#### **Kvehl McDermott**

International Affairs and Political Science Does the Anti-Muslim Sentiment in France Encourage Radical Islam?

Adviser: Molly Wallace

#### Nolan Russell

International Affairs and German Mein Austria: Discovering What it Means to be Austrian in a Multicultural World

Adviser: Molly Wallace

#### MUB, Room 336

### International Affairs: National/ Minority Identities, Language, and Culture

Moderator: Molly Doyle

#### **Ashley Bertz**

International Affairs and Political Science The Catalan Identity: Increased Salience in the Wake of Economic Crisis Adviser: Molly Wallace

#### Amy LaRocca

International Affairs and Spanish Gitano Flamenco Characteristics in Mainstream Spanish Culture Adviser: Molly Wallace

#### Amanda Maillet

International Affairs and Linguistics How to Say 'iPod' in French: An Examination of France's Language Policies and the Effects They are Having on the French People Adviser: Molly Wallace

#### Lindsay Nolan

International Affairs and International Business and Economics The Effects of Nationalism on the Basque

Adviser: Molly Wallace

#### Trisha Schuman

International Affairs and Linguistics Indigenismo: Lexical Borrowings into Peruvian Spanish

Adviser: Molly Wallace

#### MUB, Room 338

# International Organizations and the Challenges of Global Governance

Moderator: Alvina Snegach

#### Mike Deering

Marketing

Agenda 21: The Future of Sustainability in

Question

Adviser: Alynna Lyon

#### **Crystal Doyle**

Political Science

The Tea Party and the State Legislatures'

Attack on Agenda 21 Adviser: Alynna Lyon

#### **Audrey Hansen**

Political Science and Spanish Human Rights and Transnational Justice: Spain and Chile

Adviser: Alynna Lyon

#### Tegan O'Neill

Political Science

Regional Political Integration in Southeast

Asia and Natural Disasters Adviser: Alynna Lyon

#### Laura Roach

**Economics** 

The Role of the World Trade Organization: An Equalizer or a Tool of Exploitation Adviser: Alynna Lyon

#### MUB, Room 340

### Evaluating the Health of a Nation: Research from the College of Health and Human Services

Moderator: TBD

#### Madeline Allen

Kinesiology

The Relationship Between the Strengthto-Weight Ratio and Self-Administered Disability Index in Older Adults Adviser: Summer Cook

#### Molly Bedker

Health Management and Policy
The Health of a Nation—Lessons from a
State Perspective
Adviser: Semra Aytur

#### Lana Ciali

Psychology

A Qualitative Study of Stimulant Medication Use and Misuse Among College Students: Exploring Motives for Misuse Adviser: Barbara White

#### Alyssa DeQuattro

Kinesiology

Can Chair-Rise Time Predict Walking Difficulty in Older Adults?

Adviser: Dain LaRoche

#### **Natalie Fortier**

Kinesiology

Happiness and the Ladder of Inference Adviser: Brent Bell

#### Alexander Lamothe

International Affairs and Family Studies Renewing promise: An Analysis of the Effects of Positive Behavior Interventions and Supports in New Hampshire High Schools

Adviser: Erin Sharp

#### Dina Milano

Kinesiology

Effects of Low Load Blood Flow Restricted Exercise on Neuromuscular Recovery in College-aged Females

Adviser: Summer Cook

#### **Charlotte Slate**

Kinesiology

High Body Weight Influences Functional

Mobility in Older Adults Adviser: Dain LaRoche

#### MUB, Room 304

### Political Theory, Ideas, and Literature

Moderator and Adviser: John Kayser

#### Nikolas Beimler

Political Science Plato's Republic in Shakespeare

#### **Ryan Donnelly**

Political Science
An Analysis of Machiavelli's 'Prince'

#### Matthew St. Hilaire

Political Science

American Mobocracy: Death by Suicide

#### MUB, Room 321

## Exploring Research in Sociology I: Sex and Society

Moderators: Sharyn Potter, Catherine Moran

#### Benjamin Bullock

Sociology

Exploring a Division of Gender in Measuring Sexual Coercion: Are Researchers on the Same Page? Advisers: Murray Straus, Karen Vangundy

#### **Amber Carlson**

Justice Studies and Sociology
Definitions and Perceptions of Sexual
Assault: How Important is Victim and
Perpetrator Gender?

Advisers: Rebecca Glauber, Sharyn Potter

#### **Audrey Hickey**

Psychology and Sociology The Portrayal of Female Sexual Desire in Current Films

Adviser: Catherine Moran

#### Alli Puchlopek

Sociology

Rape Myth Acceptance and Bystander Attitudes on Campus: Understanding Students' Perceptions of Sexual Assault

Adviser: Rebecca Glauber

#### MUB, Room 237

#### Studies in Spanish Syntax II

## Moderator and Adviser: John Chaston

#### Michelle Flaherty

Spanish

Preterite Versus Perfect Tense in Latin American and Spanish Songs and Pop Culture

#### Luke Hansford

International Affairs and Spanish Rechazando in Spanish: Subjunctive or Indicative

#### Tristen Krakie

**English and Spanish** 

Forecasting the Unknown: the Spanish Use of Subjunctive and Indicative in Predictive Statements

#### **Shannon Langtry**

Spanish and Psychology Spanish Mood in Agradecer, Murmurar, and Quejarse. Are We Thankful? Or Murming Complaints?

#### Hilary Miller

Chemistry and Spanish Spanish Mood Selection: Probablemente Subjunctive, Posiblemente Indicative

#### Celina Williamson

Linguistics and Spanish A Shadow of a Doubt: Why are 'sin Duda que' and 'el Hecho de que' Doubtful Conjectures?

#### **MUB, Strafford Room**

# Culture Through the Mediums of War Film, Manga, and French Literature

Moderator: Delia Konzett

#### Parker Callahan

Music Theory

War Film: Looking at The Valley of Elah

Adviser: Delia Konzett

#### Michael DeStefano

History

Breaking the Conventions of the World

War II Film

Adviser: Delia Konzett

#### **Molly Driscoll**

European Cultural Studies and French An Innocent Victim? The Representation of Anne Boleyn in Nineteenth Century French Drama, Art, and Literature Adviser: Barbara Cooper

#### Katherine Juster

English and Theatre
Comedy in War Film
Adviser: Delia Konzett

#### Alexandru Panait

Sociology

From Shunga to Ero Manga: Erotica as a Product of Popular Culture In Japan Adviser: Pamela Ikegami

#### Mack Willingham

Theatre
War Film

Adviser: Delia Konzett

## Parents Association Undergraduate Research Symposium

## Poster Presentations, Session B

Friday, April 26 10:50 a.m.-Noon Memorial Union Building Granite State Room

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

#### Maria Aiello

Justice Studies and Sociology

**Sidney Bennett** (graduate student)

#### Cameron Cunningham

Psychology

Survivors' Voices on Prevention Adviser: Victoria Banyard

#### Nicole Ashmankas

Zoology

Detection of Pressure in Juvenile Limulus polyphemus

Adviser: Winsor Watson

#### **Neil Baroody**

Kinesiology

The Effect of a Barefoot Running Training Program on Running Economy and Performance

Adviser: Tim Quinn

#### Sarah Bradshaw

Psychology

#### Joshua Mattie

Neuroscience and Behavior and Psychology

#### Jason McBurnie

Biomedical Science

A Rodent Model of Prior Cannabinoid Exposure on Executive Function in Adulthood

Adviser: Jill McGaughy

#### Brian Caluori

Political Science

#### Rachel Shanahan

Psychology

### **Timothy Vogel**

Tyler Weber

#### Katherine Wooten

Neuroscience and Behavior Temporal Dynamics of Contrast Gain Advisers: Jenny Lang, John Sparrow, William Stine

#### Laura Castracane

Neuroscience and Behavior Spatial Learning and Memory Observed After ISS

Adviser: Robert Drugan

#### **Matthew Cotton**

#### **Elora Demers**

Nicole Petersen

Biochemistry, Molecular, and Cellular Biology

#### Kendall Milkey

Biomedical Science

**Megan Thompson** (graduate student) A Screen to Identify and Characterize Mutations in Arabidopsis thaliana Causing Sodium-Dependent Root Skewing Adviser: Estelle Hrabak

#### **Christine Curtin**

Occupational Therapy Evaluation Tool for the Selection of iPad Apps for Learning for Students with Developmental Disabilities Adviser: Sajay Arthanat

#### Ethan Duane

Biochemistry, Molecular, and Cellular Novel Antimicrobial Agents: Expression

of Human Keratin 6A in Plants Adviser: Subhash Minocha

#### **Emily Elgert**

Neuroscience and Behavior Norepinephrine Involvement in the Intermittent Swim Stress-Induced Deficit in Spatial Learning and Memory Adviser: Robert Drugan

#### Cara Foley

Health Management and Policy Challenges Associated with Cross-sectoral Collaboration and Strategies to Incentivize Partnership for Health Impact Assessment Adviser: Semra Aytur

Maegan Gagne (graduate student) **Rajtilak Majumdar** (graduate student) **Heather Wingate** 

Biology

Effects of Heavy Metals and Salt on Wild Type and High Putrescine Arabidopsis Adviser: Subhash Minocha

#### Kayleigh Greaney Samantha Harkey **Ryan Hebert**

Psychology

Intimate Partner Violence in Rural Communities: Attitudes and Perceptions of Young Adults

Adviser: Katie Edwards

#### Natalie Hall

Plant Biology

Protection of Arabidopsis Thaliana from Abiotic Stressors by Putrescine Adviser: Subhash Minocha

#### **Ashley Heim**

Zoology

Boldness in the Asian House Gecko, Hemidactylus frenatus, and Its Relationship to Running Speed, Bite Force, and Mass Adviser: Leslie Curren

#### **Amy Landry**

Biomedical Science Infective Endocarditis and Its Role in Dentistry

#### Adviser: Thomas Pistole

Hannah Lawrence

Political Science and Linguistics Women's Rights in a Post-Mubarak Reality Adviser: Georgeann Murphy

#### Justin Lupone

Health Management and Policy Assessing the Effectiveness of a Clinic-based Diabetes Management Program in a Community Setting Adviser: Robert McGrath

#### Caitlin McCarthy

Biomedical Science

Characterization of Cellular FLICE Inhibitory Protein (c-FLIP) in Cells of Human Cervical Cancer Adviser: David Townson

#### Amanda Mead Rebeka Walker

Psychology

The Thin Ideal: Media and How it Relates to Body Dissatisfaction and Disordered Eating Behaviors in College Women Adviser: Katie Edwards

#### **Kelly Morris**

Occupational Therapy How Ready are First Year Bachelor of Occupational Science Students to be Confident Self-directed Learners? Adviser: Kerryellen Vroman

#### Olivia O'Hara

Health Management and Policy Assessing the Value of Program Relationships with Alumni Adviser: Robert McGrath

#### **Hong Sun Park** Kerry Spongberg

Psychology Impact of Legislation on Mental Health *Issues and the Role of Advocacy: Implications for Student Involvement* Adviser: Katie Edwards

#### **Emily Reddy**

Occupational Therapy The Relationship Between Opportunities, Participation, and Social Capital in Adolescents Advisers: Lou Ann Griswold, Robert McGrath

#### Alexander Rocke

Biomedical Science Investigation of Hospital Mortality Through Data Mining Adviser: Thomas Pistole

#### **Lachey Ross**

Justice Studies and Sociology Gun Control Law and Crime: The Effects of the Heller Decision on the District of Columbia

Adviser: Charles Putnam

#### Mark Scimone

Neuroscience and Behavior The Relationship Between Disengagement and Inhibition and their Correlation with Working Memory Capacity Adviser: Brett Gibson

#### **Rachel Sluder**

Neuroscience and Behavior Mindfulness Meditation and Depression: A Meta-analysis Adviser: Brett Gibson

#### **Brianna Smith**

Fine Arts

The Development of Planning Abilities in School-Aged Children Adviser: Brett Gibson

#### Lea Trush

Biomedical Science
Natural Resistance to HIV Harnessed for
a Potential Cure
Adviser: Thomas Pistole

#### Katharine Volz

Occupational Therapy Single Case Research on the Effectiveness of Hippotherapy Adviser: Barbara White

#### **MUB, Granite State Room**

# Advanced Technical Writing Posters

Adviser: Christine O'Keefe

#### Sarah Benner

Information Technology Technical Writing Issues in Information Technology

#### Rebecca Caron

International Affairs and English Technical Writing in International Affairs

#### Benjamin Stallman

Fine Arts

Technical Writing Issues in Graphic Design

# Parents Association Undergraduate Research Symposium

# Oral Presentations, Session C

#### Friday, April 26 1:40–2:50 p.m. Memorial Union Building

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#### **MUB, Strafford Room**

## A Queer Perspective: Undergraduate Research on LGBT Intimate Partner Violence

Moderator: Kateryna Sylaska

#### **Annie Crossman**

Psychology and Women's Studies Community Factors and LGB Intimate Partner Violence Victims' Experiences Advisers: Katie Edwards, Kateryna Sylaska

#### Ryan Hebert

Psychology Reflections on Research Experiences: Where We Are and Where We Are Going Advisers: Katie Edwards, Kateryna Sylaska

#### Arianna Schaaff

Psychology and Sociology Helping Hands: Qualitative Analysis of LGB Victims' Disclosure Experiences Advisers: Katie Edwards, Kateryna Sylaska

#### MUB, Rockingham Lounge

# Exploring Research in Anthropology III: Religion and Gender

Moderator: Svetlana Peshkova

#### Lauren Banker

Anthropology and Women's Studies Mi Método, Mi Elección: A Comparative Look at Birth Control Access in Chile and the United States of America Advisers: Karen Niland, Svetlana Peshkova

#### Megan Barry

Anthropology

An Islamic Approach to Sustainability
Adviser: Svetlana Peshkova

#### Kathryn Garland

Anthropology

Between Belly Dancing and the Veil: American Views on Moroccan Women and Beauty

Adviser: Svetlana Peshkova

#### Vanessa Sowell

Social Work

A Comparative Study of Purity Between America and Pakistan Adviser: Svetlana Peshkova

#### MUB, Room 302

#### **English Literature:**

# Calcutta Modern: Home and World in the Novels of Amitava Ghosh and Amit Chaudhuri

Moderator and Adviser: Sandhya Shetty

#### Christopher Brown

English Literature Signifying Slowly: Defamiliarization and Interrupting Tempo in Amit Chaudhuri's A Strange and Sublime Address

#### **James Freeley**

English Teaching

Opium Makes the World Go Round:

Amitava Ghosh's Sea of Poppies

#### **Brian Gingras**

Political Science and English
Laboratory of the Postcolonial Novel:
Character Simulations

#### MUB, Room 338

#### **English Literature:**

## Comic Asian America Across Gutters, Panels, and Frames

Moderator: Monica Chiu

#### **Adam Babinat**

English

Comics and Education: When is the

Meaning Lost?

Adviser: Monica Chiu

#### Jonathan Constable

**English Teaching** 

Family Matters: History and Heritage

in Graphic Form

Adviser: Sandhya Shetty

#### **Christopher Hall**

English and Civil Engineering Understanding Gene Yang's "Chin-Kee" Through Comic Form

Adviser: Monica Chiu

#### **Curtis Hines**

English

Form and Function in Layman and

Guillory's "Chew" Adviser: Sandhya Shetty

#### MUB, Room 332

### Conflict and Cooperation Among East Asian Economies

Moderator: Chelsea Moyer

#### Jesse Childs

Political Science

Evaluating the Japanese Economic Miracle

Advisers: Lawrence Reardon

#### **Crystal Doyle**

Political Science

Corruption in the Japanese Economy

Adviser: Lawrence Reardon

#### Ryan Mack

Political Science

*Senkaku/Diaoyu Island Dispute* Adviser: Lawrence Reardon

#### Tegan O'Neill

Political Science

ASEAN and the East Asian Countries

Adviser: Lawrence Reardon

#### MUB, Room 330

# Ethnic Studies II: American Indian Literature in the 21st Century (ENG 739): How to Build a Digital Archive of Native American Literature

Moderator and Adviser: Siobhan Senier

#### Carl Bumbaca

English

Occupy Wikipedia, Part II: Researching and Writing Alongside Authors

#### Parker Cavallaro

**English Teaching** 

Anthologizing Online: Breaking the Historical Mold

#### Shelby McGuigan

History

Doing Native History Online: Conversations with Joan Tavares Avant

#### Dana Roach

English

Occupy Wikipedia, Part I: Increasing Female Authorship and Representation

#### MUB, Room 334

# Gambling, Corruption, and Other Costs of Growth in East Asia

Moderator: Roberto Reyna

#### Victor Adejuyigbe

Political Science and Economics Economic Growth in South Korea: Explaining the Miracle on the Han River

Adviser: Lawrence Reardon

#### Joseph Cenney

Political Science

Macau: The New World Leader in

Gambling

Adviser: Lawrence Reardon

#### Aliza Harrigan

Political Science

The Negative Impact of South Korea's Economic Development on the Elderly

Adviser: Lawrence Reardon

#### Michael Jeffers

Political Science

North Korea and the Industrial Revolution

Adviser: Lawrence Reardon

#### MUB, Room 304

#### **English Literature:**

#### Land/Text/Image

# Moderator and Adviser: Briggite Bailey

#### Katherine Murray

English

The Darker Side of Industrialism: Representations of Labor in Davis and Glazier

#### Nathan Popielarczyk

English

An American Indian Identity: Zitkala-Sa

#### Sawyer Theriault

English

From Thoreau to Muir: The Birth and Progress of American Environmental Thought

### MUB, Room 203

# Memorials and Film as Rhetorical Displays

Moderator and Adviser: Lawrence Prelli

#### **Hilary Bird**

Communication

A Dramatistic Approach to Understanding the Rhetorical Influence of Taxi Driver

#### **Janet Mesh**

Communication

A Comparative Analysis of the Rhetorical and Commemorative Functions of Holocaust Memorials in the United States

#### MUB, Room 203

#### **Morality in Everyday Discourse**

# Moderator and Adviser: Jessica Robles

#### Jessica Bennett

Communication
Moral Implications in Humor

#### Michael Consalvo

Communication

Deviant Behavior in the Workplace

#### **Emily Varnese**

Communication Sex and Morality, and Its Implications for College

#### MUB, Room 233

# From Algae to Algebra: Studies in Chemical Engineering and Math Education

Moderator: TBD

# Daniel Eltringham

Chemical Engineering
Algae Growth in Photobioreactors Using
LEDs to Maximize Lipid Production
Adviser: Ihab Farag

#### **Amber Lagasse**

Mathematics Education

Misconceptions and Errors in Algebra

Adviser: Timothy Fukawa-Connelly

#### Brian McConnell Brendan Nichols

Chemical Engineering
Kinetics of the Lipid Extraction from
Microalgae
Adviser: Ihab Farag

#### MUB, Room 340

# Piracy, Plunder, Pollution, and Problems in East Asia

Moderator: Kayleigh Mitchell

#### Paul Chiarantona

Entrepreneurial Studies and Political Science

A Disparity in Regional Development: China's Urban and Rural Economic Inequality

Adviser: Lawrence Reardon

#### Caroline Graham

International Affairs and Political Science Reasons for Japan's Prolonged Recession Adviser: Lawrence Reardon

#### **Matthew Iones**

International Affairs and Political Science Arbitrary Judiciary and Piracy: The Effects of China's Courts on Intellectual Property Abuse

Adviser: Lawrence Reardon

#### Kevin Michel

Political Science

China's Status as a Developing Nation Adviser: Lawrence Reardon

#### Brian O'Connor

Political Science

Chinese Economic and Political Control of Tibet

Adviser: Lawrence Reardon

#### Casper VanCoesant

International Affairs and Political Science Why Doesn't China Protect Its Environment?

Adviser: Lawrence Reardon

#### MUB, Room 321

# Exploring Research in Sociology II: Social Forces and Community Change

Moderators: Cliff Brown and Cesar Rebellon

#### **Audrey Hickey**

Psychology and Sociology
A Qualitative Examination of University
of New Hampshire Student Impact on the
Town of Durham, New Hampshire
Adviser: Cliff Brown

#### Molly McCahan

EcoGastronomy and Music Theory Permaculture: Principles, Beliefs, and Values

Advisers: Burt Feintuch, Thomas Safford, Steven Whitman, Daniel Winans

#### Halie Olszowy

Sociology

Senses of Community on College Campuses Adviser: Sally Ward

# Alexandru Panait

Sociology

We Negotiate with Terrorists: Evaluating Research on Diplomacy with Terrorists Adviser: Cesar Rebellon

#### MUB, Room 237

#### Studies in Spanish Syntax III

Moderator and Adviser: John Chaston

#### Kate Brock

Spanish

Thank you for Gossiping and Complaining: A Study of Mood and Tense in Three Spanish Verbs of Communication

#### **Hillary Burrows**

International Affairs and Spanish Saying Maybe in Spanish Literature: Tal Vez, We Use the Indicative, Quizás We Use the Subjunctive

#### Victoria Glidden

International Affairs and Spanish
The Spanish Imperfect: Repairing Imperfect
Teaching of an Imperfect Tense

#### Casey Hagelin

International Affairs and Spanish To Be or Not To Be: An Analysis of the Spanish Verb "to be" with Adjectives

#### Melanie Hawthorne

Spanish and History

Do We Use the Spanish Indicative or
Subjunctive? Let's Si!

Adviser: John Chaston

#### Amy LaRocca

International Affairs and Spanish Uncertainty and Possibility in Spanish Noun Clauses: What do People Think? Adviser: John Chaston

#### MUB, Room 336

# The Politics of Identity and Elections

Moderator: Susan Siggelakis

#### **Audrey Hansen**

Political Science and Spanish Morality and Identity in American Political Community Adviser: Susan Siggelakis

#### Nathaniel Kaplan

Political Science The 2012 Presidential Election in North Carolina

Adviser: Andrew Smith

#### Nicholas Mignanelli

Political Science Nietzche, Multiculturalism, Quebecois & World Government Adviser: Stacy VanDeveer

#### **Alexander Parkes**

Political Science Ethnicity and Hungary Adviser: Susan Siggelakis

Adviser: Andrew Smith

#### Willem Weiser

Political Science Presidential Campaigns in Wisconsin

#### MUB, Room 207

#### **U.S. and World Politics II**

#### Moderator and Adviser: Lionel Ingram

#### Alexa Ayoub

Justice Studies and Political Science US Foreign Policy and the Iranian Nuclear Program

#### Patrick Marvin

Justice Studies and Political Science
Possible Outcomes of the Current Situation
in Egypt

#### Jocelyn Thibault

Political Science U.S.-Cuban Relations

#### Scott Zerbi

Political Science Pakistani Nuclear Proliferation

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

# **Poster Presentations**

#### Friday, April 26 Paul College

Through original research and valuable guidance from mentors, this event helps students gain deeper academic knowledge as well as professional experience. This URC event includes poster presentations, oral presentations, and feedback from University and business leaders.

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

#### **Accounting and Finance**

Moderator: Wenjuan Xie

#### Darren Brown

Accounting

How Technology has Effected Trading in

Adviser: Wenjuan Xie

#### Kimberly Jarry

Accounting and Finance
The Progression of Financial Restatements:
Causes and Market Reaction
Adviser: Le (Emily) Xu

#### Kristin Kennedy

Accounting and Finance
An Analysis of Fraud: Causes, Prevention,
and Notable Causes
Adviser: Le (Emily) Xu

#### **Amber Lombard**

Accounting and Finance
The Convergence of Lease Accounting
Standards: Rationale, Current Status, and
Potential Future
Adviser: Le (Emily) Xu

#### Colleen Steele

Accounting and Finance The Convergence of U.S. GAAP and IFRS: Revenue Recognition Adviser: Le (Emily) Xu

#### Paul College, Room G25 10–11:30a.m.

# EcoGastronomy: Capstone Research and Projects (Posters)

**Moderator: Daniel Winans** 

#### Margaret Baldwin

EcoGastronomy and Environmental Conservation Studies Adaptation of Crops to Climate Change in Western Africa and Latin America Adviser: Daniel Winans

#### Kaitlyn Cameron

Psychology and EcoGastronomy Cafe Synesthesia Adviser: Daniel Winans

#### PETER T. PAUL COLLEGE OF BUSINESS AND ECONOMICS UNDERGRADUATE RESEARCH CONFERENCE, CONTINUED

#### **Emily Cooper**

EcoGastronomy and Wildlife and Conservation Biology Growing Smarter: Sustainable Food and Living After School Program Advisers: Trent Schriefer, Daniel Winans

#### Lauren Cotnoir

EcoGastronomy and Communication A Study of Milk as an Essential Food Group

Adviser: Daniel Winans

#### Lydia Crisp

EcoGastronomy and Psychology Connecting Farms to Local Businesses: An Analysis of Local Food Distribution and Challenges in Southern New Hampshire Adviser: Daniel Winans

#### Gabrielle Durante

EcoGastronomy and English Literature Pollinator Gardening for the Urban Farmer Adviser: Daniel Winans

# **Kathleen Ernsting**

EcoGastronomy and Hospitality Management

Exploring Event Planning: How to Utilize Local Resources and Overcome Challenges to Remain a Sustainable Food Business in

New England

Adviser: Daniel Winans

#### Kelly Giller

EcoGastronomy and Hospitality Management Value Added Products In New England Dairy Farms

Adviser: Daniel Winans

#### Micayla Gilligan Kimberly Mayo

EcoGastronomy and Nutrition The Local Tomato: A Sustainably Delicious Food Trolley on the UNH Campus

Adviser: Daniel Winans

#### Carrie Anne Harmon

EcoGastronomy and Hospitality Management The Knoble Rot: Business Proposal for Wine Store and Tapas Bar Adviser: Daniel Winans

#### Hannah Hoban

EcoGastronomy and Recreation Management and Policy The Edible Green: An Edible Landscape for New England Country Clubs Adviser: Daniel Winans

#### Erin Jackson

EcoGastronomy and Entrepreneurial

Dry Technology Business Plan: Revolutionizing the Textiles Market Adviser: Robert Gough

#### Jennifer Lane Maura McCartney

EcoGastronomy and Nutrition A Proposal to Implement Field Experience and Experimental Learning to the EcoGastronomy Capstone Class Adviser: Daniel Winans

#### **Scarlett Moberly**

EcoGastronomy and Art History Keep Growing: Mapping the North Country's Food System Adviser: Daniel Winans

#### Gina Puorro

EcoGastronomy and Nutrition *Introduction to Culinary Nutrition:* Designing an Introductory Course on Nutrition, Cooking, and Food Systems Adviser: Daniel Winans

#### **Elizabeth Puris** Geraldine Walker

EcoGastronomy and Sustainable Agriculture and Food Systems The Farm Studio: An Intimate Look at Sustainable Agriculture in New Hampshire Adviser: Daniel Winans

#### Rebecca Rothman

EcoGastronomy and Hospitality Management The Role of Food and Beverage Managers in Ensuring a Sustainable Future Adviser: Daniel Winans

#### Sara Schmidt

EcoGastronomy and Hospitality Management Breaking Down American Breakfast: The Evolution of the Tradition Adviser: Daniel Winans

#### **Kelley Simpson**

EcoGastronomy and Nutrition Back2Basics: Nutritious, Home-cooked Granola Bars with Simple, All-natural Ingredients

Adviser: Daniel Winans

#### Stephanie Terenzio

EcoGastronomy and Nutrition Having a Ball: A Guide to Home Food Production and Preservation Adviser: Daniel Winans

#### Michelle Wong

EcoGastronomy and Hospitality Management Sea to Table: Exploring Aquaculture in Tanzania

Adviser: Daniel Winans

#### Paul College Great Hall 10-11:30a.m.

## **Economics Capstone Research Projects (Posters)**

Moderator and Adviser: Karen Smith Conway

#### Anthony Albano

Economics Effect of Fossil Fuel Prices on U.S. Consumption of Solar Energy

#### Jonathan Barry

Economics Does New Mutual Fund Money Follow Recent Mutual Fund Success?

#### Erin Bogan

Economics Does Climate-Induced Happiness Play a Role in Suicide Prevention?

#### **Zachary Campbell**

Economics

Effectiveness of Prescription Drug Monitoring Programs on Reducing Opiate Overdose Incidences Adviser: Karen Conway

#### **Allison Casey**

International Affairs and Economics The Effect of Affluence on Low-Income Student Test Scores

#### Christopher Celi

**Economics** 

The Market for Water: Supply, Demand, and Viable Solutions for the Long-Term

#### Michael Cohn

**Economics** 

Does Financial News Affect Stock Prices?

#### Goran Galic

Economics

The Economic Benefits of the FIFA World

#### Scot Hein

Economics

The Effects of Gun Control on Violent Crimes

#### William Kluber

**Economics** 

An Economic Study of Tuition Rates and the Demand for a College Education

#### Lawrence McQuaid

**Economics** 

The Effect of Fast Food Restaurant Location on Obesity

#### Brian Morin

Economics

Macroeconomic Factors and U.S. Congressional Election Outcomes

#### Eileen O'Leary

Economics

Factors Affecting Corporate Charitable Donations

#### **Abigail Palmatier**

Economics and Political Science A Cobweb Model of Engineers

#### **Stephen Potts**

Economics and Information Technology *Moneyball in Baseball* 

#### **Tollan Renner**

Statistics and Economics
The Economic Effects of the New
Hampshire Liquor Commission and Policy
Implications

#### Laura Roach

**Economics** 

The Effect of Conscription on Innovation

#### **Derek Scanlon**

**Economics** 

The Effects of Foreign Direct Investment on Employment and Wages in the Home Country

#### Joseph Sinotte

Economics

How New Product Announcements Affect Stock Market Prices of Competing Firms

## **Kelly Spencer**

Economics

Harry Potter and the Dynamics of Book Sales

#### Nicholas Wons

**Economics** 

Confidence Effects on IPO's

# Paul College, Room G45 10-11:30a.m.

#### **Honors Macroeconomics**

Moderator and Adviser: James Wible

#### **Austin Bauer**

Undeclared

A Macroeconomic Analysis of Portugal

#### Stephen Campbell

Undeclared

A Macroeconomic Analysis of China

#### **Daniel Coste**

**Economics** 

A Macroeconomic Analysis of Japan

#### Kevin Dwyer

International Affairs and Spanish A Macroeconomic Analysis of Argentina

#### **Margaret Ferguson**

Accounting

A Macroeconomic Analysis of Ireland

#### **Dominic Ferreira**

Undeclared

A Macroeconomic Analysis of Switzerland Adviser: James Wible

#### **David Gottschalk**

Mechanical Engineering

A Macroeconomic Analysis of Germany

#### Jeffrey Lertora

Undeclared

A Macroeconomic Analysis of England

#### Kathryn Maguire

Hospitality Management

A Macroeconomic Analysis of Canada

#### **Eric Murray**

Economics

A Macroeconomic Analysis of Italy

#### Adam Staszkiewicz

Humanities

A Macroeconomic Analysis of Norway

#### Robert Swan

Mechanical Engineering

A Macroeconomic Analysis of Modern Russia

#### Tycho Tromp

Biomedical Science

A Macroeconomic Analysis of The Netherlands

#### Craig Tyer

**Economics** 

A Macroeconomic Analysis of Spain

#### John Wallace

Economics

A Macroeconomic Analysis of Brazil

#### Alyson Werth

Management

A Macroeconomic Analysis of Mexico

#### Rebecca Wuorio

Economics

A Macroeconomic Analysis of Finland

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

## International Business and Economics

Moderator and Adviser: Meera Venkatachalam

#### Megan McCann

International Business and Economics Female Authority in a Globalizing Marketplace

#### PETER T. PAUL COLLEGE OF BUSINESS AND ECONOMICS UNDERGRADUATE RESEARCH CONFERENCE, CONTINUED

#### Paul College, Room G45 Noon-1:30p.m.

#### Law and Economics (Posters)

Moderator and Adviser: James Wible

#### Jeffrey Agnew

History and Political Science
An Economic Analysis of Reckis v. Johnson
and Johnson

#### Christopher Celi

**Economics** 

An Economic Analysis of Almeder v. Kennebunkport

#### Michael Cohn

**Economics** 

An Economic Analysis of Whitmill v. Warner Bros.

#### Brendan Gallagher

**Economics** 

An Economic Analysis of Knight v. Jewett

#### Craig Hooker

Economics and English
An Economic Analysis of Gove v. ZBA of
Chatham

#### **Kemal Kadic**

Finance and Economics

An Economic Analysis of Salinger v.

Colting

#### Benjamin Kidder

History and Economics An Economics Analysis of Barrington v. Townsend

#### William Kluber

**Economics** 

An Economic Analysis of Tiffany v. Ebay

#### **Benjamin Morrow**

Finance

An Economic Analysis of Wiley v. Kirtsaeng

#### Andrew O'Connor

Finance and Economics
An Economic Analysis of U.S. v. Bernard
Madoff

#### Eileen O'Leary

**Economics** 

An Economic Analysis of Whitman v. Goldberg

#### Michael Restuccia

Economics

An Economic Analysis of Liebeck v. McDonalds

#### **Derek Scanlon**

**Economics** 

An Economic Analysis of Tyler v. Hannaford Brothers

#### Harrison Shea

Finance and Economics

An Economic Analysis of Kelo v. New

London

#### Dana Steele

Finance

An Economic Analysis of Yamanouchi Pharmaceutical v. Danbury Pharmacal

#### **Rhett Terrell**

**Economics** 

An Economic Analysis of Residents Defending Their Homes v. Lone Pine Hunters' Club

#### **Christopher Wallace**

Accounting

An Economic Analysis of Tarlton v. Kaufman

#### Nicholas Wons

Economics

An Economic Analysis of Benevolent Assoc. v. Crescent Landing

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

# **Marketing Presentations**

# (Posters)

Moderator: Melissa Bishop

Oliver Alderman Emily Gatsas Lindsay Jeffries Lindsay Lavin Marketing

Analytical Ice Cream Overview

(Low-Cal-Pal)

Adviser: M. Billur Akdeniz

#### Nicole Avedikian Cynthia O'Brien

Marketing

Mobile Future Institute Adviser: William Machanic

#### **Ann Marie Britton**

Marketing and International Business and Economics

The Beauty Industry's Influence on Women in Society

Adviser: Bruce Pfeiffer

## Kailey Chappell

**Travis Dadoly** 

Paige Goloubef

Jordan Thomas

Marketing

Analyzing the Perceptions and Products of the Ice Cream Market
Adviser: M. Billur Akdeniz

#### **Bailey Comyns**

Marketing

Impact of Visual Merchandising on University of New Hampshire Students

Adviser: Bruce Pfeiffer

#### Sarah Daigle

Marketing

Elegance By Design Adviser: Melissa Bishop

#### Brittany Emerson Kristen Kouloheras

Dana Pandorf

Marketing and International Business and Economics

#### Nicole Olsen

Marketing

Analytical Marketing Plan for New Shampoo Introduction

Adviser: M. Billur Akdeniz

#### Sean Stewart

Marketing

Finding Success in Emerging Markets

Adviser: Bruce Pfeiffer

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

## Oral Presentations

#### Friday, April 26 Paul College Building

Through original research and valuable guidance from mentors, this event helps students gain deeper academic knowledge as well as professional experience. This URC event includes poster presentations, oral presentations, and feedback from University and business leaders.

#### Paul College, Room 125 10-11:30a.m.

#### **Atkins Investment Group**

Moderators and Advisers: Stephen Ciccone and Ahmad Etebari

#### Charles Almeida

Accounting and Management

#### Nicholas Sorkin

Lucas Winthrop

Finance

Technology

#### Janine Appleton

Biomedical Science

#### John Kerrigan

Finance

#### **Brian Lowell**

Accounting and Finance *Healthcare* 

#### **Jonathan Bartholomew**

International Business and Economics and Finance

#### **Douglas Cataldo**

Finance and Management

#### **Daniel Cray**

Accounting and Finance *Financials* 

#### Ryan Bell

Finance and Information Systems Management

#### Victoria Hexeberg

International Business and Economics and Finance

#### Maria von Svoboda

Finance

Consumer Discretionary

#### Steven Buske

Computer Science

#### **Daniel Kraft**

Finance and Economics

#### William McCarran

Finance and Entrepreneurial Studies *Basic Materials* 

#### Greg Carter Daniel Lambert

Daniel Lan

Economics

Energy

#### Nicholas Castaldi

Benjamin Schenck

Finance

#### Eric Harwood

**Economics** 

Officers of Atkins Investment Group

## **Christopher Doyle**

Samantha-Jo Virga

**Economics** 

#### **Connor Slein**

Political Science

Portfolio Strategy

#### Charles Kidd

International Business and Economics

#### Gustav Nilsson

**Harrison Shea** 

Finance and Economics *Consumer Staples* 

#### James Miller

Tyler Walsh

Accounting and Finance

#### **Scott Morris**

Management and Finance Industrials

#### **Brandon Ossinger**

Finance and Information Systems Management

#### Caitlin Tappan

Finance and International Business and Economics

#### Jeffrey Wyer

Finance

Telecom

#### **Austin Perea**

Political Science and Economics Socially Responsible

#### Caitlin Schlesinger Ioseph Stanek

Finance and Economics

#### James Taylor

Accounting and Finance *Utilities* 

#### Paul College, Room 135 10-11:30a.m.

#### Marketing Workshops, Session I

Moderator and Adviser: Peter Masucci

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Travis Dadoly Hannah DeBenedictis

Lindsay Jeffries

Kristin Mayo

Chase Meyers

**Iulie Morris** 

John Neenan

jonn Neenan

Rebecca Risman

Jessica Rousseau

Marketing

Assessing and Measuring the Value of Athletics to the UNH Brand, and Promoting Increased Attendance at Events to Undergraduate Students at UNH Paul Annand Gavin Bennett Michael Cerulli Christopher Cover David Goodsell Kelly Johnson

Christopher Lorenzo

Alissa Marks Melissa Terry Kevin Walker Marketing

Assessing the Effectiveness of UNH Admissions Programs in Reaching Targeted Audiences

Nicholas Barnes Julia Germano Kyle Hatem Jenna Kucinskas James Mistovich Ryan Mullen Nathan Stavseth Lauren Steed Shawn Stuber Marketing

#### **Ann Marie Britton**

Marketing and International Business and Economics
Boston Therapeutics: Research and

Development of a Marketing Plan for SUGARDOWN,\* a Dietary Supplement for Managing Sugar Intake, Which Targets the College-Aged Demographic Group

Brittany Emerson Kristen Kouloheras Dana Pandorf

Marketing and International Business and Economics

Daniel Imbriaco Kaitlin Kilpatrick Eric Labonte Miranda Martinos Ryan McFarlane Justin Patrie Joseph Peterson Nicole Spinosa

Nicole Spin Marketing

Chipotle Mexican Grill: Research and Development of Marketing Programs Aimed at Raising Awareness of the Student Brand Manager Positions with Chipotle to Both College and High School Students Tyler Bascom Jennifer Caponetti Kailey Chappell Paige Goloubef Nathan Laperle Andrew Lessard Matthew Liedes

**Christopher Pham** 

Marketing **Dylan Manz** 

**Eric Schultheis** 

Marketing and Entrepreneurial Studies Enterprise Rent A Car: Research and Development of a Marketing Campaign to Increase Awareness and Use of Enterprise as a Transportation Option by UNH Students

Patrick Barnard Mikayla Cadoret Mike Deering Brendan Flaherty Heather Kelly Derwood Mason Shannon Mulligan Emily Philpott Katherine Tancreti Ryan Ward Marketing

Samuel Nute

Marketing and Entrepreneurial Studies eUNH Part 1: A Study Measuring Awareness Levels and Student Perceptions of Online Courses

Chris Cardarelli Brittney Carnes Ashley Clifford Justin Corcoran Kevin Cronin Julia Longley Anna Powers Sarah Smith Meaghan Sullivan Marketing

Peter Maxfield

Entrepreneurial Studies and Marketing eUNH Part 2: A Continuing Study to Measure Both College and High School Student Awareness and Perceptions of Online Education

Paul College, Room 135 Noon-1:30 p.m.

#### Marketing Workshops, Session II

Moderator and Adviser: Peter Masucci

Nicole Avedikian Bailey Bartlett Brianna DeLuca Charles MacCall Rory McCarthy Ryan McKane Nicole Olsen Amy Polaneczky Jordan Thomas

Justin Voellmann Marketing

FreePriceAlerts.com: Development of a Marketing Campaign to Increase Awareness of the Brand and Promote Its Use Among College Students

Cody Bernard
Erik Chesna
Heather Dion
John Doisneau
Lindsay Lavin
Cynthia O'Brien
Gregory Pachner
Carlista Robinson
Andrew Styles
Kelly Sullivan
Joseph Yalicki
Marketing

Research and Development of a Comprehensive Marketing Campaign to Promote the Image of, and Use of UNH Campus Recreation Facilities and Programs

Jonathan Boghigian Colin Champagne Michael Dwyer Thomas Fitzsimmons Alexandra Robichaud Baron Vogel Marketing

Sarah MacLellan

Marketing and Management Seacoast Reads: Design and Development of a Marketing Plan to Raise Awareness and Promote the Program Robert Cormier

Management and Marketing

**Alex Gormley** 

**Dennis Kapsimalis** 

Mary Kavjian

Michael Marshall

Timothy McCarthy

Samantha Philbrick

**Justin Pleadwell** 

Sean Stewart

Marketing

#### **Hannah Shoer**

Management and Marketing TurnRight.com: Development of a Marketing Campaign to Increase Awareness of the Brand and Use of Its Online Mentoring and Advising Services by College Students

Ariel Buchholz

Joseph Cappiello

**Emily Gatsas** 

**Trevor Leahy** 

**Zachary Racine** 

Eric Raiche

Sean Reagan

Marketing

Design and Development of a Marketing Campaign for the Healthy UNH Initiative

**Bailey Comyns** 

**Brennan Conley** 

**Julianne Edwards** 

Alexander Guilbeault

Nicholas Hogan

Natalie Kerman

Michael Levy

Kasandra Michailov

**Karah Rogers** 

Samuel Watkinson

Marketing

#### Sarah Perron

International Affairs and Marketing Research and Development of a Marketing Plan to Raise Awareness of Information Technology (IT) Security Oliver Alderman

Ethan Ash

Jennifer Azarian

**Michael Bakies** 

**Iames Cassin-Reed** 

John DeMichaelis

Jason Metzenroth

Jason Metzenrotn

Gregory Silverman

Samantha Watterson

Ariel Yardeni

Marketing

Special Olympics: Development of a Marketing Campaign to Promote the Penquin Plunge Fundraising Event

#### Paul College, Room 125 12–1:30 p.m.

# Multidisciplinary Oral Presentations

Moderator: Valentini Kalargyrou

#### **Komot Gabriel**

International Business and Economics Lessons for South Sudan: Corruption and Economic Development

Adviser: Bruce Elmslie

Alex Gormley Eric Labonte

Marketing

Dylan Manz

Marketing and Entrepreneurial Studies

#### **Tyler Stubbs**

Information Systems Management and Entrepreneurial Venture Creation Prestige Coffee

Adviser: M. Billur Akdeniz

#### Louis Jacobs

Economics and Mathematics Institutions and Growth Adviser: Bruce Elmslie

#### Samantha Pheffer

Accounting and Management Casino Accounting Procedures: A Case Study of Foxwoods Resort Casino Adviser: Valentini Kalargyrou

#### **Christopher Schwab**

Information Systems Management The Next Generation of Entrepreneurs Adviser: A.R. Venkatachalam Paul College, Room G25 1:30-3p.m.

# Sustainable Investing and the UNH Endowment: Findings from the Responsible Endowment Research Project

Moderator: Stephen Ciccone

#### Andrea Dow

Sociology

Organizational Change in Higher Education: How University Endowments are Making the Shift Towards Sustainable Investing

Advisers: Thomas Safford, Yusi Turell

#### Gina Guadagnoli

History

Responsible Endowments Research Project: Findings and Recommendations

Adviser: Yusi Turell

#### **Austin Perea**

Political Science and Economics Environmental, Social, and Governance Factors and Portfolio Performance: An Analysis

Advisers: Stephen Ciccone, Yusi Turell

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

# **Bud Albin Challenge Round**

Friday, April 26 1–4 p.m. Paul College

This competition takes students out of the classroom and into the real world. Students are required to research and prepare strategies for commercializing new products and services, which they present to a panel of industry judges. Prizes are awarded for the most feasible and fundable approaches for starting, acquiring, or expanding a business venture.

# The Naked Arts— Creativity Exposed

# Act III

Friday, April 26 12:15–1 p.m. Memorial Union Building Strafford Room

This event exposes the inner creative process of artists working in various disciplines. Presenters will describe the process, research, and other creative aspects undertaken to bring an artistic creation from initial inspiration to the stage or gallery. This may include a performance or excerpts from their work to illustrate their creative scholarship.

Joshua Berk Ethan Brown Nathan Mann Undeclared

Alyssa LeBlanc

Theatre

Pollination Vibration

Advisers: Szu-Feng Chen, Rob Haskins, Thomas Payne, Leah Woods

# College of Health and Human Services Grimes Award Competition

Friday, April 26 1:30–4 p.m. Pettee Hall, Room G10

Jack and Marianna Grimes and family, all UNH graduates, endowed the funds for this celebration of excellence in undergraduate research. The oral presentation competition includes finalists who have been selected by CHHS faculty after rigorous scientific review of written proposals.

Information on participants will be available at the event.

# Psychology Department George M. Haslerud Undergraduate Research Conference

Friday, April 26 1:30-5 p.m. Murkland Hall

The George M. Haslerud Undergraduate Research Conference, named for the late Professor Emeritus of Psychology, recognizes and celebrates undergraduate research conducted by honors psychology students. Students present their original research projects before an audience of UNH faculty, staff, graduate students, fellow undergraduates, and friends and family.

#### **Kaitlyn Cameron**

Psychology

Creative Careers and Self-Actualization

Adviser: Rebecca Warner

#### Allison Caplin

Psychology

What are the Relations Among Stress Perception, Health Perception and Activity Participation in School-Aged Children? Adviser: Robert Drugan

#### Sarah Dobush

Psychology

Anger Proneness, Hostility, and Commitment in Intimate Relationships Adviser: Edward Lemay

#### Saige Jutras

Psychology

Correlates of Help-Seeking Following Stalking Victimization: A Study of College Women

Advisers: Katie Edwards, Kateryna Sylaska

#### Tristan Papallo

Psychology

Do Ultrasonic Vocalizations During Intermittent Swim Stress Forecast Resilience in a Subsequent Forced Swim Test? Adviser: Robert Drugan

Adviser: Robert Drugar

#### Monica Rosskothen

Psychology

Tiptoeing Around Insecure Relationship Partners: Experimental Evidence that Perceiving Partner's Insecurity Heightens Vigilance to Threat

Adviser: Edward Lemay

#### Kerry Spongberg

Psychology

Interpersonal Confidence and Desire: Implications for Explanations, Emotions, and Behavior in Romantic Relationships Adviser: Edward Lemay

#### Samuel Stevens

Psychology

Trust Biases Perceptions of Romantic Partners' Hostility and Responsive Behavior

Adviser: Edward Lemay

#### Madeline Whitcomb

Psychology

Reflections in Bystander Intervention

Adviser: Victoria Banyard

# Honors English Undergraduate Research Conference

Friday, April 26 2–6 p.m. Hamilton Smith Hall English Department

To complete Honors-in-English students must conduct a semester-long research project, culminating in a 30-40 page senior thesis. The Honors English Undergraduate Research Conference provides these students and students in the linguistics program with the opportunity to share their work with their fellow students, professors, and families. The presentations include poetry, autobiographical writing, journalism, and scholarship on literary texts from several different centuries.

#### **Molly Branch**

English/Journalism and Women's Studies Sisters in Our Mothers' Gardens: Intimate Female Friendship in Their Eyes Were Watching God

Adviser: Reginald Wilburn

#### Lvnsev Burke

English

A Collection of Poems Adviser: David Rivard

#### William Dyke

English

A Pedagogical Analysis of Economic Issues in American History

Adviser: Christina Ortmeier

#### **Robyn Keriazes**

International Affairs and English/ Journalism Multimedia Use in Local Newsrooms Adviser: Andrew Marsters

#### Lynnette Macomber

Justice Studies and English Sexual Iconoclasm in Early Modern Drama

Adviser: Jason Zysk

#### Katy Sternberger

English/Journalism Books and Religious Reformation in Medieval and Early Modern Drama Adviser: Jason Zysk

#### Celina Williamson

Linguistics and Spanish A Morphological Study of Drug Brand Names

Adviser: Rochelle Lieber

# Philosophy Department Undergraduate Research Conference

Friday, April 26 4–8:30 p.m. Murkland Hall

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

#### Mark Baroni

Philosophy

The Problem with American Professional Sports

Adviser: Nickolas Smith

#### Hannah Gilb

Philosophy

Money and the Origins of Philosophy

Adviser: Charlotte Witt

#### **Joshua Hamor**

Philosophy

Underground Currents in Ethics or

Materialism

Adviser: Nickolas Smith

#### Stefan Jadaszewski

Psychology and Philosophy Personal Authority and our Aptitude for Happiness

Adviser: Paul McNamara

#### Brianna Jean

Philosophy and Mathematics
Structural Scientific Realism
Advisers: Willem De Vries, Val Dusek

#### Ryan Keenan

Mathematics and Philosophy
A Neuroeconomic Defense of Daniel
Haybron on Human Decision-making
Adviser: Paul McNamara

#### Rebecca Paquette

Philosophy and English Literature The Paradox of Fiction Adviser: Paul McNamara

#### Connor Strobel

Political Science and Philosophy What of Angelic Violence? Philosophical Reflections on Steven Pinker's The Better Angels of Our Nature Adviser: Nickolas Smith

#### Kevin Vansylyvong

History and Philosophy Reconciling Foucault and the Modern Historian

Adviser: David Hiley

#### Christine Warden

Philosophy and Physics

Everything is Relational

Advisers: Drew Christie, Paul McNamara,

Charlotte Witt

#### Justin Ykema

Philosophy
Say What You Mean
Adviser: Willem De Vries

# Student Composers' Concert

Friday, April 26 8 p.m. **Bratton Recital Hall Paul Creative Arts Center** 

The UNH Student Composers' Concert is an annual event that features the music of undergraduate and graduate students of the Music Department. The music is newly composed, and is almost exclusively performed by fellow music students.

#### Parker Callahan

Music Theory

Two Pieces for Voice and Piano: "Maybe I Found Him" and "My Mister Summer Love"

Adviser: Christopher Kies

#### Nathan Faro

Music Theory Four Postcard Vignettes for Piano Adviser: Christopher Kies

#### **Trevor Frost**

Music Education Depression, Anxiety, and a Hint of Madness

Adviser: Andrew Boysen

#### Vincent LaMonica

Music Education and Music Theory Concerto for English Horn, "Bleu Squid" I. Aria, Allegro; II. Adagio; III. Theme and Variations

Adviser: Michael Annicchiarico

#### Molly McCahan

EcoGastronomy and Music Theory The Tuft of Flowers

Adviser: Michael Annicchiarico

#### Ian Nelson

Music Education Ascent

Adviser: Andrew Boysen

#### Ryan O'Connell

Music Education Chumalungma Adviser: Andrew Boysen

#### **Richardson Smith**

Music Performance Study and Music Education Untitled

Adviser: Michael Annicchiarico

# 22nd Annual COLSA **Undergraduate Research** Conference

# **Oral Presentations**

Saturday, April 27 7:45 a.m.-2 p.m. **Huddleston Ballroom and Holloway Commons** 

Nicole Antaya (graduate student) Dairy Management

#### Valerie Goeman

Animal Science

Feeding Incremental Levels of Ground Flaxseed Linearly Reduced Milk Yield and Enteric Methane Emissions in Organic Iersev Cows

Adviser: Andre Brito

#### Sophia Burke

**Environmental Sciences** 

Acoustic Monitoring of Ebullitive Flux From a Mire Ecosystem in Subarctic

Sweden

Adviser: Ruth Varner

#### **Evan Ehrlich Molly Hunt**

Wildlife and Conservation Biology Analysis of Behavior and Song in Hybrid Male Saltmarsh x Nelson's Sparrows Adviser: Adrienne Kovach

#### Sara Fechner

Nutrition

Development of an Obesity Prevention Program Using Participatory Action Research

Adviser: Gale Carey

#### Jenny Jing

Biomedical Science The Affects of Dietary Fatty Acids on Immune Cell Function Advisers: Anne Ronan, (lab assistant) Anthony Tagliaferro

#### Ashley Klink

Biology and Biology

# Rajtilak Majumdar

#### Lin Shao

Plant Biology

Effects of Abiotic Stress Factors on S-adenosylmethionine Decarboxylase (SAMDC) Genes on Arabidopsis Thaliana Adviser: Subhash Minocha

#### Megan McLaughlin

Genetics

Biofilm Ecology and Diversity Allows for Persistence After Antibiotic Treatment Adviser: Vaughn Cooper

#### Lauren Tassone

Biomedical Science ABO Blood Type and Diet Correlation

Adviser: Adele Marone

# 22nd Annual COLSA **Undergraduate Research** Conference

## Poster Presentations

#### Saturday, April 27 7:45 a.m.-2 p.m. **Huddleston Ballroom and Holloway Commons**

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

#### Nicole Antaya

Dairy Management

#### Valerie Goeman **Erin Murray**

Animal Science

Kelp Meal (Ascophyllum nodosum) Did Not Improve Milk Yield or Mitigate Heat Stress but Increased Milk Iodine in Mid Lactation Organic Jersey Cows During the Grazing Season

Adviser: Andre Brito

#### Nicole Ashmankas

Zoology

Detection of Pressure in Juvenile Limulus polyphemus

Adviser: Winsor Watson

#### **Nicholas Bates** Parker Gage Thomas Ilaria Shawn Ryan

Environmental and Resource Economics Fracking: Facts and Fiction

Adviser: John Halstead

#### **Matthew Blunt**

Civil Technology and Applied Business Management

GIS Analysis of Diet and Cancer Rates in Mediterranean Countries

Adviser: Anthony Vannozzi

#### **Christopher Bottom**

**Cody Merrill** (graduate student)

#### **Kelsey Wellington**

Wildlife and Conservation Biology Developing a Protocol to Standardize Detection Rates By Trail Cameras Used to Monitor Forest Carnivores Adviser: John Litvaitis

#### Alexandra Bourcy **Crystal Cascio**

#### Sarah Maskwa

Nutrition

Guiding Stars at the UNH Dairy Bar Advisers: Gale Carey, Jesse Morrell

#### Allison Brehm Stephanie Walsh

Zoology

Synchrony as a Proxy for Male Fitness in Baiting Behaviors of the Spotted Hyena, Crocuta crocuta

Adviser: Leslie Curren

#### Aurora Burgess

Marine, Estuarine and Freshwater Biology The Effect of Stocking Density, Temperature, and Fish Size on Ammonia Production in Alewives (alosa pseudoharengus)

#### **Elizabeth Burgess**

Adviser: David Berlinsky

Genetics

The Effects of Cytokinin on the Transcriptional Regulation of PIN Expression in Arabidopsis thaliana

Adviser: Dennis Mathews

#### Patricia Calvin

Biomedical Science

Big Cats in Conflict: Namibia's Challenge in Managing and Protecting Predators on Communal and Commercial Farm Land

Adviser: Andrew Conrov

#### **Andrew Campbell**

**Environmental Sciences** Photosynthetically Active Radiation Associated with the Presence and Growth of an Invasive Tree, Castor Aralia (Kalopanax septemlobus), in a New Hampshire Forest

Adviser: Thomas Lee

#### **Kevin Chesmore** (graduate student)

#### **Scott Finnance** Cody White

Neuroscience and Behavior Identification of the Circadian Clock Gene and Protein Cryptochrome-2 in the American Lobster, Homarus americanus Advisers: Chris Chabot, Winsor Watson

#### **Emmaline Clarkson**

Biology

Biodiversity of Leafhoppers in Organic and Non-Organic Farms in Southern N.H.: a Comparison of Different Trapping **Techniques** 

Adviser: Donald Chandler

#### Ben Claxton

Biochemistry, Molecular, and Cellular

Is Cytoplasmic Sequestration of p53 Characteristic of Cells From a Clinical Population of Acute Myologenous Leukemia (AML) Patients and is Mortalin Involved? Adviser: Charles Walker

#### Logan Cline

Biology

Effects of Exotic Shrub Glossy Buckthorn (Frangula alnus) on the Diet Composition of Nestling Common Yellowthroats Adviser: Matthew Tarr

#### Alison Cocchiola

Biology

**Kazu Okamoto** (graduate student)

Alyssa Piemonte Andrew Quitadamo

Biochemistry, Molecular, and Cellular Biology

#### Jordan Ramsdell Abigail VanNote

Genetics

Role of DNA Methylation in Transposable Element Mobilization in Caenorhabditis elegans

Adviser: W. Kelley Thomas

22<sup>ND</sup> ANNUAL COLSA UNDERGRADUATE RESEARCH CONFERENCE, CONTINUED

#### Alison Cocchiola

Biology

Kazu Okamoto (graduate student)

Alyssa Piemonte

Andrew Quitadamo

Biochemistry, Molecular, and Cellular Biology

#### Jordan Ramsdell Abigail VanNote

Genetics

The Role of DNA Methylation in Transposable Element Mobilization in Caenorhabditis elegans: UNC-22 nicotine assay

Adviser: W. Kelley Thomas

#### Alison Cocchiola

Biology

Kazu Okamoto (graduate student)

Alyssa Piemonte Andrew Quitadamo

Biochemistry, Molecular, and Cellular Biology

#### Jordan Ramsdell Abigail VanNote

Genetics

Comparative Analysis of TE Mobilization in Caenorhabditis elegans Adviser: W. Kelley Thomas

#### **Iillian Corcoran**

Zoology

Animal Personalities
Adviser: Brett Gibson

## Matthew Cotton Elora Demers

Nicole Petersen

Biochemistry, Molecular, and Cellular Biology

#### Kendall Milkey

Biomedical Science

Megan Thompson (graduate student) A Screen to Identify and Characterize Mutations in Arabidopsis thaliana Causing Sodium-Dependent Root Skewing Adviser: Estelle Hrabak

#### Chelsea Crepeau

Genetics

The Investigation of Microbe-Nematode Interactions

Adviser: Louis Tisa

#### Marissa Cuda

Zoology

Learning Abilities of Juvenile Lobsters Adviser: Winsor Watson

**Christopher Cummings** (graduate student)

#### Umija Durakovic

Biochemistry, Molecular, and Cellular Biology

Regulation of the Angiogenic Inducer CCN1 by Prostaglandin F2a in Granulosa Cells

Adviser: Paul Tsang

Evan DaSilva (graduate student) Randi Foxall (graduate student)

#### Sarah Gagne

Biology

Does the GlnD Nitrogen Metabolism Regulator Mediate Regulation of Iron Uptake by the GacA Global Activator of Colonization in Vibrio fischeri? Adviser: Cheryl Whistler

#### Ethan Duane

Biochemistry, Molecular, and Cellular Biology

Ashley Matthews (graduate student)
Olivia Fleszar (graduate student)
Lin Shao (graduate student)
Novel Antimicrobial Agents: Expression
of Human Keratin 6A in Plants
Adviser: Subhash Minocha

#### **Danielle Dubois**

Nutrition

Binge Drinking, Blood Pressure, and Duration of Physical Activity as Risk Factors for Cardiovascular Disease in College Students

Adviser: Jesse Morrell

#### Sarah Dudek

Wildlife and Conservation Biology Does Facial Mask Size Reflect Territory Quality for Male Common Yellowthroats Adviser: Matthew Tarr

#### **Cameron Duquette**

Wildlife and Conservation Biology An Evaluation of Managed Nesting Habitats for Turtles in Southeastern New Hampshire

Adviser: John Litvaitis

#### **Emily Elgert**

Neuroscience and Behavior Norepinephrine Involvement in the Intermittent Swim Stress-Induced Deficit in Spatial Learning and Memory Adviser: Robert Drugan

#### **Scott Finnance**

Neuroscience and Behavior

#### Sara McKinney

Animal Science

The Possible Role of Extra-ocular Photoreceptors in the Entrainment of Lobster Circadian Rhythms to Light:Dark Cycles.

Adviser: Winsor Watson

Maegan Gagne (graduate student)
Rajtilak Majumdar (graduate student)

#### Heather Wingate

Biology

Effects of Heavy Metals and Salt on Wild Type and High Putrescine Arabidopsis Adviser: Subhash Minocha

#### Daniel Gallant

Biomedical Science

Assessing Inflammatory Markers in Grain Fed vs. Pasture Fed Dairy Cows Adviser: Thomas Foxall

#### Evagelia Georgakilas

Nutrition

College Students' Midpoint Sleep Time and Dietary Intake

Adviser: Anthony Tagliaferro

#### Natalie Hall

Plant Biology

Protection of Arabidopsis Thaliana from Abiotic Stressors by Putrescine

Adviser: Subhash Minocha

#### **Ashley Heim**

Zoology

Boldness in the Asian House Gecko, Hemidactylus frenatus, and Its Relationship to Running Speed, Bite Force, and Mass

Adviser: Leslie Curren

#### **Charlene Higgins**

Environmental and Resource Economics Barriers and Opportunities of Community Gardening Projects in New Hampshire Adviser: John Halstead

# Daniel Hocking

**Environmental Sciences** 

#### **Patrick Sargent**

Biomedical Science Relating Hematological Patterns in Red-backed Salamanders to Stress in Different Habitats and Densities Adviser: Kimberly Babbitt

#### Marissa Huppe

Integrated Agricultural Management: Veterinary Tec

Developing an Integrated Agricultural Enterprise on 12 Acres in Farmington, N.H.

Adviser: Andrew Conroy

#### **Brian Hurley**

Biology

**Ashley Matthews** (graduate student) Production of Neoculin (a Taste Modifying Protein) in Vegetables Through Genetic Engineering

Adviser: Subhash Minocha

**Sheldon Hurst IV** (graduate student) **Lauren Petersen** (graduate student)

#### Kaitlyn LaCourse

Biochemistry, Molecular, and Cellular Biology

Identification of genetic loci involved in Serratia sp. SCBI production of antimicrobial agents

Adviser: Louis Tisa

#### Katie Kozacka

Biochemistry, Molecular, and Cellular Biology

Proteomic Identification of Preferential Interactions between PDE6 Catalytic Subunits and its Inhibitory Subunit Advisers: Feixia Chu, Rick Cote

#### **Moire Loftus**

Zoology

#### Alec Luro

Ecology, Evolution and Behavior

#### Elizabeth Natola

Wildlife and Conservation Biology

#### Jennifer Wilmot

Biology

Individual Differences in Male Baiting Behavior of Spotted Hyenas: Female Choice and Baiting Aggression as an Indicator of Male Fitness

Adviser: Leslie Curren

#### Stephanie Malanga

Neuroscience and Behavior
The Influence of Light and Hormones on
the Daily Rhythms of the Nudibranch,
Melibe leonina

Adviser: Winsor Watson

#### Caleb Maney

Environmental Sciences

Land-use affect on soil dynamics

Adviser: Stuart Grandy

#### Christie Mastriano

#### **Leah Tully**

Nutrition

Multivitamin/Mineral Usage, Body Mass Index, and Exercise Among College Students

Adviser: Jesse Morrell

#### Kadina Mazic

Biochemistry, Molecular, and Cellular Biology

The Effect of pH on the Charge of a Monoclonal Antibody

Advisers: Dana Filoti, Thomas Laue

#### Caitlin McCarthy

Biomedical Science Characterization of Cellular FLICE Inhibitory Protein (c-FLIP) in Cells of Human Cervical Cancer Adviser: David Townson

#### John Micozzi

Biomedical Science Anatomical Study of the Oak Apple Gall Nursery Chamber

Adviser: Wayne Fagerberg

#### **Matthew Morris**

Sustainable Agriculture and Food Systems Effects of Cover Crop Systems on Earthworm Communities Adviser: Richard Smith

#### Elizabeth Natola

Wildlife and Conservation Biology Phylogeography of the New England Cottontail

Adviser: Adrienne Kovach

#### Elizabeth Orlowicz

Marine, Estuarine and Freshwater Biology Filtering Efficiency and Feeding Mechanisms of Daphnia pulex on Microcystis aeruginosa and Nannochloropsis

Adviser: James Haney

#### Mallika Prabhakar

Biomedical Science
Detection of Immunoglobulin A in
Neonatal Calf Saliva
Advisers: Nate Smith, Paul Tsang

#### Samuel Rafter

Biochemistry, Molecular, and Cellular Biology

Plant Nuclear DNA Quantitation By Flow Cytometry

Advisers: Thomas Davis, Qian Zhang

#### Josiah Robertson

Integrated Agricultural Management: Veterinary Technology Bohanan Farm, Contoocook, N.H.: The Fifth Generation, Looking to the Future. Adviser: Andrew Conroy

#### Nathan Roe

Environmental Sciences
Effective Microorganisms Influence on Pea
Growth and Nutrient Efficiency
Adviser: Rebecca Sideman

#### **Sean Santos**

Biology

Pathways of Distinction Analysis of Ewing's Sarcoma GWAS Data Adviser: Thomas Davis 22ND ANNUAL COLSA UNDERGRADUATE RESEARCH CONFERENCE, CONTINUED

#### **Inga Sidor** (graduate student)

#### **Andrew Walant**

Biomedical Science

Real-time PCR Validation and Sensitivity Analyses in the Quantification of Human Fecal Molecular Markers to Detect Non-Point Sources of Nitrogen in Surface Water Adviser: John Bucci

#### Jillian Smith

Nutrition and Spanish

Variations in Carotenoids in Plasma from Jersey Cows at an Organic Dairy Compared to a Conventional Dairy Over

Adviser: Joanne Curran-Celentano

#### Elizabeth Sterndale

**Environmental Conservation Studies** Asamang, Ghana: A Community Perception of Water Quality Adviser: Rosemary Caron

#### Yang Tang

Biomedical Science RIG-1 Structure and Function

Adviser: Feixia Chu

#### Kathryn Thomson

**Environmental Sciences** Environmental Change in the Great Basin Over the Past Century

Adviser: Rebecca Rowe

#### Ionathan Trudeau

Wildlife and Conservation Biology Ecology and Social Structure of Black Bears in Central New Hampshire Adviser: Peter Pekins

Sophie Trusty

Sustainable Agriculture and Food Systems Effects of Agricultural Management Practices on Soil Properties and Weed Seed Banks at the UNH Organic Garden

Adviser: Richard Smith

#### Cameron Vergato

Biomedical Science How Does DNA Damage from Etoposide Stress and Treatment With Mortalin siRNA Change the Expression of p53 and Mortalin in KG-1 Acute Myelogenous Leukemia Cells? Adviser: Charles Walker

# **Chemistry Department Poster Exhibition**

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

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

#### Stephan Barkley

Chemistry

Polymer-based Indicators Adviser: W. Rudolf Seitz

Elizabeth Brady (graduate student) **Kelsey Packard** 

Chemistry

#### **Austin Gregoire**

Undeclared

Understanding the Whirlpool Process in the Beer Brewing Industry by Monitoring Iso-Alpha-Acid Concentration

Adviser: Sterling Tomellini

#### **Muong Dang**

Chemistry and Chemistry and Chemistry The Comparison Between Vietnam and the United States Chemistry Training Adviser: Charles Zercher

#### Kathryn Dube

Chemistry

Selective Olefin Metathesis as Intra-chain Crosslinking Towards Nanoparticle Formation

Adviser: Erik Berda

#### Meaghan Elrick

Chemistry

Pedagogy for Pre-Collegiate Scientific Education

Adviser: Charles Zercher

#### **Justin Fleming**

Chemistry

Synthesis and Applications of Tricyclic Bisoxaminals

Advisers: Gary Weisman, Edward Wong

#### Katherine Grzejka

Chemistry

Progress Towards 2-(Aminomethyl)-Benzenethiol for Use in Modeling Biological Metal-thiolate Bonds Adviser: Samuel Pazicni

#### **Brian Kispert**

Chemistry

Studies of Stoichiometric Monobenzylation of Cross-bridged Cyclam by SN2 Alkylation and Reductive Alkylation

Advisers: Gary Weisman, Edward Wong

#### Michael Marallo

Chemistry

Applied Techniques for Tutoring General Chemistry Students Advisers: Charles Zercher

#### Hilary Miller

Chemistry and Spanish Benzyl Group Migration and Exchange in Arenium Ions

Adviser: Richard Johnson

#### Jean Remy Mutumwa

Chemistry

Effect of Cu(II) on the Aggregation of PolyNIPAM-co-bipyridine Modified Silica Nanoparticles

Adviser: W. Rudolf Seitz

#### Michael Nardone Jr

Chemistry

Zinc Carbenoid Reactions of Unsaturated

Beta-dicarbonyls Adviser: Charles Zercher

#### **Matthew Odom**

Chemistry

The Chemistry of Smell Adviser: Arthur Greenberg

#### Melissa Otis

Chemistry

Peer Lead Team Learning in General Chemistry

Adviser: Christopher Bauer

#### Lauren Pintabona

Chemistry

General Chemistry Labs: Behind the Scenes

Adviser: Charles Zercher

#### **Shannon Poges**

Chemistry *Polyketone Acene Mimics*Adviser: Glen Miller

#### **Benjamin Rogers**

Chemistry

Synthesis of Polymeric Nanostructures by the Palladium-catalyzed Sonogashira Coupling

Adviser: Erik Berda

#### **Gregory Samuel**

Chemistry

Teaching Chemistry Through Fieldwork

Adviser: Charles Zercher

#### Amanda St. Jean

Chemistry

The Double Chain Extension Adviser: Charles Zercher

#### Meghan Tobin

Chemistry

Synthetic Approach to 5,6-Benzo-1azabicyclo[2.2.2]octane-2-one: A Lactam Having Zero Resonance Energy Adviser: Arthur Greenberg

#### **Brittany White**

Chemistry

Novel Carbocation Rearrangements of Polycyclic Compounds

Adviser: Richard Johnson

#### Alexandra Wood

Chemistry

History of Alpha Chi Sigma Adviser: Charles Zercher

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

# **Championship Round**

Wednesday, May 8 1–5 p.m. Holloway Commons Squamscott Room

This competition takes students out of the classroom and into the real world. Students are required to research and prepare strategies for commercializing new products and services, which they present to a panel of industry judges. Prizes are awarded for the most feasible and fundable approaches for starting, acquiring, or expanding a business venture.

# Acknowledgements

The UNH Undergraduate Research Conference has grown to become a signature event at the University, an annual highlight of the spring semester and one of the largest and most diverse conferences of its kind. Bringing the URC to fruition each year is the result of a collaborative, behind-the-scenes network of a great many campus community members. Here, we acknowledge these individuals and campus institutions, and thank them for helping make URC 2013 happen.

Special thanks to:
UNH Parents Association
Office of the Vice President for Student
and Academic Services
Office of the Senior Vice Provost for
Engagement and Academic Outreach
All Faculty Mentors

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College of Engineering and Physical Sciences Alumni Association

College of Engineering and Physical Sciences (CEPS) Dean's Office

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Memorial Union Building Administrative Staff New Hampshire NASA Experimental Program to Stimulate Competitive Research (EPSCOR)

New Hampshire Space Grant Consortium Phi Beta Kappa

The University Honors Program

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URC Program Assistants Rebecca Howard '14 and Julia Ricciardi '16

Web Solutions

# Thanks to the 2013 URC Planning Committee (and all the many individuals who served on numerous subcommittees)

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Nivedita Gupta, Associate Professor, Chemical Engineering

Laura Hill, Educational Program Coordinator, Peter T. Paul College

Erica Johnson, Director, InterOperability Lab Robert McGann, Director, UNH Admissions Michael Merenda, Professor and Chairperson, Management

Cari Moorhead, Associate Dean, Graduate School

Thomas Payne, Assistant Professor, English Dan Reagan, Associate Dean for Academic Affairs, UNH Manchester

Chris Reardon, Associate Professor and Chairperson, Political Science

Tom Safford, Assistant Professor, Sociology Pam Smith, Director, Donor Relations,

UNH Advancement

Rose Whitmore and Molly Tetreault, Interim Directors, Connors Writing Center Jim Wible, Professor, Economics Julie Williams, Senior Vice Provost,

Engagement and Academic Outreach

2013 URC Event Chairs/Co-chairs:

Mike Annicchiarico, Student Composers'

Tim Barretto, Thompson School, Community Leadership Program

Carole Berry, Karen Burnett-Kurie, Nivedita Gupta, Ruth Varner, Interdisciplinary Science & Engineering Symposium

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

Janet Cass, Lynne Cooper, Parents Association Undergraduate Research Symposium

Vaughn Cooper, 22nd Annual COLSA URC Jay Derick, Mike Griswold, Cari Moorhead, Graduate Research Conference

Willem deVries, Eliza Wood, Philosophy Department Undergraduate Research Conference

Marianne Fortescue, UNH Office of Community Service Student Partnerships

Laura Hill, James Wible, Paul College Undergraduate Research Conference Delia Konzett, Honors English Undergraduate Research Conference

Jessica Lepler, History Department Undergraduate Research Conference

Catherine Mazur, 2013 Senior B.A. & B.F.A. Art Exhibition & Reception and M.F.A. Thesis Exhibition

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

Thomas Payne, Naked Arts—Creativity Exposed!

Dan Reagan, UNHM Undergraduate Research Conference - Oral, Poster, Cinema Arts Day, and Technology Day

Cindi Rohwer, Chemistry Department Poster Exhibition

Neil Vroman, CHHS Grimes Award Competition

Jim Wible, Laura Hill

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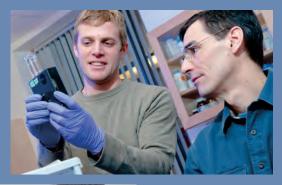
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