UNDERGRADUATE RESEARCH CONFERENCE 2021





















→ ORAL PRESENTATIONS - CHHS



Effects of Pitch Perturbation
os:15 on Vocal Learning
Effects of Pitch Perturbation on
Vocal Learning



→ ORAL PRESENTATIONS - CEPS & COLSA







→ POSTER PRESENTATIONS - COLA & UNHM









URC 2021

Welcome to the UNH Undergraduate Research Conference



JAMES W. DEAN JR.



WAYNE JONES

POR 22 YEARS, the URC has celebrated the innovative research that our undergraduate students pursue and the academic excellence that they achieve as they create solutions to real-world challenges. Guided by our renowned faculty mentors, our students also develop important life skills in problem solving, project management and teamwork — qualities that will serve them well as they graduate and pursue successful careers.

The URC's online format adds a new dimension to the demanding research that our students' presentations represent. In many ways, their work mirrors how businesses, institutions and societies are adapting to, and preparing for, a dynamic world that will increasingly function remotely and online after we emerge from the COVID-19 pandemic.

It is inspiring to know that close to 1,600 undergraduates have risen to the challenge for the 2021 URC. We encourage you to explore their engaging final projects and presentations, many of which represent years of hard work, inquiry and experimentation. Our URC students, along with the dedicated faculty and staff who support them, define the Wildcat community at its very best.

As you view the URC online, we think you will be as impressed and as proud as we are.

Thank you for visiting the virtual URC, and for supporting New Hampshire's flagship public university.

Best regards,

James W. Dean Jr.

PRESIDENT

WAYNE JONES

Provost and Vice President for Academic Affairs

A Welcome from the Hamel Center for Undergraduate Research

TELCOME to the 22nd annual celebration of academic excellence at the University of New Hampshire! The URC embodies UNH's mission to offer students a discovery-based education by encouraging inquiry, exploration, and deeper immersion in their fields of study. Student presenters represent disciplines from across the academic spectrum, reflecting the breadth and depth of undergraduate research and scholarship at UNH.

At the Hamel Center for Undergraduate Research, our core mission is to provide resources and financial support for the research, scholarly, and creative projects of UNH students. Our additional role as the administrative home of the URC enables us to broaden our commitment to supporting and showcasing all stages of the research process – including the final stage of communicating research findings to the wider public. For many UNH students, the URC is their first opportunity to present their work to a broad audience. The URC is thus vital in giving students practice in public speaking, communicating complex ideas to a general audience, and developing a deeper understanding of their subject areas. Such experience prepares students to pursue graduate study and to establish and be successful in meaningful careers.

This year, of course, the global pandemic has brought challenges to our world, to our University, and to undergraduate research. Many student projects were delayed due to COVID-19 safety protocols; other projects had to be revised in order to be carried out safely; a few had to be suspended altogether. Despite these challenges, our students persevered. The following pages represent close to 1,600 undergraduate students who presented their research,

scholarship, and creative work across more than twenty virtual URC events on the Durham and Manchester campuses. Thanks to the resourcefulness, creativity, and spirit of our UNH community, the virtual URC was a resounding success.

In addition to recognizing our students' achievements, we also want to recognize the many members of the UNH community whose dedication and enthusiasm are critical to making the URC possible. You will find their names in the acknowledgements at the back of the book. The partnerships between – and shared investment of – students, faculty, staff, and administrators not only ensure the success of the URC but also demonstrate the strength of the UNH community. Thank you for joining us in celebrating our students' remarkable scholarship!

PAUL C. TSANG, PH.D.

Paul C. Doans

Director, Hamel Center for Undergraduate Research Professor of Molecular, Cellular, and Biomedical Sciences

MOLLY DOYLE, PH.D.

Administrative Director, Hamel Center for Undergraduate Research

AMANDA LEGER, M.A.

amanda Jeser

URC Coordinator, Hamel Center for Undergraduate Research

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UNH Manchester Undergraduate Research Conference

Oral Presentations

Tuesday, April 20

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

Noor-Aldean Deek

Business

Fresh Check Day - SLA

Adviser: Keriann McDonough

Harshi Karedla

Neuropsychology

A Guide to Personal Pronouns: Why and

How to Use Them

Adviser: Keriann McDonough

Brian Lundgren

History

Wind of Change: Decolonization and Resistance in Singapore, South Africa, and

Northern Ireland

Adviser: Kristen Woytonik

Melissa Mullen

Analytics and Data Science

Jamila Peguero

Psychology

Visibility Week: Student Leadership

Academy Capstone

Adviser: Keriann McDonough

Vishnu Soni

Neuropsychology

Theorizing the Antithetical: Motion-

Induced Blindness in a Static Image and Its Interaction with Optic Flow

Adviser: John Sparrow

History Department Undergraduate Research Conference

Tuesday, April 20

The History Department hosts several panels of undergraduate history majors who present research projects from their academic classes, research seminars, independent research projects, and Honors theses. The History URC provides History students with the opportunity to share their work with fellow students, professors, and families.

Megan Busby

History

Reconstructing the Black Family: How the Freedman's Bureau Sought to Shape Black Family Structures after Emancipation Adviser: Alexis Broderick

Matthew Castagna

History

Disabled Civil War Veterans and the

Struggle for Pensions Adviser: Marion Dorsey

Cole Christopher

History

Italian American Mafia and Gun Control Adviser: Eliga Gould

Joseph DiVola

History

The Second Amendment and Its Racial Undertones

Adviser: Eliga Gould

Nicholas Fitzgerald

History, Political Science

Contagious Opinion: How the Public Reacted to Three Disease Outbreaks in

Southern New England

Advisers: Kimberly Alexander, Elizabeth

Mellyn, Cynthia Van Zandt

Maxwell Gilpatrick

History

The Politics of the 2nd Amendment: How the 2nd Amendment Became Polarized

Adviser: Eliga Gould

Norman Kerman

History

Making Waves: How New Bedford's Whaling Industry Attracted Southern Slaves and Sparked Abolitionist and Anti-Slavery Movements

Adviser: Alexis Broderick

Tatyana Rossolimos-Kalogeropoulos

Justice Studies, Psychology

Gun Reform and the Associated Political

Contingency

Adviser: Eliga Gould

Elinor Schelleng

Classics, History

Perceptions of Masculinity from the Classical World to the Victorian Period

Adviser: Michael Leese

Maiah Vorce

History

Changing Representations of the Second World War: Why We Fight, Victory at Sea,

and The World at War Adviser: Marion Dorsey

UNH Manchester Undergraduate Research Conference

Poster Presentations

Wednesday, April 21

The UNHM URC 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.

Robert Abbott

Homeland Security, International Affairs

Ionathan Kane

Corinne Prestia

Ana Toomey

Cameron Walsh

Homeland Security Harbor Homes

Adviser: James Ramsay

Catherine Aborn

Biotechnology

Working in the UNH Manchester COVID

Testing Lab

Adviser: Kristen Johnson

Maryam Ahmad

Biological Sciences, Neuropsychology End of Life Care: An Internship at Brookhaven Hospice Facilities Adviser: Nicholas Mian

Nicolette Barber

Neuropsychology

Abbey Olsen

Biochemistry, Molecular and Cellular

Biology

The Sequencing of Halococcus dombrowskii

and Sulfolobus shibatae Adviser: Kyle MacLea

Kevin Barry

Jana Bushway

Jonathan Davis

Emily Judkins

Alex Materkowski Forrest Vail

Homeland Security

Sean Jorgensen

Jacob Ricci

Homeland Security, Political Science Homeland Security Capstone Presented by Student Security Professionals

Adviser: James Ramsay

Nicole Benoit

Matthew Haigis

Cara Joyce

Ryan Roberts

Elizabeth Scrima

Homeland Security

Elizabeth Manchester

Homeland Security, Justice Studies Continuity of Operations Plan

Adviser: James Ramsay

Simren Bhogal Dianne Moschitta

Biotechnology

FOXN2 Knockout in Mice and Human

Cell Lines

Adviser: Kristen Johnson

Katelyn Blue

Brianna Turner

Biotechnology

Effect of Differing Sequential Order of Red and Blue Fluorescent Proteins in E. coli

Adviser: Kristen Johnson

Katelyn Blue

Biotechnology

Healthcare during a Pandemic: COVID-19

Testing Technician Adviser: Kyle MacLea

Meghan Bolton

Public Service and Nonprofit Leadership *Transgender Policy and Rights in the U.S.* Adviser: Stephen Pimpare

riaviser. Stephen i impa

Nemanja Boskovic

Biotechnology

Draft Genome Sequence of

Dactylosporangium fulvum, Isolated

from Soil

Adviser: Kyle MacLea

Nemanja Boskovic

Fidel Mkabela

Biotechnology

IPTG Induced Red Chromo Fluorescence

Adviser: Kristen Johnson

Jacob Brahm

Business

Labor Law and Union Membership in the

United States

Adviser: Stephen Pimpare

Maggie Briggs

Biotechnology

Bacteriophage Collection from Exeter's

Natural Spring

Adviser: Kyle MacLea

Jacob Brown

Biotechnology

Fluorescent Protein Expression in

Mammalian Cells

Adviser: Won Hyuk Suh

Jack Cavallaro

Regan Cullen

Natalie Noble

Matthew Sibley

Homeland Security

Kellee Gilcreast

Homeland Security, Justice Studies *HLS 790 Senior Capstone: Evergreen*

Woods Senior Living Facility

Adviser: James Ramsay

Samantha Chase

Biotechnology

Nela Klonowski

Biological Sciences

AHL Detection in Spoiled Milk

Adviser: Kristen Johnson

Samantha Chase

Biotechnology

Utilizing Heterotrophic Plate Counts to Determine Effectiveness of the Disinfection Process at Manchester Water Works

Adviser: Kyle MacLea

Hannah Chisholm

Kaelli Gehrung

Ethan Manning

Stavros Ouellette

Public Service and Nonprofit Leadership

HB172: Establishing Greenhouse Gas

Emission Reduction Goals for the State and

 $Establishing\ a\ Climate\ Action\ Plan$

Adviser: Stephen Pimpare

Hannah Chisholm

Public Service and Nonprofit Leadership

National Bail Reform

Adviser: Stephen Pimpare

Michelle Cullen

Alex Gomez

Biotechnology

Forbidden Blue Juice: Investigating

the Escherichia coli AI-2 Quorum-

Sensing System Using an AmilCP Blue Chromoprotein

Adviser: Kristen Johnson

Laura Dailey

Psychology

Applied Behavior Analysis in New

Hampshire

Adviser: Trish Merrill

Charlotte Dubois

Public Service and Nonprofit Leadership Analyzing the Peoples Act of 2021 and Its

History

Adviser: Stephen Pimpare

UNH MANCHESTER UNDERGRADUATE RESEARCH CONFERENCE, POSTER PRESENTATIONS, CONTINUED

Charlotte Dubois

Public Service and Nonprofit Leadership

Katherine Heck

Politics and Society

Selma Jusufovic

Undeclared SB 99 FN

Adviser: Stephen Pimpare

Charlotte Dubois

Public Service and Nonprofit Leadership What Influence Remains within the Current Democratic Party from the Nixon Era?

Adviser: Stephen Pimpare

Hunter Dupuis Lejla Hodzic

Biotechnology

Purple Sticky Bandits: Using Synthetic Biology to Engineer E.Coli to Express Red and Purple/Blue Chromoprotein Adviser: Kristen Johnson

Eugenia Fedorov

Biology

Path to Becoming an Emergency Medical

Technician

Adviser: Kyle MacLea

Trevor Flannery

Homeland Security

Genealogy Crime Solving vs. Privacy

Adviser: Stephen Pimpare

Nicole Gallien

Biotechnology

Bioluminescence in E. coli in Response to

Arabinose

Adviser: Kristen Johnson

Nicole Gallien

Biotechnology

Cytotoxicity Evaluation of Synthetic Nanoparticles and Microparticles

Adviser: Won Hyuk Suh

Haley Garside

Biological Sciences Naturopathic Medicine Adviser: Kyle MacLea

Kaelli Gehrung

Public Service and Nonprofit Leadership The Clean Air Act and Policy

Adviser: Stephen Pimpare

Kaelli Gehrung

Public Service and Nonprofit Leadership The Relationship between Grocers and

Sustainability

Adviser: Stephen Pimpare

Monique Gingras

Biotechnology

Direct Isolation of Garden Bacteriophage

from Derry, NH Adviser: Kyle MacLea

Seana Gosselin

Psychology

Marketing and Older Adults Adviser: Alison Paglia

Kyra Grasso

Biomedical Science, Biotechnology Investigating the Biocompatibility of Synthetic Polymer Particles and Their Potential Use in Molecular Delivery **Applications**

Adviser: Won Hyuk Suh

Kyra Grasso

Biomedical Science, Biotechnology Protein Analysis of Mammalian Cells Treated with Liposomes Adviser: Won Hyuk Suh

Tyler Gross

Homeland Security, International Affairs

Harrison Hassell

Homeland Security, Justice Studies

Nicholas Horman Valerie Johnson Justin Snyder

Homeland Security

Homeland Security Capstone: Public High School Emergency Operations Reform

Adviser: James Ramsay

Jacob Hawkesworth

Undeclared

Stavros Ouellette

Public Service and Nonprofit Leadership Police Brutality

Adviser: Stephen Pimpare

Katherine Heck

Politics and Society

Balanced Budget Federal Legislation

Adviser: Stephen Pimpare

Jonathan Hoying

Camryn Oliwa

Biotechnology

The Rainbow's Backbone: Investigating the Use of Fluorescent and Chromoproteins as Signaling Agents for Gene Expression

Adviser: Kristen Johnson

Selma Jusufovic

Politics and Society Corporate Law in Manchester Adviser: Stephen Pimpare

Nela Klonowski

Biological Sciences Antibiotic Discovery Adviser: Suzanne Cooke

Lvdia Kokx

Public Service and Nonprofit Leadership How Has the USA Patriot Act Affected Racial Profiling in America? Adviser: Stephen Pimpare

Hannah Lindh

Psychology

Child Poverty and the Need for Systemic

Adviser: Stephen Pimpare

Alyssa Lombardi

Biological Sciences

Effects of FOXN2 on Gene Expression Levels of AKT2 and ROCK2 under Various Conditions

Adviser: Kristen Johnson

Zachary MacKenzie

Biotechnology

Isolation, Purification, and Analysis of a

Bacteriophage Adviser: Kyle MacLea

Ethan Manning

Public Service and Nonprofit Leadership National Labor Policy: Policy Origins and Opportunities

Adviser: Stephen Pimpare

Ethan Manning

Public Service and Nonprofit Leadership

Right to Work, for Less? Adviser: Stephen Pimpare

Naomi Marshall

Biological Sciences

Observation and Investigation in the Office of the Chief Medical Examiner Located in Concord, NH

Adviser: Suzanne Cooke

Sean McCormack-Kuhman

Homeland Security

The Correlation between Participating in Athletics at the University of New Hampshire and Post-Graduation Employment Rates and Job Advancement Adviser: Stephen Pimpare

Spencer Mears

Biotechnology, Neuropsychology Assessing Pain in Older Adults with Neurocognitive Decline

Adviser: Alison Paglia

Spencer Mears

Biotechnology, Neuropsychology Monitoring Total Coliform Bacteria in the Lake Massabesic Watershed at Manchester Water Works

Adviser: Kyle MacLea

Raymond Miller

Biological Sciences

Novel Bacterial Genomic DNA Extraction Using DNAzol

Adviser: Suzanne Cooke

Fi Morano

Biological Sciences

Impact of Disease on Human Survivorship

Adviser: Kyle MacLea

Dianne Moschitta Sydney Rollins

Biotechnology

Chroma coli: pH-Induced Color Changes

in E. coli

Adviser: Kristen Johnson

Melissa Mullen

Analytics and Data Science Using Generative Adversarial Networks to Identify Spectrum Disorders from Functional MRIs

Adviser: Jeremiah Johnson

Erica Ogert

Biological Sciences

Sequencing the Oggie Bacteriophage

Adviser: Kyle MacLea

Kenneth Paquette

Biotechnology

Phage Isolation from a Garden in Madbury

Adviser: Kyle MacLea

Tony Pion

Alexander Richards

Undeclared

HB220: Establishing Medical Freedom in

Immunizations

Adviser: Stephen Pimpare

Aya Raouf

Biology

Patient Ambassador Internship

Adviser: Kyle MacLea

Mamady Sankoh

Biological Sciences

STEM Outreach via Zoom: Effectively Teaching Physiology to First and Second Graders Using Hands-On Activities Adviser: Patricia Halpin

Holly Schoeller

Psychology

The Effects of Three-Dimensional Depth on Motion-Induced Blindness (MIB)

Adviser: John Sparrow

Rebecca Skahan

Neuropsychology

An Investigation of Mediation Analysis: Caregiver Trauma Affects Child Symptoms through Caregiver Symptomatology

Adviser: Nicholas Mian

Nicholas Spinosa

Biotechnology

Analysis of the Effect of FoxN2 on Pancreatic Cancer Cell Adhesion

Adviser: Kristen Johnson

Sirisha Srinivasan

Biotechnology

Encapsulation of Fluorescent Proteins in

Polymer Microspheres Adviser: Won Hyuk Suh

Sirisha Srinivasan

Biotechnology

Rafaela Tonne

Biological Sciences

The Operana: The Design of a Lac Operon That Exhibits a Yellow Color and

Generates a Banana Smell Adviser: Kristen Johnson

Luke St. Cyr

Undeclared

What Push and Pull Factors Are Most Prevalent amongst American

Alt-Right Groups?

Adviser: Stephen Pimpare

Brianna Sullivan

Biotechnology

A Day in a COVID Testing Lab

Adviser: Kyle MacLea

Rafaela Tonne

Biological Sciences

UNHM COVID Lab: Using RT-LAMP Assay as a Screening Tool for SARS-COV-2

Adviser: Suzanne Cooke

Sadie Vezina

Biotechnology

Solution Squad: Potassium Sensor

Advisers: Kristen Johnson,

Nicholas Rinella

Raunak Vijay

Biotechnology Yard in Salem, NH

Adviser: Kyle MacLea

Michael Watson

Public Service and Nonprofit Leadership

Student Loan Debt

Adviser: Stephen Pimpare

Joli White

Biological Sciences

Internship at the Office of the Chief

Medical Examiner

Adviser: Kyle MacLea

Jillian Wienzek

Biotechnology

 $Noninvasive\ Dentistry$

Adviser: Patricia Halpin

Melissa Woodard

Biological Sciences

Genome Sequencing of Dermacoccus

barathri/profundi

Adviser: Kyle MacLea

UNH Manchester URC Cinema Arts Day

Thursday, April 22

The UNHM Communication Arts program has a production track in which students complete introductory and advanced coursework 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.

Jada Ferreira

Marketing Waiting to Inhale

Adviser: Anthony Tenczar

Abigail Gendron

English Teaching

 $Identity: A\ Journey\ through\ Poetry$

and Film

Adviser: Barbara Jago

Elizabeth Langfeld

Communication Arts

ELUNIA - Borderlines (Music Video)

Adviser: Anthony Tenczar

Robert Skaff

Communication Arts A Lullaby of Murder Adviser: Anthony Tenczar

University-Wide Undergraduate Sustainability Research Symposium

Oral Presentations

Thursday, April 22

Students from all disciplines present research on a broad range of sustainability challenges — addressing environmental stewardship, social well-being, and economic vitality to meet our present needs, while ensuring the ability of future generations to meet their needs. Undergraduates doing sustainability research who present at this Symposium are automatically considered for the new UNH Sustainability Awards.

Stav Alkalay

Economics

Comcast: An Analysis of the Company's

Sustainability Practices Adviser: Fiona Wilson

Janet Andrews

English

Yevgenia Men

Neuroscience and Behavior

Samuel Mercer

Chemical Engineering

Using Internet of Things Technology for a

Sustainable Future

Adviser: Alexandra Contosta

Cole Bartlett

Economics, Sustainability

Katie Hoppler

Economics, English/Journalism

Emily Simkins

Neuroscience and Behavior B Impact Clinic: Kikori Adviser: Fiona Wilson

Cole Bartlett

Economics, Sustainability

Kelsea Batchelder

Kathryn Rascoe

Marketing, Sustainability

Jahmilha Crook

English, Sustainability

Sustainability Splash

Advisers: Kendall Gray, Fiona Wilson,

Betty Woodman

Eric Berry

Kathryn Rascoe

Marketing, Sustainability

Deniz Kayhan

International Affairs, Political Science

Gabrielle Sott

International Business and Economics, Sustainability

B Impact Clinic: Dirigo Collective

Adviser: Erin Allgood

Alexis Bogart

Finance

Jordan Bohan

Ecogastronomy, Marketing

Kate Cone

Marketing, Sustainability

Shelly Lancaster

Wildlife and Conservation Biology B Impact Clinic: Bristol Seafood

Adviser: Erin Allgood

Daisy Burns

Economics

Jill Durkin

Economics, Finance

Grace O'Connor

Finance

Benjamin Vath

Business Administration

B Impact Clinic: Prime Buchholz Team

Adviser: Fiona Wilson

Elizabeth Cain

Environmental Conservation and Sustainability

Fair Trade Certification of UNH

Durham Campus

Adviser: Jennifer Andrews

Justine Cassel

Marine, Estuarine and Freshwater

Biology, Sustainability

Santa Fe Naturals: An Analysis of the Company's Sustainability Practices

Adviser: Fiona Wilson

Emily Chen

Environmental Sciences

Madeline Strange

Environmental Engineering

Emma Wick

Philosophy, Sustainability
B Impact Clinic: L.L.Bean Student
Consultants

Adviser: Fiona Wilson

Hallie Contois

Communication, Sustainability

John Hurley

Information Systems and Business Analytics, Sustainability

Sarah Kfoury

Mathematics, Sustainability

Joseph Philbrick

Biology, Sustainability

Steven Rizzo

Environmental Engineering,

Sustainability

Building a Flood-Resilient Kittery:

Working Waterfront and

Transportation Corridors

Advisers: Cameron Wake,

Betty Woodman

Sarah Craft

Undeclared

FedEx: An Analysis of the Company's

Sustainability Practices Adviser: Fiona Wilson

Grady Dole

Community and Environmental Planning, Sustainability

Samuel Hinkley

Environmental and Resource Economics, Sustainability

Autumn Houle

Social Work, Sustainability, Women's and Gender Studies

Maxwell Schoenfeld

Anthropology, Sustainability

Colleen Spear

Business Administration, Sustainability Jack's Pizza/Pittsfield Community Garden

Adviser: Devon Guyer

Matthew Dowling

Marketing, Sustainability

Eleanor Hartmann

Entrepreneurial Studies, Sustainability

Karly Houghton

Recreation Management and Policy,

Sustainability

Autumn Scott

Environmental and Resource Economics, Sustainability

Marketing the Sustainability Dual Major

Advisers: Cameron Wake,

Betty Woodman

Alexis Eaton

Environmental Engineering,

Sustainability

Chloe Gross

Environmental Conservation and

Sustainability

Burt's Bees: An Analysis of the Company's

Sustainability Practices Adviser: Fiona Wilson

Stella Fairall

Environmental Conservation and Sustainability, International Affairs Scottish Marine Renewable Energy: U.S. Approaches for Development of Wave and

Tidal Technologies

Adviser: Clayton Mitchell

Danielle Forte

Communication, Sustainability

Grace Holler

Nutrition, Sustainability

Edward Lange

Analytical Economics

Sara Manzelli

Sustainability, Zoology

Kaitlin Murphy

Marketing, Sustainability

From Pandemic Responses to Sustainable

Food Systems Solutions

Advisers: Erin Hale, Betty Woodman

Cole Fuller

Analytical Economics, Educational Studies

Hershey & Co: An Analysis of the Company's Sustainability Practices

Adviser: Fiona Wilson

Ben Gallahue

Environmental and Resource Economics

Sam Kitfield-Vernon

Environmental Conservation and

Sustainability

B Impact Clinic: Good Start Packaging

Adviser: Erin Allgood

Luke Howard

Political Science, Sustainability

Sydney Marshall

Finance, Sustainability

Michael Pasciuto

Mechanical Engineering, Sustainability

Taylor Rose

Environmental and Resource Economics,

Sustainability

Luke Zuchowski

Environmental Engineering
UNH Woodlands and Agricultural
Operations as Natural Climate Solutions

Advisers: John Gunn, Betty Woodman

Bailey Jones

Environmental Engineering How Switching to Electric Vehicles Could Reduce UNH's Carbon and Nitrogen Footprints

Adviser: Jennifer Andrews

Brendan Kelly

Business Administration

New Day Impact Investing: An Analysis of the Company's Sustainability Practices

Adviser: Fiona Wilson

Caroline LeBlanc

Analytical Economics

Anthem Blue Cross: An Analysis of the Company's Sustainability Practices

Adviser: Fiona Wilson

Jack Martin

Marketing, Sustainability

Mackenzie O'Rourke

Analytical Economics, Sustainability

Erin Williams

English, Sustainability

Elana Zabar

Community and Environmental Planning, Sustainability UNH Campus Sustainability Tour

Adviser: Cameron Wake

UNIVERSITY-WIDE UNDERGRADUATE SUSTAINABILITY RESEARCH SYMPOSIUM, ORAL PRESENTATIONS, CONTINUED

Patrick O'Neil

Computer Science
Intel: An Analysis of the Company's
Sustainability Practices
Adviser: Fiona Wilson

Matthew Oriente

Business Administration, Sustainability Evaluation of Sustainable Investing by ESG Principles for the UNH Foundation Adviser: Erik Gross

Owen Price Deni Thuman

Wildlife and Conservation Biology

Sarah Richard

Neuroscience and Behavior, Wildlife and Conservation Biology

Sean Skinner

Sustainability, Wildlife and Conservation Biology Assessing Great Bay's Restored Oyster Reef's Return to Shellfishing Advisers: Adrienne Kovach, Cameron Wake, Betty Woodman

Katie Remeis

Business Administration Chipotle: An Analysis of the Company's Sustainability Practices Adviser: Fiona Wilson

Aliya Sarris

Political Science, Spanish, Women's and Gender Studies H&M: An Analysis of the Company's Sustainability Practices Adviser: Fiona Wilson

University-Wide Undergraduate Sustainability Research Symposium

Poster Presentations

Thursday, April 22

Students from all disciplines present research on a broad range of sustainability challenges—addressing environmental stewardship, social well-being, and economic vitality to meet our present needs, while ensuring the ability of future generations to meet their needs. Undergraduates doing sustainability research who present at this Symposium are automatically considered for the new UNH Sustainability Awards.

Phoebe Adame

Environmental Sciences, Sustainability Trash 2 Treasure

Adviser: Jennifer Andrews

Janet Andrews

English

Yevgenia Men

Neuroscience and Behavior

Samuel Mercer

Chemical Engineering
Using Internet of Things Technology for a
Sustainable Future

Adviser: Alexandra Contosta

Hannah Flaherty

Biomedical Science Streptomyces hygroscopicus in the Stellwagen Bank National Marine Sanctuary: Discovery of Biosynthetic Gene Clusters with Potential to Produce Chemotherapeutic Compounds Advisers: Semra Aytur, John Bucci

Jennifer Hargenrader

Electrical Engineering
Are Electric Vehicles a Viable Solution for
Energy Storage in a Microgrid?
Adviser: Cameron Wake

Jessica Manning

Environmental Engineering University of New Hampshire's Energy Plan Adviser: Jennifer Andrews

Connor Melican

Earth Sciences

Analysis of Urban Heat Flux in Durham, NH

Adviser: Katharine Duderstadt

Philosophy Department Undergraduate Research Conference

Thursday, April 22

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 Q & A period.

Caroline Gibson

Philosophy, Political Science Care Ethics, Disability, and Public Policy Advisers: Tama Andrews, Charlotte Witt

Liliana Mangan

Philosophy *Elaborative Learning Thesis*Adviser: Willem deVries

Ely Marciano

Philosophy *The Self: Real or Illusory*Adviser: Timm Triplett

Parker Stewart

Philosophy Hegel and Marx: A Shared Commitment to Humanity

Adviser: Willem deVries

Gordon Unzen

Justice Studies, Philosophy, Psychology Artificially Intelligent Global Governance Adviser: Nicholas Smith

All Colleges Undergraduate Research Symposium

Oral Presentations

Friday, April 23

The All Colleges Undergraduate Research Symposium showcases students from a variety of disciplines from across the colleges, including the liberal arts, social sciences, health and human services, business and economics, and biological and physical sciences. Students present their faculty-mentored projects as a poster or oral presentation.

Robert Abbott

Homeland Security, International Affairs Lack of Identity in U.S.-German Relations in the 21st Century Adviser: Smita Lahiri

Lina Adjout

International Affairs, Political Science Algeria's Economic Paralysis and Its Impact on Migration Adviser: Thomas Safford

Favour Alejo

Biomedical Science An Immigrant Woman Haunted by Her Authoritarian Homeland and Host Country Adviser: William Woodward

Kiarra Austin

Political Science Chinese Censorship on the Internet Adviser: Lawrence Reardon

Jamie Azulay

Communication Breaking News: Journalism Is at the Brink of Extinction

Adviser: Michael Soha

Cayla Barretto

Nursing

The Impact of an Educational Module on Female Athlete Triad Knowledge in Female Collegiate Athletes

Adviser: Eileen Hollis

Nicholas Beall

Political Science Potential Hong Kong Immigration Adviser: Lawrence Reardon

Emmanuelle Beaurpere

Business Administration, International Affairs Post-Colonialism in Singapore Adviser: Thomas Safford

Emma Blair

Nursing

The Effects of COVID-19 on Older Adults in Assisted Living Facility Adviser: Kerry Nolte

Katherine Blood

Biomedical Science Designing a Website for Career Decision Making Adviser: Molly Campbell

Monica Bove

Katelyn Gray Lauren Soleimani

Jenna Sweeney

Amanda Torres

Educational Studies, Human Development and Family Studies

Alyssa Fragano

Educational Studies, English/Journalism

Taylor Fumarola

Tucker Jennison

Educational Studies, History

Jenna Jessup

Biology, Educational Studies

Keelan MacKenzie

Joseph Palazzolo

Educational Studies, Spanish

Taylor Nygren

Educational Studies, Women's and Gender Studies

Christina Palumbo

Educational Studies, Psychology UNH Education Advising Program: How Can We Make It Stronger? Adviser: Barbara Peterson

Mia Brikiatis

Educational Studies, English Teaching

Aleigha Raymond

Educational Studies, English

UNH Write Free: How Can We Motivate

Students Online to Write? Adviser: Barbara Peterson

Sabrina Brown

English

Examining Sustainable Libraries Adviser: Molly Campbell

Iulia Bushell

Communication Sciences and Disorders Effects of Pitch Perturbation on Vocal Learning Adviser: Donald Robin

Olivia Cadieux

International Affairs, Sociology How Is Italy's Aging Population Impacting Their Social and Economic Conditions? Adviser: Thomas Safford

Marina Cardoso Vianna Vaz

International Affairs, Political Science Using HIV/AIDS-Specific Foreign Aid to Build up National Health System Capacity: Lessons from Brazil and Nigeria Adviser: Smita Lahiri

Marina Cardoso Vianna Vaz

International Affairs, Political Science Collective Note-Taking and Its Impact on Students: A Case Study

Adviser: Katherine Gaudet

Emmalyn Casteris

Linguistics, Women's and Gender Studies A Look into the Lived Experience of Food-Insecure College Students and Accessibility of Student Resources

Adviser: Siobhan Senier

Andrew Cavanagh

Economics

North Korea Funding of Their

Nuclear Program

Adviser: Lawrence Reardon

Mariaisabel Cedeno

American Sign Language (ASL)/English Interpreting, Psychology Cultural Variations in Children's Involvement in Household Work Adviser: Pablo Chavajay

ALL COLLEGES UNDERGRADUATE RESEARCH SYMPOSIUM, ORAL PRESENTATIONS, CONTINUED

Connor Chamberlin

Communication, Political Science China's International Relations and Climate Change

Adviser: Lawrence Reardon

Connor Chamberlin

Communication, Political Science
U.S. Religious Groups and Their Impact on
Diplomatic Relations with the Holy See
Adviser: Lawrence Reardon

Laura Clancy

Justice Studies, Sociology

American Identity and the Middle East

Adviser: Catherine Moran

Abbey Coe

Geography, International Affairs Monetizing and Marxizing Queerness: China's Part in Rainbow Capitalism Adviser: Thomas Safford

Jake Connolly

Communication Apologetic Discourse in Sexual Allegation Scandals

Adviser: Lawrence Prelli

Maya Coykendall

Social Work

Before and After the #MeToo Movement: Investigating How the Media Discusses Male-Perpetrated Sexual Harassment Adviser: Jennifer O'Brien

Kelsey Crowley

Political Science Trends in Global Migration Adviser: Alynna Lyon

Brayden Danforth

English

Developing Sustainability Website Adviser: Molly Campbell

Zoe Dawson

Communication, International Affairs The Illiberal Nature of the Global Gag Rule: How Installing a Global Gag Rule Has Worsened Women's Lives

Adviser: Smita Lahiri

Sarah Desimone

Communication, Political Science LBGTQ+ Representation in "Friends" Adviser: Joseph Terry

Emily Desormier

Communication, English Literature

Charlotte Stansbury

Communication

Prevention Innovations Research Center Intern Project: Best Practices in Social Media Engagement and Measurement for Research Centers

Adviser: Michelle Lynch

Ben Desrochers

Political Science

The Infinite War: Why States Play Different

Levels of the Realist Game Adviser: Lawrence Reardon

Althea Devereux

Nursing

Evaluating the Relationship between
Trust and Anxiety during the COVID-19

Pandemic

Adviser: Kristen Clark

Kaylyn Dickinson

Noah Ryder

Psychology

Sofia LombardoJustice Studies, Psychology

Danielle Tremblay

Neuroscience and Behavior Demonstrating Four Pathways of Stereopsis through Spacial Frequency Curves Advisers: Andrew Kitt, William Stine

Kristina Dileo

Human Development and Family Studies The Role of Peer Support Groups in Coping with the Reproductive Challenges Associated with Polycystic Ovarian Syndrome Adviser: Erin Sharp

Evan Edmonds

English/Journalism
College Students Hold the Keys to
Cultivating Civility
Adviser: Lydia Reinig

Evan England

Sociology

Environmental Ableism: Who Are Environmentalist Best Practices Best For?

Adviser: Thomas Safford

Stella Fairall

Environmental Conservation and Sustainability, International Affairs Celtic Heritage Tourism: Sustainability and Identity

Adviser: Thomas Safford

Faith Farnham

Nursing

Health Needs and Accessibility of Syringe Service Programs (SSPs) and Healthcare and Support Services in Manchester Adviser: Kerry Nolte

Emma Fraser

International Affairs, Sustainable Agriculture and Food Systems The Issues of Population Decline and Demographic Shifts within Japan Adviser: Thomas Safford

Shaelyn Frost

French, International Affairs
Systemic Racism in France and the
United States: An Analysis of Policies and
Historical Practices That Led to the 2020
Black Lives Matter Marches
Adviser: Smita Lahiri

Reilly Gilmour

Nursing

A Comparison of Health Habits between Nursing and Non-Nursing Majors Advisers: Eileen Hollis, Kerry Nolte

Alexis Goldstein

Occupational Therapy
Website Research and Design
Adviser: Molly Campbell

Madeline Graf

Communication
Using the Practice 'Legit'
Adviser: Edward Reynolds

Zander Guldbrandsen

Geography

Territorial Disputes in the South China Sea: Brunei and China Adviser: Lawrence Reardon

Jared Gustafson

Communication

Prevention Innovations Research Center Intern Project: Sexual Violence and

Harassment in Sports Adviser: Jane Stapleton

Audrey Hettinger

International Affairs, Political Science Protesting in the Age of Technology Adviser: Smita Lahiri

Rebecca Holland

Anthropology Historical Garment Reconstruction and Recreation Adviser: Amy Michael

Sophia Hughes

Marketing, Sociology A Look at the Gender Hierarchy among Cultures Adviser: Tamsin Whitehead

William Johnson

Communication, Political Science Political Cooperation after Longstanding Animus: Historical Analysis Adviser: Lawrence Reardon

Avery Judd

International Affairs, Political Science A Comparative Study of Governmental Systems in the Maghreb: Tunisia, Algeria, and Morocco

Adviser: Smita Lahiri

Brianna Judkins

Nursing

Nurses' Perceptions of Caring for Patients in the Prone Position Adviser: Clarissa Michalak

Philip Kaifer

Political Science Emigration from Central America Adviser: Lawrence Reardon

Isabelle Kapoian

Economics

The Present Azerbaijani Threat to Ethnic Armenian Cultural Heritage Following the 2020 Nagorno-Karabakh War

Adviser: Nicole Ruane

Deniz Kavhan

International Affairs, Political Science The Future of Artificial Intelligence and Global Governance

Adviser: Thomas Safford

Deniz Kayhan

International Affairs, Political Science Perspectives on the End of Capitalism and the Exponential Emergence of Technology Adviser: Elizabeth Carter

Benjamin Kelley

Political Science

The Long-Lasting Implications of Japan's Immigration Issues

Adviser: Lawrence Reardon

Allison Kosmala

Maeve Pitman

Justice Studies, Psychology Prevention Innovations Research Center Intern Project: A Review of Best Practices for Collecting and Transcribing Qualitative Data

Adviser: Elizabeth Moschella

Abrita Kuthumi

International Affairs, Political Science The United States and Foreign Aid Adviser: Thomas Safford

Madison Laurent

Nursing

Life Stressors and Postpartum Depression Adviser: Alyssa O'Brien

Katherine Legier

Sociology, Women's and Gender Studies Political Affiliation and the Black Lives Matter Movement Adviser: Rebecca Glauber

Katherine Legier

Sociology, Women's and Gender Studies Prevention Innovations Research Center Intern Project: Expanding Sexual Violence Prevention Resources with the USafeUS App

Adviser: Sharyn Potter

Sofia Lombardo

Justice Studies, Psychology Increment and Decrement Effects in Motion-Induced Blindness Advisers: John Sparrow, William Stine, Dan Swift

Lauren MacLachlan

International Affairs, Political Science The Role of the Confucius Institute in American Schools: A Case Study of the Oyster River School District Adviser: Smita Lahiri

Julian Maduro

English

The Evolution of Assigned Reading: Diversity in New Hampshire High School Reading and Student Reading Engagement Adviser: Laura Smith

Noah Malo

Political Science

Refugees and Forced Migrants: The Syrian Refugee Crisis

Adviser: Lawrence Reardon

Brooke Marston

Communication

Campaigning with the Stars: The Emerging Intersection between Fandom and Politics Adviser: Michael Soha

Brooke Marston

Communication

Uses Unaddressed: How Social Technologies Tacitly Allow Acts of Gender-Based Violence Adviser: Nora Draper

Delaney McKee

Psychology

A Comparison of the Rise of COVID-19 in Differing Ecological Models: COVID on Campus

Adviser: Elizabeth Caldwell

Caelin McMahon

Anthropology, Spanish Language Use in Puerto Rican Literary Journals Adviser: Casey Golomski

Alexa McNamara

Communication Art Spaces as Places for Everyday Political Talk

Adviser: Lydia Reinig

Kelsey Mercurio

Biochemistry, Molecular and Cellular Biology, Sustainable Agriculture and Food Systems

Roles of Non-Frankia Bacteria in Root Nodule Formation and Function in Alnus glutinosa

Adviser: Louis Tisa

ALL COLLEGES UNDERGRADUATE RESEARCH SYMPOSIUM, ORAL PRESENTATIONS, CONTINUED

Pari Moghadam

French, International Affairs Sociological Changes in China during the Transition to Communist Party Rule Adviser: Thomas Safford

Megan Molinari

Marine, Estuarine and Freshwater Biology, Neuroscience and Behavior

Mary Munley

Marine, Estuarine and Freshwater Biology Evaluating Alternative Bait Ingredients for the Channeled Whelk Fishery Adviser: Elizabeth Fairchild

Emily Moor

Biomedical Science
Exploring the Effects of Concussion on
Pediatric Health-Related Quality of Life
Adviser: Patricia Kelshaw

Curtis Newton

International Affairs, Political Science Second Language Acquisition (SLA) and the Ousting of Russian in the Baltic States Adviser: Thomas Safford

Aislinn Noble

Political Science

Constitutional Manipulation and the Exploitation of the People

Adviser: Lawrence Reardon

Gwynevere Norris

International Affairs, Linguistics German beyond the Gender Binary Adviser: Thomas Safford

Tannah O'Brien

Nursing

Fluid Resuscitation and Sustaining Practice Change in the Pediatric Setting

Adviser: Kerry Nolte

Justice Ohanasian

Social Work, Spanish Analyzing the Perceived Barriers to Reporting Sexual Violence among College Students

Adviser: Tarkington Newman

Annelise Papinsick

Humanities, Music

Virginia Walsh

Humanities, Psychology Forgotten History of Women at UNH: The Citizenship School Adviser: Nicole Ruane

Yongyao Peng

International Affairs, Political Science China's Effort to Build Soft Power: The Confucius Institutes Adviser: Smita Lahiri

Yongyao Peng

International Affairs, Political Science The Making of a Superpower: The Recent Development of China's Military Adviser: Lawrence Reardon

Shane Pimental

International Affairs, Political Science The Iran Nuclear Dilemma Adviser: Lawrence Reardon

Elizabeth Rebuck

Psychology

A Tale of Two Cities: An Analysis of the U.S. COVID-19 Response

Adviser: Elizabeth Caldwell

Chloe Richard

Biomedical Science A Survey of Opportunistic Fungi in the Portsmouth, NH Region Adviser: Juan Rojo

Michael Roderick

Political Science

China's Reluctance to Lead on Global

Climate Change

Adviser: Lawrence Reardon

Sawyer Rogers

History, Political Science
Nationalism and the Disputed East
China Sea
Adviser: Lawrence Reardon

Liam Ross

Political Science

Rolling Back Communism: U.S. Involvement in the Korean War Adviser: Lawrence Reardon

Stephanie Rouse

Communication, International Affairs A Basic Right: Nigeria's Search for Clean Water

Adviser: Smita Lahiri

Fanny Cathrine Sanderberg

International Affairs, Sociology Norway's Black Gold: A Case Study of Oil Development and Its Environmental Impact Adviser: Thomas Safford

Kaja Marie Midtskog Sandsten

English, International Affairs
The Rise of Anti-Immigrant and
Nationalist Sentiments in France and the
United Kingdom
Adviser: Thomas Safford

Mitchell Scacchi

Political Science

The Role of the President of the United States in Interpreting the U.S. Constitution Adviser: Susan Siggelakis

Antonia Schmitz

Psychology

A Comparison of the Rise of COVID-19 in Differing Ecological Models: COVID-19 in Germany and the United States Adviser: Elizabeth Caldwell

Kaitlyn Seamans

Occupational Therapy

Influence of Sign Language on Undesirable Behaviors of a Child with Developmental Delay: Single-Case Experimental Design Adviser: Lou Ann Griswold

Nikita Serdiuk

English

Researching the Reasons for Worldwide Rise of Modern Nationalism Adviser: Molly Campbell

Colin Small

Computer Science MMS SITL Ground Loop: Automating Spacecraft Data Selection Advisers: Matthew Argall, Marek Petrik

Allyson Smith

Political Science, Women's and Gender Studies Women's Rights in China Adviser: Lawrence Reardon

Denali Smith

International Affairs, Linguistics Typological Analysis of the Languages in Mainland China

Adviser: Thomas Safford

Madison Smith

Communication Sciences and Disorders Theory and Neural Bases of Childhood Apraxia of Speech and Apraxia of Speech Adviser: Donald Robin

Raymond Staples

Business Administration, Political Science China's Solar Power Renewable Energy Adviser: Lawrence Reardon

Hayden Stinson

Linguistics, Spanish

Gay Male Speech and Regional Dialects in Motion: Constructing Linguistic Identity in

Southern New Hampshire Adviser: Rachel Burdin

Violet Sullivan

Kinesiology

Running History and Injury Status in Female Current and Former Division 1 Distance Runners during the COVID-19 Pandemic

Adviser: Summer Cook

Jinyang Sun

Political Science

Analysis of Sino-U.S. Ideological Relationship

Adviser: Lawrence Reardon

Jennifer Suwu

Political Science

Preventing the Tyranny of the Commons:

South China Sea

Adviser: Lawrence Reardon

Charles Swift

Communication

Chinese Perceptions of North Korea

Adviser: Lawrence Reardon

Anthony Tamagnini

Political Science

Modern Genocide: Why Nations Are Addressing China's Treatment of the Uyghurs

Adviser: Lawrence Reardon

Emily Tomasi

International Affairs, Political Science A Changing Political System: Democratic Backsliding and Its Effects on Human Rights in Hungary

Adviser: Thomas Safford

Emily Tomasi

International Affairs, Political Science A Global Audience: China's Relationship with the American Film Industry
Adviser: Lawrence Reardon

Arianna True

Biomedical Science

Developing Healthcare Inequalities Website

Adviser: Molly Campbell

Ronelle Tshiela

Political Science

 $Sino-Vatican\ Relations\ and\ the\ Separation$

of Church and State

Adviser: Lawrence Reardon

Emma Watts

Sociology

Color-Blind Racism at the University of New Hampshire

Adviser: Rebecca Glauber

Emma Watts

Sociology

 ${\it Critical \, Race \, Analysis \, of \, the \, American \, Dream}$

Adviser: Ryan Gibson

Emma Watts

Sociology

Prison Conditions and Mental Health: An Analysis of American Incarceration

Adviser: Ryan Gibson

All Colleges Undergraduate Research Symposium

Poster Presentations

Friday, April 23

The All Colleges Undergraduate Research Symposium showcases students from a variety of disciplines from across the colleges, including the liberal arts, social sciences, health and human services, business and economics, and biological and physical sciences. Students present their faculty-mentored projects as a poster or oral presentation.

Chiara Antonioli

Biomedical Science Anticoagulant Rodenticide, Canine Distemper Virus, and Necropsy Findings in Fisher, Gray Fox, and Red Fox from NH Adviser: David Needle

Ian Aver

Biomedical Science

Regulation of Fibroblast Growth Factor 2 (FGF2) and Cellular Communication Network Factor 1 (CCN1) by Thyroid Hormone in the Mid-Cycle Bovine Corpus Luteum

Adviser: Paul Tsang

Emily Baker

Anthropology

Indigenous New Hampshire Rising: Self-Identity in the 20th and 21st Centuries

Adviser: Svetlana Peshkova

Nicolette Barber

Neuropsychology

Brigid Ramsden

Psychology

Neurological Changes Caused by

COVID-19

Adviser: Elizabeth Caldwell

ALL COLLEGES UNDERGRADUATE RESEARCH SYMPOSIUM, POSTER PRESENTATIONS, CONTINUED

Kyana Burgess

Anthropology, Sustainability

Victoria Slight

Anthropology, Justice Studies Constructing an Osteobiography: A Biological Profile and Historical Custody Investigation Adviser: Amy Michael

Matthew Castagna

History

Examining the Status of Physical Education for Students with Disabilities in the State of New Hampshire

Adviser: Michelle Grenier

Anna Ciolfi

Health Sciences
The Effect of Acute Aerobic Exercise on
Memory in Young Adults
Adviser: Ronald Croce

Laura Clancy

Justice Studies, Sociology *Coastal Elitism* Adviser: Kenneth Johnson

Kyle Deegan

Neuroscience and Behavior The Role of Ventral Medial Thalamus in Spatial Working Memory Advisers: Brett Gibson, Robert Mair

Victoria Dobrzycki

Health Management and Policy Associations of Opioid/Prescription Drug Misuse with Suicidal Ideation, Bullying, and Dietary Factors among U.S. High School Students

Adviser: Semra Aytur

Brittany Dunkle

Anthropology, Justice Studies COVID-19's Impact on the Human Trafficking Industry: A Case Study in New Hampshire

Adviser: Casey Golomski

Kathryn Dwyer

Social Work, Women's and Gender Studies An Ecological Perspective of Inclusive LGBTQ+ Athletic Climates: A Multi-Methods Study Adviser: Tarkington Newman

Alexandra Ecker

Neuroscience and Behavior

Elizabeth Rebuck

Psychology
Defining Subjective Features of
Spontaneous Thought Using

Retrospective Recall

Advisers: Caitlin Mills, Cati Poulos

Hannah Flaherty

Biomedical Science Streptomyces hygroscopicus in the Stellwagen Bank National Marine Sanctuary: Discovery of Biosynthetic Gene Clusters with Potential to Produce Chemotherapeutic Compounds Advisers: Semra Aytur, John Bucci

Emma Fuini

Social Work

Transgender Healthcare Services Provided by a Sample of Independent Abortion Clinics Adviser: Will Lusenhop

Alyssa Greig

Biomedical Science Comparative in silico Analysis of Bromodomain-Containing Regulatory Complexes in Apicomplexan Parasites Adviser: Vicki Jeffers

Olivia Henriques

Biochemistry, Molecular and Cellular Biology A Comparison of Online and Face-to-Face PLTL in Chemistry Courses: Student Outcomes and Leader Perspectives Adviser: Christopher Bauer

Donnelly Hutchings

Biochemistry, Molecular and Cellular Biology
Do the Phytoestrogens Daidzein and
Equol Impact the Expression of Cellular
Communication Network Factor 1 (CCN1)
and Vascular Endothelial Growth Factor
A (VEGFA) in the Young Bovine Corpus
Luteum (CL)?
Adviser: Paul Tsang

Samuel Kierstead

Michael Piessens

Mechanical Engineering
Power-Assisted Hand Cycle for People with
Physical Disabilities
Adviser: Ivaylo Nedyalkov

Hailey Kirchner

Neuroscience and Behavior Examination of Alpha Oscillatory Differences to Monotheistic and Polytheistic Religious Concepts Adviser: Robert Ross

Jacqueline Klombers

Biology

Joseph Ledan

Marine, Estuarine and Freshwater Biology Examining Behavior of Lumpfish, Cyclopterus lumpus, under Differing Light Levels
Advisers: Michael Doherty,
Elizabeth Fairchild

Sean Kohlbrenner

Computer Science

Language of Learning Lab: Educational

Data Mining

Adviser: Laura Allen

Auvisci. Laura Am

Sierra Kruser

Neuroscience and Behavior Changes in Alpha Oscillations in an Executive Function Task in Parkinson's Patients

Adviser: Robert Ross

Sonthaya Lacy

Neuroscience and Behavior, Spanish Congruency Effects on Testing Adviser: Caitlin Mills

Abigail Laverriere Tara Willette

Nutrition

Weight and Body Composition Fluctuations among Male Collegiate Athletes across Multiple Seasons Adviser: Kevin Pietro

Grayson Leichtman

Occupational Therapy
An Updated Exploration of the PSS-C:
Investigating Current Global Scores and a
New Local Sample
Adviser: Barbara White

Aislinn Low

Neuroscience and Behavior Relationship between Personal Intelligence and Motivation Advisers: Hannah Lightcap, John Mayer

Laura Lynch Sarah Waleryszak

Nutrition

Exploring COVID-19 Effects on Level of Food Insecurity among College Students Adviser: Jesse Morrell

Jessica Manning

Environmental Engineering Ice Modeling Capabilities for Improved Response to Arctic Maritime Spills Adviser: Nancy Kinner

Juliana Mastan

Neuroscience and Behavior Activation Likelihood Estimation of Deception-Related Brain Regions Advisers: Sarah Meier, Donald Robin

Grace McGrew

Neuroscience and Behavior Interoceptive Association of Nicotine as Stimulus

Adviser: Sergios Charntikov

Kelsey Mercurio

Biochemistry, Molecular and Cellular Biology, Sustainable Agriculture and Food Systems

Roles of Non-Frankia Bacteria in Root Nodule Formation and Function in Alnus glutinosa

Adviser: Louis Tisa

Ashlyn Murphy

Communication Sciences and Disorders The Impact of Child-Directed Speech during Parent-Child Interactions in a Museum Adviser: Jill Thorson

Meegan O

Justice Studies, Social Work
Discrimination, Does One Shoe Fit All?
Exploring the Relationship between Sexism
and Racism

Adviser: Ellen Cohn

Grace O'Halloran

Communication Sciences and Disorders Prosodic and Phonetic Analyses of Adult Male and Female Puerto Rican Spanish Speakers

Adviser: Jill Thorson

Julia Paquette

Biomedical Science Factor Fiction? Identifying a Putative Toxoplasma gondii Transcriptional Complex Adviser: Vicki Jeffers

Carli Rita

Occupational Therapy
The Efficacy of the Healthy Families
Flourish Program for Families Raising
Children with Autism
Adviser: Sarah Smith

Nicole Sarette

Sociology

The Effect of Socioeconomic Status on Students' Attitudes toward Student Debt Adviser: Benjamin Brown

Kelly Schnell

Social Work

Trends in Use of Restraint Rates in Inpatient Psychiatric Facilities across U.S. from 2017-2020

Adviser: Kathryne Brewer

Brandon Smith

Biomedical Science Resting State Effective Connectivity Differences between High Ruminators and Low Ruminators Adviser: Robert Ross

Emily Soule

Economics, Political Science Uruguay's Bold Experiment: Assessing the Impact of Marijuana Decriminalization Adviser: Mary Malone

Tyler Stetson

Neuroscience and Behavior A Computational Approach to Understanding Computer-Mediated Health Conversations Adviser: Caitlin Mills

Gordon Unzen

Justice Studies, Philosophy, Psychology

Rachel Young

Justice Studies, Psychology, Women's and Gender Studies Applying the Integrated Cognitive Legal Socialization Model to 2020 COVID-19 Pandemic Rule-Violating and Rule-Following Behavior Adviser: Ellen Cohn

Krysten Walker

Occupational Therapy
Member Perceptions of an Online
Community-Based Program for Adults
with Brain Injury
Adviser: Barbara White

Rachel Young

Justice Studies, Psychology, Women's and Gender Studies

An Intersectional Feminist Analysis of Contemporary NH Drug Policies Adviser: Robin Hackett

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

Oral Session L

Friday, April 23

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

Marketing Workshop Presentations

Adviser: Peter Masucci

Ryan Abarzua

Finance, Marketing John Cadagan Sage Gallagher Samuel Lupinacci Samantha Prial

Caroline Wheatley

Marketing

Health Management and Policy, Marketing Paul College MS Accounting: Desi

Paul College MS Accounting: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Applications to This Professional Master's Degree Program PETER T. PAUL COLLEGE OF BUSINESS AND ECONOMICS UNDERGRADUATE RESEARCH CONFERENCE, ORAL SESSION I, CONTINUED

Benjamin Albanese

Finance, Marketing

Travis Campbell

Marketing

Megan Champagne

Marketing, Spanish

Jack Martin

Marketing, Sustainability

Owen Novak

Entrepreneurial Studies, Marketing Nashua International Sculpture Symposium: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Participation in This Nashua, NH-Based, Non-Profit Arts Organization

Robert Andreasse

Finance, Marketing

Mikayla Ferguson

Rachael Muise

Management, Marketing

Gianna Filaretos

Molly Finn

Marketing

Christian Redding

Entrepreneurial Studies, Marketing ClarityHLTH: Research and Develop Marketing Programs Aimed at Generating Awareness for This Manchester, NH, Healthcare Technology Start-Up Company

Zachary Bahai

William Mauer

Cara Sullivan

Isabelle Todd

Marketing

Marisa Labadini

Entrepreneurial Studies, Marketing

James Wichert

Communication, Marketing Women's Wellness Exchange: Research, Design, and Develop Marketing Programs Aimed at Generating Awareness for This Portsmouth, NH, Women's Health Focused Start-Up Company Kelsea Batchelder

Marketing, Sustainability

Peter Donohoe

Alexander Stodolski

Meghan Sweatt

Marketing

Juliana Mancinelli

Finance, Marketing

Zachary Merian

Marketing, Theatre

Indonesian Community Connect: Design and Develop Marketing Programs to Aid in the Introduction of "Little Indonesia" by This Non-Profit Cultural Organization in Somersworth, NH

Aimee Bayer

Morgan Houk

Kyle Spellicy

Marketing

Anthony D'Angelo

Finance, Marketing

Patrick Flaherty

Kelly Nguyen

Management, Marketing

Our Place NH: Research and Develop Marketing Programs Aimed at Increasing Awareness of and Donations to This Non-Profit Organization Providing Housing for Developmentally Disabled People

William Bazemore

Johanna McCarthy

Maxwell Shelley

Janessa Terry

Marketing

Sara Greenwald

Michael Rametta

Management, Marketing

Locally Handmade: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Growing Sales for This Salem, NH-based, Woman-Owned Small Retail Business Cecilia Beaudoin

Johanna Rewucki

Michael Robinson

Marketing

Hannah Carroll

Information Systems and Business

Analytics, Marketing

Melissa Dingle

Kinesiology, Marketing

Patrick Flynn

Finance, Marketing

Health & Wellness: Design and Develop Marketing Programs Aimed at Increasing Awareness of the Many Programs Offered to Support Students at UNH during the COVID-19 Pandemic

William Beaulieu

Victor Langone

Tyler Martin

Margaret Moss

Marketing

Kyle Norris

Finance, Marketing

ecoText: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and Generating Sales Leads for This Dover, NH, Online Educational Materials Start-Up Company

Jack Bouchard

Thomas Modelevsky

Daniel Romagna

Isabella Ronson

Marketing

Courtney Fahey

Hospitality Management, Marketing

Jessica Hanley

Environmental Conservation and

Sustainability, Marketing

Reveal Yoga: Design and Develop

Marketing Programs to Grow Awareness of and Increase Business for This Bethlehem, NH, Woman-Owned Start-Up Company Alex Cabana

Taylor Crane

Finance, Marketing

Connor Jesson

Management, Marketing

Skylar O'Reilly

Jacob Penttinen

Nathan Whitcomb

Marketing

Measured Air Performance: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Sales Leads for This Manchester, NH, Technology Company

Jacob Callahan

Caroline Murphy

Jessica Silvagni

Marketing

Jeffrey Cole

Information Systems and Business

Analytics, Marketing

Lindsey McGinnis

Management, Marketing

Edvance Life Skills: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Sales for This Bedford, NH. Educational Products Small Business

Hannah Cehovsky Olivia Fusegni

Nikolos Raftopoulos

Marketing

Lauren Chandler

Hospitality Management, Marketing

Henry Garvey

Catherine Molla

Management, Marketing

Riverview Farm on the Winnipesaukee: Research, Design, and Develop Marketing Programs to Help Launch and Grow Awareness for This New Sustainable Farming Start-Up Company

Koca Chan

Information Systems and Business

Analytics, Marketing

Courtney Foote

Christopher Muollo

Victoria Tully

Marketing

Steven McKeen

Economics, Marketing

Dover Flexo Electronics: Design and Develop Marketing Programs Aimed at Growing Awareness of and Attracting New Customers for This Rochester, NH,

Manufacturing Company

Isabel Cieslar

Marketing, Nutrition

Kiera Connell

Olivia Glick

James LeVie

Management, Marketing

Brendan Glock

Cassaundra Kalba

Marketing

Seacoast Community Radio, WXGR-LP FM: Research and Develop Marketing Programs Aimed at Increasing Awareness of and Adding Listeners to This Portsmouth, NH-Based, Alternative Music Radio Station

Andrew Connolly

Entrepreneurial Studies, Marketing

Kaitlyn Keane

Victor Li

Gabrielle Marrocco

Marketing

Emma O'Neill

Management, Marketing

Nuttin Ordinary: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and Growing Sales for This Peterborough, NH-Based, Plant-Based Cheese Company Kayla Coppola

Thomas McCormick

Marketing

Brian Kofman

Marketing, Psychology

Allison Scimone

Management, Marketing

Danielle Szwedski

Finance, Marketing

Food Providers Network: Research and Develop Marketing Programs Aimed at Increasing Awareness of and Participation in This NH-Based Food Distribution Non-Profit Organization

Kelly Crawford

Finance, Marketing

Drew Delano

Patrick Gavin

Rachel Hall

Paige Kauhl

Charles Kelleher

Marketing

Dover Physical Therapy: Research and Develop Marketing Programs Aimed at Growing Business for This Local Physical Therapy Company

Giuseppe CrimiVaroli

Christopher Houde

Sophia Irby

Marketing

Andrew Mitchell

Information Systems and Business

Analytics, Marketing

Celia Prescott

Finance, Marketing

Socha Companies: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and Attracting New Customers to This Manchester, NH-Based, Apartment Rental Business Allison Crowley Haley Demers

Marketing

Michael Grieve

Finance, Marketing

John Littlefield

Management, Marketing

Haylee Walsh

Information Systems and Business

Analytics, Marketing

Merritt Chiropractic: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Business for This Local, Family-Owned Chiropractic Business in Durham, NH

Anthony DeGirolamo

Finance, Marketing

Sophia Hughes

Marketing, Sociology

Evelina Izdebski

Management, Marketing

Michael Mulligan

Jenna Peterson

Nicholas Salcito

Marketing

Port City Pretzels: Research and Develop Marketing Programs Aimed at Increasing Awareness of and Growing Sales for this Portsmouth, NH-Based, Woman-Owned Small Business

Miranda Dow

Art: Studio Art, Marketing

Shelby Ganem

Alyson Jacobs

Entrepreneurial Studies, Marketing

Ethan Landon

Marketing, Psychology

Matthew Paolucci

Business Administration,

Entrepreneurial Studies, Marketing

Gavin Thibodeau

Marketing

Menadena: Design and Develop Marketing Programs Aimed at Increasing Awareness of and Identifying New Customers for This Keene, NH, Sales and Marketing Agency

Matthew Dowling

Marketing, Sustainability

Amelia Marchand

International Business and Economics,

Marketing

Elizabeth Marsden

Information Systems and Business

Analytics, Marketing

Brandon Robinson

Elizabeth Ruffner

Marketing

RAWZ Natural Pet Foods: Design and Develop Marketing Programs Aimed at Increasing Awareness and Sales of Products from This York, Maine-Based, Non-Profit Manufacturer of Pet Foods

Jessica Favarolo

Brendan Jacobs

Donald MacCallum

Iessica Nadeau

Shannon Thomes

Finance, Marketing

Piscataqua Maritime Commission: Research and Develop Marketing Programs Aimed at Increasing Awareness of and Support for This NH-Based Non-Profit Organization

Tyler Germain

Cameron MacRae

Jennifer Quigley

Victoria Tenaglia

Marketing

Devin Sawtelle

Entrepreneurial Studies, Marketing Oracle Safety Consulting: Design and Develop Marketing Programs Aimed at Increasing Engagements for This Londonderry, NH, Consulting Business

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

Oral Session II

Friday, April 23

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

Atkins Investment Group

Advisers: Stephen Ciccone, Ahmad Etebari

Sarah Blampied

Jacob Burhans

Lucas Jones

Molly MacNeilly

Myles Maloof

Accounting, Finance

Mark Borak

Nicholas Fothergill

Jack Gillis

Matthew Gravallese

Ann-Marie Kolberg

Sophia Mazzarelli

Grant Morhun

Allie Reyes

Steven Schnobrich

Kyle Shaw

Erik Sherkanowski

Emily Strout

Justin Szabo

Finance

Zachary Broder

Manish Giri

Economics, Finance

Colin Buckley

Marketing

Aran Cherouvis

Rvan Coxen

Madisen Gonya

Samuel Hetu

Benjamin Kfoury

Katelyn Wallace

Finance, Information Systems and

Business Analytics

Patrick Fleming

Business Administration

Conor Iowett

Anthony Tamposi

Chloe Villemure

Accounting

Joseph Lampe

Economics

Cameron Marshall

Economics, Philosophy

Daniel Maurer

Diego Smith

Analytical Economics

Andrew Meyer

Cameron Taaties

Analytical Economics, Philosophy

Russell Miles

Applied Mathematics

Anna Schriefer

Economics, Information Systems and

Business Analytics

John Standish

Entrepreneurial Studies, Finance

Sarah Wilkinson

Analytical Economics, Sustainability

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

Poster Session I

Friday, April 23

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

B.S. Economics & B.A. Economics

Mohammed Abukhalaf

International Business and Economics

Manish Giri

Economics, Finance

John McDonough

Economics

The Economics Effect of Brexit Adviser: Reagan Baughman

Bryce Barrett Michael Botelho

Lily Cosman

Economics

The Impacts of Education on Economic Growth and Poverty Reduction

Adviser: Reagan Baughman

Brenna Burkett

Accounting, Economics

Isabelle Kapoian Craig Millard

Economics

The Impact of Technological Growth on Health Spending in the United States

Adviser: Reagan Baughman

Riley Burns

Economics

Samed Ramic

John Washburn

Accounting, Economics

Social Benefits of Taxes on Cigarettes Adviser: Reagan Baughman

Maggie Carroll Joseph Rando

Economics

Steven McKeen

Economics, Marketing

Air Pollution in China: The Effect of Emissions Reduction Policies

Adviser: Reagan Baughman

Kaya DeRobbio

Economics

Determinants of the Unemployment Rate Adviser: Aziz Saglam

Jack Franco

Sean French

Isabella Lovering

Economics

The Effect of Education on Crime Adviser: Reagan Baughman

Richard Grandstaff

Economics

Productivity and Pay: Is the Link Broken

Adviser: Aziz Saglam

Treat Hardy

Economics

Chris Laudati

Economics, Political Science

Jordan Sardo

Economics, Finance

Win or Loss for the American Worker?

Examining the Effects of NAFTA

Adviser: Reagan Baughman

Camden Hearn

Analytical Economics

Factors Affecting Crime Rates

Adviser: Aziz Saglam

Cameron Hebert

Ethan Rotthoff

Timothy Sullivan

Economics

How Automation Will Affect the

American Workforce

Adviser: Reagan Baughman

Joseph Henderson Aidan Kittredge

Economics

Cody Schoolcraft

Analytical Economics

The Effects of Student Loan Debt on

Homeownership

Adviser: Reagan Baughman

Noah Kerbyson

Economics

Effects of the Minimum Wage on

Employment

Adviser: Aziz Saglam

Edward Lange

Analytical Economics

Labor Force (Non)Participation:

Trends, Causes

Adviser: Aziz Saglam

Eric Lugli

Economics

Economic Effects of Olympic Games

Adviser: Aziz Saglam

Samuel Mabile

Economics

U.S. National Debt and Standard of Living of Future Generations

Adviser: Aziz Saglam

Daniel Maurer

Analytical Economics Unemployment Effects of Mergers and Acquisitions

Adviser: Aziz Saglam

Sadie Mazzola

Analytical Economics Contributing Factors to Winning in Major League Baseball Adviser: Aziz Saglam

Bosibori Mosongo

Analytical Economics, Sustainability Economic Impacts of Climate Change Adviser: Aziz Saglam

Mackenzie O'Rourke

Analytical Economics, Sustainability Race and Gender Wage Gap Adviser: Aziz Saglam

Khurem Qazi

Economics

Monetary Policy and Asset Price Bubbles Adviser: Aziz Saglam

Andrew Volmar

Analytical Economics Gross Domestic (Product or Happiness) Adviser: Aziz Saglam

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

Poster Session II

Friday, April 23

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

Information Systems and Business Analytics

Lucas Appleton Brandon Clark

Business Administration, Information Systems and Business Analytics

John Hurley

Information Systems and Business Analytics, Sustainability

Rachel Strout

Finance, Information Systems and Business Analytics

Haylee Walsh

Information Systems and Business Analytics, Marketing Customer Data Analysis for Johnson & Johnson Adviser: Roger Grinde

Jared Bjornberg

Finance, Information Systems and Business Analytics

Kyle Capprini

Information Systems and Business Analytics, Management

Jocelyn Sheltra

Nikita Talwar

Information Systems and Business Analytics

New Point of Sale System for SEE Science Center

Advisers: Roger Grinde, Russell Miles

Hannah Carroll

Information Systems and Business Analytics, Marketing Optimizing Seating with COVID Regulations Adviser: Ali Hojjat

Koca Chan

Information Systems and Business Analytics, Marketing Ethical Use of Beauty in Advertising Adviser: Shuili Du

Liam Conrad

Information Systems and Business Analytics Semiconductor Supply Chain Security Strategies Adviser: Russell Miles

Kelsie Dawe

Finance, Information Systems and Business Analytics Identifying the Glass Ceiling for Female Angel Investors Adviser: Jeffrey Sohl

Jenna Frasier Daniella Sirois

Finance, Information Systems and Business Analytics

Jake Malatesta

Grant Workman

Information Systems and Business Analytics

ISBA Capstone: Worker Safety and Risk Assessment in a Manufacturing Setting Adviser: Russell Miles

Ian Grant

Accounting, Information Systems and Business Analytics What Type of Music Becomes Popular in a Crisis Adviser: Kholekile Gwebu

Jake Hewins

Information Systems and Business Analytics Predicting College Enrollment during a Global Crisis Adviser: Burcu Eke Rubini

Kyle Jalbert

Finance, Information Systems and Business Analytics Misinformation in the U.S. Presidential

Election: An Analysis of Social Media Data

Adviser: Kholekile Gwebu

Isabelle Kapoian

Economics

The Present Azerbaijani Threat to Ethnic Armenian Cultural Heritage Following the 2020 Nagorno-Karabakh War Adviser: Nicole Ruane

Samuel Lupinacci

Marketing

Improving the Evaluation of Prospects in the NBA Draft

Adviser: Moein Khanlari

Matthew Paolucci

Business Administration, Entrepreneurial Studies, Marketing Forward-Looking Strategy for the Music Industry Adviser: Andrew Earle

Ienna Peterson

Marketing Understanding Secret Consumer Purchases and Their Effects on Brands

Adviser: Danielle Brick

Dagny Wilkins

Information Systems and Business Analytics, Management Data Analytics: An In-Depth Job Analysis Adviser: Kholekile Gwebu

Multidisciplinary/Honors Thesis

Sydney Carlisle

Accounting, Entrepreneurial Studies U.S. Federal Tax Dollars Lost Due to Tax Havens

Adviser: William Knowles

Maria Chandra

Finance

Sunshine in the Stock Markets Adviser: Wenjuan Xie

Kathleen Flath

Business Administration British Petroleum's Response to the Deepwater Horizon Oil Spill Adviser: Wenjuan Xie

Samuel Hetu

Finance, Information Systems and Business Analytics Investigation into Market Microstructure Evolution: The Impact of HFT Regulation on Markets Advisers: Michael Hanlon,

Mihail Miletkov

Alexander Heye

Accounting

The Future of Auditing: An Analysis of AI Implementation in the Big Four Accounting Firms

Adviser: Linda Ragland

Lucas Jones

Accounting, Finance
Business Risk and Attest Service Fees:
Understanding the Effect of Low Fed
Interest Rates on Bank Audit Fees
Adviser: Jonathan Nash

Yanni Kakouris

Business Administration How Can an Economic Analysis Affect the Understanding of a Court's Decision? Adviser: James Wible

Hannah Kaplan

Management, Marketing
The Instagram Effect: Are Influencers
Impacting Social Expectations and
Purchasing Decisions of UNH Students?
Adviser: Peter Masucci

Samantha Lynch

Finance

Bringing Awareness to the Idea of Psychology Driving Markets Adviser: Richard Kilbride

Samuel Mabile

Economics

Solar PV Preferences in Boston and Atlanta Adviser: Ju-Chin Huang

Alexa Mayo

Business Administration, French
Brain Drain in European Origin Countries:
The Case of Hungary (1990-2015)
Adviser: Marc Herold

Sadie Mazzola

Analytical Economics
The Role of Tax Incentives on Business
Location and Economic Growth
Adviser: Reagan Baughman

Justin Mooney

Accounting, Information Systems and Business Analytics COVID-19 and the Effects on World's Most Admired Companies Adviser: Le Emily Xu

Kyle Norman

Accounting

Effects of the CARES Act on Public Companies' Pension Plans Adviser: Catherine Plante

Matthew Oriente

Business Administration, Sustainability Evaluation of Sustainable Investing by ESG Principles for the UNH Foundation Adviser: Erik Gross

Sean Orr

Economics
COVID-19's Impact on the U.S.
Labor Market
Adviser: Reagan Baughman

Jessica Oswald

Accounting, International Business and Economics
The Effect of the COVID-19 Pandemic on the Issuance of Going Concern Opinions

and Financial Restatements Adviser: Le Emily Xu

Ajaypal Panesar

Economics

Tooth Be Told: The Effects of Integrating Oral Health into Primary Care Coverage on Health Outcomes and Patient Well-Being in the United States Adviser: Brad Herring

Coleman Russell

Accounting, Management
Do PCAOB Inspection Reports Incentivize
Auditors to Improve Audit Quality?
Adviser: Jonathan Nash

John Washburn

Accounting, Economics
Income Inequality Effects on Work
Movement during the Pandemic
Adviser: Loris Rubini

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

Poster Session III

Friday, April 23

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

EcoGastronomy

Althea Ansah

Ecogastronomy, Nutrition
Maple Leaf Nutrition LLC: Integrating
New Hampshire Agriculture with
Nutritional Coaching Services
Adviser: Daniel Winans

Kerry Hull

Ecogastronomy, Sustainable Agriculture and Food Systems Fermenting in a College Kitchen: Cost-Benefit Analysis Adviser: Daniel Winans

Emily Johnson

Ecogastronomy, Environmental Sciences Mindful Meat: A Guide to Sustainable Animal Consumption Adviser: Daniel Winans

Rebecca Malloy

Ecogastronomy, Environmental Conservation and Sustainability Eating with the Ecosystem: Evaluating Different Ways to Support Biodiversity with Food and Consumer Habits Adviser: Daniel Winans

Alexandra Papadakis

Ecogastronomy, Nutrition
Dietary Quality of Bhutanese Refugee
Adults Eligible for the Supplemental
Nutrition Assistance Program
Advisers: Sherman Bigornia,
Daniel Winans

Economics of Climate Change

Adviser: Robert Mohr

Bryce Barrett

Maximillian Watson

Economics

John Hurley

Information Systems and Business Analytics, Sustainability

Andrew Volmar

Analytical Economics Carbon Pricing around the World with Cases from China, Canada, British Columbia, and Australia

Cole Bartlett

Economics, Sustainability

Steven McKeen

Economics, Marketing

Logan Slattery

Economics, Political Science

John Washburn

Accounting, Economics New Zealand's Carbon Emission Trading Scheme

Matthew Batta

Finance

Mackenzie Redmond

Economics, Information Systems and Business Analytics Analyzing the Clean Power Plan

Timothy Campbell

Economics

Peter Logee

Applied Mathematics

Bosibori Mosongo

Analytical Economics, Sustainability Pricing Emissions with the Regional Greenhouse Gas Initiative

Iill Durkin

Economics, Finance

Hayley Isdale

Economics

Grace O'Connor

Finance

Biden Administration Climate Proposals: Building Back Better Environmental Policies

Camden Hearn

Analytical Economics

Brenna McNamara

Environmental Conservation and

Sustainability

Catherine Taylor

Environmental and Resource Economics Analysis of Regional Greenhouse Gas Initiative (RGGI)

Joseph Henderson

Wesley Kunin

Economics

Two Economists' Perspectives on California's Carbon Pricing

Grace McCurley

Kevin Teng

Undeclared

Paige Noble

Environmental and Resource Economics California Climate Change Policy

Jacob Teixeira

Finance

Sean Walter

Economics, Finance

Proposals for Greenhouse Gas Regulation in Pennsylvania and Massachusetts

UNH Manchester URC Engineering Technology Day

Senior Project Presentations

Friday, April 23

The UNHM Engineering Technology Program presents its annual Senior Project Presentations 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.

Owen Armbricht James Knight Cody McCarthy Tyler St Denis

Mechanical Engineering Technology VEX-U Robotics Competition: Team UNHM-1

Adviser: Robert Arredondo

Ethan Brown Brad Ferreira

Mechanical Engineering Technology

Ryan Murphy Dung Tran

Electrical Engineering Technology VEX-U Robotics Competition: Team UNHM-5

Adviser: Robert Arredondo

Brenda Cardenas Joshua Seiler

Mechanical Engineering

Jacob Moreau

Mechanical Engineering Technology VEX-U Robotics Competition: Team UNHM-3

Adviser: Robert Arredondo

Alexis Condon

Electrical Engineering Technology Proposal for a Robotic Working Cell Adviser: Robert Arredondo

Jordan Cusano Nathan Landry Steven Stanton

Mechanical Engineering Technology

Michael Lucci Electrical Engineering Technology

VEX-U Robotics Competition: Team UNHM-4

Adviser: Robert Arredondo

Kevin Daley Erik Weber

Mechanical Engineering Technology Karan Lekhi

Electrical Engineering Technology VEX-U Robotics Competition: Team UNHM-2

Adviser: Robert Arredondo

Patrick Dodge

Electrical Engineering *Line 3*

Advisers: Robert Arredondo, Takahide Ohkami

Jefry Dominguez

Electrical Engineering Technology
Wafer Map and Automation System Control
Adviser: Robert Arredondo

The Naked Arts— Creativity Exposed!

Friday, April 23

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 Aznive

Art: Art History, History

Meghan Feeney

Art: Studio Art

Sarah Marie Jarrar

Anthropology, History

Emily Vadeboncoeur

Art: Art History

Remembering Mosul: Digital

 $Documentation\ and\ Preservation\ of\ a$

Ruined City

Advisers: Ivo Van der Graaff,

Ethel Wolper

Audrey Cannon

Art: Studio Art

Painting with Light

Adviser: Sachiko Akiyama

Alizah Coraccio

Fine Arts

Exploration of Abstract Forms in Clay

Adviser: Sachiko Akiyama

Tyler DiGregorio-Aubin

Theatre

The Applications of 3-D Printing in Theatre

Adviser: Szu-Feng Chen

Julian Maduro

English

The Summer without Little Debbie

Adviser: Clark Knowles

Allison Musitano

English Teaching

A Winter Life: The Short Story Process

Adviser: Clark Knowles

Annelise Papinsick

Humanities, Music
The Role of the Piano in Celtic Music
Adviser: Rose Pruiksma

Alise Shuten

Psychology, Theatre

Dance/Movement Therapy in a

Psychotherapy Culture

Advisers: Assaf Benchetrit, Gay Nardone

Julia Sommer

Theatre Molière and COVID-19 Adviser: Szu-Feng Chen

Emma Stine

Art: Studio Art, Italian Studies Experiments in Figure Painting Adviser: Sachiko Akiyama

Clare Terrio

Psychology, Theatre
My Body Is Home: Self Image and Dance
Adviser: Gay Nardone

E.J. Theriault

Fine Arts

Questioning Sustainability through Sculpture Adviser: Sachiko Akiyama

Alexandra Vergara

English Teaching
A Letter to Elektra
Adviser: Shelley Girdner

Megan Wilson

Fine Arts

Exploring Nature through Painting

Adviser: Sachiko Akiyama

Emily Wozer

Nutrition, Theatre
The Effects of Dance Training on
Body Image
Adviser: Assaf Benchetrit

Senior B.A. & B.F.A. Exhibition

Friday, April 23

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

Adviser: Sachiko Akiyama

Audrey Cannon

Art: Studio Art
Painting with Light

Alizah Coraccio

Fine Arts

 $Exploration\ of\ Abstract\ Forms\ in\ Clay$

Emma Stine

Art: Studio Art, Italian Studies Experiments in Figure Painting

E.J. Theriault

Fine Arts

Questioning Sustainability through Sculpture

Megan Wilson

Fine Arts

Exploring Nature through Painting

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

Bud Albin Challenge Round

Friday, April 23

The Bud Albin Challenge acts as the Semi-Final Round of the Holloway Prize Innovation to Market Competition. Twenty teams present their business concepts to a panel of industry judges. From here, six will be selected to move on to the Championship Round.

College of Health and Human Services (CHHS) Grimes Award Competition

Friday, April 23

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.

Victoria Dobrzycki

Health Management and Policy Associations of Opioid/Prescription Drug Misuse with Suicidal Ideation, Bullying, and Dietary Factors among U.S. High School Students

Adviser: Semra Aytur

Nursing

Faith Farnham

Health Needs and Accessibility of Syringe Service Programs (SSPs) and Healthcare and Support Services in Manchester Adviser: Kerry Nolte

Ashlyn Murphy

Communication Sciences and Disorders The Impact of Child-Directed Speech during Parent-Child Interactions in a Museum Adviser: Jill Thorson

Justice Ohanasian

Social Work, Spanish
Analyzing the Perceived Barriers to Reporting
Sexual Violence among College Students
Adviser: Tarkington Newman

Danielle Picot

Human Development and Family Studies Individualized Coaching to Improve Preschool Quality: Preception from Teachers and Administrators Adviser: Kimberly Nesbitt

Rebecca Proulx

Human Development and Family Studies How Do Secure Children Problem Solve? Thematic Coding of the Attachment Story Completion Task Adviser: Jill Sherman

Carli Rita

Occupational Therapy
The Efficacy of the Healthy Families
Flourish Program for Families Raising
Children with Autism
Adviser: Sarah Smith

Kaitlyn Seamans

Occupational Therapy
Influence of Sign Language on Undesirable
Behaviors of a Child with Developmental
Delay: Single-Case Experimental Design
Adviser: Lou Ann Griswold

Kristin Short

Occupational Therapy Living through a Pandemic: A Study on the Social Interaction of College Students during COVID-19

Adviser: Lou Ann Griswold

Violet Sullivan

Kinesiology

Running History and Injury Status in Female Current and Former Division 1 Distance Runners during the COVID-19

Pandemic

Adviser: Summer Cook

Krysten Walker

Occupational Therapy
Member Perceptions of an Online
Community-Based Program for Adults with
Brain Injury

Adviser: Barbara White

Honors English Undergraduate Research Conference

Friday, April 23

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

Marlies Amberger

English

Shades of Tangerine: A Creative
Nonfiction Exploration of Feminism in the
1960s and 1970s
Adviser: Jaed Coffin

Parker Ayotte

English

Multimedia of the Mind: Digital Rhetoric and Interdisciplinary Acquisition Adviser: Melinda White

Rose Correll

English/Journalism
Boston Globe Spotlight: Investigative
Reporting on Church Abuse Then and Now
Adviser: Tom Haines

Psychology Department George M. Haslerud Undergraduate Research Conference

Friday, April 23

The George M. Haslerud URC, 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.

Kristen Graham

Justice Studies, Psychology Intimate Partner Violence and Bystander Behavior Adviser: Jolie Wormwood

Emily Handy

Psychology
The Effects of Online and In-Person
Courses on Public Speaking Anxiety
Advisers: Katerina Karaivanova,

Caitlin Mills

Anna Kalinowski
English, Psychology
Corticostriatal Pathway Inactivation and
Its Connections to Associative Learning
with Nicotine Stimulus in Rats
Adviser: Sergios Charntikov

Sofia Lombardo

Justice Studies, Psychology Increment and Decrement Effects in Motion-Induced Blindness Advisers: John Sparrow, William Stine, Dan Swift

Elizabeth McGowan

Psychology

The Relationship between COVID-19 Rule Compliance and Anxiety and Depression among Different Populations Adviser: Ellen Cohn PSYCHOLOGY DEPARTMENT GEORGE M. HASLERUD UNDERGRADUATE RESEARCH CONFERENCE, CONTINUED

Molly O'Shea

Justice Studies, Psychology Impacts of COVID-19 and Social Media Use on Mental Health Adviser: Ellen Cohn

Gordon Unzen

Justice Studies, Philosophy, Psychology Political Ideology Effects on Legal Socialization

Adviser: Ellen Cohn

Rachel Young

Justice Studies, Psychology, Women's and Gender Studies The Intersection of Race and Sex in Crime Victims Adviser: Ellen Cohn

COLSA Undergraduate Research Conference

Oral Presentations

Saturday, April 24

Student presentations at the COLSA URC are based on research conducted in any of the departments within the College of Life Sciences and Agriculture. Registrants will be notified by the COLSA URC committee if they are selected for an oral presentation.

Lok Cheng

Marine, Estuarine and Freshwater Biology A Deposition Baseline for Microplastic Particle Distribution in an Estuary Adviser: Bonnie Brown

Stephanie Petrovick

Environmental Sciences Change in Oak Tree Vessel Size under Drought Conditions at Thompson Farm, NH Adviser: Heidi Asbjornsen

Chloe Richard

Biomedical Science A Survey of Opportunistic Fungi in the Portsmouth, NH, Region Adviser: Juan Rojo

Julia Squillace

Wildlife and Conservation Biology Linking Nest Timing Phenotypes to DNA Methylation of Circadian Rhythm Genes in Breeding Female Tidal Marsh Sparrows Adviser: Adrienne Kovach

COLSA Undergraduate Research Conference

Poster Presentations

Saturday, April 24

Student presentations at the COLSA URC are based on research conducted in any of the departments within the College of Life Sciences and Agriculture. Research ranges from field studies to molecular biology to genomics studies.

Diya Anand

Biology

Identifying the Effects of Various Fractions of the Devil's Club Plant on SARS-CoV-2 Adviser: Brian Barth

Chiara Antonioli

Biomedical Science Anticoagulant Rodenticide, Canine Distemper Virus, and Necropsy Findings in Fisher, Gray Fox, and Red Fox from NH Adviser: David Needle

Emma Arsenault

Biochemistry, Molecular and Cellular Biology

Joanna Suber

Genetics

The Effects of Devil's Club (Oplopanax horridus) Root Extract Fractions in Acute Myeloid Leukemia Adviser: Brian Barth

Ian Ayer

Biomedical Science

Regulation of Fibroblast Growth Factor 2 (FGF2) and Cellular Communication Network Factor 1 (CCN1) by Thyroid Hormone in the Mid-Cycle Bovine Corpus Luteum
Adviser: Paul Tsang

Khem Basnet

Sustainable Agriculture and Food Systems The Effect of Pollen Source on Fruit Quality: An Investigation of the Xenia Effect in Kiwiberry (Actinidia arguta) Adviser: Iago Hale

Julie Bobyock

Environmental Sciences
The Impact of Water Withdrawals on
Summer Low Flows in the Ipswich River
Watershed, MA
Adviser: Wilfred Wollheim

Ava Boutilier

Biomedical Science

Travis Fischer

Biochemistry, Molecular and Cellular Biology Targeted Effect of Pacritinib, a Jak2/Flt-3 Inhibitor, on the Tumor Microenvironmes

Inhibitor, on the Tumor Microenvironment in Waldenstrom Macroglobulinemia Adviser: Sherine Elsawa

Jillian Broadhurst

Biomedical Science

Occurrence of Pulmonary Arteritis with Lungworm Infections in Gray Seals from Cape Cod, 2013-2020 Adviser: Inga Sidor

Adviser: Iliga Sidoi

Ash Bustead Mark Cummings Collin Figler

Environmental Sciences

Carmen Butler

Environmental Conservation and Sustainability Review of Best Practices for Engaging Local Communities in Arctic Change Research Adviser: Jessica Ernakovich

Aidan Buzard

Biomedical Science Fatal Salmonellosis in Four Guinea Pigs from Northern New England Advisers: Colleen Monahan, David Needle

Aliya Caldwell Lok Cheng

Cate Wardinski

Marine, Estuarine and Freshwater Biology

Lauren McDowell

Marine, Estuarine and Freshwater Biology, Sustainability Evaluating Regurgitated Pellets as Indicators of Microplastic Ingestion by NH-Breeding Seabirds

Advisers: Bonnie Brown, Elizabeth Craig

Justine Cassel

Marine, Estuarine and Freshwater Biology, Sustainability Cyanobacteria Communities under Opaque Ice: Analyzing Size and Pigment Changes with Depth Advisers: James Haney, Katherine Low

Jeanne Cassidy

Biomedical Science Determination of the Effects Maternal Colostrum Has on the Small Intestinal Development of Calves Evidenced by D-xylose Absorption Advisers: Peter Erickson, Tess Stahl

Lok Cheng

Marine, Estuarine and Freshwater Biology **Sydney Mapley**

Biology

Assessing Predator-Prey Interactions between Migrating Juvenile Sockeye Salmon Smolts and Bull Trout in British Columbia Adviser: Nathan Furey

Alexus Day

Biomedical Science

Bert Prince

Biochemistry, Molecular and Cellular Biology Impacts of Obesity on Ceramide Treatment for Acute Myeloid Leukemia Adviser: Brian Barth

Jacob Dearborn

Wildlife and Conservation Biology Evaluating the Use and Accuracy of Unmanned Aerial Systems (UAS) for Forest Health and Individual Tree Measurements in New England Forest Communities Adviser: Russell Congalton

Lillian Delgado

Marine, Estuarine and Freshwater Biology Cyanotoxin Accumulation in Northeastern Seabird Tissues

Adviser: James Haney

Angelica Dziurzynski

Earth Sciences, Marine, Estuarine and Freshwater Biology The Impact of Sedges on Belowground Methane Concentration and Diffusion in a Temperate Peatland Adviser: Ruth Varner

Larissa Fairweather

Kaci Gilbert

Marisol Mendoza

Biochemistry, Molecular and

Cellular Biology *Investigating the Substrate Specificity of* Human Lactate Dehydrogenase Using Site-Directed Mutagenesis Advisers: Rick Cote, Laurie Westover

Hannah Flaherty

Biomedical Science Streptomyces hygroscopicus in the Stellwagen Bank National Marine Sanctuary: Discovery of Biosynthetic Gene Clusters with Potential to Produce Chemotherapeutic Compounds Advisers: Semra Aytur, John Bucci

Lilly Friedman

Biomedical Science Gene Editing in Actinobacteria Adviser: Louis Tisa

Tanner Frost

Forestry

Comparison of Methods to Quantify Changes in Tree Productivity under **Drought Conditions**

Adviser: Matthew Vadeboncoeur

Alexia Gianoulis

Biomedical Science Using the Plasma Dose Response Method to Determine If the Next Generation AjiPro-L is More Effective Than the Third Generation AjiPro-L

Adviser: Nancy Whitehouse

Alyssa Greig

Biomedical Science Comparative in silico Analysis of Bromodomain-Containing Regulatory Complexes in Apicomplexan Parasites Adviser: Vicki Jeffers

Joshua Hall

Biomedical Science Postmortem and Diagnostic Findings in 38 Canada Lynx (Lynx canadensis) Advisers: Colleen Monahan, David Needle

Hayleigh Hildebrand

Environmental Sciences, Russian How Does Agricultural Management Affect the Distribution of Organic N into Different Soil Pools?

Advisers: Lauren Breza, A. Stuart Grandy

Holly Hoag

Zoology

Mandibular Gland Volume Variation across Jewel Wasp (Nasonia spp.) Species and Sex

Adviser: Istvan Miko

Donnelly Hutchings

Biochemistry, Molecular and Cellular Biology Do the Phytoestrogens Daidzein and Equal Impact the Expression of Cellular Communication Network Factor 1 (CCN1) and Vascular Endothelial Growth Factor A (VEGFA) in the Young Bovine Corpus Luteum (CL)?

Adviser: Paul Tsang

Sam Kitfield-Vernon

Sustainability Evaluating Seasonal Storage Technologies for the United States and UNH Adviser: Clayton Mitchell

Environmental Conservation and

Jacqueline Klombers

Biology

Joseph Ledan

Marine, Estuarine and Freshwater Biology Examining Behavior of Lumpfish, Cyclopterus lumpus, under Differing Light Levels Advisers: Michael Doherty, Elizabeth Fairchild

COLSA UNDERGRADUATE RESEARCH CONFERENCE, POSTER PRESENTATIONS, CONTINUED

Morgan Kritzman Andrew Shapiro

Marine, Estuarine and Freshwater Biology Assessing the Potential Impacts of Invasive Japanese Knotweed on Brook Trout Prey in Stream Habitats in Northern New Hampshire

Adviser: Nathan Furey

Troy LaPolice

Biology

Investigating Erroneous Gene Duplication in Poison Frog, Ranitomeya imitator Adviser: Matthew MacManes

Olivia Lachapelle

Environmental Sciences Fungal Production of Enzymes, Melanin, and Metabolites in Artificial Soil Adviser: Serita Frey

Mitchell Lachs

Neuroscience and Behavior An Examination of Oscillatory Power Modulation during Working Memory Updating

Adviser: Robert Ross

Bryan Landry

Genetics

Genetic Variations of Coagulation Factor V Genes across Populations and Species Adviser: W. Kelley Thomas

Abigail Laverriere Tara Willette

Nutrition

Weight and Body Composition Fluctuations among Male Collegiate Athletes across Multiple Seasons Adviser: Kevin Pietro

Adviser: Kevin Pietro

Robert Lazo

Environmental Sciences
Effects of Hydrocarbon and NAPL
Substances on Water Quality
Adviser: Wilfred Wollheim

Christopher Lenox

Biomedical Science
Investigating Sphingolipid Regulation of
the Tumor Immune Microenvironment
Adviser: Brian Barth

Laura Lynch Sarah Waleryszak

Nutrition

Exploring COVID-19 Effects on Level of Food Insecurity among College Students Adviser: Jesse Morrell

Sara Manzelli

Sustainability, Zoology Black-Footed Cat (Felis nigripes) Husbandry: Improving Captive Experience via Enrichment Adviser: Janet Anderson

Kelsey Mercurio

Biochemistry, Molecular and Cellular Biology, Sustainable Agriculture and Food Systems

Roles of Non-Frankia Bacteria in Root Nodule Formation and Function in Alnus glutinosa

Adviser: Louis Tisa

Elizabeth Miller

Animal Science

Epidemiological Evaluation of Medical and Behavioral Illness at the Pope Memorial Humane Society

Adviser: Sarah Proctor

Jonathan Moehlmann

Biomedical Science

Potential Chenopodium ficifolium Resistance to Glyphosate in New England Agriculture

Adviser: Thomas Davis

Megan Molinari

Marine, Estuarine and Freshwater Biology, Neuroscience and Behavior

Mary Munley

Marine, Estuarine and Freshwater Biology Evaluating Alternative Bait Ingredients for the Channeled Whelk Fishery

Adviser: Elizabeth Fairchild

Elizabeth Nerney

Marine, Estuarine and Freshwater Biology Phytoplankton Growth Response to Microplastics

Adviser: Liz Harvey

Griffin Nye

Biomedical Science

Bat-Associated Streptomyces Bacteria Produce Antiviral Peptides (AVPs) That Target Clinically Relevant Viral Families

Adviser: Cheryl Andam

Erica Oliver

Biomedical Science
Using the Plasma AA Dose-Response
Method to Compare the Methionine
Bioavailability of Two Rumen Protected
Encapsulated Supplements
Adviser: Nancy Whitehouse

Alexandra Papadakis

Ecogastronomy, Nutrition
Dietary Quality of Bhutanese Refugee
Adults Eligible for the Supplemental
Nutrition Assistance Program
Advisers: Sherman Bigornia, Daniel Winans

Alexandra Papadakis

Ecogastronomy, Nutrition
National Disparities in Food Security,
Social Vulnerability, and Health
Conditions: Considerations for the
COVID-19 Pandemic
Advisers: Semra Aytur, Jessica Carson,
Amy Taetzsch

Julia Paquette

Biomedical Science Factor Fiction? Identifying a Putative Toxoplasma gondii Transcriptional Complex Adviser: Vicki Jeffers

Robyn Parker

Wildlife and Conservation Biology Effects of Small Mammal Seed Predation on Seedling Establishment in Northern New Hampshire

Advisers: Rebecca Rowe, Ryan Stephens

Maeve Perrin

Equine Studies

Effects of the Air Quality in Equine Stable Environments on the Respiratory Health and Allergy Response of Human Personnel: A Review

Adviser: Christina Keim

Joseph Philbrick

Biology, Sustainability
Benthic Cyanotoxin Transfer in the Oyster
River Food Web
Advisers: James Haney, Katherine Low

Ryan Puterbaugh

Biochemistry, Molecular and Cellular Biology Structural Studies of a Regulator of G-Protein Signaling Adviser: Krisztina Varga

Caridad Reyes

Neuroscience and Behavior
An Analysis of Signal Qualities of Acheta
domesticus Calls Produced during
Exposure to Noise Perceived via
Different Sensory Pathways
Adviser: Daniel Howard

Chloe Richard

Biomedical Science A Survey of Opportunistic Fungi in the Portsmouth, NH, Region Adviser: Juan Rojo

Paul Rozenberg

Environmental Sciences
How Does Streamflow Affect Specific
Conductivity in Streams?
Adviser: Wilfred Wollheim

Savannah Salvage

Neuroscience and Behavior Meta-Analytic Connectivity Modeling of Brain Regions Related to Deception Advisers: Sarah Meier, Donald Robin

Samantha Schultz

Genetics

Effect of Rosiglitazone on STAT3 Inhibition in Breast Cancer Cells Adviser: Sarah Walker

Summer Smith

Biomedical Science Ursolic Acid Blocks the NADPH Oxidase in Pathways of Neuroinflammation Adviser: Brian Barth

Brittney Spooner

Biomedical Science
Estimated Glomerular Filtration Rates and
the Racial Multiplier: Clinical Implications
and Current Attitudes
Adviser: Juan Rojo

Julia Squillace

Wildlife and Conservation Biology Linking Nest Timing Phenotypes to DNA Methylation of Circadian Rhythm Genes in Breeding Female Tidal Marsh Sparrows Adviser: Adrienne Kovach

McKenna Wells

Environmental Sciences
Assessing the Impacts of COVID-19
on Plastic Consumption and Recycling
Behaviors on College Campuses
Adviser: Patricia Jarema

Natalie White

Environmental Sciences Assessing Salt Marsh Erosion along Moody Point on New Hampshire's Great Bay Estuary Adviser: Gregg Moore

Emily Williams

Biology

Biomagnification of BMAA in the Aquatic Food Web of Oyster River

Adviser: James Haney

Interdisciplinary Science & Engineering (ISE) Symposium

Poster Presentations

Wednesday, April 28

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.

Biology

Group Leader: Krisztina Varga

Kelsey Mercurio

Biochemistry, Molecular and Cellular Biology, Sustainable Agriculture and Food Systems

Roles of Non-Frankia Bacteria in Root Nodule Formation and Function in Alnus glutinosa

Adviser: Louis Tisa

Ryan Puterbaugh

Biochemistry, Molecular and Cellular Biology Structural Studies of a Regulator of

G-Protein Signaling
Adviser: Krisztina Varga

Maria Seneres

Bioengineering Constructing Molecular Models of Tripeptides with Sequence-Encoded Properties

Adviser: Harish Vashisth

Tyler St. Peter

Chemistry

Using Ribosomes to Create Other Polymers Adviser: John Tsavalas

Chemistry

Group Leader: Richard Johnson

Sawyer Cawthern

Chemistry

Investigation of Controlled on Demand Self-Assembly and Disassembly of Polymer Nanostructures

Adviser: Erik Berda

Jessica Douillette

Chemistry

Age of Fingerprints Established through Ambient Ozonolysis of Unsaturated Triacylglycerols Adviser: John Tsavalas

Alec Espinola

Chemistry

Comparison of Chlorine-Detecting Devices in Ship Ballasts Adviser: Anyin Li

Adam Joos

Chemistry

Bioconjugation of an Antifreeze Protein to a Synthesized Copolymer Adviser: John Tsavalas

Julia Leary

Chemistry

Investigation of Aniline Bipyridine as a Metal-Free Hydrogen Producing Ligand Adviser: Christine Caputo

Michael Miller

Chemistry

En Route to Cyclacenes: A Diels-Alder Strategy for the Synthesis of Molecular Belts Adviser: Richard Johnson

James Wilkes

Chemistry

The Synthesis of Benzyl and Methyl Pyrene Modified Nickel Cyclams for CO2 Reduction

Adviser: Christine Caputo

INTERDISCIPLINARY SCIENCE & ENGINEERING (ISE) SYMPOSIUM, POSTER PRESENTATIONS, CONTINUED

Civil Engineering — Design

Group Leaders: Eshan Dave, Anthony Puntin

Gabriel Archambault

Environmental Engineering

Gordon Hoyt Tyler Moore

Civil Engineering
Barrington, NH, Mallego Road Bridge
Advisers: Saeed Eftekhar Azam,
Kayla Hampe, Jillian Semprini

Niroj Bhattarai John Leach Cassie Norton Civil Engineering

Jessica Manning

Environmental Engineering Sheehan-Basquil Park Site Renovation

Adviser: Anthony Puntin

Samuel Brandt Cole Contigiani Hannah Miller Adam Wielebinski Civil Engineering

The Hell Gate Wharf Rehabilitation

Adviser: Jo Sias

Olivia Caron Erica Eames Matthew Fitzpatrick

Christopher Looney

Olivia Oskin

Civil Engineering

Hamilton Canal Multi-Use Tower

Adviser: Anthony Puntin

Jacey Chavez Tyler Heymans John Plifka

Civil Engineering

Hannah Gagne Luke Zuchowski

Environmental Engineering

Meredith Madden Nicole Ramaker Jonathan Stahl Nicholas Thum

Mechanical Engineering

Michael Pasciuto

Mechanical Engineering, Sustainability Department of Energy U.S. Solar Decathlon

Advisers: Felix Devito, Martin Wosnik

Morgan Conklin

Eli Moslow

Civil Engineering

Joshua Howard Carolina Patino

Environmental Engineering

City of Manchester Christian Brook

CSO Separation Project

Advisers: Jeremy Bouvier,

Frederick McNeill, Weiwei Mo

Nicholas Eagan Dillon Eberhardt

Joshua Landry

Christopher O'Leary

Troy Thirkell

Civil Engineering

U.S. Route 1 Bypass Bridge Replacement,

Kittery, ME

Adviser: Matthew Low

Casey Hughes Daniel Page Joseph Yurczyk

Civil Engineering

Indian Carry Road Stream Crossing

Project

Adviser: Kenneth Flesher

Civil Engineering — Investigation

Group Leaders: Eshan Dave, Anthony Puntin

Brandon Belmonte Joseph DeGregorio Andrew Godfrey Jessica Nekowitsch

Environmental Engineering

CEE 798: Evaluating the Implementation of Stormwater BMPs in Portsmouth, NH

Advisers: Erin Bell, James Houle

Alden Blais Ailish Bozzo Ryan Daley

Civil Engineering

Harvard Museum of Comparative Zoology

Adviser: Raymond Cook

Sage Cawthern

Emily Clickner

Joseph Jorgens

Ryan Savoy

Guillermo Sepulveda

Civil Engineering

Portsmouth Senior Center Structural

Assessment

Advisers: Robert Henry, Tim Nichols,

Tyler Renz, Carter Terry

Isaac Colcord Nicholas Whitley

Civil Engineering

Dylan Erasmus

Environmental Engineering

Steven Rizzo

Environmental Engineering,

Sustainability

Construction of Luxury Apartments over a

Former MGP Site

Advisers: Jean Benoit, Jay Hodkinson,

Anthony Puntin

Jack Doherty

Civil Engineering

Jin Yang

Environmental Engineering

Maintaining Unpaved Roads

Adviser: Eshan Dave

Ryan Fournier

Environmental Engineering

Joshua Joslyn-Grasewicz

Stephen Roche

Ethan Smith

Jacob Stoddard

Civil Engineering

Livermore, NH, Resort Development and

Dam Design Feasibility Project

Adviser: Anthony Puntin

Jesse Jakubajtys Christian Milioto

Calvin Poitras
Civil Engineering

Lee Center Intersection Road Safety Audit

Adviser: Kyle Kwiatkowski

Andrew Weaver

Environmental Engineering

Tidal Culvert Analysis in Georgetown, ME

Adviser: Nancy Kinner

Civil Engineering — Research

Group Leaders: Eshan Dave, **Anthony Puntin**

Jessica Buhrle **Shane Fillion** Gage Moran

Environmental Engineering Reducing Hydrogen Sulfide in Augusta, Maine, Main Sewer Line Adviser: M. Robin Collins

Gregory Bush Sara Murcko **Garry Yapto**

Environmental Engineering Quantifying the PFAS Cycle Adviser: James Malley

Sage Cawthern

Civil Engineering Replacing a Load-Bearing Wall with a Beam Adviser: Raymond Cook

Joseph DeGregorio

Environmental Engineering Initial Characterization of Microplastics in the Great Bay Estuary Adviser: Paula Mouser

Ian Desmarais

Civil Engineering Exploring the Relationship between Poverty Levels and Typhoon Mortalities in the Philippines

Adviser: Kyle Kwiatkowski

Ian Desmarais Garrett Puchalski Joshua Rowland

Civil Engineering Seismic Resilience and Adaptation of Arctic Infrastructure and Social Systems Adviser: Majid Ghayoomi

Ryan Fournier

Environmental Engineering An Analysis of SARS-CoV-2 Biomarker Concentrations at the Durham Wastewater Treatment Plant

Adviser: Paula Mouser

Holly Proulx Cameron Wagner

Environmental Engineering

Michael Tung Cameron Ugolini

Mechanical Engineering UAV Snow Mapping for Avalanche Forecasting in Tuckerman Ravine Adviser: Jennifer Jacobs

Computer Engineering

Group Leader: Wayne Smith

Abdulla Saeed Al-Hajri

Computer Engineering Solar Panel Cooling System Adviser: Edward Song

Travis Canfield Joseph Lagasse **Patrick Scott**

Computer Engineering Smartphone-Based Video Conferencing System Adviser: Edward Song

Rvan Conte Robert Lee

Computer Engineering Meshed LoRa Wide Area Network of Sensor Nodes for Precision Farming Adviser: MD Shaad Mahmud

Nathanael Frisch

Computer Engineering

Anushreeya Gurung

Analytics and Data Science

Daniel McCarthy Computer Science

Samuel Mercer

Chemical Engineering Wireless Data Processing System for Localized IoT-Enabled Device Networks

Adviser: Alexandra Contosta

Computer Science — **Applications**

Group Leaders: David Benedetto, Matthew Plumlee

Ramya Bathula

Computer Science

Ryan Lawes

Michael Survilas

Information Technology Study Abroad Course Transfer Database Advisers: David Benedetto, Catherine D'Auteuil

Bowen Bilodeau **Bryan Choate** Ryan Lefebvre Keelan Piispanen

Computer Science

LS-ADAPT

Adviser: David Benedetto

Jacob Golas Bing Yi Liu Jake Nicholas

Computer Science

Travis Raynolds Information Technology

VR Space Science: Electromagnetic Flow

Field Visualizations Adviser: Matthew Plumlee

Pratyush Kharel

Information Technology

Crystal O'Brien **Scotton Price**

Computer Science

Web-Based Augmented Laboratory Learning Experiences (WALLE) Advisers: Betsy Coleman, Matthew

Plumlee

Connor Lacourse

Ethan Lisi Caleb Peffer

Nicolas Silberstein Camara Benjamin Whitehead

Computer Science

Hallhub: Reinventing Event Promotion and Residence Hall Management on Campus

Adviser: Matthew Plumlee

INTERDISCIPLINARY SCIENCE & ENGINEERING (ISE) SYMPOSIUM, POSTER PRESENTATIONS, CONTINUED

Joseph Macedo Evan Rodgers

Computer Science

Andrew O'Neil Pranav Prasad

Information Technology

Project Pathways

Adviser: David Benedetto

Kajalben Patel Joseph Rabideau Zehua Zhang

Information Technology
USS Albacore Remote Learning

Applications

Adviser: David Benedetto

Brendan Therrien

Computer Science
NextStep Mobile App
Adviser: David Benedetto

Computer Science — Data Science

Group Leaders: David Benedetto, Matthew Plumlee

Abhilekh Adhikari Dakota Bagley Ashley Martin

Information Technology CEPS Diversity Tracker Adviser: David Benedetto

Matthew Eager Sean Kohlbrenner Computer Science

Amith Harish Kashyap Nilan Phommachanh

Information Technology

Roads of the Sea

Advisers: David Benedetto,

Christos Kastrisios, Val Schmidt

Joseph Guidoboni

Computer Science
Learn-to-Retrieve-and-Generate for
Article Generation
Adviser: Laura Dietz

Connor Lennox

Computer Science

Impromptune: Symbolic Music Generation with Relative Attention Mechanisms

Adviser: Laura Dietz

Tiancheng Liang

Yulin Yang

Yang Ye

Computer Science

Linkai Liang

Computer Engineering

Natural Language Processing Development

Adviser: David Benedetto

Yingjie Ma

Computer Science

Using IPMs to Model Tree Growth in the

White Mountain National Forest

Adviser: Marek Petrik

Dylan O'Keeffe

Analytics and Data Science

Kevin Rhoades

Computer Science

Derek Riccardi

Computer Science

Analyzing Storm Events Impact on Rivers

Adviser: Laura Dietz

Colin Small

Computer Science

MMS SITL Ground Loop: Automating

Spacecraft Data Selection

Advisers: Matthew Argall, Marek Petrik

Computer Science — Systems

Group Leaders: David Benedetto,

Matthew Plumlee

Sawyer Bergeron Joseph Carrara

Griffin Leclerc

Computer Science

Cluster Construction for Advanced Analytics

Adviser: Scott Valcourt

Ryan Bergman Anthony Pilotte

Computer Science

Christopher Trilling

Computer Engineering

Cameron Vahe

Information Technology

Employee Tracking System for Adhering to

COVID-19 Guidelines

Advisers: Matthew Plumlee, Qiaoyan Yu

Xueliang Chen

Yuhui Wu

Information Technology

Garrick Craft

Computer Science

 $Protocol\ Performance\ Testing\ Automation$

Advisers: Radim Bartos, David Benedetto,

Matthew Plumlee

Aurora Desmarais

Jordan Felt

Uri-Jaun Hall

Computer Science

CO2 Sensor Software

Adviser: David Benedetto

Ezekiel Emstad

Quinlan Graham

Stephen Horn

Computer Science

Space Weather Follow-On MAG Flight and

Ground Software

Adviser: Matthew Argall

Jackson Lucier

Duncan McInnes

Information Technology

Garrett Smith

Business Administration

Network Probe Monitor

Adviser: David Benedetto

Earth Sciences

Group Leader: Thomas Lippmann

Cvnthia Bova

Earth Sciences

Modeling the Fate and Transport of Carbon Constituents in a Subarctic

Watershed in Northern Sweden

Adviser: Ruth Varner

Brittani Chapman

Earth Sciences

Investigation of New England Forest

Biometrics Utilizing Airborne LiDAR Data

Adviser: Michael Palace

Benjamin Cotton

Earth Sciences

The Role of Bioavailable Dissolved Organic Nitrogen Cycling at Station ALOHA in the

Subtropical North Pacific Ocean Adviser: Robert Letscher

Angelica Dziurzynski

Earth Sciences, Marine, Estuarine and Freshwater Biology

The Impact of Sedges on Belowground Methane Concentration and Diffusion in a

Temperate Peatland Adviser: Ruth Varner

Trevor Fenoff

Earth Sciences

An Analysis of River Channel Change over Time in the Lamprey River

Adviser: Anne Lightbody

Jessica Gray

Earth Sciences

The Effect of Temperature on Primary Productivity Trends in the Global Ocean

Adviser: Robert Letscher

Peter Haber

Earth Sciences

Magnetostratigraphy of Paleogene Deposits in Coastal San Jorge Basin and Implications for South American Land

Mammal Ages

Adviser: William Clyde

Quinton Hazard

Earth Sciences

Monitoring Cape Cod's Changing Shoreline

Adviser: Michael Palace

Quinton Hill

Earth Sciences

Remotely Sensed Seasonal Traces of Bedrock Contributions to Stream Chemistry in Hubbard Brook, NH Advisers: Julia Bryce, Michael Palace

Cooper Mattheu

Earth Sciences

Relative Abundance of Phytoplankton in Surface Waters of the Mid-Atlantic

Adviser: Liz Harvey

Connor Melican

Earth Sciences

Analysis of Urban Heat Flux in Durham, NH Adviser: Katharine Duderstadt

Laura Spring

Earth Sciences

Evaluating the Relationship between Seismicity and Crustal Uplift Rates across the Southeastern Sector of the Laurentide Ice Sheet

Advisers: Joel Johnson, Joseph Licciardi

Electrical Engineering

Group Leader: Wayne Smith

Alhussein AL-Jawad

Electrical Engineering

Multi-Band Electromagnetic

Field Interference

Adviser: Kent Chamberlin

Ranuli Abeysinghe

Electrical Engineering

Free Space Optics Audio Channel

Adviser: Nicholas Kirsch

Michael Bahrs Kevin Healev

Nicholas Skinner

Electrical Engineering 3-D Lidar Mapping System

Adviser: Se Young Yoon

Owen Baillargeon Samuel Goudreault

John Ward

Electrical Engineering PMU SCADA Design

Adviser: Nicholas Kirsch

Kyle Beaupre

Electrical Engineering

Dual-Axis Solar Tracker

Adviser: Edward Song

Dylan Brown Simon McIntosh

Electrical Engineering

Chinghei Cheng

Larry Nguyen

Timothy Vigliotte

Computer Science

Colin Daly

Jonathan Ells

Jaiden Evarts

Connor Fleury

Zachary Hulecki

Joseph Lapierre

Nicholas Miele

Aidan Moore

Dylan Russell

Mechanical Engineering

Navswarm

Adviser: May-Win Thein

Allen Burnett

Matthew Ladd

Electrical Engineering

EARS

Adviser: John LaCourse

Whitman Carroll

Patrick Conroy

Electrical Engineering

Lunabot Project

Advisers: John LaCourse, May-Win Thein

Brian Coffen

Electrical Engineering

Wireless Wearable Triage and Health Monitoring Device for MCIs and First

Responders

Adviser: MD Shaad Mahmud

Matthew Dodge

Electrical Engineering

Modeling the UNH Microgrid

Adviser: Nicholas Kirsch

Joseph Eichelser

Wing Kiu Jiang

Electrical Engineering

 $Project\ MANTARAY$

Advisers: May-Win Thein, Qiaoyan Yu

Tanner Fortier

Electrical Engineering

Simulation of Ethernet Link Partner at

10Mb/s over a Single Twisted Pair

Adviser: Richard Messner

Jennifer Hargenrader

Electrical Engineering

Solar-Powered Aquaponics System

Adviser: Se Young Yoon

Kevin Healey

Electrical Engineering

Object Detection and Classification with

3-D Lidar Mapping System

Adviser: Se Young Yoon

Bartlett Hooper

Andrew Nguyen

Christian Talmo

Jeffrey Wansley

Electrical Engineering

QuadX Swarm

Advisers: May-Win Thein, Se Young Yoon

INTERDISCIPLINARY SCIENCE & ENGINEERING (ISE) SYMPOSIUM, POSTER PRESENTATIONS, CONTINUED

Charity Reed

Electrical Engineering
In-Home Data Collection for Experiments
with Human Participants
Adviser: Andrew Kun

Matthew Serpis

Electrical Engineering
Personal Hydroponics System for Home Use
Advisers: John LaCourse, Wayne Smith

Ujan Talukdar

Electrical Engineering SDR Machine Learning Approach to Classifying Wireless Signals Adviser: Nicholas Kirsch

Eric Zuchowski

Electrical Engineering
15-Watt Solid State Guitar
Combination Amplifier
Adviser: Wayne Smith

Innovation Scholars

Group Leader: Timothy Carlin

Christian Baduria Mason McDonald

Computer Science

Alec Damsell

Statistics

Autonomous Long-Range Aerial Data Collection for Environmental Surveys Adviser: Timothy Carlin

Aaron Bateman

Ryan Tripp

Mechanical Engineering

Christopher Bui

Jasmine Ho

Bioengineering

Sophia Pettit

Undeclared

Soft Robotics: Soft Wheel Robot Adviser: John LaCourse

Kaiden Bedell

Mechanical Engineering

Arielle Kotulak

Chemical Engineering
Assessing the Influence of Climate on NH
Sugar Maple Syrup Quality
Adviser: Alia Lesnek

Julia Bowman

Environmental Engineering

Heidi Bucking

Marine, Estuarine and Freshwater Biology Measuring Road Salt Concentrations in Water Bodies around UNH Adviser: Alia Lesnek

Philip Breton

Civil Engineering

Kathryn Carlson

Chemical Engineering

Alexis Eaton

Environmental Engineering, Sustainability

Katie O'Brien

Environmental Engineering Water Quality Sensor for Coastal Structure Analysis

Advisers: Savannah DeVoe, Diane Foster

Jackie Genthner

Chemical Engineering

Amy Prendergast

Electrical Engineering

Gavin Smith

Engineering Physics

Optimal Weight-to-Strength Analysis of 3-D Printed Scalable Wind Turbines

Adviser: Mason Bichanich

Evan Goodale

Ocean Engineering

Camden Guay

Statistics

The Formaldehyde Slide: Monitoring Air Quality at UNH

Adviser: Alia Lesnek

Tyler Johnson

Bioengineering

Jackson Perkins

Jane Schwadron

Ocean Engineering

Steven Wilson

Mechanical Engineering

Research and Design of Wave Rider Buoy for Collecting Wave Data in Hampton, NH Advisers: Savannah DeVoe, Diane Foster

Philip McKendall

Electrical Engineering

Jackson Morrissey

Mechanical Engineering
Diabetic Alert Wearable
Adviser: Madhay Baral

Garrett King Sara Overhulser Sriyam Rimal

Computer Science
Gauging Music Popularity with
Chord Progressions
Adviser: Timothy Carlin

Mathematics

Group Leader: Michelle Capozzoli

Sophia Brisard

Mathematics

Learning to Teach: What Do Prospective Mathematics Teachers Learn from Reflecting on Video Recordings of Their Own Classroom Teaching? Adviser: Orly Buchbinder

Elisa Chen

Applied Mathematics

Anomaly and Fraud Detection in

Campaign Finance Data

Advisers: Tama Andrews, John McClain

Danielle Curtin

Statistics

Project ECHO and the Confidence of Treatment for Patients with Substance Use Disorder

Adviser: Michelle Capozzoli

Julia Fitzgibbons

Mathematics

Parameter Estimation for Epidemic Modeling Adviser: Adam Boucher

Christopher Manseau

Mathematics

K-Stage Euclidean Behavior of Coordinate Rings of Algebraic Curves

Adviser: Edward Hinson

Russell Miles

Applied Mathematics

Machine-Learning Classification of Two-Dimensional Objects Using Reflected

Wave forms

Adviser: Mark Lyon

Mechanical Engineering — **Competition and Club Teams**

Group Leader: Alireza Ebadi

Marc Akouri **Jonathon Amrein Dennis Codling Patrick Gillis Peter Hunt** William Lauzon Joseph Mroz **Zachary Rossi** Nathan Stegman

Mechanical Engineering

Whitman Carroll **Patrick Conroy Electrical Engineering**

Ran Chen Han Jintong **Tao Zhang** Computer Science LunaBot Team

Adviser: May-Win Thein

Patrick Anderson Jarrod Arruda Sawyer Banley-Bill **Jacob Dow** John Gallo **Nelson Kim Justin Lomba** Thomas Miller Sungjoon Shinnishi DJ Simoneau **Cooper Spaulding David Swan Timothy Ziadeh**

Mechanical Engineering Precision Racing Team Adviser: Todd Gross

Secundino Baldonado **Grace Johnston** Alex Lumbert **Matthew Porter Ross Thyne** Alice Wade

Mechanical Engineering

Kang-Li Chen

Mechanical Engineering UNH Students for the Exploration and Development of Space

Adviser: Todd Gross

Noah Bonneau **Brandon Hanson Timothy Underhill** Computer Science

Matthew Bowring **Griffith Comtois** Samuel Cranford Patricia Goodwin Colleen Kelly

Devon Kraemer-Roberts

Shane Monahan

Mechanical Engineering

Bartlett Hooper Andrew Nguven **Christian Talmo Jeffrey Wansley Electrical Engineering**

QuadX Swarm

Adviser: May-Win Thein

Thomas Cote Matthew Dostie Divyamsh Nepal **Derek Ramsey Rvan Suttmeier Matthew Weaver Andrew Williams**

Mechanical Engineering 2021 UNH Mini Baja Team Design

Adviser: Todd Gross

Ionathan Ells

Mechanical Engineering

ET-NavSwarm

Adviser: May-Win Thein

Mechanical Engineering — **Industry**

Group Leader: Alireza Ebadi

Michael Clemente **Bryce Desmarais** Cole Dunaiski

Mechanical Engineering LOONS

Adviser: Christopher White

Matthew Dunbar **Timothy Morris Jackson Tarrant**

Mechanical Engineering Hutchinson Material Handling in Robotic

Manufacturing Cell Adviser: Alireza Ebadi **Garrison Fenner** Mohammed Raouf Oscany Rodriguez-DeJesus

Mechanical Engineering Hypertherm Plasma Arc Cutting Experimental Set Up and Analyses

Adviser: Brad Kinsey

William Girard Tristan Herbert Isaac Mathewson Jeremy Rescott Samuel Twombly

Mechanical Engineering Hypertherm Plasma Cutter Automatic Consumable Changer

Adviser: Brad Kinsey

Samuel Kierstead Michael Piessens

Mechanical Engineering Power-Assisted Hand Cycle for People with Physical Disabilities

Adviser: Ivaylo Nedyalkov

Jason Landolt Yinghao Zhai

Mechanical Engineering U.S. Navy: NAVAIR Unmanned Drone Thermal System Controller

Advisers: Charles Klewicki,

Christopher White

Curtis Linton Kathy Robbins Laura Stanieich Maria Virga

Mechanical Engineering Distributed Cyber Manufacturing

Case Study

Advisers: Jinjin Ha, Brad Kinsey, Elizabeth Mamros

Ouinn Parker Cole Schoonover

Mechanical Engineering NEMO Equipment: Measuring Dynamic Response of Tent Pole Architecture

Adviser: Todd Gross Ariana Schmidt

Devony Whiting

Mechanical Engineering Modular Wheelchair Levers Adviser: Ivaylo Nedyalkov

INTERDISCIPLINARY SCIENCE & ENGINEERING (ISE) SYMPOSIUM, POSTER PRESENTATIONS, CONTINUED

Mechanical Engineering — Research

Group Leader: Alireza Ebadi

Ali Al-Jewad Nathan Daigle Sohani Demian Jordan Hoffman Mechanical Engineering Giovanni Guglielmi

Environmental Engineering
Life Cycle Environmental and Economic
Comparison of Water Droplet Machining
and Traditional Abrasive Waterjet Cutting
Advisers: Brad Kinsey, Weiwei Mo

Ali Al-Jewad Nathan Daigle Sohani Demian Jordan Hoffman

Mechanical Engineering

Giovanni Guglielmi

Environmental Engineering Traverse System for Water Droplet Machining

Advisers: Brad Kinsey, Weiwei Mo

Abdulla Alradhi Faisal Binsalma Max Bundesmann

Mechanical Engineering Real Time Activity and Weight of Desert Mice Advisers: Dani Blumstein,

Anthony Puntin

Hunter Cini

Davis Cole Jaden LaRoche

Rachael Martinez

Mechanical Engineering Classroom Ventilation Methods to Prevent Particle Transfer

Advisers: Todd Gross, Ivaylo Nedyalkov

Donovan Corless Hui Jin Kevin Yeung Yu Zhou

Mechanical Engineering Acoustic Streaming Heat Pipe Adviser: Christopher White Scott Franco Thomas Mason

Mechanical Engineering
Design of a One-Handed Bike Pump
Adviser: Todd Gross

Curtis Linton

Mechanical Engineering
Mitigating the Lateral Mixing of Aerosols
Using Computational Fluid Dynamics
Adviser: Todd Gross

Noah Payeur Zifeng Qiu

Mechanical Engineering
Fixturing for Double-Sided Incremental
Forming Machine
Advisers: Jinjin Ha, Brad Kinsey,
Elizabeth Mamros

Devin Roderick

Mechanical Engineering
Microgravity Plyometric Exercise Machine
Adviser: May-Win Thein

Ocean Engineering

Group Leader: M. Robinson Swift

Rachel Barden Garrett Frohman Olivia Luthringer Ocean Engineering Haley Fong

Emma Kross

Marine, Estuarine and Freshwater Biology Composite Lines for Kelp Aquaculture Adviser: M. Robinson Swift Jessie Barker Vincent Dejana Amanda Enderson Matthew Radzelovage Richard Randall

Mechanical Engineering

Benson Cao James Kahn Hoe Hin Loh Jeffrey Pitts Jakob Velle David Watson Computer Science

Jenna Ehnot
Ocean Engineering

Joseph Eichelser
Wing Kiu Jiang
Electrical Engineering

ASV/UUV/Robofish Advisers: Michael Chambers, Elizabeth Fairchild, Yuri Rzhanov, May-Win Thein

Dakota Bouret Rory Walsh Ocean Engineering

Brian Thorne

Mechanical Engineering
Wave-Powered Water Pump

Adviser: M. Robinson Swift

Matthew Dowling Sean Gillam Magdalyn Kosalek Michael Monahan Jason Robidoux

Ocean Engineering

Derek Goulet
Mechanical Engine

Mechanical Engineering
Efficacy of Bubble Screens on
Turbidity Control
Adviser: Tracy Mandel

MacLane Keohane Thomas Spiro

Ocean Engineering Characterizing Tidal Current Structures in the Piscataqua River While Monitoring Estuarine Health

Advisers: Patrick O'Byrne, Martin Wosnik

Physics — Experimentation and Investigation

Group Leader: Ningyu Liu

Kelly Bisson Jeffrey Campbell Hanyu Jiang Engineering Physics Alex Chesley Jeffrey Grant

Mechanical Engineering
Design and Modeling for the IMAP
Student Collaboration CubeSat
Advisers: Jason Legere, Marc Lessard,
Noe Lugaz

Lihy Buchbinder

Physics

Exploring the Effects of Tip Shapes on Tip-Sample Interactions for Scanning Tunneling Microscopy Adviser: Shawna Hollen

Shawn Cawley

Engineering Physics Rogowski Coil: Damping with a Flux Feedback Circuit Adviser: Matthew Argall

Grace Johnston

Mechanical Engineering MAP-Lo Star Sensor Development and Calibration

Adviser: Harald Kucharek

Riley Powell

Engineering Physics Design and Optimization of a Micron-Sized Bonding Technique for Electronic Measurements of 2-D Material Flakes Adviser: Shawna Hollen

Lillian Soucy

Physics Techniques for Dynamic Nuclear Polarization NMR Analysis

Adviser: Karl Slifer

Robert Wells

Engineering Physics Plastic CUBESAT Chassis Design and Experimentation Adviser: Amy Keesee

Amanda Wester

Physics

Transition Edge Sensor Microcalorimeters for ASCENT — A Superconducting Energetic X-Ray Telescope Adviser: Fabian Kislat

Physics — Theory, Modeling, and Data Analysis

Group Leader: Ningyu Liu

Ben Campbell

Mathematics, Physics
Prediciting Calabi-Yau Threefold Topology
from the Kreuzer-Starke List of 4-D
Reflexive Polytopes
Adviser: Per Berglund

Audrey Coleman

Physics

Assessing the Applicability of the Maximum Likelihood Method for LEAP Using COMPTEL Data Adviser: Mark McConnell

Tan Dao

Physics

Correlation between Chiral Fluctuations and the Topological Hall Effect Adviser: Jiadong Zang

Payson Dunn

Classics, Physics
Developing a Fractal Model of Electrical
Discharge Trees
Adviser: Ningyu Liu

Isabella Householder

Physics

Statistical Study of Van Allen Radiation Belt Electron Precipitation during Satellite Conjunctions at Low Earth Orbit Adviser: Chia-Lin Huang

Anastasia Marchuk

Physics, Russian
Low Frequency Waves Due to Newborn
Interstellar Pickup He+ Observed by the
Ulysses Spacecraft
Adviser: Charles Smith

Nathan Richard

Physics

Investigating Fast Breakdown in Lightning Narrow Bipolar Events Advisers: Ningyu Liu, Julia Tilles

Collin Stevenson

Engineering Physics

Dynamic Contact Angle in OpenFOAM

Adviser: Ivaylo Nedyalkov

Peter T. Paul College of **Business and Economics First-Year Innovation** and Research Experience (FIRE) URC

Poster Presentations & **Oral Presentations**

Saturday, May 1

FIRE is an integrated, team-based, and game-like experience for firstyear Paul College students. Through a series of challenges, students develop business plans that are presented at this year-end finale, which features poster and oral presentations on students' business plans and concludes with a "Grand Challenge Round."

Grand Challenge: Bio Tech

Team: 7 Cool Ranch Doritos

Adviser: Spencer Coveney

Daniel Alissi

Delaney Cunningham

Matthew Darby

Philip Herman

Maggie Keenan

Max Kunesh

Nicholas Luneau

Gavin O'Hara

Ciera Schwarzer

Jacob Stewart

Business Administration

Alexander Bernhard

Taylor Burgess

Steven Huang

Margaret Lahey

Eliza Liponis

Emily Lynch

Undeclared

Team: Seal Eyes

Adviser: Zachary Merian

Eric Anderson

Danielle Baker

Derek Bobbitt

Ethan Brennan

Samuel Eggimann

Sheila El-Azem

Rvan Luis

Maeghan McGraw

Kyle Miller

Oliver O'Keefe

Haley Ott

Sophia Pagliazzo

Jason Patterson

Theo Pearson

Luke Stradley

Jonathan Willeman

Business Administration

Gabrielle Havden

Nicholas Roscoe

Undeclared

Team: It's In the Bag-arella

Adviser: Joseph Bagarella

Jessica Andrews

Madison Burns

Alexa Gillett

Nicole Kinzlmaier

Andrew Milrov

Lillian Murray

Graham Pogue

Jadyn Raftery-Smart

Erin Reilly

Joseph Shepard

Emily York

Business Administration

Gabrielle Johnson

Kobie Taylor

Undeclared

Emilee Martin

Hospitality Management

Jacob McGuire

Economics

Team: 24 Karat

Adviser: Marisa Labadini

Andrew Ariagno

Trinity Birmingham

Dominic Cavanagh

Gregory Davis

Daniel Gottschalk

Jared Jesseman

Lauren Kirby

Avery Langone

Evan LeBlanc

Cameron McGill

Rvan Santosuosso

Business Administration

Hailey Bartini

Scott Cavan

Matthew Darwin

Alex Hughes

Undeclared

Team: 20Money

Adviser: Sophia Mazzarelli

Jacob Buban

Nathan Bussone

Carley Dahlstrom

Gabriella Fabiszewski

Jack Flanagan

Andria Loiacono

Olivia O'Connor

Elodie Poussard

Joseph Reagan **Todd Richardson**

Aidan Rolfe

Gianna Salvi

Business Administration

Quinn Doherty

Regan Doody

Michael Leahy

Ian Miles

Julia Saab

Stuart Standish

Christopher Thorne

Undeclared

Grand Challenge: Environment

Team: BobsCats

Adviser: Robert Horgan

Emily Alberigo Paige Cote Cole Giannasca **Jarrett Haves** Marly Johnson **Brendan Kelly** Finnbarr Kiernan Anna Kovacs Emma LaRoche Glenn Lewis **Zachary Menard** Nicholas Tucci Michael Ziv

Business Administration

Joshua Hoffman Colleen Simpson Abriana Teodoro Undeclared

Team: Zero-Dark-30

Adviser: Kelsie Dawe

Cameron Allen Joseph Cammarata **Grace Clark** George Clarke **Evan Deary** Isabel Gavarre Adam Julian Morgan Kahn

Brianna Legros **Jackson O'Connell** Anthony Sanville

Alexys Wheeler

Business Administration

Matthew Galley Trevor Goding Allison Ivers Jacob Martin Undeclared

Team: GR8

Adviser: Eleanor Johnston

Andrew Arnoldo **Eric Chase Conor Considine** Makenzie Gagne Mitchel Gagnon Lucas Mathieu Rowena Murphy **Trevor Santoro** Maiah Seul **Zachary Steere** Logan Talanian **Business Administration** Ionathan Borsari Sarah Carroll James Kosiarski Mariah Sanborn Undeclared

Team: Fuego Four

Adviser: Ivy Gogolin

Cameron Avila Michael Picciuto **Dawson Samperi Dubois** Ethan Silvestri

Samuel Tynan Undeclared **Emily Bini Thomas Carpenter** Linda Freeman **Tucker Guard Toby Helton** Avery Joensuu AI Maalouf **Ashley Martin Benjamin Perkins**

Jacob Rotker Kendra Zarnofsky **Business Administration**

Cole Keegan Finance

Team: Hannah's Holiday Carroll's

Adviser: Hannah Carroll

Thomas Berthasavage Rebecca Camire Alaina Dacko **James Hanlon** Matthew Marsico Maximus Pellegrini **Louis Preston** Brendan Reagan **Devin Rooney** Savannah Schoonmaker

Bailey Shippee Adrian Sutton Calvin Todd **Iack Wheeler**

Business Administration

Jacob Calamar Reilly Landry Undeclared

Team: Team Robinhood

Adviser: Robert Andreasse

Michael Capodanno **Liam Conery** Jake Coppola Maggie Johnson Charlotte Johnson Alec Lawry **Jennifer Lawton** Samantha Meredith **Jack St. Sauveur Business Administration Kiley Collins**

Myles Kierstead Caroline McCarthy Undeclared

Grand Challenge: Sports

Team: 21 Savages

Adviser: Lauryn Cappuccio

Mody Abdel-Salam Yannick Bright Colin Caridi **Nolan Duffy Benjamin Errington** Carolyn Garofoli **Jack Needham** Linnea Piper **Cameron Plona** Lucas Ragusa Joanna Romneos Cade Ronan

Olivia Secontine

Zachary Shaw

Undeclared

Team: The Wolves of PAUL Street

Adviser: Molly Richardson

Andrew Abirached Reagan Calcari **Madison Davine Brandon Dickinson Gregory Fallon Kyle Morfis** Kaitlyn Silva Julia Tully

Business Administration

Daniel Craven Ada DiYenno Sean Hanrahan **Brody McAndrew** Evan Pescosolido **Declan Smith** Jack Waldo Undeclared

Team: Ser10us Business

Adviser: Jordan Sardo

Nicolette Allen Owen Henderson Joseph Perfilio Undeclared Michael Bardsley Aleksandra Bedard **Tyler Brang Spencer Cheney** Jack Duffin **Margaret Gerard Tommy Langlois Emily Milton** John Page Abel Ravencraft

Cam Rosnov Business Administration Iillian Cookinham

Economics

Cole Fuller

Analytical Economics, Educational Studies

Team: ON F1RE

Brandon Antinori

Adviser: Jared Bjornberg

Angelina Bisson **Drew Blackwell** Anastasia Campe Erica Cao **Matthew Gallant** Jeremy Mitchell Nicholas Nadeau Angelo Nicolosi **Kyle Vallee Edvn Winter**

Business Administration

Jocelvne Bisson Mason Davis Olivia Harper **Duncan Moreland** Maggie Peterson Alexander Russo Undeclared

Team: Team 31

Adviser: Hannah Carroll

Matthew Armata **Rvan Buxton Madison Corgan** Benjamin Gardiner Caroline Hoff Christopher Karras Michaela Lawyer Isabella LoRusso Shane Malcolm **Jackson Nichols Ashley Phillips Garrett Smith** Andrew St. Martin Matthew Wilkins **Business Administration** Melanie Baillargeon **Molly Colasanti Molly Hill Katie Smith** Undeclared Laura Earle Economics

Team: Pac12

Adviser: Anthony Tamposi

Madeline Beaton Charlotte Butterfield Alexander Cafaro **Sydney Daley** David DeMello Radames Gonzalez Emma Jayne Hardin **Jack Hennings** Cameron Lee Jimmy Lin Natalie Ouellette **Kyle Pinard Emmett Roy** Olivia Surdam

Business Administration

Garrett Chu Sean Demarkis **Grace Harbour Colby Travis** Undeclared

Team: BLA23

Adviser: Johanna Rewucki

Shane Cassidy Jason DeSilva **Cameron Gendron** Nick Patti Emma Ressler Carsen Richels **Kevin Russell Noah Shatzer Andrew Trogler**

Lea Wenaas **Christopher Wilkins Business Administration** Anne-Marie Maughn Will Shoemaker **Cooper Smith Evan Stanley**

Undeclared

Grand Challenge: Supply Chain

Team: Team Titanium

Adviser: Gabrielle Sott

Stav Alkalay **Economics** Matthew Befford Will Caraccio Abigail Ferullo Damian Flynn Oren Gabay Malachi Gaunya Joseph Jusseaume **Zack Leduc** Wylie MacDougall Andrew Madden

Elisabeth McLaughlin

Owen McNeil **Emma Pixley** Undeclared

Team: DRA9ONS

Adviser: Angela Moquin

Max Anderson Rylee Bresnahan Chloe DeLuca Noah Diep Nicholas Kiah **Kyle Murphy** Collin Murphy **Avarose Scavio** Catrina Touchette **Brian Weston**

Business Administration

John Giuliano **Matthew Lampert** Ian Lidster Jack Meehan **Samuel Patterson** Luke Piers Undeclared

Team: EL17ES

Adviser: Ian Bushnell

Alexandra Asprogiannis **Michael Dutton** Caleigh Patterson Undeclared **Jacob Emerson**

Madeleine Hungerford Thomas Keegan Victoria Kennedy **Zack Klidaras**

Jack Leahy Christina Merchant **Jared Morrison** Joseph O'Brien **Benjamin Pitts David Roos** Nicholas Roy Sydney Scali

Logan Wahrenberger **Business Administration**

Team: Drew'5 Cruise

Adviser: Andrew Siemering

Madison Baggs Kim Fuller **Jake MacInnis Carson Swift Courtney Vincent Christopher Womelsdorf Business Administration**

Casev Byrne Luke Curtis Anna Glenn Alexander Grav Ryan Maki Sean McIntyre Alyson Mooney **Gregory Schaefer** Connor Trenholm Undeclared

Team: Straight off the Couch

Adviser: Pinar Gokalp

Lvdia Baldini **Emily Daniels** Keith Fletcher Nick Higginbotham Paige Labonville Andrew Otersen Matthew Rittenberg

Beau Vernet Tyler Wilbur **Business Administration Evan Coyne**

Isabella Crowell **Harrison Graham Jacob Hamilton Patrick Haney** Luke Norton **Hayley Pelletier Timothy Ryan** Undeclared Ella Dudley

Economics, Finance

Team: The Great 28

Adviser: Steven McKeen

Anna Bergeron Jeremy Forman **Christopher Hatfield**

Undeclared **Daisy Burns** Thomas Carolan **Devlin Costa** Samuel Gobeil **Eric Griffin** Conner MacCini Owen Miller Economics

Natalia Grasso Fazla Karim **Brandon Murphy**

Business Administration

Johanne Nichols

Finance

Grand Challenge: Travel and Tourism

Team: Dream Team 16

Adviser: Ann-Marie Kolberg

Alexander Barouxis-Kroll

Chloe Coldwell

Christopher Donaghev

Oliver Jacques

Whittaker Sanborn

Undeclared

Logan Brown

Jack Colby

Henry DiNapoli

Michael Foohey

Maria Jacques

Olivia LaRose

Braden LaSpisa

Delaney McGann

Havley Oliver

Patrick Yudkin

Business Administration

Jason Carney

Finance

Team: Seal Team 6

Adviser: Ienna Peterson

Axel Barretto Rodriguez

Jake Beatty Kaitlin Collins Christopher Dawe Thomas Flanagan

Chase Gagnon

Carolyn Hoadley

Shane MacLaughlin

Jack McCarty

Joshua McInerney

Elizabeth Nichols

Michael Paulauskas

Zachery Priestley

Business Administration

Connor Claypoole

Nicholas Muzi

Undeclared

Team: I Got 25 Problems but Winning Ain't One

Adviser: Yanni Kakouris

Alex Behling

Tyler Bourget

Michael Burgess

Sara Carleo

Addison Craven

Ashley Gallant

Keri Hodgkinson

Aidan Hughes

Keith Huska

Richard Markwarth

Nickolas Merchant Thomas Murawski

Sophia Newman

Business Administration

Nathaniel Gould

Rachel Poston

Undeclared

Team: Scuba Squad

Adviser: Sophia Hughes

Leon Bester

Ashlynn Hatch

Alex Vercolen

Ayrika West

Undeclared

Nicholas Cafarelli Gina Carpinito

Iulia Davis

Cameron Dolbec

Bella Dziak

Richard Hussey

Nikolai Jenson

Ryan Johnston

Garon Kelley

Liam McCov

Shea Philbrook

Kailee Still

Danny Sweetland

Samuel Thurston

Aidan Vostrovsky

Anthony Zeissig

Business Administration

Team: Team 14 Hospitalitybees

Adviser: Jamie McGee

Hannah Collette

Camryn Copp

Adriana DeSimone

Alexander Durant

Olivia Eno

Davan Hanley

Mairead Hussey

Libby Moreau

Audrey O'Keefe

Jillian O'Malley

Kerstin Surrette

Hospitality Management

Sofia DeSimone

Undeclared

Bridget Lenahan

Hospitality Management, Spanish

Team: TGI Firedays

Adviser: Sarah Wilkinson

Brooke Conroy Sarah Glennon Olivia Graves-Witherell Caroline LeBlanc Braden McDonnell Peder Preststulen Nersnaes **Hanlon Paul James Schneider** Alexandra Stuessi **Analytical Economics** Sarah Craft Cooper Hamel **Thomas Nolan** Ryan Quinn Tim Sicard Undeclared **Dylan Driscoll Brett Limric** KJ McClurg

Ann Manchester Kelley Nursing Inquiry Day

Wednesday, May 5

Neil Politano

Nicholas Walter

Business Administration

This event features scholarly presentations by undergraduate Honors students and Graduate Program students in Nursing.

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

Championship Round

Thursday, May 13

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.

Languages, Literatures, & Cultures (LLC) Department Undergraduate Research Conference

Thursday, May 13

The Department of Languages, Literatures, and Cultures (LLC) hosts an undergraduate research conference comprised of oral and poster presentations.

Audrey Bello

Neuroscience and Behavior Questioning the Necessity of Revenge Adviser: Scott Weintraub

Sandra Black

Social Work, Spanish
La Representación Cinemática de la
Delincuencia Juvenil durante la Crisis
Económica de España
Adviser: Jaume Marti-Olivella

Charlotte Butterfield

Business Administration
The Femicide Epidemic in Nicaragua

Adviser: Lucia Montas

Michael DeSisto

Biochemistry, Molecular and Cellular Biology Chile: The Search for Justice

Adviser: Scott Weintraub

Ella Dudlev

Economics, Finance
Pinochet as an Example of the Violations
of Human Rights
Adviser: Scott Weintraub

Jude Everett

Spanish

The Performance of Grief in "Temporada de Huracanes" de Fernanda Melchor Adviser: Lori Hopkins

Wyatt Garrett

Civil Engineering

 $A\ Case\ of\ Legalization:\ Drug\ Policy$

in Uruguay

Adviser: Scott Weintraub

Sierra Kehoe

Earth Sciences

Art as Protest and Reflection

Adviser: Scott Weintraub

Bridget Lenahan

Hospitality Management, Spanish Art Produced from the Nicaraguan Contra War

Adviser: Lucia Montas

Kari Malatak

Homeland Security, International Affairs The Banality of Violence: Genocide, Terror, and the Concept of Evil in Latin America Adviser: Scott Weintraub

Christopher Manseau

Mathematics

Exploring the Role of Mathematics in Juan Luis Martínez's "La Nueva Novella" Adviser: Scott Weintraub LANGUAGES, LITERATURES, & CULTURES (LLC) DEPARTMENT UNDERGRADUATE RESEARCH CONFERENCE, CONTINUED

Aubrey Porter

Psychology Helping Transgender Latinxs Immigrants through Art Therapy

Adviser: Mauricio Pulecio-Pulgarin

Anna Roberge

Human Development and Family Studies Governmental Accountability: Leading Attribute of Closure Adviser: Scott Weintraub

Alexandra Vergara

English Teaching
Identity and Belonging for Latinx
Students in New England
Adviser: Lucia Montas

Hunter Wells

Computer Engineering
The Path to Accountability in Guatemala
Adviser: Scott Weintraub

Lindsey Wood

Spanish

Adaptaciones del Testimonio: Nuevas Perspectivas de la Frontera entre México y los Estados Unidos Adviser: Lori Hopkins

Acknowledgments

The UNH Undergraduate Research Conference has grown to become a signature event at the University 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 network of many community members across campus. Here, we acknowledge these individuals and campus units and thank them for helping to make the virtual 2021 URC happen.

Special thanks to:

Office of the Provost & VP for Academic Affairs
Office of the Senior Vice Provost for
Academic Affairs

All Faculty Mentors and Other Research Advisers

Hamel Center for Undergraduate Research
UNH Academic Technology
UNH Advancement
UNH Admissions
UNH Communications and Public Affairs (CPA)
UNH Dimond Library
UNH Earth Systems Research Center IT
UNH Printing Services
UNH Robert J. Connors Writing Center
UNH Web and Mobile Development

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College of Engineering and Physical Sciences (CEPS)

College of Life Sciences and Agriculture (COLSA)

Harvey Hubbell Foundation/Burndy Corporation Institute for the Study of Earth, Oceans, and Space (EOS)

Jack and Pat Weeks Fund
Paul and Anna Grace Holloway
Peter T. Paul College of Business and Economics
UNH Information Technology (IT)
UNH InterOperability Laboratory (UNH-IOL)

Thanks to the 2021 URC Planning Committee (as well as the many individuals who served on subcommittees):

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Lauren Conley, Operations Manager, Advancement

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Molly Doyle, Co-Chair, All Colleges Undergraduate Research Symposium; Administrative Director, Hamel Center for Undergraduate Research

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Caroline Kanaskie, Co-Chair, Graduate Research Conference

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2021 URC Event Chairs/Co-Chairs:

Sachiko Akiyama and Ben Cariens, Senior B.A. & B.F.A. Exhibition

Tarah Beaupre and **Lou Ann Griswold**, CHHS Grimes Award Competition

Kristen Bradford and **Kerry Nolte**, Ann Manchester Kelley Nursing Inquiry Day

Daniel Chavez and **Scott Weintraub**, Languages, Literatures, and Cultures Department URC

Szu-Feng Chen, The Naked Arts—Creativity Exposed!

Willem deVries, Philosophy Department URC

Molly Doyle and **Amanda Leger**, All Colleges Undergraduate Research Symposium

Andrew Earle, Paul College Holloway Prize Competition

Elisabeth Farrell, University-Wide Undergraduate Sustainability Research Symposium

Maureen Gillespie, Psychology Department George M. Haslerud URC

Tara Hicks Johnson and **Sue Humphrey**, Interdisciplinary Science & Engineering (ISE) Symposium

Delia Konzett, Honors English URC

Andrea LaBonte and **Sean Stewart**, Paul College FIRE URC

Eileen Laskoski and **Melda Ormeci Matoglu**, Paul College URC

Janet Polasky and Laura Simard, History Department URC

Dan Reagan and Mary Young, UNH Manchester URC

Pamela Wildes and Wil Wolheim, COLSA URC

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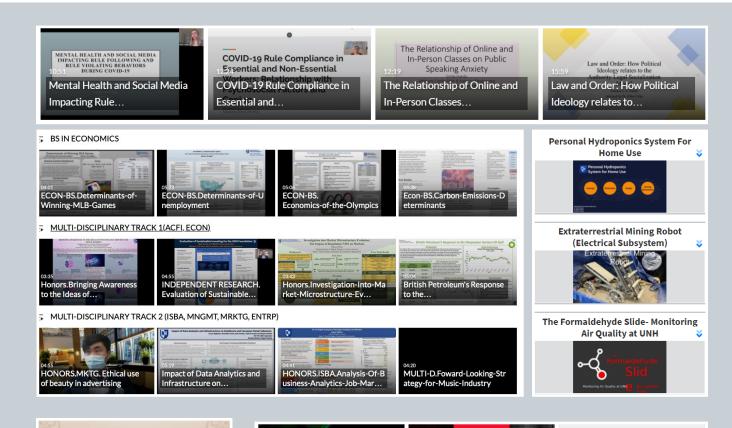
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