

UNDERGRADUATE RESEARCH CONFERENCE | 2022



University of
New Hampshire

Welcome to the UNH Undergraduate Research Conference



JAMES W. DEAN JR.



WAYNE JONES

THANK YOU for joining us for UNH's 23rd annual Undergraduate Research Conference. Featuring the innovative and cutting-edge research of students across every discipline, the URC is a highlight of the academic year and a wonderful display of talent at our Durham and Manchester campuses.

In addition to sharing our students' academic excellence, the URC reflects the dedication of our faculty mentors, whose research and teaching expertise are the hallmarks of a great UNH education. As students work with faculty to develop projects, they also build important life skills in problem solving, project management and teamwork — qualities that will serve them well as they graduate and pursue successful careers.

We encourage you to explore our students' engaging final projects and presentations, many of which represent years of hard work, inquiry and experimentation. It is even more inspiring to know that more than 1,600 undergraduates rose to the challenge in 2022, our first in-person URC since 2019, and that they persevered despite the disruptions of COVID-19.

Our URC students and the dedicated faculty and staff who support them define the Wildcat community at its very best. Whether you visit a poster session, an oral presentation or a hands-on demonstration, we think you will be as impressed and as proud as we are. We're delighted to welcome you to the URC, and always appreciate your support for New Hampshire's flagship public university.

Best regards,

A handwritten signature in cursive script, reading "James W. Dean Jr.".

JAMES W. DEAN JR.

PRESIDENT

A handwritten signature in cursive script, reading "Wayne Jones".

WAYNE JONES

PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS

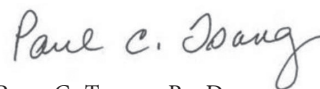
A Welcome from the Hamel Center for Undergraduate Research

WELCOME to the 23rd 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, we are delighted to be returning to in-person events for the first time since URC 2019. This spring, more than 1,600 students – mentored by over 360 faculty members and other research advisers – will present their research and scholarship at 20+ URC events on the Durham and Manchester campuses, including symposia, panel and poster sessions, performances, and prize competitions. Despite the challenges and disruptions of the COVID-19 pandemic over the past two years, these students have persevered in pursuing their research, scholarly, and creative goals. Thanks to the resourcefulness, creativity, and spirit of our UNH community, our students have continued to excel.

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.
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.
URC Coordinator, Hamel Center for Undergraduate Research

URC 2022 Contents

Calendar of Events	4	UNH Manchester URC Engineering Technology Day, Senior Project Presentations	38
Campus Map	5	The Naked Arts—Creativity Exposed! (Act III)	38
Friday, April 15 Events		Paul J. Holloway Prize Innovation to Market Competition (Bud Albin Challenge Round)	39
Student Composers' Concert	6	College of Health and Human Services (CHHS) Grimes Award Competition	39
Tuesday, April 19 Events		Psychology Department George M. Haslerud URC	40
UNH Manchester URC Oral Presentations	6	Languages, Literatures, & Cultures (LLC) Department URC	40
Wednesday, April 20 Events		Honors English URC	41
Interdisciplinary Science and Engineering (ISE) Symposium	6	Senior B.A. & B.F.A. Exhibition and Preview Reception	41
University-Wide Undergraduate Sustainability Research Symposium	15	Saturday, April 23 Events	
The Naked Arts—Creativity Exposed! (Act I)	17	College of Life Sciences and Agriculture (COLSA) URC	
UNH Manchester URC Poster Presentations	18	Oral Presentations	42
Thursday, April 21 Events		Poster Presentations	42
UNH Manchester URC Cinema Arts Day	20	Paul College of Business and Economics First-Year Innovation and Research Experience (FIRE) URC	46
Paul J. Holloway Prize Innovation to Market Competition (Charles and Miriam Nelson Poster Competition)	21	Wednesday, May 4 Events	
History Department URC	21	Ann Manchester Kelley Nursing Inquiry Day	51
The Naked Arts—Creativity Exposed! (Act II)	22	Wednesday, May 11 Events	
Philosophy Department URC	22	Paul College of Business and Economics Paul J. Holloway Prize Innovation to Market Competition (Championship Round)	51
Friday, April 22 Events		Additional Features	
All Colleges Undergraduate Research Symposium Welcome Breakfast	22	Acknowledgments	52
All Colleges Undergraduate Research Symposium		Student Index	53
Oral Presentations, Session A	22		
Poster Presentations, Session A	24		
Oral Presentations, Session B	26		
Poster Presentations, Session B	27		
Oral Presentations, Session C	30		
Paul College of Business and Economics URC			
Poster Session I	32		
Oral Session I	33		
Oral Session II	33		
Poster Session II	34		
Oral Session III	35		
Poster Session III	37		

URC 2022 Calendar

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

FRIDAY, APRIL 15

8-10 p.m.
Student Composers' Concert
Paul Creative Arts Center,
Bratton Recital Hall **(8)**

TUESDAY, APRIL 19

9 a.m.-12 p.m.
UNH Manchester URC,
Oral Presentations
88 Commercial Street, Room 201,
Manchester

WEDNESDAY, APRIL 20

9 a.m.-4 p.m.
Interdisciplinary Science and
Engineering (ISE) Symposium
Hamel Recreation Center **(1)**

9 a.m.-4 p.m.
University-Wide Undergraduate
Sustainability Research Symposium
Memorial Union Building, Rooms 330
and 332 **(5)**

12-2 p.m.
The Naked Arts – Creativity
Exposed! (Act I)
Paul Creative Arts Center, Museum of Art **(8)**

3:30-6 p.m.
UNH Manchester URC,
Poster Presentations
88 Commercial Street, Room 201, 6th Floor,
and Student Commons, Manchester

THURSDAY, APRIL 21

10 a.m.-12 p.m.
UNH Manchester URC,
Cinema Arts Day
88 Commercial Street, Room 456,
Manchester

12-2 p.m.
Paul College of Business and Economics
Paul J. Holloway Prize Innovation to
Market Competition, Charles & Miriam
Nelson Poster Competition
Paul College **(7)**

12-3 p.m.
History Department URC
Memorial Union Building, Rooms 332,
334, and 340 **(5)**

12:40-2 p.m.
The Naked Arts – Creativity Exposed!
(Act II)
Paul Creative Arts Center, Museum of Art **(8)**

4-7 p.m.
Philosophy Department URC
Hamilton Smith Hall, Room 210 **(2)**

FRIDAY, APRIL 22

9-9:30 a.m.
All Colleges Undergraduate Research
Symposium Welcome Breakfast
Memorial Union Building, Granite
State Room **(5)**

9:30 a.m.-1:25 p.m.
All Colleges Undergraduate Research
Symposium
Memorial Union Building, Granite
State Room and various rooms **(5)**

9 a.m.-2:30 p.m.
Paul College URC
Paul College **(7)**

9 a.m.-4 p.m.
UNH Manchester URC,
Engineering Technology Day
Senior Project Presentations
88 Commercial Street, Room 201,
Manchester

12:15-1:25 p.m.
The Naked Arts – Creativity Exposed!
(Act III)
Memorial Union Building, Theatre I **(5)**

1-4 p.m.
College of Health and Human Services
(CHHS) Grimes Award Competition
Pettee Hall, Rooms G02, 106, and 114 **(9)**

1-4 p.m.
Paul College of Business and Economics
Paul J. Holloway Prize Innovation
to Market Competition, Bud Albin
Challenge Round
Paul College, Rooms G85, 115, 135,
and 175 **(7)**

1-4 p.m.
Psychology Department
George M. Haslerud URC
McConnell Hall, Room 220 **(4)**

1-5 p.m.
Languages, Literatures, & Cultures
(LLC) Department URC
Murkland Hall, Room G17 **(6)**

2-3:30 p.m.
Honors English URC
Hamilton Smith Hall, Room 205 **(2)**

4-6 p.m.
Senior B.A. & B.F.A. Exhibition
and Preview Reception
The exhibition will remain open until
May 19.
Paul Creative Arts Center,
Museum of Art **(8)**

SATURDAY, APRIL 23

8:15 a.m.-12 p.m.
College of Life Sciences and
Agriculture (COLSA) URC
Memorial Union Building, Granite State
Room and MUB Theater II **(5)**

9 a.m.-2 p.m.
Paul College First-Year Innovation and
Research Experience (FIRE) URC
Paul College **(7)**

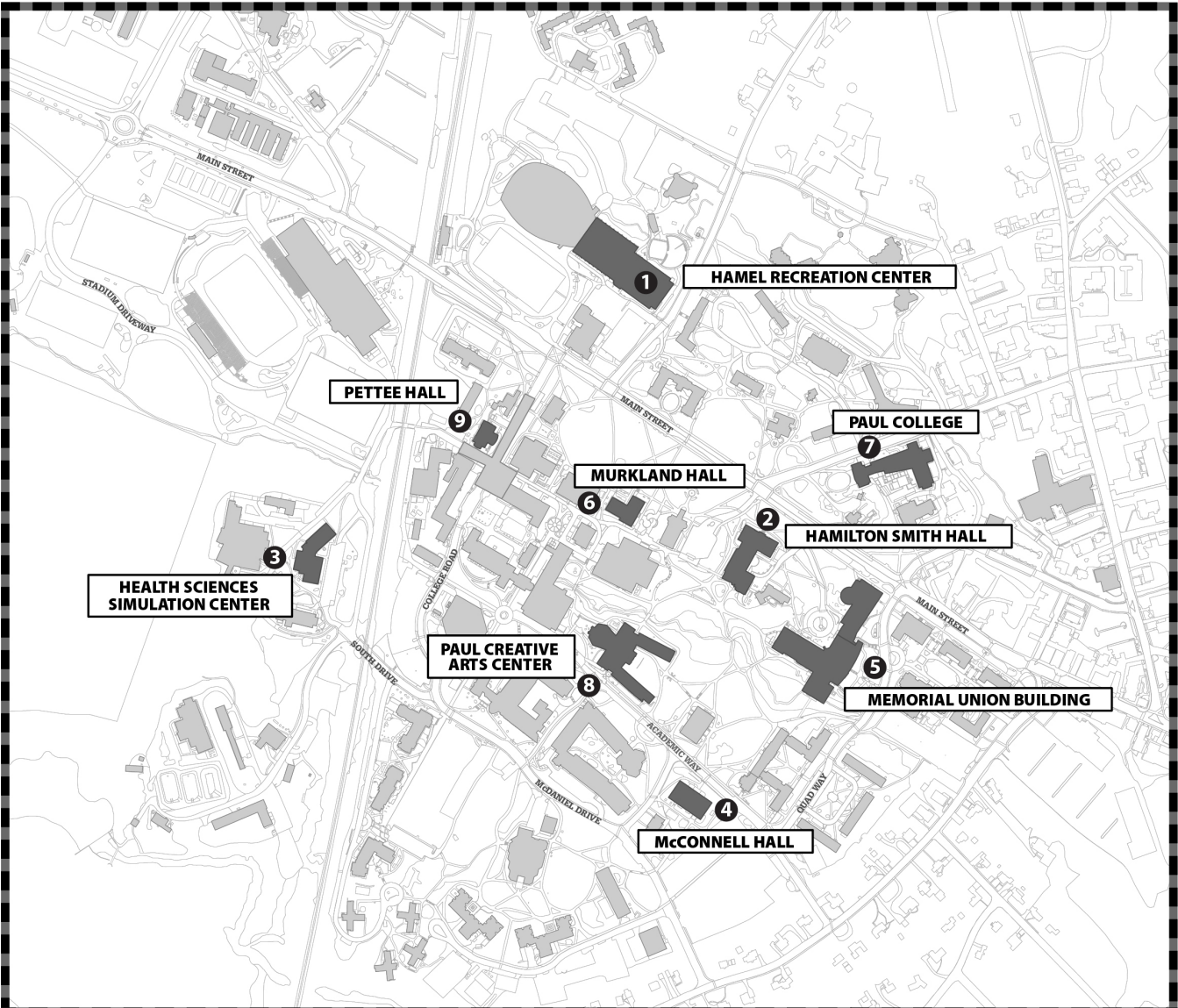
WEDNESDAY, MAY 4

2-5 p.m.
Ann Manchester Kelley Nursing
Inquiry Day
Health Science Simulation Center **(3)**

WEDNESDAY, MAY 11

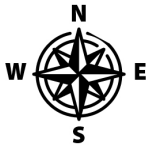
12:30-5 p.m.
Paul College of Business and Economics
Paul J. Holloway Prize Innovation
to Market Competition,
Championship Round
Paul College, Room G75 and Great Hall **(7)**

URC 2022 Campus Map



BUILDING KEY

1. Hamel Recreation Center
2. Hamilton Smith Hall
3. Health Sciences Simulation Center
4. McConnell Hall
5. Memorial Union Building (MUB)
6. Murkland Hall
7. Paul College
8. Paul Creative Arts Center
9. Pettee Hall



UNH Manchester
88 Commercial Street
Manchester, NH

For directions to UNH Manchester go to
manchester.unh.edu/about/directions-parking
or call (603) 641-4124.

Student Composers' Concert

**Friday, April 15
8–10 p.m.**

**Paul Creative Arts Center,
Bratton Recital Hall**

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

Adviser: Michael Annicchiarico

Wesley Coffin

Music

Matrimony & Journey of a Duckling

Kyle Cook

Music

*Byzantine Suite: I – Fugato, II – Legato,
III – Dance*

Amanda White

Music

Hello!

UNH Manchester Undergraduate Research Conference

Oral Presentations

Tuesday, April 19

9 a.m.–12 p.m.

**88 Commercial St., Room 201
Manchester**

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

Autumn Bedell

Homeland Security, Public Service and
Nonprofit Leadership

Hannah Chisholm

Politics and Society

Angela Fuentes

Public Service and Nonprofit Leadership

Alexandra Twitchell

Psychology

Jacob Young

Humanities

Community Wellness—Improving the

Quality of Student Life at UNH Manchester

Adviser: Lisa Enright

Maria Corniel

English Teaching

The Systematic Indoctrination of

Germany's Youth

Adviser: Sonic Woytonik

William DeSilva

Biological Sciences

Camden Lynch

Pamella Laiz Mozzer

Abeer Shabaka

Kira Smith

Vishnu Soni

Neuropsychology

Changes in Student Life during the

COVID-19 Pandemic: A Survey

Adviser: Nicholas Mian

Emily Persson

Biotechnology

The Righteous among the Nations

Adviser: Sonic Woytonik

Joshua Puzzo

Communication Arts

*Stories of the Holocaust: A Look into the
Bialystok Uprising and Haika Grosman*

Adviser: Sonic Woytonik

David Reynolds

Computer Information Systems

Wannsee Conference

Adviser: Sonic Woytonik

Jordan White

American Sign Language (ASL)/

English Interpreting

Deaf People and the Holocaust

Adviser: Sonic Woytonik

Kelsey Wynn

Analytics and Data Science

Music of the Holocaust: Performances

by Prisoners

Adviser: Sonic Woytonik

Interdisciplinary Science & Engineering (ISE) Symposium

Poster Presentations

Wednesday, April 20

9 a.m.–4 p.m.

Hamel Recreation Center

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: Vicki Jeffers

Jaxson Libby

Biochemistry, Molecular and

Cellular Biology

Emma Tobbe

Bioengineering

Developing a Tumor-on-Chip Platform for

Cancer Drug Discovery

Advisers: Linqing Li, Sarah Walker

Harrison Parent

Biochemistry, Molecular and
Cellular Biology
*Targeting the BCL6 Transcription Factor in
Ovarian Cancer*
Adviser: Sarah Walker

Emily Pratt

Biochemistry, Molecular and
Cellular Biology
*Targeting STAT3 in Triple Negative
Breast Cancer*
Adviser: Sarah Walker

Chemical Engineering**Group Leader: Young Jo Kim****Ellen Blackwell**

Bioengineering
*Engineering Macromolecular
Hydrophobicity to Induce LCST and
Microstructures in Biomaterials*
Adviser: Linqing Li

Eli Duggan

Bioengineering
*Optimization of Anti-HIV Monoclonal
Antibody to Improve Neutralization
Breadth and Potency*
Adviser: Brandon DeKosky

Samuel Mercer

Chemical Engineering
*Enhancement of Plasmonic Au Catalysts
for Photocatalytic Methane Conversion*
Adviser: Nan Yi

**Civil and Environmental
Engineering — Design****Group Leaders: Majid Ghayoomi,
Anthony Puntin****Michael Beaudoin****Chris Gouveia****Thomas Mierzwa****Tyler Stanley**

Civil Engineering
Rehabilitation of Lafayette Brook Bridge
Advisers: Yashar Eftekhari Azam,
Julie Whitmore

Haley Brown**Dan Bukunt****Michael Libby****Christopher Piekarski****Sean Van Scoy**

Civil Engineering
*Narragansett Bay Campus (NBC)
Pier Reconstruction*
Adviser: Majid Ghayoomi

Jack Callinan

Civil Engineering, Sustainability

John Regan**Maxwell Regan****Joshua Taranto**

Civil Engineering
UNH North Drive Underpass
Adviser: Kyle Kwiatkowski

Nathan Clegg**Jamie Murphy****Nicholas Walsh**

Civil Engineering

Tyren Hartford

Civil Engineering, Sustainability
*UNH 2021 Newmarket Waterfront
Improvement Project*
Advisers: Matthew Low, Tyler Renz

Megan Cramton

Environmental Engineering

Conner Gill**Jacob McIntire****Tanner Valhouli****Noah Wilcox**

Civil Engineering
King Street Commons Development
Adviser: Anthony Puntin

Sierra Dahl**Jack Meade****Nicholas Munroe****Tess Priest****Payton Surprenant**

Civil Engineering
*Lee, NH - NH 125 over Little River Bridge
Replacement & Traffic Control Plan*
Advisers: Jo Sias, Samuel White

Nick LaBrecque**Timothy LaPorte****Matthew Miloro****Nicholas Prescott**

Civil Engineering
*Stage Road Bridge over Nighthawk
Hollow Brook, Gilmanton, NH*
Adviser: Fei Han

Joseph Rebeiro**Connor Schott****Logan Stevens****Jacob Sullivan-Hasson**

Civil Engineering
Whitney Road Extension
Adviser: Anthony Puntin

**Civil and Environmental
Engineering — Investigation****Group Leaders: Majid Ghayoomi,
Anthony Puntin****Dylan Babonis****Jonathan Collette****Noah Greene****Seamus Quinn****Deirdre Rafferty**

Civil Engineering
Hayes Marsh Dam
Advisers: Corey Clark, Anthony Puntin

Kiara Boren

Civil Engineering

James Carney**Mitch Heidler****Nicole King**

Environmental Engineering
*Tracking and Analysis of Stormwater Best
Management Practices in Dover, NH*
Adviser: James Houle

Gregory Chase**Rebecca Dean****Jeffrey Edwards****Patrick Potter****Catherine Rieger**

Civil Engineering
Albacore Park Expansion
Adviser: Kenneth Flesher

Kenny Chen**Victoria Kapantais**

Environmental Engineering

Sian Davis**Xander Oram**

Civil Engineering

Subsurface Gravel Wetland Design

Adviser: Amin Mohebbi

William Conley**Rita Masouras****Maya Norris**

Civil Engineering

Alissa Reitter

Civil Engineering, International Affairs

Self-Sinking Caisson Failure Analysis

Advisers: Zack Chabot, Raymond Cook

Sam Daigle**Nicholas Lowe****Steven Mason****Travis Tkaczek**

Civil Engineering

Boston City Hall Plaza Renovation

Adviser: Majid Ghayoomi

Brian Genet**Colby Jacques****Gabe Jaquith****Katie Pelletier**

Environmental Engineering

*Merrimack Village District Wells #4 & #5**PFAS Treatment Design*

Advisers: Lynnette Carney, James Malley,

Mike Metcalf, Peter Pitsas

Wesley Lambert**Chad Lawrence****Madeline Richardson****Nathaniel Wunderlich**

Environmental Engineering

Georgetown, ME Solar Energy Project

Adviser: Nancy Kinner

Civil and Environmental Engineering — Research**Group Leaders: Majid Ghayoomi, Anthony Puntin****Jasper Anderson****Allison Bickford****Justin Durant****Benjamin Spencer**

Civil Engineering

*Best Management Practice in Highly**Urbanized Henry Law Park - Dover, NH*

Advisers: James Houle, Gretchen Young

Will Baldwin**Cole Gorham****Benjamin Guertin****Elizabeth Gunn****Nathan Raffia**

Mechanical Engineering

Wilder Byrne

Environmental Engineering

Miles Libby**Jacob Roberts**

Civil Engineering

The Green Standards Net Zero Home

Adviser: Felix Devito

Callie Beard**Lindsay Guertin****Maeve Richardson**

Environmental Engineering

PFAS in Vermont Background Soils

Advisers: Paula Mouser, Harrison Roakes

Sara Berg

Environmental Engineering,

Sustainability

Megan Cramton

Environmental Engineering

*Decision Making for Drinking Water**Emergency Planning and Response in**New Hampshire*

Adviser: Weiwei Mo

Sarah Boisvert**Bailey Jones****Devon Mexcur**

Environmental Engineering

UNH Sewer Line Evaluation Capstone

Advisers: Jason Kreil, Ken Mavrogeorge,

Adam Moskal, Paula Mouser,

Kellen Sawyer

Alexis Eaton

Environmental Engineering,

Sustainability

*The Fate and Transport of 17-beta**Estradiol, 17-alpha Ethinyl Estradiol, and**Estrone in Wastewater Treatment*

Adviser: Paula Mouser

Christopher Keohane

Environmental Engineering

August Murray**Emma Sauerwein****Dana Sher**

Civil Engineering

*Infrastructure Management for Cities of**Tomorrow*

Advisers: Eshan Dave, Weiwei Mo

Devan Sack

Civil Engineering

*A Resilience Assessment of Wash Projects**in Eastern Africa*

Adviser: Kyle Kwiatkowski

Connor Schott

Civil Engineering

*An Examination of Effective Length**Factors in Moment Frames*

Adviser: Raymond Cook

Computer Science — Applications**Group Leaders: David Benedetto, Matthew Plumlee****Razz Alkalay****Nick Moersch****Nicolas Spezzano**

Information Technology

Air Traffic Visualiser

Adviser: Radim Bartos

Alessandra Bernardini**Killian Cowan****Alexander Mercedes**

Computer Science

Roads of the Sea

Adviser: Christos Kastrisios

Anna Botts**Nick Braga****Conor Harrington****Chafik Nadim**

Information Technology

*UNH Sales Center — Contact/Event**Management Solution (1)*

Adviser: David Benedetto

Timothy Clocksin

William Lee

Computer Science

Cameron Day

Matty Hartman

Information Technology

Albacore VR Submarine Exhibit

Advisers: Matthew Plumlee,

Patricia Violette

Jiacheng Ding

Computer Science

Ryan Foley

Nas Tber

Information Technology

DegreePath

Adviser: David Benedetto

Gabby Germany

Daniel McCarthy

Computer Science

NextStep Health Feature Development

Adviser: David Benedetto

Elvis Hidalgo

Information Technology

Elijah Johnson

Daniel Kirichok

Computer Science

SPAITR Interactive Map

Adviser: David Benedetto

Nicholas Ippedito

Steven Saing

Information Technology

Jennifer Nachatelo

Information Technology, Justice Studies

UNH Sales Center (Input)

Adviser: David Benedetto

Computer Science — Data Science

Group Leaders: David Benedetto,
Matthew Plumlee

Owen Arnone

Austin Megalaitis

Computer Science

Mihir Khadka

Justin Nem

Information Technology

Social Media Sentiment Analysis

Advisers: Matthew Plumlee, Collette Powers

Isabel Beaulieu

Modeling Seafood Takeout Trends

Advisers: Philip Ramsey, Easton White

Nicholas Bridges

Joey Neleber

Alex Valhos

Computer Science

Jacob Easterling

Analytics and Data Science

SPAITR Data Processing

Adviser: David Benedetto

Mallory Cashman

Analytics and Data Science

SPAITR: Event Detection in Sports-Related

Sensor Data with Machine Learning

Adviser: Laura Dietz

Tobey DiMambro

Ashley Roy

Analytics and Data Science

Gersi Doko

Kendall Hixon

Computer Science

NextStep HealthTech Data Analysis

Adviser: David Benedetto

Jeffrey Fernandes

Maximillian Hennessey

Computer Science

Benjamin Grimes

Liqi Li

Information Technology

PiRail

Adviser: David Benedetto

Daniel Mattson

Computer Science

Reinforcement Learning Applied to the

Isles of Shoals Smart Grid

Adviser: Marek Petrik

Computer Science — Systems

Group Leaders: David Benedetto,
Matthew Plumlee

Paul Ackels

Computer Science

NextStep HealthTech Cybersecurity Team

Adviser: David Benedetto

Patrick Doherty

Connor Murphy

Jason Waleryszak

Jason Worden

Computer Science

WIBL (Wireless Inexpensive

Bathymetry Logger)

Advisers: Brian Calder, Matthew Plumlee

Riley Glover

Cole Stukel

Isaiah Tauscher

Information Technology

SilverTech Elastic Stack Build

Adviser: David Benedetto

Jacob Harrison

Jonathan Nelson

Christian Pribyl

Computer Science

Experiment Automation for an

Electrochemical Sensor

Adviser: Matthew Plumlee

Adam Judge

Reid Leclerc

Cameron Scott

Zhouhai You

Computer Science

Automated Foosball Goalie Project

Adviser: Matthew Plumlee

Justin Moening

Trevor Morrison

Joseph Pilotte

Ryan Tremblay

Information Technology

OS Monitoring

Adviser: David Benedetto

Selena Richards

Computer Science

Utilizing Yumi Robot and 3D Human

Model to Assist Physical Therapy Patients

Adviser: Momotaz Begum

Zachary Taylor

Computer Science

Risk Factors Identification for Work-

Related Musculoskeletal Disorders with a

Wearable Motion Tracking System

Advisers: Diliang Chen, Dongpeng Xu

Earth Sciences**Group Leader: Thomas Lippmann****Ritwik Baral**

Environmental Sciences

*Using QGIS to Create Road Networks in 3 States of Interest, to Show COVID-19**Data and Issues Occurring*

Adviser: Michael Palace

Serena Butler

Earth Sciences

Environmental and Societal Impacts of a Potential Yellowstone Eruption on New England

Adviser: Joseph Licciardi

Angelica Dziurzynski

Earth Sciences, Marine, Estuarine and Freshwater Biology

Assessing Controls of Methane and Carbon Dioxide Emissions from a Temperate Reservoir

Adviser: Ruth Varner

Arielle Kotulak

Environmental Sciences

Using Glacial Striations on Bedrock to Determine Ice Flow Behavior during the Last Deglaciation in the New Hampshire Seacoast Region

Adviser: Joseph Licciardi

Marvin Kuryala

Environmental Sciences

Analysis of Northeast Weather Data

Adviser: J. Matthew Davis

Anthony Nguyen

Environmental Sciences

Estimating Historical River Channel Change in New England

Adviser: Anne Lightbody

Sophia Smith

Chemistry

Investigation of the Surface Tension of Salt Water Solutions to Better Understand Sea Salt Aerosols

Adviser: Margaret Greenslade

Emma Thibodeau

Earth Science

A Look into Ocean Acidification Effects on Mussels

Adviser: Christopher Hunt

Natalie White

Environmental Sciences

Controls on Carbon Gas Fluxes from a Temperate Forest Soil

Adviser: Ruth Varner

Electrical and Computer Engineering**Group Leader: Wayne Smith****Ram Acharya****Owen McKenna**

Electrical Engineering

Michael Baumer**Liam Cate**

Computer Engineering

Ballistic Projectile Tracking

Adviser: Richard Messner

Christopher Boyer

Electrical Engineering

Beat Frequency Oscillator Metal Detector

Adviser: Nicholas Kirsch

Luke Bradley

Electrical Engineering

Coleman Stolberg

Electrical Engineering

Airborne Wind Turbine

Adviser: John LaCourse

Jiawei Chen

Computer Engineering

*Gesture Recognition by Flexible EMG**Sensor Array*

Adviser: Diliang Chen

Sydney Chock**Gabriella Liano**

Electrical Engineering

*KRILL Development: U.S. Navy's**Unpiloted Underwater Vehicle (UUV)*

Advisers: Wayne Smith, May-Win Thein

Matthew Corso

Electrical Engineering

Nathanael Frisch

Computer Engineering

Electrical Panel Power Sensing System

Adviser: Richard Messner

Andrew Courtemanche**Josh Lariviere**

Computer Engineering

LoRa Mesh Network for IoT Applications

Adviser: MD Shaad Mahmud

Declan Cutler

Electrical Engineering

The Design, Development, and Testing of a Choice/Serial Reaction Time Apparatus for EEG Data Collection & Analyses

Adviser: Wayne Smith

Matthew DiBiase

Computer Engineering

Digital Guitar Effects Pedal

Adviser: Richard Messner

Joseph Donovan**Noah Mulgrew****Brlye Rivera**

Electrical Engineering

Model Solar Power Dwelling

Adviser: Wayne Smith

Stephanie Dondyk

Computer Engineering

Brendan Murphy

Electrical Engineering

Quad-X Swarm ECE — Automatic Quad Charging

Adviser: Wayne Smith

Matthew Eckert

Computer Engineering

Low-Cost 3D Scanning with LiDAR

Adviser: MD Shaad Mahmud

Abraham Elias**Jonathan Merheb**

Computer Engineering

Lunabots 2022 — ECE Team

Advisers: Dean Sullivan, May-Win Thein

Joshua Hemond**Tyler Vrettos**

Electrical Engineering

Small-Scale Hydro/Solar DC Power Generator

Adviser: Richard Messner

Hunter Kilson**Nicholas Perreault**

Electrical Engineering

Biomechanical Electricity Generator for the Knee Joint

Adviser: John LaCourse

Timothy O'Connor

Electrical Engineering

Nature's Potential

Adviser: John LaCourse

Marc Tausanovitch

Electrical Engineering
Design of a Discrete Operational Audio Amplifier
 Adviser: John LaCourse

Sen Wang

Electrical Engineering
Real-Time Monitoring of Diabetics' Retinopathy Using Wearable Devices
 Adviser: MD Shaad Mahmud

Hunter Wells

Computer Engineering
Removing Physical Presence Requirements for a Remote and Automated World
 Adviser: Qiaoyan Yu

Innovation Scholars**Group Leader: Timothy Carlin****Emerald Bell**

Mechanical Engineering

Kevin Terwilliger

Computer Science
How the Date Changes Ratings
 Adviser: Kyle Ouellette

Anne Berg**Kelsea Carmichael**

Ocean Engineering

Molly Derrigan

Chemical Engineering

Catherine Selby

Environmental Engineering
Monitoring Flood Severity within a Coastal Community: Developing a Waterproof Housing for a Thermistor and Pressure Sensor
 Advisers: Savannah DeVoe, Diane Foster

Zachary Bialous**Abigail Pierce****Tatum Vansicklen****Jackson Weber**

Mechanical Engineering

Adam Elsner

Information Technology
3D Printed Remote Controlled Car Powered by Sensors and Microcontrollers
 Adviser: Brad Kinsey

Alana Burch**Megan Sorette**

Computer Science
Twitter for You: Correlation between Trending Data & Major Events
 Adviser: Kyle Ouellette

Will Callery**Kristian Lane****Matthew McMahon****Alex Mills**

Mechanical Engineering
Winglet Effectiveness for Small Scale Applications Based on Winglet Scale and Angle of Attack
 Advisers: Brad Kinsey, Ivaylo Nedyalkov

Cole Capobianco**Patrick Jackson****Connor Powley**

Environmental Engineering

Brooklyn Wallace

Bioengineering
Artemia salina Survivability in Lowered pH Conditions
 Adviser: Kieran Curran

Seth Chartier**Zachary Drew****Max McKenney****Matthew Redard**

Mechanical Engineering

Timothy Rybecky

Computer Science
Off-Road Electric Skateboard with Trailer
 Adviser: Brad Kinsey

Nathan Chasse

Analytics and Data Science

Isabelle Hu

Mechanical Engineering

Matthew Laflamme**Stephen McKenney**

Computer Science
Correlating Sentiment with Journal Article Success
 Adviser: Kyle Ouellette

Nathan Facticeau

Mechanical Engineering
Electromagnetic Forming of Aluminum Bottles
 Adviser: Brad Kinsey

Trevor Federico-Grome

Undeclared

Amelea Hauer**Avery Wilson**

Earth Sciences

Samantha Pearson

Physics

Analysis of the Value of Regenerating Woodlands for Biodiversity

Adviser: Kieran Curran

Nicholas Gacharna

Chemistry

Morgan Smith

Undeclared

Corey Zima

Ocean Engineering

Innovation Scholars Ocean Engineering Section: Circuitry Group

Advisers: Savannah DeVoe, Diane Foster

Kathleen Hanson

Mechanical Engineering

Kelsey Purnomo

Civil Engineering

Manufacturing Center ScrapBot

Adviser: Brad Kinsey

Katherine Harpster

Neuroscience and Behavior

Analyzing Misinformation with Twitter

Advisers: Laura Allen, Sarah Creer

Jacob Lewis

Mechanical Engineering

In-Situ Resource Utilization for In-Space

Manufacturing

Adviser: Brad Kinsey

Murray McKay**Anna Miller**

Ocean Engineering

Parker Reed

Computer Engineering

Owen Tolve

Environmental Engineering

Innovation Scholars: Ocean & Environmental Sensing WIMP

Weather Station

Advisers: Savannah DeVoe, Diane Foster

Durga Raja
Environmental Engineering
Scarlett Roberts
Ocean Engineering
Dougray Thoreen
Mechanical Engineering
Wave Buoy
Advisers: Savannah DeVoe, Diane Foster

Mechanical Engineering — Competition and Clubs

Group Leaders: Juan Bautista,
Anthony Puntin

Jaret Armstrong
Robbie Dowst
Anthony Ferraro
Gregory Keeler
Jeffrey Leach
Edward McLellan
Jackson Perry
Brian Schwab
Mechanical Engineering
UNH Precision Racing
Adviser: Todd Gross

Ryan Baer
Undeclared
Douglas Breault
Ben Brockway
Spencer Brush
Devon Bushey
Jason Cagney
Ruicong Feng
Caroline Flood
Stephen Heirtzler
Thomas Oliver
Mechanical Engineering
Trevor Cox
Engineering Physics
Abraham Elias
Jonathan Merheb
Computer Engineering
David Liu
Brandon Lo
David Nguyen
Anthony Tam
Computer Science
*UNH LunaCats: Extraterrestrial
Mining Robot*
Adviser: May-Win Thein

Dawson Buchanan
Alex Chesley
Samantha Cuzzo
Tyler DuBien
Jeffrey Grant
Casimir Guida
Tom Pare
Madison Pitre
Cornelis Plomp
Alec Ross
Alice Wade
Mechanical Engineering
Hybrid Rocket System
Adviser: Todd Gross

Tyler Burke
Thomas Colson
Alexander Montehermoso
Kenneth Openshaw
Noah Rapazzo
Esther Solomon
Mechanical Engineering
UNH SAE Mini Baja Team
Adviser: Todd Gross

Patrick Close
Evan Dowd
Sean Esdale
Dylan Rogers
Jacob Seymour
Oneil Smith-Elias
Mechanical Engineering
Kevin Ingalls
Jarret LaFlamme
Chris Lentine
Jacob Nardone
Computer Science
*UNH Extraterrestrial
Navigational Swarm*
Adviser: May-Win Thein

Jeb Collins
Clayton Greig
Matthew Kimball
Mechanical Engineering
Stephanie Dondyk
Computer Engineering
Spencer Janelle
Harrison Mannering-Londres
Jon Snow
Nick Vincent
Computer Science
Brendan Murphy
Electrical Engineering
Quad-X Swarm
Adviser: May-Win Thein

Mechanical Engineering — Industry

Group Leaders: Juan Bautista,
Anthony Puntin

Mohamed Altamimi
Ryan Olson
Alana Pettaway
Mechanical Engineering
Machine Process Health Monitoring
Adviser: Todd Gross

Joseph Batal
Ryan Dumais
Andrew Stimpson
Anthony Woodhouse
Mechanical Engineering
*Automated Cartridge Changer for
Hypertherm Plasma Cutting Torch*
Advisers: Brian Currier, Brad Kinsey,
Terence O'Neil

Matthew Batal
Kyle Preble
Russ Somphonlueg
Andrew Trasatti
Lexi Yerardi
Mechanical Engineering
Timberland Dynamic Outsole
Adviser: Todd Gross

Justin Berube
Mya Levy
David Luby
Cody Sullivan
Mechanical Engineering
Pontoon Boat Helipad
Advisers: Nathan Laxague, Karl Leinsing,
Christopher White

Orrin Bliss
William Fernandes
Jacob Lorden
Mechanical Engineering
*Automating an F3T Incremental
Forming Machine*
Advisers: Nathan Daigle, John Roth

Christopher Hazen
Mechanical Engineering
3D Printed Casting Molds
Advisers: Craig Haskell, John Roth

Shea Malloy
Elizabeth Saucier
 Mechanical Engineering
Pipe Drilling Automation for PVC Oyster Sorting Machines
 Adviser: John Roth

Lucas Mostoller
Michael Peters
Markos Starz
Nicholas Zsofka
 Mechanical Engineering
Mechanical Study of Reciprocating Firing Pin Assembly
 Adviser: Juan Carlos Cuevas Bautista

Ben Seprosevo
 Mechanical Engineering
Closed Door Machining
 Adviser: Todd Gross

Mechanical Engineering — Research

Group Leaders: Juan Bautista, Anthony Puntin

Ruben Abounaja
Colin Gilmore
Jack Kennefick
Alex Robacher
Chase Wescott
 Mechanical Engineering
Kayak Roof Load Assist
 Adviser: Todd Gross

Maxim Begin
James Descoteau
Derek Elwell
Christian Workman
 Mechanical Engineering
Kayak Loading System
 Adviser: Todd Gross

Connor Buckley
Noah Cleary
Colin Mower
Emily Peacock
Thomas Splagounias
 Mechanical Engineering
Recirculating Water System for Water Droplet Machining Process
 Advisers: Brad Kinsey, Benjamin Mitchell

Luke Cava
Christian Lamers
Eric Langley
 Mechanical Engineering
Investigating the Current Hernia Mesh Designs
 Adviser: Nikhil Padhye

Orion Clachar
 Mechanical Engineering
Automated Prosthetic Leg
 Adviser: Diliang Chen

Patrick Earley
 Mechanical Engineering
Maria Skidmore
 Chemical Engineering
Composite Bioint for Improved Biocompatibility and Mechanical Stability of 3D Printed Tissue-like Structures
 Adviser: Kyung Jae Jeong

Adison Hicks
 Mechanical Engineering
Kicker-Sticker
 Advisers: Ivaylo Nedyalkov, Viktoriya Staneva

Christian Workman
 Mechanical Engineering
Wire Electrical Discharge Machining Power Supply Design
 Adviser: May-Win Thein

Ocean Engineering

Group Leader: M. Robinson Swift

Jessie Barker
Matthew Radzelovage
Christopher Redard
William Seguin
 Mechanical Engineering
Jenna Ehnnot
 Ocean Engineering
Patrick McKinnon
 Computer Science
Andrew Weeks
 Computer Science, Engineering Physics
Marine and Naval Technological Advancements for Robotic Autonomy: Autonomous Surface Vehicle
 Adviser: May-Win Thein

Samantha Brady
Matthias Page
 Ocean Engineering
Marco Carattini
Nicholas Hatfield
 Zoology
Ella Caughran
 Biology
Design and Construction of a Recirculating Flume for Lumpfish Adhesion Strength Testing
 Advisers: Elizabeth Fairchild, Tracy Mandel, Shelby Perry

Joseph Camobreco
Alex Charest
 Mechanical Engineering
Andrew LePage
 Ocean Engineering
Brendan Reagan
 International Business and Economics
Devan Sack
Meaghan Wiggin
 Civil Engineering
Tori Sweet
 Environmental Engineering
Coastal Wave Powered RO System
 Advisers: Erin Bell, Chelsea Kimball, Weiwei Mo, M. Robinson Swift, Martin Wosnik

Benson Cao
 Computer Science
Gavin Cherella
William Conner
 Ocean Engineering
Amanda Enderson
Caroline Russell
 Mechanical Engineering
Shelly Lancaster
 Wildlife and Conservation Biology
Heather Nelson
 Anthropology, Zoology
Marine and Naval Technological Advancements for Robotic Autonomy: Ghost Unpiloted Performance Platform Submersible
 Adviser: May-Win Thein

Lindsay Cartmell

Biology

Alexis McGarry

Mechanical Engineering

Katie Swenson

Ocean Engineering

North Atlantic Right Whale (Eubalaena glacialis) Entanglement: A Scaled Model Simulation Offers Potential Mooring System Engineering Solutions

Adviser: M. Robinson Swift

Sydney Chock**Gabriella Liano**

Electrical Engineering

Jack Hamilton**Marguerite Kennish****Brendan Ulrich**

Mechanical Engineering

Jeffrey Pitts**Noah Wilder**

Computer Science

Marine and Naval Technological Advancements for Robotic Autonomy: Unpiloted Underwater Vehicle

Adviser: May-Win Thein

Jenna Ehnott

Ocean Engineering

Seasonal Variation in Elastic Moduli of American Beachgrass, Ammophila breviligulata

Adviser: Tracy Mandel

Jake Greenland

Marine, Estuarine and Freshwater Biology

Anthony Lee**Sarah Leighton****Aidan Thayer**

Ocean Engineering

Jack Schreiber

Mechanical Engineering

Redesign of Channeled Whelk Traps for Improved Selective Harvesting

Advisers: Elizabeth Fairchild, Mary Kate Munley

Liz Hauschild**Rose Walker**

Ocean Engineering

Acoustic Monitoring of Floating Offshore Wind Turbines

Advisers: Jerica Nolte, Tom Weber, Martin Wosnik

Drew Kelley**Liam Morrison****Matthew Walter**

Ocean Engineering

Underwater Web Camera

Adviser: Easton White

Katie Swenson

Ocean Engineering

A Platform Design for the Analysis of the Distribution and Abundance of Fish and Investigate the Relation to Seabirds

Adviser: Tom Weber

Physics — Experimentation and Instrumentation

Group Leader: Ningyu Liu

Lihy Buchbinder

Physics

Characterizing Insulating States in TaS₂ with Atomic Adsorbates

Adviser: Shawna Hollen

Jeffrey Campbell

Engineering Physics

BEEPS Mass Spectrometer Redesign

Adviser: Marc Lessard

Kayden Dube

Physics

A Virtual Reality Environment for 3D Reconstructions of Magnetic Reconnection Events Observed by the Magnetosphere Multiscale Mission

Adviser: Matthew Argall

Christopher Howard**Ida Eleonora Olsmats**

Engineering Physics

Modeling a Flux Gate Magnetometer

Adviser: Matthew Argall

Ryan Murphy

Physics

Impact of Thinner Carbon Foils in IMAP-Lo on Measuring the Neon to Oxygen Ratio of the Solar System

Adviser: Nathan Schwadron

Samuel Poisson

Engineering Physics

Andrew Weeks

Computer Science, Engineering Physics

*Venusian Atmospheric Interplanetary**CubeSat Concept (V-ATOMICC)*

Adviser: James Clemmons

Physics — Theory, Modeling, and Data Analysis

Group Leader: Ningyu Liu

Payson Dunn

Classics, Physics

Fractal Modeling of Sprites in Earth's Upper Atmosphere

Adviser: Ningyu Liu

Anastasia Marchuk

Physics, Russian

Low-Frequency Waves Due to Newborn Interstellar Pickup He⁺ Observed by the Ulysses Spacecraft

Adviser: Charles Smith

Gavin Riley

Physics

Generally Covariant Theory of Conserved Multipole Charges

Adviser: David Mattingly

Jessica Roberts

Classics, Physics

Placing Constraints on Fuzzy Dark Matter Properties

Advisers: Nathan Musoke, Chanda Prescod-Weinstein

Joseph Shields

Physics

A Review of Monte Carlo Methods and Their Application in Medical Physics for Simulating Interactions of Ionizing Radiation

Adviser: Karl Slifer

Amanda Wester

Physics

Investigating Signs of Orbital Decay in Exoplanetary Systems

Adviser: John Gianforte

University-Wide Undergraduate Sustainability Research Symposium

Oral Presentations

Wednesday, April 20
9 a.m.–4 p.m.
Memorial Union Building,
Rooms 330 and 332

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.

Emily Abrusci
 Environmental Conservation and Sustainability
Nathan Brennan
 Business Administration
Grey-t Water
 Adviser: Ian Grant

Jeffrey Allen
 Business Administration, Management, Sustainability
Emma Farnham
 Economics, Finance
Amanda Kelly
 Management, Sustainability
Jillian Lawrence
 Marketing
B-Impact Clinic: Goods That Matter
 Adviser: Erin Allgood

George Anderson
 Environmental Sciences
Melissa Duggan
 Edyn Winter
 Business Administration
Maddie Strange
 Environmental Engineering
B-Impact Clinic: Lucky and Me
 Advisers: Erin Allgood, Sarah Glatt

George Anderson
 Environmental Sciences
Hallie Saracina
 Environmental Engineering
Assessing Waste Management at the University of New Hampshire with the Post-Landfill Action Network's Atlas Assessment
 Adviser: Jennifer Andrews

Eric Berry
 Marketing, Sustainability
Spencer Blake
 Environmental Conservation and Sustainability, Sustainability
Jack Callinan
Tyren Hartford
 Civil Engineering, Sustainability
Nate Richard
 Finance, Sustainability
Catherine Wardinski
 Marine, Estuarine and Freshwater Biology, Sustainability
Carbon Capture and Utilization (CCU)
 Adviser: Cameron Wake

Maggy Biega
 Anthropology, Sustainability
Kate Cone
 Marketing, Sustainability
Gillian Reynolds
 Spanish, Sustainability
John Rooney
 Communication, Sustainability
Gabrielle Sott
Communicating the Connections between Climate Change, Human Health, and Sustainability: Team 1
 Adviser: Semra Aytur

Caitlin Borges
 Sustainability, Zoology
Megan Caruso
 Recreation Management and Policy, Sustainability
Kaitlin Griffin
 Information Systems and Business Analytics, Sustainability
Bryce Lacombe
 Environmental and Resource Economics, Sustainability
Morgan McKenney
 Information Systems and Business Analytics, Sustainability
Grace O'Connor
 Business Administration, Sustainability
Waste Tracking: Understanding Different Types of Waste Data at UNH and Discovering How to Best Track, Utilize, and Showcase Data
 Adviser: Jade Chalkley

Kyana Burgess
 Anthropology, Sustainability
Kylee Casner
 Sustainability, Undeclared
Justine Cassel
 Marine, Estuarine and Freshwater Biology, Sustainability
Taylor Grant
 Sustainability, Sustainable Agriculture and Food Systems
Amanda Kelly
 Management, Sustainability
Communicating the Connections between Climate Change, Human Health, and Sustainability: Team 2
 Adviser: Semra Aytur

Daisy Burns
 Economics, Sustainability
Isabella Cruz-Krahn
 Forest Technology
Tyler Distefano
 Political Science
Kaelli Gehrung
Public Service and Nonprofit Leadership Util Student Consultant Presentation: B-Impact Clinic
 Advisers: Erin Allgood, Susan Kaplan

Grace Cannon**Moe Festa**

Marketing, Sustainability

Jillian Locke

Sustainable Agriculture and Food Systems

Jason Plant

Entrepreneurial Studies

*UNH B-Impact Clinic EmVision**Project Highlight*

Adviser: Erin Allgood

Grace Cannon

Marketing, Sustainability

Cassandra Hollasch

English

Communication in Sustainability: An Important Effort to Spread Awareness on Sustainability Issues and Solutions

Advisers: Jade Chalkley, Cathy Meyer

Isabel Cole

Sustainable Agriculture and Food Systems

The Four R's: A Framework to Evaluate the Environmental Impact of Environmental Research

Adviser: Adam Wymore

Laura Davies

Undeclared

An Analysis of Ben & Jerry's Sustainability Practices

Adviser: Fiona Wilson

Erin Donahue

Nursing

An Analysis of Companies Fueling the Renewable Energy Industry

Adviser: Fiona Wilson

Ian Dudgeon

Genetics

An Analysis of Carbon Markets

Adviser: Fiona Wilson

Jill Durkin

Economics, Finance

Boloco Team B-Impact Clinic

Adviser: Erin Allgood

Alexis EatonEnvironmental Engineering,
Sustainability*Sustainability Advocates Internship Projects*

Adviser: Jade Chalkley

Sydney GendreauEnvironmental and Resource
Economics, Sustainability**Kaitlin Houle**Sustainability, Wildlife and
Conservation Biology**Ethan McDonough****Clay Webber**

Political Science, Sustainability

Sophie Ropp

Economics, Sustainability

Exploring Natural Climate Solutions for UNH

Adviser: Jennifer Andrews

Samuel Gobeil

Analytical Economics, Sustainability

Kaitlin Griffin**Sydney Weisensee**

Information Systems and Business

Analytics, Sustainability

Kira Nolan

Marketing

B-Impact Clinic: Relyco

Adviser: Erin Allgood

Chloe GrossEnvironmental Conservation and
Sustainability*Regional Composting*

Adviser: Jennifer Andrews

Brooke HealyWildlife and Conservation Biology
*Sustainability with Pollinators:**Bee Campus USA*

Adviser: Jade Chalkley

Briella Hirsch

Management

Eryn Pierce

Accounting

Emma Wick

Philosophy, Sustainability

Sarah Wilkinson

Analytical Economics, Sustainability

Jenna d'Arcy

Community and Environmental Planning

Peer-to-Peer Education in the Sustainability World

Advisers: Jade Chalkley, Erin Hale

Tyler Johnson

Bioengineering

An Analysis of GSK's Sustainability Practices

Adviser: Fiona Wilson

Elias Longa

Political Science

An Analysis of American Airlines' Sustainability Practices

Adviser: Fiona Wilson

Anthony Lotane

Economics, Philosophy

How the Development of the Hybrid Motor Creates Value for Toyota and Society

Adviser: Fiona Wilson

Naomi Lueckel

Wildlife and Conservation Biology

An Analysis of How Sustainable Agriculture Practices Are Being Used in the Food Industry

Adviser: Fiona Wilson

Anna Madden

English

An Analysis of Tom's of Maine's Sustainability Practices

Adviser: Fiona Wilson

Ana O'Neil

Health Management and Policy, Spanish

An Analysis of Moderna's Sustainability Practices

Adviser: Fiona Wilson

Matt Oriente

Information Systems and Business

Analytics, Sustainability

An Analysis of Bonds

Adviser: Fiona Wilson

Liam O'Toole

Colby Sherwin

Business Administration

An Analysis of Companies Fueling the Renewable Energy Industry

Adviser: Fiona Wilson

Alexander Ousback

Mathematics

An Analysis of the Solar Industry

Adviser: Fiona Wilson

Jason Plant

Entrepreneurial Studies
*Enablers and Constraints of the
 B Corps Movement*
 Adviser: Fiona Wilson

Sawyer Rogers

History, Political Science
*The State and Nature of Social Capital:
 Using Kensington, NH as a Lens*
 Adviser: Elizabeth Carter

Catherine Taylor

Environmental and Resource Economics
*How ThredUp Moves Fashion towards a
 Circular Economy*
 Adviser: Fiona Wilson

Meaghan Wiggin

Civil Engineering
*Accounting for the Embodied Carbon
 at the University New Hampshire
 Using SIMAP*
 Advisers: Jennifer Andrews, Allison Leach

Daisy Young

English, Sustainability
Storytelling and NH Food Culture
 Adviser: Erin Hale

Natalie Young

Equine Studies
*An Analysis of Vail Resort Inc.'s
 Sustainability Practices*
 Adviser: Fiona Wilson

University-Wide Undergraduate Sustainability Research Symposium

Poster Presentations

**Wednesday, April 20
 9 a.m.–4 p.m.
 Memorial Union Building,
 Rooms 330 and 332**

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.

EcoGastronomy Capstone Poster Presentations

Adviser: Dan Winans

Jordan Bohan

Ecogastronomy, Marketing
Good, Clean, and Fair Food Careers

Tanner Drake-Deese

Ecogastronomy, Sustainable
 Agriculture and Food Systems
*Sensory and Sustainability: Food
 Pairing and Brewing Practices*

Madison Herman

Ecogastronomy, Nutrition
*Exploring EcoGastronomy through
 UNH Dining*

Annah Santarosa

Ecogastronomy, Hotel and
 Hospitality Management
*Turning the Tables: An Analysis and
 Guide to Sustainable Food Service*

Kendra Spencer

Ecogastronomy, Nutrition
*Exploring Gleaning: Education
 Campaign for Gather*

Britt Wicander

Ecogastronomy, Philosophy
*Analyzing the Sustainability of Intentional
 Living Communities*

The Naked Arts— Creativity Exposed! (Act I)

**Wednesday, April 20
 12–2 p.m.
 Paul Creative Arts Center,
 Museum of Art**

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.

Madison Albanese

Fine Arts
Madi's Mixed Media
 Adviser: Julee Holcombe

Haley Dewsnap

Studio Art
Undercurrents
 Adviser: Julee Holcombe

Natalie Eberhardt

Music
*The Queer Politics of Aaron Copland's
 Music in the 21st Century*
 Adviser: Rose Pruiksma

Grant Gilbert

Fine Arts
Divine Cataclysms
 Adviser: Liese Zahabi

Caleb Hoell

English
Novel Presentation and Excerpts
 Adviser: Clark Knowles

Annie Montanus

English Literature

How to Create and Destroy a God

Adviser: Thomas Payne

Shannon Roy

Theatre

*Mental Health Matters: Dance**Movement Therapy*

Adviser: Gay Nardone

Emily Shafritz

Theatre

*Spectra: Kaleidoscopic Experience
through Art in Living Color*

Adviser: Tom Alsip

UNH Manchester Undergraduate Research Conference

Poster Presentations

Wednesday, April 20**3:30–6 p.m.****88 Commercial St., Room 201,
6th Floor, and Student Commons
Manchester**

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.

Abrar Al Zavar

Biology

*STEM Teaching Fellows: Creating Videos
to Increase K-12 Student Knowledge on the
Function of the Human Body*

Adviser: Patricia Halpin

Roya Ardehali

Public Service and Nonprofit Leadership

*Why Do Some High School Seniors Choose
to Go to College and Others Choose to Go
Directly to Work and How Does This Differ
by Gender?*

Adviser: Stephen Pimpare

Emily Baker

Delaney Cote

Lydia Kokx**Kaitlyn Tevepaugh**

Public Service and Nonprofit Leadership

HB1674 Relative to Reproductive Rights

Adviser: Stephen Pimpare

Parker Baumann**Julia Castimore****Kendall Hawkorn**

Biotechnology

*HEK Cell Transfection of RFP Plasmid and
Characterization of RFP Protein*

Adviser: Won Hyuk Suh

Parker Baumann

Biotechnology

*Observing Secondary Metabolite**Production on Differential Media*

Adviser: Suzanne Cooke

Autumn Bedell

Homeland Security, Public Service and

Nonprofit Leadership

Angela Fuentes**Sabrina Rahme**

Public Service and Nonprofit Leadership

Hebatullah Shabaka

Communication Arts

*HB478 Relative to Treatment of PFAS
Contaminants in the Drinking Water of
the Merrimack Village Water District*

Adviser: Stephen Pimpare

Brandon Casey

Biological Sciences

*The Microbial Diversity over the
Changing Seasons*

Adviser: Suzanne Cooke

Taylor Ceci

Biotechnology

*MLA and AMES Testing in Genetic
Toxicology*

Adviser: Kristen Johnson

Meghana Chintamaneni**Brianna Sullivan**

Biotechnology

Joel Osterman

Biological Sciences

*Optimization of Bacterial
Production of mCherry*

Adviser: Won Hyuk Suh

Sarah Cole

Biological Sciences

*The Byproduct of Sedimentation:**Testing Water Treatment Sludge for**Novel Antibiotics*

Adviser: Suzanne Cooke

Shoshawna Cook

Biological Sciences

Food Safety

Adviser: Patricia Halpin

Michelle Cullen**Hunter Dupuis****Dawin Khiev**

Biotechnology

*GFP Transfection Efficiency Comparison**Study Using RVM and HEK Cells*

Adviser: Won Hyuk Suh

Michelle Cullen

Biotechnology

*Water Sampling at Manchester**Water Works*

Adviser: Suzanne Cooke

Jacob D'Onofrio

Undeclared

Nazi Propaganda

Adviser: Sonic Woytonik

Isabella Darling

Biological Sciences

*The Effects of Co-Culture on Antibiotic**Producing Bacteria*

Adviser: Suzanne Cooke

Ethan De Angelis

Public Service and Nonprofit Leadership

*Do the Individuals in the Homeless**Community Remain Static Due to the**Factors of a Common Mental Illness?*

Adviser: Stephen Pimpare

Kaitlyn Douillard

Biological Sciences

Ian Hatton**Kari-Lynn Knight****Kira Smith****Vishnu Soni**

Neuropsychology

*Making Bright Objects Disappear:**A Study of Motion-Induced Blindness*

Advisers: Joseph LaBarre, John Sparrow

Hunter Dupuis**Sadie Vezina****Matthew Woodworth**

Biotechnology

*Investigating Bioink Formulations**Incorporating Peptides and Their**Biocompatibility Utilizing Human**Neural Progenitor or Stem Cells*

Adviser: Won Hyuk Suh

Hunter Dupuis**Anya Kurtenbach**

Biotechnology

*RVM Cells Differentiated on SLA Print**Resin vs. MeGel Crosslinked Structure*

Adviser: Won Hyuk Suh

Michael Evers**Isaah Gray****Rayhan Khan****Chance Spinney**

Homeland Security

Recreation Department

Adviser: James Ramsay

Lauren Ferraro

Neuropsychology

Dementia and Music Therapy

Adviser: Alison Paglia

Eric Frederic

Psychology

Antisemitism: Past and Present

Adviser: Sonic Woytonik

Angela Fuentes

Public Service and Nonprofit Leadership

Holocaust Refugees in Latin America

Adviser: Sonic Woytonik

Gabrielle Garneau

International Affairs, Political Science

*Does Collective Bargaining Impact Fair**Wages in Maine's Public Sector Unions?*

Adviser: Stephen Pimpare

Thomas Gerton**Emma Giberson****Sonal Rathod**

Biotechnology

Characterization and Purification of RFP

Adviser: Won Hyuk Suh

Thomas Gerton

Biotechnology

*Internship at Advanced Solutions**Life Sciences*

Adviser: Suzanne Cooke

Thomas Gerton**Dianne Moschitta**

Biotechnology

*RVM Cultured on Electrospun**Fibers vs. Polystyrene Surface*

Adviser: Won Hyuk Suh

Emma Giberson**Dawin Khiev**

Biotechnology

*RVM Cells Cultured on Bioprinted Dots of**Methacrylated Hyaluronan/Gelatin*

Adviser: Won Hyuk Suh

Monique Gingras**Fardeen Siddiqui****Shoshana Trudel****Raunak Vijay**

Biotechnology

*Isolation and Identification of Borrelia**burgdorferi Bacterial Viruses from New**Hampshire Ixodes Scapularis*

Adviser: Kyle MacLea

Tejaswini Gouni

Biological Sciences, Biotechnology,

Genetics

Raymond Miller**Jessica Ricard**

Biotechnology

*The Effect of Antibacterial Agent**Concentration on GFP Production*

Adviser: Won Hyuk Suh

Ian Harris**Melanie Stahley****Matthew Woodworth**

Biotechnology

*Developing New Protocols to Test the**Cytocompatibility of Peptide-Based Bioink**Utilizing Human Neural Stem Cells*

Adviser: Won Hyuk Suh

Abigail Harris**Lauren Martins**

Public Service and Nonprofit Leadership

*HB1468 Relative to the Legalization of**Cannabis*

Adviser: Stephen Pimpare

Ian Hatton

Neuropsychology

*Manipulation of Perception Processing**in Motion-Induced Blindness*

Adviser: John Sparrow

Max Hayes-Hunsicker

Undeclared

*Cultural Holocaust: The Fate of Jewish**Art and Artists*

Adviser: Sonic Woytonik

Madison Hoadley**Jacob Jerome**

Justice Studies

Samantha Hobson**Ervin Karic****Benjamin Olmstead****Allison Sinagra****Jonathan Taylor**

Homeland Security

*Capstone Consulting Project:**Concord Hospital*

Adviser: James Ramsay

Lejla Hodzic

Biotechnology

*Using Gateway Cloning to Induce FOXN2**Overexpression in Human Pancreatic**Cancer Cell Lines*

Adviser: Kristen Johnson

Jonathan Hoying**John Sardella****Sadie Vezina**

Biotechnology

*ReNcell VM Transfection Using**pcDNA3-EGFP*

Adviser: Won Hyuk Suh

Nadin Jailaubekova

Biotechnology

*False Holocaust Memoirs and the**Misrepresentation of Historical Events*

Adviser: Sonic Woytonik

Nadin Jailaubekova**Fardeen Siddiqui**

Biotechnology

Fidel Mkabela

Bioengineering

*Nanopore Sequencing of Ureaplasma**mirouringentialium and Ureaplasma**zalophigenitalium*

Adviser: Kyle MacLea

Ryan Johnson

Neuropsychology
The Role of Medical Killings during the Holocaust
Adviser: Sonic Woytonik

Nadia Keokominh

Biotechnology
Holocaust Influencers: Posers at Auschwitz
Adviser: Sonic Woytonik

Elvira Kibarova

Biological Sciences
My Experience as a Medical Scribe
Adviser: Patricia Halpin

Kari-Lynn Knight

Neuropsychology
Child Life Specialist: A Work of Heart
Adviser: Nicholas Mian

Madison Kriete

Public Service and Nonprofit Leadership
Does Drinking Alcohol Frequently in College Impact a Student's Academic Performance?
Adviser: Stephen Pimpare

Anya Kurtenbach

Biotechnology
Analyzing Effects of FOXN2 Transcription Factor Downregulation by Performing qPCR for Gene Expression and Western Blot for Protein Expression for Pancreatic Cancer Cell Lines
Adviser: Kristen Johnson

Isabelle Laizure

Ofori Mensah

Dianne Moschitta
Biotechnology
Bacterial Production of GFP Fusion Proteins
Adviser: Won Hyuk Suh

Benjamin Madore

Undeclared
Ravensbrück: The Largest Concentration Camp For Women
Adviser: Sonic Woytonik

Megan Maher

Biological Sciences
The Importance of Analytical Research in the Field of Science
Adviser: Suzanne Cooke

Davis Miller

Bryan Robbins

Matthew Winders
Public Service and Nonprofit Leadership
HB1264 Establishing Ranked-Choice Voting for State Primary Elections and Municipal Elections
Adviser: Stephen Pimpare

Joel Osterman

Biological Sciences
Novel Antibiotics in Bryophyta
Adviser: Suzanne Cooke

Allison Pham

Biotechnology
The Disconnect in the Use and Purpose of the Syllabus between Faculty and Students is REAL
Adviser: Patricia Halpin

Hayden Rangel

Bioengineering
Aya Raouf
Biotech
RVM Cells Cultured on Different Laminin Product Absorbed Surfaces
Adviser: Won Hyuk Suh

Jessica Ricard

Biotechnology
Restroom Sanitation Investigation
Adviser: Cheryl Wood

Naeleh Sapienza

Andrew Wasylina
Matthew Woodworth
Biotechnology
GFP vs. RFP Production in Bacterial Cells
Adviser: Won Hyuk Suh

Stephanie Slaybe

Public Service and Nonprofit Leadership
How Does Childhood Trauma Affect the Mental Health Status of UNH Manchester Students?
Adviser: Stephen Pimpare

Kaitlyn Tevepaugh

Public Service and Nonprofit Leadership
Are Schools Equipped to Help Students with Managing Mental Illness?
Adviser: Stephen Pimpare

Alexander Wachenfeld

Computer Science
German Medical Experiments in Concentration Camps Influence Military Advancements
Adviser: Sonic Woytonik

Tristen Witkowski

Neuropsychology
Virtual Reality Integration in Neuropsychology Education
Adviser: Daniel Seichepine

UNH Manchester URC Cinema Arts Day

Thursday, April 21
10 a.m.–12 p.m.
88 Commercial St., Room 456
Manchester

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.

Catherine Hevey

Communication Arts
How a Global Pandemic Has Affected an X-Ray Technologist
Adviser: Anthony Tenczar

Bailey Jamieson

Communication Arts
Musicipia
Adviser: Anthony Tenczar

Christopher Saunders

Communication Arts
Pretty in Pink
Adviser: Anthony Tenczar

Christopher Saunders

Communication Arts
Robbery Gone Awry
Adviser: Carol Fisher

Christopher Saunders

Communication Arts
The King of Trash
 Adviser: Carol Fisher

Christopher Saunders

Communication Arts
What Lies Beneath
 Adviser: Anthony Tenczar

Cameron Schuyler

Communication Arts
A Video Essay of a Hero's Journey: The Perfect Formula for Great Storytelling
 Adviser: Anthony Tenczar

Cameron Schuyler

Communication Arts
Checkmate
 Adviser: Anthony Tenczar

Cameron Schuyler

Communication Arts
MALACHI
 Adviser: Anthony Tenczar

Cameron Schuyler

Communication Arts
Paper Race
 Adviser: Anthony Tenczar

Hebatullah Shabaka

Communication Arts
The Documentary of Us
 Adviser: Anthony Tenczar

Robert Skaff

Communication Arts
Morning Deliveries
 Adviser: Anthony Tenczar

Robert Skaff

Communication Arts
The Tales of Peregrine the Thief, Lorelei the Mischievous, and Bio Futures the Corporation
 Adviser: Anthony Tenczar

Peter T. Paul College of Business and Economics

Paul J. Holloway Prize Innovation to Market Competition

Charles & Miriam Nelson Poster Competition

Thursday, April 21
12–2 p.m.
Paul College

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

History Department Undergraduate Research Conference

Thursday, April 21
12–3 p.m.
Memorial Union Building

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 Undergraduate Research Conference provides History students with the opportunity to share their work with fellow students, professors, and families.

MUB, Room 336**20th Century History****Kasey Birth**

History
The Women Who Fought with Glory: Varying Perceptions and Experiences of the Women Airforce Service Pilots, Women's Army Corps, and Army and Navy Nursing Corps of World War II
 Adviser: Marion Dorsey

Sawyer Rogers

History, Political Science
Irish-American Reaction to the League of Nations
 Adviser: Nicoletta Gullace

Julie Sulva

History, Recreation Management and Policy
The Issues of German Immigration to the United States during the Holocaust
 Adviser: Janet Polasky

MUB, Room 338**Intolerance and Language****Zoie Haskell**

History, International Affairs, Women's and Gender Studies
Rhetoric about Islam and Its Lingering Effects on American Muslims and Arabs
 Adviser: Svetlana Peshkova

Jocelyn Palethorpe

History, Psychology
Irish Language
 Adviser: Nicoletta Gullace

Ryan Saputo

Classics, History
Barbarians & Heretics: Anti-Greek and Anti-Latin Sentiments in Crusade-Era Chronicles, 1095–1204 CE
 Adviser: David Bachrach

MUB, Room 340

Society and Social Movements

Julianne Edwards

Educational Studies, History

Captain America and Social Movements

Adviser: Jason Sokol

Michael Munroe

History

The Mexican Revolution and

Transnational Movement

Adviser: Lucy Salyer

Sawyer Rogers

History, Political Science

The State and Nature of Social Capital:

Using Kensington, NH as a Lens

Adviser: Elizabeth Carter

**The Naked Arts—
Creativity Exposed!**

Act II

Thursday, April 21

12:40–2 p.m.

**Paul Creative Arts Center,
Museum of Art**

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.

Bryson Badeau

Theatre

Dog Sees God: Confessions of a

Teenage Blockhead

Advisers: Szu-Feng Chen, David Kaye

Luccas Booth

Fine Arts

Layered Space

Adviser: Brian Chu

Lorna Bostwick-Pope

Fine Arts

Biomorphic Boxcar

Adviser: Julee Holcombe

Jason Staples

Analytics and Data Science,

Environmental Conservation

and Sustainability

Echoes of Eternity

Adviser: Thomas Payne

**Philosophy Department
Undergraduate Research
Conference**

Thursday, April 21

4–7 p.m.

Hamilton Smith Hall, Room 210

The Philosophy Department 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.

Andrew Meyer

Analytical Economics, Philosophy

*The Role of Coherence in a System of
Rationality*

Adviser: Paul McNamara

Kieran Newcomb

Philosophy, Psychology

*The Significance of the Principle
of Sufficient Reason for Leibniz's
Cosmological Argument*

Adviser: Willem deVries

Emma Wick

Philosophy, Sustainability

*The Effect of Reading Literary Fiction on
the Enhancement of Sympathy*

Adviser: Charlotte Witt

Jacob Zercher

Mathematics, Philosophy

*Audi and Fumerton on the Plausibility of
Justification via Implicit Beliefs*

Adviser: Paul McNamara

**All Colleges
Undergraduate
Research Symposium**

Welcome Breakfast

Friday, April 22

9–9:30 a.m.

**Memorial Union Building,
Granite State Room**

This informal gathering gives students, faculty, and attendees an opportunity to visit with each other before experiencing the large university-wide event that follows: the All Colleges Undergraduate Research Symposium.

**All Colleges
Undergraduate Research
Symposium**

Oral Presentations, Session A

Friday, April 22

9:30–10:40 a.m.

Memorial Union Building

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

MUB, Room 334***China: Establishing a New Global Economic Order?***

Adviser: Lawrence C. Reardon

Moderator: Brandon Lalonde

Surya Ari

Political Science

*Silk behind Steel: Domestic Agenda Fueling China's Belt and Road Initiative***Benjamin Johns**

History

*Troubling Tides: China's Territorial Claims in the South China Sea***Carson King**

Political Science

*The Economics of the South China Sea Dilemma***Alex Quitongan**

Political Science, Psychology

*Chinese Food Quality and Agricultural Outsourcing***Jaden Smith**

Business Administration

*Containing Capitalism: China's Special Economic Zones***MUB, Room 330*****Comm-entary: Published Papers in Communication***

Moderator: R. Michael Jackson

Thomas Butt

Communication

Cloud Rhetoric — Digital Populism of Thaksin Shinawatra

Adviser: Kate Zambon

Emily Desormier

Communication

'Um Mundo Novo' or Just More of the Same for Brazil Post-Olympics?

Adviser: R. Michael Jackson

Madeline Graf

Communication

Are Humans an Invasive Species? How the Development of Our World Has Continuously Encroached on Wildlife

Adviser: R. Michael Jackson

Lily Neher

Theatre

The Resurrection of Yik Yak

Adviser: Kevin Healey

Ashley White

Communication, Women's and Gender Studies

Tiger King: A Case Study in Environmental Media Representation and Effects

Adviser: Joseph Terry

MUB, Room 336***Human Rights and Discrimination***

Moderator: Michael Cole

Emory Bayer

International Affairs, Political Science

Using Humanitarian Parole as a Method of Immigration

Adviser: Jen Spindel

Andrei Chirila

International Affairs

China's Seventy Years of Sinicizing Tibet

Adviser: Lawrence C. Reardon

Natalie Fosberg

French, International Affairs

Solving Overpopulation: China's One-Child Policy

Adviser: Lawrence C. Reardon

Gabrielle Garneau

International Affairs, Political Science

China's State-Sponsored Discrimination and Human Rights Abuses

Adviser: Lawrence C. Reardon

Aidan Kelly

Russian

Religion under Chinese State Atheism

Adviser: Lawrence C. Reardon

MUB, Room 332***Human Security and the Freedom from Want and Fear***

Moderator: Heather Austin

Nour AlHajjiri

International Affairs, Political Science

The Effects of Israeli Occupation on Palestinian Economy

Adviser: Elizabeth Carter

Brenda Mendoza

International Affairs, Linguistics

An Analysis of Missing and Murdered Indigenous Women

Adviser: Fredrik Meiton

Alissa Reitter

Civil Engineering, International Affairs

The Unnoticed Side of International Aid

Adviser: Smita Lahiri

Jasmine Taudvin

English/Journalism, International Affairs

International News Coverage of the Parkland Shooting

Adviser: Fredrik Meiton

MUB, Room 302***Multidisciplinary Session I***

Moderator: Andrew Ferris

Lauren Ainscow

Sociology

Motherhood and Incarceration

Adviser: Ryan Gibson

Anya Bond

Biomedical Science

Research and Design for a Website on Dental Phobias

Adviser: Molly Campbell

Arianna Coletti

Anthropology

TikTok: A Platform for Appreciation or a Modern and Digital Plague?

Adviser: Sara Withers

Ezra Coyne

Environmental and Resource Economics, International Affairs

Maori in New Zealand

Adviser: Fredrik Meiton

Kegan Messmer

Linguistics, Russian
X-Bar Conjunction Theories in English and Russian Compared
 Adviser: Sean Madigan

Sawyer Rogers

History, Political Science
The State and Nature of Social Capital: Using Kensington, NH as a Lens
 Adviser: Elizabeth Carter

MUB, Room 338**National Security, Technology, and Economic Statecraft**

Moderator: Maingi Solomon

Tanner Crockett

International Affairs, Russian
How Russia Projects Its Insecurities through Its Geopolitics
 Adviser: Smita Lahiri

Steven Davis

Homeland Security, International Affairs
The Troubles in Northern Ireland
 Adviser: Fredrik Meiton

Autumn Goldenberg

International Affairs, Sociology
Land Grabs in Latin America: How Land Acquisition and Expropriation Have Come to Favor the Elite, and How This Affects Markers of Development
 Adviser: Smita Lahiri

Mel Nagashima

Communication, International Affairs
Automation: Friend or Foe?
 Adviser: Smita Lahiri

Ethan Steuer

International Affairs, Political Science
U.S. Counterterrorism Strategy towards Islamic Terrorism
 Adviser: Fredrik Meiton

MUB, Room 340**The Role of Culture, Identity, and Norms in International Affairs**

Moderator: Smita Lahiri

Madeline Ferland

German, International Affairs
Alternativ für Deutschland's Support for Russia: A Threat to Western Political Ideology in Europe?
 Adviser: Fredrik Meiton

Michael Katsiris

Homeland Security, International Affairs
How Christian Life as Well as Culture Was Changed in and around Constantinople Directly before and after the Ottoman Siege of the City
 Adviser: Fredrik Meiton

Olivia Marnell

English, International Affairs
Affective Citizenship: Deconstructing Britain's Deprivation Orders through Law and Literature
 Adviser: Smita Lahiri

Thomas McDonough

International Affairs, Political Science
Cultural Diplomacy as a Means of Establishing Soft Power
 Adviser: Smita Lahiri

MUB, Room 321**Transnational Governance Dilemmas**

Moderator: Funso Afolayan

Sophia Little

English, International Affairs
Immigration Policy
 Adviser: Fredrik Meiton

Cameron Magner

Communication, International Affairs
Overfishing in the South China Sea
 Adviser: Fredrik Meiton

Kate Persson

English, International Affairs
Importance of Language in Migrant Integration: A Comparative Analysis of Germany's and Sweden's Language Policies and Their Effects on Compulsory Education Graduation Rates and Conversely Unemployment Rates within their Migrant Populations
 Adviser: Fredrik Meiton

Emma Pryor-West

International Affairs, Political Science
The Breaking of British Nationalism: The Scottish Case
 Adviser: Smita Lahiri

All Colleges Undergraduate Research Symposium

Poster Presentations, Session A

**Friday, April 22
 9:30–10:40 a.m.
 Memorial Union Building,
 Granite State Room**

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

Saba Awan

Aidan Birmingham
Jordan Bussiere
Michael Cushing
Ethan Lynch
Alison Moore
Patrick Smeltzer
 Homeland Security
Facility Assessment
 Adviser: James Ramsay

Abigail Battles

Community and Environmental Planning
What Is the Public Opinion on Immigration in the United States?

Adviser: Dante Scala

Will Bauer**Alyssa Hall**

Psychology

Kaleb Ducharme

Neuroscience and Behavior

How Does Affective Framing Influence Comprehension?

Adviser: Caitlin Mills

JP Blasi

English

Mental Health in Athletics

Adviser: Molly Campbell

Elza Brechbuhl

Communication, Women's and Gender Studies

Collegiate Hookup Culture and Monogamy: The Spectrum of Non-Platonic Relationships in Contemporary Popular Film

Adviser: Stephanie Harzewski

Hannah Brinkman

Political Science

How Much Trust Does Gen Z Have in News Outlets?

Adviser: Dante Scala

Alex Carbone

Nursing

Implementing Daily Schedules to Prevent Episodes of Agitation in Pediatric Patients Boarding in the Emergency Department with Behavioral Health Diagnoses

Advisers: Kerry Nolte, Anne Meginniss

Yifang Chang

German, Psychology

Spatial Frequency Effects on

Local Stereo Acuity

Advisers: Andrew Kitt, Sofia Lombardo, John Sparrow, William Stine, Rebecca White

Elizabeth Christy

Neuroscience and Behavior

The Effects of a Single Bout of Acute Aerobic Exercise on Alpha and Beta Oscillations in Recognition Memory

Advisers: Ronald Croce, Robert Ross

Rachel Courter

Communication Sciences and Disorders

Assessing How Adults Produce and Understand the Melody and Rhythm of Speech

Adviser: Jill Thorson

Haylee Crowle

Animal Science

Noise Pollution and Its Effect on

Mate Quality Choice of Cricket,

Teleogryllus commodus

Adviser: Jessica Briggs

Adam Dapolite

International Affairs, Political Science

Losing Faith: European Distrust in Their National Election Process

Adviser: Dante Scala

Jon Dickinson

Political Science

Do People Favor Equity or Equality?

Adviser: Dante Scala

Brandon Elias

Economics

Close to Blue, Vote for Blue

Adviser: Dante Scala

Madison Ferrie

Political Science

The United Nations as Seen by the Eastern World

Adviser: Dante Scala

Harrison Flag

Management

Kimberly Yuen

Occupational Therapy

Give the People What They Want: Quantitative Decision Making for

Entertainment Venues

Adviser: Peter Zaimes

Julia Gregorio

Nursing

Review of Age-Related Trends of Infection among People Hospitalized for Infections with Concurrent Substance Use

Adviser: Kerry Nolte

Travis Grimm

Political Science

United States and Its Relationship with Global Affairs

Adviser: Dante Scala

Carson Hansford

Political Science

Attitudes toward Government Response to COVID-19

Adviser: Dante Scala

Katherine Harpster

Neuroscience and Behavior

Analyzing Misinformation with Twitter

Advisers: Laura Allen, Sarah Creer

David Hart

Nursing

Nursing Student Self-Efficacy in Clinical Skills, Levels of Anxiety, and Utilization of Alternative Education Experiences during the COVID-19 Pandemic

Adviser: Kerry Nolte

Julia Kiburis

English, Homeland Security

Olivia McCabe**Matthew Robison**

Homeland Security

Trevor Mills**Allison Mozzicato****David Thurston****Emily Yetton**

Homeland Security, Justice Studies

HLS Capstone Final Project: Youth Human Development Center

Adviser: James Ramsay

Megan Knuettel

Social Work

The Dual Pandemic: COVID-19, Systemic Racism, and College Student-Athletic Mental Health

Adviser: Tarkington Newman

Sarah Krein

Nursing

A Comparison of Perceptions of Labor Support before and during the COVID-19 Pandemic

Adviser: Alyssa O'Brien

Isabella Livingston

Educational Studies, Human

Development and Family Studies

Variables That Affect Parents' Goals for Visiting a Children's Museum

Adviser: Jill Trumbell

Meghan Lotti

Nursing

Gender Related Trends among People Hospitalized for Infections with Concurrent Substance Use

Adviser: Kerry Nolte

Aislinn Low

Neuroscience and Behavior

Take a Chance on Me: How Motivation, Risk Perception, and Personality Enter into Choices about Interpersonal Relationships

Adviser: John D. Mayer

Laura Lynch

Nutrition

Exploring the Impact of COVID-19 on Food Security among New Hampshire Communities

Adviser: Jesse Stabile Morrell

Jamie Mater

Psychology

The Troubled Teen Industry and Its Effects: An Oral History

Adviser: Robert Eckstein

Miah Munro

Psychology

Understanding the Personality of a Coworker

Adviser: John D. Mayer

August Murray

Civil Engineering

Climate Change and the Future of the New Hampshire Ski Industry

Adviser: Sean McLaughlin

Brittney Nalesnik

Biomedical Science

Prevalence of Vaping and the Association with Cardiometabolic Risk in College Students

Adviser: Jesse Stabile Morrell

Kieran Newcomb

Philosophy, Psychology

The Intersection of Adverse Childhood Experiences, Caregiver Closeness, and Substance Use in 14-15 Year-Olds in the United States

Adviser: Kimberly Mitchell

Simon Quinn

Political Science

Climate Change

Adviser: Dante Scala

Grace Roy

Health Management and Policy

Tele-ACT and Recreational Therapy: Adapting Acceptance and Commitment Therapy for Telehealth Delivery to Support People with Chronic Pain during the COVID-19 Pandemic

Adviser: Semra Aytur

Cecilia Toner

Justice Studies, Psychology

Police Burnout and Alcohol Use

Adviser: Kimberly Mitchell

Mya Urena

Neuroscience and Behavior

Subjective and Physiological Measurements of the Psychedelic Virtual Reality Experience

Adviser: Caitlin Mills

Ryan Vona

Political Science

Americans' Attitudes toward Increased Migrant Encounters and Immigration Policy

Adviser: Dante Scala

Sarah Waleryszak

Nutrition

Challenges and Barriers Associated with Food Security during COVID-19 among UNH Students

Adviser: Jesse Stabile Morrell

Aidan Walsh

Genetics

Illuminating the Ancestry of Native American DNA Segments Using Genetic and "Paper Trail" Genealogy

Adviser: Thomas Davis

Patrick Walsh

Political Science

Swing Voters in U.S. Presidential Elections

Adviser: Dante Scala

All Colleges Undergraduate Research Symposium

Oral Presentations, Session B

Friday, April 22**10:50 a.m.–12 p.m.****Memorial Union Building**

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

MUB, Room 330

Honors Research in Communication and Comm-entary: Published Papers

Moderator: R. Michael Jackson**Jake Connolly**Communication: Business Applications
Public Monuments in Changing Societies and Political Orders

Adviser: Lawrence Prelli

Sara Donatello

Communication

Equity vs. Equality: How Differing Viewpoints Choose to Portray History

Adviser: Kate Zambon

Merrimac Moran

Communication, Women's and Gender Studies

The Orgasm Gap: What Role Does the Patriarchy Play in the Bedroom?

Advisers: R. Michael Jackson, Tamsin Whitehead

Max Oxendine

Communication

TikTok: A New Source of Labor

Adviser: Lin Zhang

Megan Switzgable

Communication, Educational Studies
How the Media Frames Mental Health and Social Media: A Case Study of the Facebook Whistleblower
 Adviser: Nora Draper

MUB, Room 302**Multidisciplinary Session II**

Moderator: Liz Fowler

Haylie Bjorklund

Emma Campion

Alexandra Shapazian

Educational Studies, Psychology

Aleigha Hilberg

Educational Studies, English Teaching

Maclane Jennison

Educational Studies, History

Nicole Jutras

Analytical Economics, Educational Studies, International Affairs

Isabella Livingston

Kaylie Longua

Educational Studies, Human Development and Family Studies

Haley Lubliner

Educational Studies, Zoology

Rebecca McGee

Educational Studies, Recreation Management and Policy

Angela Moquin

Educational Studies, Finance

James Silveria

Educational Studies, Spanish

Megan Switzgable

Communication, Educational Studies
UNH Community Awareness and Accessibility of Academic Resources at the University
 Adviser: Barbara Peterson

Ellen Blackwell

Bioengineering

Engineering Macromolecular

Hydrophobicity to Induce LCST and

Microstructures in Biomaterials

Adviser: Linqing Li

Jason Masiello

Psychology

An Analysis of Youth Impulsivity and Selfishness: A Psychological Explanation for Adult Rule-Violating Behavior

Adviser: Ellen Cohn

Elizabeth Phelps

Justice Studies, Psychology

One Size Does Not Fit All: Expanding the Procedural Justice Model to Accommodate Psychopathic Traits

Adviser: Ellen Cohn

MUB, Room 334**Problems behind the Potemkin Village**

Adviser: Lawrence C. Reardon

Moderator: Louise Buckley

Nour AlHajjiri

International Affairs, Political Science
How Urbanization in China Impacts the Workforce

Samuel Davies

Political Science

Crisis in China's Housing Market

Connor George

Political Science

Ready to Burst: Origins of the South Korean Housing Bubble

Juhong Jin

Economics, International Affairs
China's Culture Appropriation and South Korea

Caroline Sweet

Communication, International Affairs

Nothing In, Nothing Out: The Censorship of Chinese Media

MUB, Room 338**The Cost to Become a Global Economic Hegemon**

Adviser: Lawrence C. Reardon

Moderator: Marina Cardoso-Vianna-Vaz

Adam Dapolite

International Affairs, Political Science
The End of the Line: China's Use of the Veto in the UN Security Council

Ella Davis

International Affairs, Italian Studies
China's Environment Problem

Peter Mulvey

Political Science

Determinants of Wealth Inequality in China

Finn Wegmueller

German, International Affairs

The Challenge of China's Unemployed

Equeen Xaviera

International Affairs, Political Science

U.S.-China Trade War: Historical Analysis

All Colleges Undergraduate Research Symposium

Poster Presentations, Session B

Friday, April 22

10:50 a.m.-12 p.m.

Memorial Union Building, Granite State Room

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

Emily Abrusci

Environmental Conservation and Sustainability

Nathan Brennan

Business Administration

Grey-t Water

Adviser: Ian Grant

James Allen

Sociology

Hate Crimes versus Domestic Terrorism

Adviser: Lisa Jones

Andrew Almeida

Exercise Science

Vascular Health in Adults: An Analysis of Nitric Oxide, Flow-Mediated Dilation, and LDL-C

Adviser: Deborah Fearheller

Ian Ayer**Christopher Martinez**

Biochemistry, Molecular and Cellular Biology, Biomedical Science
Does Prostaglandin F2alpha Have an Effect on the Expression of the Angiogenic Inducer, CCN1, in Tumor Ovarian Granulosa Cells?

Adviser: Paul Tsang

Odin Bickford

Nursing
Knowledge Gaps: Addressing the Need for Palliative Care Education for University Students

Adviser: Michele Lovell

Jacob Blair**Ryan Bobbitt****Daniel Differ****Cole Jenkins****Justin Johansen****Gregory Minichiello****Laura Moore**

Homeland Security
Risk Mitigation at the Portsmouth Fire Department

Adviser: James Ramsay

Lindsey Broadhurst**Psychology****Amir Robertson**

Psychology, Women's and Gender Studies

Hannah Sheets

Neuroscience and Behavior

The Relationship between Emotional Granularity and Mental Health

Adviser: Jolie Wormwood

Julia Cantore

Political Science

What Causes Political Polarization in the United States and Why Are People More Polarized than Others?

Adviser: Dante Scala

Kylee Casner

Sustainability, Undeclared

How are COVID-19 Vaccines Being Advertised? A Content Analysis of COVID-19 Social Media Posts Made by Select State Health Departments

Adviser: Nena Stracuzzi

Maria Chouinard

French

Supporting the Oral Language Development of Young Dual Language Learners: Perspectives of EL Teachers in NH

Adviser: Judy Sharkey

Nicholas Colabatistto

Political Science

Public Perception of Labor Unions

Adviser: Dante Scala

Isabel Connors

Genetics, Political Science

Views on the Death Penalty Respective to Views on Government Involvement

Adviser: Dante Scala

Ethan Crossman

Geography, Linguistics

Migration and Taiwanese Hokkien's Geographical Distribution of Lexicon Items

Adviser: Tu Lan

Morgan Daly

Exercise Science

Comparing Vascular Function to Years of Service in Firefighters Using Analysis by Flow-Mediated Dilation and Nitric Oxide

Adviser: Deborah Fearheller

Talia Davis

Political Science

Partisanship and Freedom of Speech

Adviser: Dante Scala

Matthew Demarest

Political Science

How Do People's Political Ideologies Change for Social versus Economic Policies?

Adviser: Dante Scala

Kaylyn Dickinson**Georgia Gempler****Emily Komerska**

Neuroscience and Behavior

The Dynamics of Perceptual Filling-In and Motion-Induced Blindness during Binocular Rivalry

Advisers: Sofia Lombardo, John Sparrow, William Stine, Dan Swift, Erika Wells, Rebecca White

Cerys Eldred

Nursing

Nurse's Perceptions of Their Role Utilizing Eat, Sleep, Console in the Management of Neonatal Abstinence Syndrome

Adviser: Alyssa O'Brien

Haylee Foster

Biology

Public Health Literacy: Essential for an Educated Citizenry

Advisers: Semra Aytur, Rosemary Caron

Madeline Graf

Communication

Attitudes toward Immigration

Adviser: Dante Scala

Jake Greenland

Marine, Estuarine and Freshwater Biology

Anthony Lee**Sarah Leighton****Aidan Thayer**

Ocean Engineering

Jack Schreiber

Mechanical Engineering

Redesign of Channeled Whelk Traps for Improved Selective Harvesting

Advisers: Elizabeth Fairchild, Mary Kate Munley

Jesse Gushee

Philosophy

Opinions of Individuals on Immigration in the United States

Adviser: Dante Scala

Jackie Harris

Earth Sciences, Women's and Gender Studies

Zoie Haskell

History, International Affairs, Women's and Gender Studies

Bethany Ott

Human Development and Family Studies

Caitlin Turner

Sociology, Women's and Gender Studies

Tokenism in UNH Social Media

Adviser: Avary Thorne

Maeve Healy

Exercise Science

Recognizing the Role of Women in Public Health

Adviser: Semra Aytur

Kiely Hoyt

Biomedical Science

The Effects of Estradiol on the Angiogenic Factor CCN1 in Human Tumor Granulosa Cells

Advisers: Donnelly Hutchings, Paul Tsang

Gail Humphreys

Political Science

How Gender Affects Attitudes toward Immigration

Adviser: Dante Scala

Taylor Italia**Megan Miller****Madison Owens**

Psychology

The Embodied Mind: The Relationship between Sensitivity to Body Sensations and Mental Health

Advisers: Ewa Kochanowska, Jolie Wormwood, Jaime Young

Reka Ivanyi**Ryan Patterson**

Biology

Supports and Barriers Faced by Community College Transfer Students

Adviser: Melissa Aikens

Kylee Jedraszek

Justice Studies, Sociology

Conducting an Osteobiography: Analyzing Unidentified Remains

Adviser: Les Fitzpatrick

Sabrina Kadariya

Health Management and Policy

Planning a Participatory Research Project on Environmental Justice in Manchester, New Hampshire

Adviser: Semra Aytur

Lily Kalman**Emily Pearson**

Justice Studies, Psychology

Investigating Transgender Homicides

Adviser: Robert Eckstein

Carley Kanter

Nursing

Confidence and Inclusion of LGBTQ+ Health-Related Content in University Curriculum

Adviser: Kristen Clark

Megan Kelley**Noah Ryder****Skyler Tautkus**

Psychology

Increment and Decrement Effects in Motion-Induced Blindness

Advisers: Sofia Lombardo, John Sparrow, William Stine, Dan Swift, Erika Wells, Rebecca White

Chloe Kilkelly

Nursing

The Association between Knowledge and Confidence Related to LGBTQ+ Health Topics among University Educators

Adviser: Kristen Clark

Charlotte Kislevitz**Erin Luckern**

Psychology

The Theme of Self Integrated in Children's Books across Age Groups

Adviser: Laura Allen

Marc Laferriere

Community and Environmental Planning

Federal Budget Spending and Minority Representation in Politics

Adviser: Dante Scala

Andrew Lagos

Psychology

Luke Whissel

Linguistics

Examination of the Reading Experiences of Bilinguals

Advisers: Laura Allen, Puren Oncel

Rebecca Leary

Nursing

Addressing Patient Education Pertaining to Substance Use Risk Factors in the New Hampshire Perinatal Population

Advisers: Kerry Nolte, Alyssa O'Brien

Jaxson Libby

Biochemistry, Molecular and

Cellular Biology

Emma Tobbe

Bioengineering

Developing a Tumor-on-Chip Platform for Cancer Drug Discovery

Advisers: Linqing Li, Sarah Walker

Patricia Louis

Nursing

Analyzing Family Stress in America: A Look at Maternal Stress during the COVID-19 Pandemic

Adviser: Alyssa O'Brien

Steve MacDonald

Political Science

Political Polarization

Adviser: Dante Scala

Daniel Magelinski**Jayda Vazquez**

Psychology

Tessa-Francesca Reid

Human Development and Family Studies,

Psychology

Embodied Affect: Bodily Awareness and Affective Experience in Daily Life

Advisers: Alexandra Ecker, Jolie Wormwood

Hannah Marland

Political Science

Linkage between Sex Education and Abortion Beliefs

Adviser: Dante Scala

Ashanti Maronie

Anthropology

Resolving a Cold Case Homicide: Extraction and Sequencing of DNA from a Blood Card

Adviser: Amy Michael

Jamie Mater

Psychology

The Troubled Teen Industry and Its Effects: An Oral History

Adviser: Robert Eckstein

Virginia Mercier

Social Work

CPYD (Critical Positive Youth Development) Focused Coach Education

Adviser: Tarkington Newman

Erik Montoya

Health Sciences

Is Anticipated Body Positioning Associated with Impact Magnitudes in Youth Lacrosse? A Pilot Study

Adviser: Trish Kelshaw

Christopher Mottola

Computer Science

Parallelized Partial Differential Equation Solvers for Fast Fourier Transform Library

Adviser: John Gibson

Eman Nkounkou

Neuroscience and Behavior

Evolutionary Biology of Sensory Receptors and Pathway Components in Cnidaria

Adviser: David Plachetzki

Kyle Nord

Anthropology, Classics

Pirating Sunken Ships: Why Underwater Archaeological Sites Need Our Protection

Adviser: Alexandra Martin

Nicole Oberholtzer

Neuroscience and Behavior

Does Prior Concussion History Predict Concussion Incidence in Middle School Athletes?

Adviser: Trish Kelshaw

Harrison Parent

Biochemistry, Molecular and Cellular Biology

Targeting the BCL6 Transcription Factor in Ovarian Cancer

Adviser: Sarah Walker

Braian Powtak

Homeland Security

Social Media Use and Party Affiliation Correlation

Adviser: Dante Scala

Anthony Quiles

Political Science

Sweet Emotion: How Does National Mood Affect Voter Turnout?

Adviser: Dante Scala

Jack Ryan

Political Science

Knowledge of State-Level American Government among Rural and Urban Populations

Adviser: Dante Scala

Lara Santos

Environmental Conservation and Sustainability

Impacts of Roads on Predator Presence in Southeastern New Hampshire

Adviser: Rem Moll

Benjamin Scanlan

Justice Studies, Psychology

Consequences of Juvenile Detainment

Adviser: Ellen Cohn

Zakiya Scott

Biomedical Science

Phototransduction, Evolution and Sensory Abilities of Cnidaria

Adviser: David Plachetzki

Emily Soule

Economics, Political Science

The Opioid Crisis In New Hampshire: Public Opinion vs. Number and Nature of Bills Introduced to the State Legislature

Adviser: Dante Scala

Hailey Stevens

Nursing

Quality of Life and Symptom Sharing among Women with Athletic Urinary Incontinence

Adviser: Kerry Nolte

Michaela Stoncius

Chemistry, Political Science

The Relationship between Feelings on Non-Christian Religions and U.S. Foreign Relations

Adviser: Dante Scala

Nick Suga

Political Science

Attitudes towards the Legalization of Marijuana

Adviser: Dante Scala

Patrick Walsh

Political Science

Swing Voters in U.S. Presidential Elections

Adviser: Dante Scala

Jackson Weinbeck

Political Science

How Americans Vote Based on Their Income

Adviser: Dante Scala

Ali Whitman

Occupational Therapy

Sensory Scouting: An Investigation of Supports for Sensory Needs of Children in Local Businesses

Adviser: Sarah Smith

All Colleges Undergraduate Research Symposium

Oral Presentations, Session C

Friday, April 22**12:15–1:25 p.m.****Memorial Union Building**

The All Colleges Undergraduate Research Symposium showcases students from all disciplines. Students present their faculty-mentored projects in one of two interactive poster sessions, or in one of three oral presentation sessions. University-wide participants come from a variety of disciplines.

MUB, Room 338

Challenges Facing Japan: Rising or Setting Sun?

Adviser: Lawrence C. Reardon

Moderator: Marina Cardoso-Vianna-Vaz

Nour AlHajjiriInternational Affairs, Political Science
*Japanese Economic Miracle***Carly Brady**International Affairs, Sociology
*Gender Inequality in Japan***Harrison Clark**

Political Science

*Causes and Consequences of Japan's Aging Population***Eadie Pitono**International Affairs, Political Science
*Trading with the Enemy: The Complexities of Sino-Japanese Economic Ties***Chloe Schnitt**English, History, International Affairs
Japan's Declining Role on the International Stage

MUB, Room 302**Multidisciplinary Session III**

Moderator: Kate Gaudet

Emily AbrusciEnvironmental Conservation
and Sustainability**Nathan Brennan**

Business Administration

Grey-t Water

Adviser: Ian Grant

Sarah Bell

Sociology

*Changing Perceptions of Masculinity and
Femininity in America*

Adviser: Catherine Moran

Kyana Burgess

Anthropology, Sustainability

*Exploring Race, Sex, Age, and Geographic
Location Discrepancies in Missing Persons
Reports: The Northern New England
Perspective*

Adviser: Amy Michael

Tu Anh Duong

History

*Competing Visions of Race in
American History*

Advisers: Kurk Dorsey,

Jeffrey Frenkiewicz

Jamie Mater

Psychology

*The Troubled Teen Industry and Its
Effects: An Oral History*

Adviser: Robert Eckstein

Brenna Niziak

Justice Studies, Psychology

*The Need for Guidance: Depression
as a Mediator between Parental
Monitoring and Delinquency*

Adviser: Ellen Cohn

MUB, Room 330**Politics, Religion and Literature
in the Pre-Modern World**

Moderator: R. Scott Smith

Mackenzie Gauthier

Nursing

*Women in Movement: My Family's Oral
History of the Italian Resistance*

Adviser: Anna Wainwright

Maggie Joyce

Classics, History

*The Vocabulary of Sacred Spaces
in Pausanias*

Adviser: Stephen Trzaskoma

Chloe Kofman

Italian Studies, Religious Studies

*Chi Sono: An Exploration of Jewish Food
in Italy with a Dash of Personal Identity*

Adviser: Anna Wainwright

AJ O'Neil

Classics, Information Technology

*The Capitolium of Ostia Antica: Building
a 3D Visual Experience*

Adviser: R. Scott Smith

Camden Roy

Classics, Italian Studies

*Calling up the Dead: Translating the
Footnotes to Odysseus' Underworld
Journey*

Adviser: R. Scott Smith

Thomas Vachon

Classics

*Theater, the Demos, and the Polis:
Theater's Influence on Athenian Society
in "The Frogs"*

Adviser: Stephen Trzaskoma

MUB, Room 334**Ukraine Today, Taiwan and
Myanmar Tomorrow?**

Adviser: Lawrence C. Reardon

Moderator: Thomas McDonough

Zachary Francis

Political Science

*China's Struggle for Dominance in the
South China Sea***Marc Giudice**

International Affairs, Political Science

*Tug of War: The Use of Force in
Disputed Territory***Michelle Lee**

Computer Science, International Affairs

*Myanmar Conflict: The Underwhelming
International Response***Ronan Pleszkoch**

History, International Affairs

*Taiwan's Struggle for Sovereignty***Colin Scully**

Political Science

Obstacles to Taiwanese Independence

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

Poster Session I

Friday, April 22

9–10:30 a.m.

Paul College, Rooms G35, G45, and Great Hall

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.

ECON 774: Bachelor of Arts in Economics

Adviser: Reagan Baughman

Ian Bellino

Economics, Justice Studies

How Taxes Affect Entrepreneurship and Investment

Jacob Brancato

Economics

Effects of Economic Policy on Use of Plastics

Tasha Bui

Economics

Sugar-Based Taxes: First They're Sweet, Then They're Sour

Christopher Cole

Economics

Effects of Increasing Student Loan Debt on Home Ownership

Ryan Dixon

Economics

Economic Consequences of Aggressive Antitrust Policy

Matthew Gillespie

Economics

The Factors That Impact Economic Growth in Developing Countries

John Helmanis

Economics, Finance

Student Loans and Their Effects on Asset Accumulation

Geumsol Hwang

Economics

The Effect of Education Background on Wage of American Workers: Analysis of Wage Gap According to Educational Background

Shane Kelley

Economics

The Roots of the Puerto Rican Financial Crisis and the Road to Recovery

Kyle MacEachern

Economics

The Health Effects of Cigarette Taxes

Evan McParland

Economics, Finance

Does the Corporate Income Tax Kill Investment?

Fabiana Paolini

Economics, Italian Studies

The Effects of China's Aging Population on Economic Growth

Kaitlyn Price

Economics, Neuroscience and Behavior

Moral Hazard: A Driver of Rising Health Care Costs?

Andrew Schiller

Economics

The Economic Effects of Cancelling Student Debt

Greg Scott

Business Administration, Economics

COVID-19's Unprecedented Impact on U.S. Firms

Samuel Shepard

Economics

The Impact of Big Tech on the American Economy: Is an Antitrust Policy Appropriate?

Carter Snow

Economics

The Effects of the Gig Economy on U.S. Workers

Emily Soule

Economics, Political Science

Universal Basic Income: A Response to Job Automation?

Derek Tammaro

Economics

The Gender Pay Gap and Economic Inequality

ECON 775: Bachelor of Science in Analytical Economics

Adviser: Aziz Saglam

Jack Becker

Benjamin Swift

Analytical Economics

Henry Lavoie

Analytical Economics, German

School Funding and Student Achievement

Ian Berens

Tristan Pavarini

Analytical Economics

Effects of the Minimum Wage on Employment

Eric Ciarla

Analytical Economics, Philosophy

Alina Wright

Analytical Economics

Economic Influences on Marriage and Divorce

Benjamin Clement

Diego Smith

Analytical Economics

Is Bitcoin Price Correlated to the Stock Market?

Nathaniel Cohen

SeanPatrick Flynn

Analytical Economics

The Impact of COVID-19 Pandemic on Poverty

Briggs Haugen

Abram Rock

Analytical Economics

Factors Affecting Crime Rates

Justine Jonathan

Kieran McCormack

Analytical Economics

How Has the COVID-19 Pandemic Impacted Inflation?

Nicole Jutras

Analytical Economics, Educational Studies, International Affairs

Liam Morrissey

Analytical Economics

Impact of the COVID-19 Pandemic on Work Hours and Productivity

Camden Leno

Analytical Economics

Sarah Wilkinson

Analytical Economics, Sustainability
Determinants of Success in Major League Baseball

Andrew Meyer

Analytical Economics, Philosophy

Cameron Taatjes

Analytical Economics

COVID-19 Pandemic and the Housing Market

Shane Murphy

Colin Sprague

Analytical Economics

Are the More Educated More Likely to Use New Drugs?

Bryce Shaw

Eric Tseng Tseng

Analytical Economics

Blockchain, Cryptocurrencies and Central Banks

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

Oral Session I

Friday, April 22

9:30–11 a.m.

Paul College, Room G25

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.

The Mel Rines Student Angel Investment Fund

Advisers: Laura Hill, Jeffrey Sohl

Kelsie Dawe

Ellie Johnston

Finance

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

Oral Session II

Friday, April 22

10–11:30 a.m.

Paul College, Room G85

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

Emma Battistelli

Thomas Berthasavage

Mark Borak

Zachary Broder

Kelley Burzlaff

Joe Chavez

Aran Cherouvis

Patrick Cotton

Jacob Emerson

Jack Flanagan

Jack Gillis

Carolyn Hoadley

Jared Jesseman

Fazla Karim

Christopher Natola

Johanne Nichols

Kyle Polito

James Randazzo

Allie Reyes

Aidan Rolfe

Maiah Seul

John Standish

Evan Vogler

Mckenna Wilson

Finance

Sarah Blampied

Accounting, Finance

Benjamin Clement

Olivia Graves-Witherell

Samuel Hussey

Diego Smith

Cameron Taatjes

Analytical Economics

Patrick Fleming

Management

Cole Giannasca

Jason Plant

Luke Stradley

Entrepreneurial Studies

Adam Gray

Economics, Finance

Conor Jowett

Jae Yun

Accounting

Joseph Lampe

Cameron Marshall

Economics

Andrew Meyer

Analytical Economics, Philosophy

Chloe Villemure

Information Systems and Business Analytics

Sarah Wilkinson

Analytical Economics, Sustainability

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

Poster Session II

Friday, April 22
11 a.m.–12:30 p.m.
Paul College, Room G35, G45,
and Great Hall

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.

Eco-Gastronomy

Adviser: Dan Winans

Jordan Bohan

Ecogastronomy, Marketing
Good, Clean, and Fair Food Careers

Tanner Drake-Deese

Ecogastronomy, Sustainable Agriculture and Food Systems
Sensory and Sustainability: Food Pairing and Brewing Practices

Madison Herman

Ecogastronomy, Nutrition
Exploring EcoGastronomy through UNH Dining

Annah Santarosa

Ecogastronomy, Hotel and Hospitality Management
Turning the Tables: An Analysis and Guide to Sustainable Food Service

Kendra Spencer

Ecogastronomy, Nutrition
Exploring Gleaning: Education Campaign for Gather

Britt Wicander

Ecogastronomy, Philosophy
Analyzing the Sustainability of Intentional Living Communities

Multidisciplinary/Honors Thesis

Daniel Andrews

Accounting, Finance
The Effects of the COVID-19 Pandemic on Audit Quality and Timeliness
 Adviser: Md Safayat Hossain

Jenna Barrows

Accounting, Information Systems and Business Analytics
The Effect of Work Location on Employee Job Acceptance
 Adviser: Yunshil Cha

Sarah Blampied

Accounting, Finance
Income Inequality Has Been Expanding over the Decades: What Are the Main Contributing Factors?
 Adviser: John Hasseldine

Emily Bolognino

Economics, Justice Studies
The Effect of Infertility Treatment on Female Labor Supply in the United States
 Adviser: Reagan Baughman

Sydney Boulanger

Management
How Team Climate Influences Creativity, Collaboration, and Productivity
 Adviser: Vanessa Druskat

Zachary Broder

Finance
How BHB Pest Elimination Will Dominate the Pest Control Industry
 Adviser: Lee Mizusawa

Anders Brucker

Business, Finance
Stability of Reward Tokens
 Adviser: Jun Li

Timothy Campbell

Economics
How Can Becoming a Tax Haven Benefit a Nation?
 Adviser: Andrew Seal

Elizabeth Dion

Accounting, Finance
Executive Compensation Gap for Women: Examining the Implications of the California Board Composition Mandate
 Adviser: Steve Irlbeck

Maria Eduarda Dos Santos Koch

Accounting
Expanded Audit Reports: The Effects of Critical Audit Matters on Investors and Firms
 Adviser: Le Emily Xu

Jill Durkin

Economics, Finance
A Choice Experiment to Determine Consumer Preference for EVs in New England
 Adviser: Scott Lemos

Harrison Flagg

Management

Kimberly Yuen

Occupational Therapy
Give the People What They Want: Quantitative Decision Making for Entertainment Venues
 Adviser: Peter Zaimes

Kathleen Flath

Finance
The Value of Impact Investing
 Adviser: Richard Kilbride

John Helmanis

Economics, Finance
Should Cryptocurrency and NFTs be Taken as Collateral?
 Adviser: Richard Kilbride

Nicole Jutras

Analytical Economics, Educational Studies, International Affairs
Impact of Vocational Education on Wages in Germany
 Adviser: Reagan Baughman

Noah Lapointe

Management, Marketing
Paying Attention: The Effects of Different Social Media Posts on Consumers
 Adviser: Justin Pomerance

Thurston Mann

Economics, German
The Effects of COVID-19 on the Bicycle Supply Chain: An Investigation into the United States Bicycle Imports
 Adviser: Loris Rubini

Cameron Marshall

Economics
The Velocity of Monetary Policy
 Adviser: Michael Goldberg

Andrew Meyer

Analytical Economics, Philosophy
The Health Cost of Anthropogenic Pollution
 Adviser: Bradley Herring

Rebecca Milbury

Information Systems and Business
 Analytics, Marketing
Examining UNH Paul College's Brand Image in Students and Faculty
 Adviser: Diane Devine

Nicholas Mokas

Accounting
The Need for Technology in Higher Education's Accounting Curriculum
 Adviser: Jonathan Nash

Liam Morrissey

Analytical Economics
How Can We Bee Helpful? An Analysis of Pesticide and Commercial Pollinator Use
 Adviser: Stephanie Brockmann

Alexis Pimental

Finance
Criminal Behavior within the Youth and How These Factors Affect Business Development
 Adviser: Luciana Echazu

Ashley Pineault

Finance
Better Investment: Bitcoin or Ethereum?
 Adviser: Michael Hanlon

Ethan Pollet

Information Systems and Business Analytics
A Different Type of Virus: How Has the COVID-19 Pandemic Affected Data Breaches and Ransomware?
 Adviser: Jing Wang

Lucas Schnare

Finance
Developments of Cryptocurrency and Its Growing Role in Our Financial System
 Adviser: Zhaozhao He

Joslyn Villavicencio

Management
Examining the Effectiveness of Video Marketing Based on Consumer Attitudes: Differences between Gen Z and Baby Boomers
 Adviser: Thomas Gruen

Jessica Walsh

Business Administration
Privacy Paradox: The Impact a Health Crisis Has on Individual Views Regarding Privacy and Data Collection
 Adviser: Ermira Zifla

Sarah Wilkinson

Analytical Economics, Sustainability
ESG Disclosure in STARS Rated University Endowments
 Adviser: Wenjuan Xie

Hannah Wirth

Information Systems and Business Analytics
Experiential Learning versus Microcredentials: Educational Needs of Undergraduate Students and Working Professionals
 Adviser: Scott Lemos

Brahim Yatim

Economics, Political Science
The Real Cost of Mining: How Digging for Rare Earth Metals Could Pose a Greater Cost than Electric Vehicles Can Save
 Adviser: Bruce Elmslie

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

Oral Session III

Friday, April 22

11:30 a.m.–1 p.m.

Paul College, Rooms 175, 225, and 235

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

Rye Alley

Management, Marketing

Ladd-Patrick Fagerson

Marketing

Lauryn Murray

Marketing

Nathan Walker

Finance, Marketing

Michela Ur

Information Systems and Business

Analytics, Marketing

Super Secret Ice Cream: Design and Develop Marketing Programs to Grow Awareness of and Increase Business for This Bethlehem, NH, Woman-Owned Start-Up Company

Kaitlyn Antonides

Finance, Marketing

Travis Arnold

Marketing

Jill Broom

Marketing

Kevin McGrath

Marketing

Shania Robinson

Marketing

Samuel Taub

Marketing

Trevor Cardin

Finance, Marketing

Wright Collective: Research, Design, and Develop Marketing Programs to Increase Awareness of and Engagements for This York, Maine, Fundraising Consulting Services Company

Marco Bernasconi

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Finance, Marketing

Bring Back the Trades: Design and Develop Marketing Programs Aimed at Increasing Awareness for This Rye, NH, Non-Profit Organization That Provides Incentives and Scholarships to Young People to Learn a Trade

Eric Berry

Marketing, Sustainability

Abby DansreauHotel and Hospitality Management,
Marketing**Katelyn Howe**Information Systems and Business
Analytics, Marketing**Kira Nolan****Kendrick Shaw****Donald Willeman**

Marketing

*Outdoor New England: Research, Design, and Develop Marketing Programs to Increase Awareness of and Generate New Business for This Franklin, NH, Retailer of Outdoor Equipment, Primarily for Water-Based Sports***Jordan Bohan**

Ecogastronomy, Marketing

Thomas Costa**Madison Litka****Hanna Manca****Andrea Price**

Marketing

Andrew McIntosh

Marketing, Spanish

*Allegiant Physical Therapy: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and New Clients for This Durham, NH, Physical Therapy Practice***Tanner Brown****Katharine Hawkinson****Colton Krasinski****Anna Pysz**

Marketing

Michael Dambach**Noah Lapointe**

Management, Marketing

*The Nest Family Cafe: Research, Design, and Develop Marketing Programs to Help Launch and Grow Awareness for This New Family-Oriented Start-Up Coffee Shop Business Located in Londonderry, NH***Megan Bufagna****Dylan Degon****Liam Fay****Curtis Grundy****Reid Kirkpatrick****Daria Kuznetsova****Nicholas Meeker**

Marketing

*iWorx Systems: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and Attracting New Customers to This Dover, NH, Supplier of Scientific Laboratory Equipment for Physiology Teaching and Research***Brooke Burdon****Emily Dysart****Matthew Havey****Deisry Huliselan**

Marketing

Paul Hernandez

Finance, Marketing

Emily O'Keefe**Austin Wentzel**

Management, Marketing

*Your Oil Tools: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and Generating New Business for This Hooksett, NH, Supplier of a Wide Range of Essential Oil Products***Benjamin Cappiello****Calvin Kobylinski**

Finance, Marketing

Cameron McNally**Lily Scott****Brook Soucy**

Marketing

Kemal Warouw

Management, Marketing

*Service Federal Credit Union: Research, Design, and Develop Marketing Programs Aimed at Increasing Awareness of and Attracting New Customers to This Portsmouth, NH, Financial Services and Banking Business***Adam Costa****Emma Zupo**

Marketing

Libby Hart

Economics, Marketing

John King

Management, Marketing

Matthew O'Neill

Finance, Marketing

Zachary Suozzo

Information Systems and Business

Analytics, Marketing

*Lillian Montalto Signature Properties International: Research, Design, and Develop Digital Marketing Programs Aimed at Expanding Awareness of and Clients for This Andover, MA, Distinctive Properties Real Estate Company***Stephen Cote****Kayla Edminster****Ariana Horne****Brendyn Marsh****Nicole Petry****Joseph Viola**

Marketing

*NewVo Interiors: Design and Develop Marketing Programs Aimed at Increasing Online Awareness of and New eCommerce Business for This Manchester, NH, Supplier of Office Furniture***Tristan Crone****Justin Diamantopoulos****Tanner Mills**

Marketing

Alicia Hanlon

Management, Marketing

Adena Rothbard

Information Systems and Business

Analytics, Marketing

Tori Rothwell*Entrepreneurial Studies, Marketing The Memorial Union Building (MUB) at UNH: Design and Develop Marketing Programs to Grow Awareness of and Increase Use of Facilities and Programs at the MUB on the UNH Durham Campus*

Bryan DeCristoforo

Jillian Lawrence

Ryan Meader

Will Rudaz

Marketing

Benjamin Merrill

Marketing, Recreation Management
and Policy

Ashley Round

Accounting, Marketing

*Alchemists' Workshop: Design and
Develop Marketing Programs to Increase
Awareness of and Promote Ticket Sales and
Attendance at Productions Produced by
This Henniker, NH, Non-Profit Regional
Theater Company*

Ryan Ellsworth

Shreya Yadav

Finance, Marketing

Thomas Meagher

Kyle Rayment

Mariana Salazar Sanchez

Marketing

Steve Phan

Entrepreneurial Studies, Marketing
*Reveal Yoga: Design and Develop
Marketing Programs to Grow Awareness of
and Increase Business for This Bethlehem,
NH, Woman-Owned and Operated
Yoga Business*

Patrick Finnie

Matthew Hickman

Matthew Minton

Colton Seidel

Marketing

Olivia Gagnon

Art: Studio Art, Marketing

Zachary Loesch

Anthropology, Marketing

Phoebe Myers

Communication, Marketing

*Malloy Events: Design and Develop
Marketing Programs to Increase Awareness
of and Grow Business for This Rochester,
NH, Event Management Company*

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

Poster Session III

Friday, April 22

1–2:30 p.m.

Paul College, Great Hall

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.

Economics of Sports

Adviser: James Wible

Ian Berens

Analytical Economics
*The Labor Market of the
New England Revolution*

Brendon Bussiere

Finance
Chelsea and Their Labor Department

Colin Byrne

Economics, Finance
Labor Market of Rally Car Racing

Michael Clow

Finance
Firm Side of the Philadelphia Union

Joey DeSimone

Economics
Boston Bruins and How They Operate

SeanPatrick Flynn

Analytical Economics
Labor Analysis of the Boston Red Sox

Natalie Gagnon

Finance
Los Angeles Angels

Adam Gray

Economics, Finance
The Economics of the New England Patriots

Libby Hart

Economics, Marketing
The LA Rams — SoFi Stadium

Paul Holloway

Entrepreneurial Studies, International
Business and Economics
The Economics of Formula 1 Teams

Ryan Johnson

Economics
Cincinnati Bengals and Their Labor Market

Wesley Kunin

*The Anaheim Ducks and Their
Labor Market*

Derek Long

Economics
Formula 1 and the Labor Market

Benjamin MacKillop

Economics, Political Science
*The Economic Impacts of the Ultimate
Fighting Championship*

Fabiana Paolini

Economics, Italian Studies
*A Microeconomic-Labor Analysis of the Los
Angeles Lakers NBA Franchise*

Jacob Parilla

Management
The Vegas Golden Knights and Their Firm

Henry Piacquad

Economics
*The Cleveland Browns and Their
Labor Market*

Clara Richards

Economics
*Gender Inequalities in Sports and the
Economics behind It*

Greg Scott

Business Administration, Economics
The Economics behind the Red Sox

Bryce Shaw

Analytical Economics
The Boston Bruins and Their Labor Market

Kyle Sheehan

Economics, Finance
Boston Celtics as a Win-Maximizing Franchise

Colin Sprague

Analytical Economics
The Toronto Maple Leafs and Their Labor Market

Dylan Stiles

Statistics
A Labor Analysis of the Tampa Bay Rays Franchise

Adam Wilkinson

Environmental and Resource Economics
The Chicago Bulls and Their Firm's Economics

UNH Manchester URC Engineering Technology Day

Senior Project Presentations

Friday, April 22
9 a.m.–4 p.m.
88 Commercial St., Room 201
Manchester

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.

Adviser: Robert Arredondo

Kaitlyn Abele

Christian LaRosa
Mechanical Engineering Technology
Kevin Coleman

Jonathan Nguyen

Quinn Toulouse
Electrical Engineering Technology
UNHM VEX U Robotics Competition Team UNHM-3

Logan Audsley

Patrick Baker
Andrew Kraemer
Joren Schamel
Mechanical Engineering Technology
UNHM VEX U Robotics Competition Team UNHM-1

Stephen Dunleavy

Jason Kephart
Electrical Engineering Technology
Carl Mills

Anh Nguyen
Mechanical Engineering Technology
UNHM VEX U Robotics Competition Team UNHM-5

Colby Hammond

Connor Skane
Electrical Engineering Technology
Marina Ngalula
Mechanical Engineering Technology
Joshua Shevlin
Electrical Engineering Technology,
Mechanical Engineering Technology
UNHM VEX U Robotics Competition Team UNHM-2

Troy Lovecky

Mohammed Sukkar
Electrical Engineering Technology
Elizabeth Marcoux
Andrew Snitgen
Mechanical Engineering Technology
UNHM VEX U Robotics Competition Team UNHM-4

The Naked Arts— Creativity Exposed!

Act III

Friday, April 22
12:15–1:25 p.m.
Memorial Union Building, Theatre I

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.

Victoria Dean

Art: Art History
Both Sides of the Easel: Impressionism and Women
Adviser: Susan Wager

Megan Linehan

Theatre
Growth through Pain
Adviser: Gay Nardone

Serenity Morris

Theatre
Salim Salim, Set Design and Research
Adviser: Szu-Feng Chen

Cathryn Scanlon

Accounting
Pieces
Adviser: Clark Knowles

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

Bud Albin Challenge Round

Friday, April 22

1-4 p.m.

Paul College, Rooms G85, 115, 135, and 175

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 22

1-4 p.m.

Pettee Hall, Rooms 106, 114, and G02

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.

Elizabeth Christy

Neuroscience and Behavior

The Effects of a Single Bout of Acute Aerobic Exercise on Alpha and Beta Oscillations in Recognition Memory

Advisers: Ronald Croce, Robert Ross

Rachel Courter

Communication Sciences and Disorders

Assessing How Adults Produce and Understand the Melody and Rhythm of Speech

Adviser: Jill Thorson

Maison D'Amelio

Biomedical Science

The Effects of Post-Meal Walking on Daytime Blood Pressure in Young Adult Women

Adviser: Michael Brian

Megan Knuettel

Social Work

The Dual Pandemic: COVID-19, Systemic Racism, and College Student-Athletic Mental Health

Adviser: Tarkington Newman

Virginia Mercier

Social Work

CPYD (Critical Positive Youth Development) Focused Coach Education

Adviser: Tarkington Newman

Kersten Mercurio

Occupational Therapy

Life after the Intensive Care Unit:

Understanding Patient Needs

and Experiences

Advisers: Jamme Morency, Vidya Sundar

Grace Roy

Health Management and Policy

Tele-ACT and Recreational Therapy:

Adapting Acceptance and Commitment

Therapy for Telehealth Delivery to Support

People with Chronic Pain during the

COVID-19 Pandemic

Adviser: Semra Aytur

Kristen Sinagra

Health Sciences

Children with Attention Deficit/

Hyperactivity Disorder Have a Greater

Likelihood of Comorbid Depression

Adviser: Trish Kelshaw

Hailey Stevens

Nursing

Quality of Life and Symptom Sharing

among Women with Athletic

Urinary Incontinence

Adviser: Kerry Nolte

Ali Whitman

Occupational Therapy

Sensory Scouting: An Investigation of

Supports for Sensory Needs of Children in

Local Businesses

Adviser: Sarah Smith

Psychology Department George M. Haslerud Undergraduate Research Conference

**Friday, April 22
1–4 p.m.**

McConnell Hall, Room 220

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.

Madison Bouchard Liporto

Justice Studies, Psychology
Affective Forecasting and Mood Disorder Symptoms: How Clinical Symptoms Relate to the Prediction of Future Emotions
Adviser: Jolie Wormwood

Maggie Crean

Psychology
Hypothetical Emotional Behaviors across the Life-Span
Adviser: Michelle Leichtman

Imane Defaa

Psychology
The Role of Epistemology in Discourse Comprehension
Adviser: Laura Allen

Molly Hodgson

Psychology
Comparing the Trajectories of Low and High Baselines of Youth Delinquency
Adviser: Lisa Jones

Paxton Morley

Justice Studies, Psychology
COVID-19 Rule Following and Rule Violating Behaviors and Vaccine Hesitancy/Willingness: Do Anxiety, Depression, Anger and Belief in COVID-19 Vaccine Myths Make a Difference?
Adviser: Ellen Cohn

Miah Munro

Psychology
Understanding the Personality of a Coworker
Adviser: John D. Mayer

Morgan Parrish

Psychology
Student Experiences during COVID-19 Pandemic
Adviser: Pablo Chavajay

Elizabeth Phelps

Justice Studies, Psychology
Just Give Me a Reason: Expanding the Legal Socialization Model to Accommodate Personal Intelligence
Adviser: Ellen Cohn

Aubrey Porter

Psychology
EEG Patterns of Motor Memory Consolidation Depend on Practice Structure: A Comparison between Variable and Repetitive Practice Schedules
Adviser: Ronald Croce

Morgan Thomas

Psychology
Vicarious Memories Between Parents & Children: Examining the Impact of Subjective Well-Being and the Presence of the Reminisce Bump
Adviser: Michelle Leichtman

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

**Friday, April 22
1–5 p.m.**

Murkland Hall, Room G17

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

Olivia Balabanis

International Business and Economics, Spanish
Spanish Movie
Adviser: Jaume Marti-Olivella

Ethan Crossman

Geography, Linguistics
Migration and Taiwanese Hokkien's Geographical Distribution of Lexicon Items
Adviser: Tu Lan

Bernadette Farmer

Economics, Spanish
Migration in NH: Expanding Linguistic and Cultural Bonds, La Bitácora de Bernadette
Adviser: Mauricio Pulecio

Harrison Flagg

Management
Retratos de Visibilidad: Shedding Light on Hispanic Culture and Presence in New Hampshire
Adviser: Lori Hopkins

Peter Gerhard

Spanish
Acquisition of a Second Language for Spanish Speakers in an English-Based Education System
Adviser: Mauricio Pulecio

Peter Gerhard

Spanish

Spanish Film

Adviser: Jaume Marti-Olivella

Zoie Haskell

History, International Affairs, Women's and Gender Studies

Rhetoric About Islam and Its Lingering Effects on American Muslims and Arabs

Adviser: Svetlana Peshkova

Augustin Korsh

Psychology, Spanish

Spain's Economic Crisis and the New Political Scene

Adviser: Jaume Marti-Olivella

Bryn Larkin

Management, Spanish

¡El color, El Amor, La Ropa - Ay! (El impacto de Pedro Almodóvar)

Adviser: Carmen Garcia-Rasilla

Seth Mandravelis

French, German, Humanities

A Polyglot's Handbook

Adviser: Holly Cashman

Gillian Reynolds

Spanish, Sustainability

Cafe and Cultura: Coffee as a Vehicle for Shared Culture

Adviser: Holly Cashman

James Silveria

Educational Studies, Spanish

Dual-Immersion Bilingual Education in New Hampshire

Advisers: Holly Cashman, Lori Hopkins

Emily Zaleski

Spanish

Indigenous Identity in Latin America

Adviser: Lori Hopkins

Honors English Undergraduate Research Conference

Friday, April 22**2–3:30 p.m.****Hamilton Smith Hall, Room 205**

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

Tara Hohn

English Teaching, History

*Shakespeare's Deviation from His**Predecessors: Aligning Romeo and Juliet**with Italian Renaissance Marriage Culture*

Adviser: Douglas Lanier

Katie Hoppeler

Economics, English/Journalism

Budapest Spring 2022 Travel Writing

Adviser: Tom Haines

Olivia Marnell

English, International Affairs

*To the Farthest Ports of the**Rich East: Exploring and Writing**Salem, Massachusetts*

Adviser: Sue Hertz

Kaitlin Miller

English Teaching

*Exploring Educators' Perceptions of**Legislation about Discrimination*

Adviser: Alecia Magnifico

Senior B.A. & B.F.A. Exhibition and Preview Reception

Friday, April 22**4–6 p.m.****Paul Creative Arts Center, Museum of Art**

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

Madison Albanese

Fine Arts

Madi's Mixed Media

Adviser: Julee Holcombe

Luccas Booth

Fine Arts

Layered Space

Adviser: Brian Chu

Lorna Bostwick-Pope

Fine Arts

Biomorphic Boxcar

Adviser: Julee Holcombe

Haley Dewsnap

Studio Art

Undercurrents

Adviser: Julee Holcombe

COLSA Undergraduate Research Conference

Oral Presentations

Saturday, April 23
8:15–10 a.m.
Memorial Union Building,
Theatre II

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.

Lindsay Cartmell

Biology

Alexis McGarry

Mechanical Engineering

Katie Swenson

Ocean Engineering

North Atlantic Right Whale (Eubalaena glacialis) Entanglement: A Scaled Model Simulation Offers Potential Mooring System Engineering Solutions

Adviser: M. Robinson Swift

Anna Metzler

Biomedical Science

Looking at the Effects of M0-, M1- and M2-Polarized Macrophages on Waldenstroem Macroglobulinemia Cell Viability and Proliferation

Adviser: Sherine Elsawa

Harrison Parent

Biochemistry, Molecular and Cellular Biology

Targeting the BCL6 Transcription Factor in Ovarian Cancer

Adviser: Sarah Walker

Dominick Tavares

Nutrition

Understanding the Division I Athlete's Understanding of Nutrition

Adviser: Kevin Pietro

COLSA Undergraduate Research Conference

Poster Presentations

Saturday, April 23
10:10 a.m.–12 p.m.
Memorial Union Building,
Granite State Room

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.

Ry Andruk

Wildlife and Conservation Biology

Location, Location, Location: Common Tern (Sterna hirundo) Nest Site Selection in the Gulf of Maine

Advisers: Aliya Caldwell, Elizabeth Craig

Chiara Antonioli

Biomedical Science

The Role of Histone Variants in Regulating Gene Expression in the Protozoan Parasite Toxoplasma gondii

Adviser: Vicki Jeffers

Alexa Aubrey

Brigid Lamprey

Genetics

Population Structure and Dispersal of Prairie Warblers in the Central and Eastern United States

Adviser: Adrienne Kovach

Ian Ayer

Christopher Martinez

Biochemistry, Molecular and Cellular Biology, Biomedical Science

Does Prostaglandin F2alpha Have an Effect on the Expression of the Angiogenic Inducer, CCN1, in Tumor Ovarian Granulosa Cells?

Adviser: Paul Tsang

Karina Babina

Biomedical Science

Inactivation of Corticostriatal Pathway and Connections to Associative Learning through Nicotine Stimulus in Sprague Dawley Rats

Adviser: Sergios Charntikov

Nadire Bek

Biomedical Science

The Accumulation of Anticoagulant Rodenticides in Lynx rufus from New Hampshire, New Jersey, and New York, USA

Advisers: David Needle, Inga Sidor

Julie Bobyock

Environmental Sciences

Investigating the Impacts of Active Layer and Permafrost Microbial Community Interaction in a Changing Climate through 3-Week Incubation

Adviser: Jessica Ernakovich

Caitlin Borges

Sustainability, Zoology

Arsenic in the Bolles Avian Collection: Developing a Best Practice for Handling Specimens Treated with Historical Taxidermy Methods

Adviser: Janet Anderson

Sarah Bourgoin

Biochemistry, Molecular and Cellular Biology

Effects of HIF1a on Transcription Factor STAT3 in High Grade Serous Ovarian Cancer

Adviser: Sarah Walker

Bethany Bussey

Biomedical Science

Natural Disease Suppressiveness of Wood Fiber Substrates

Adviser: Anissa Poleatewich

Suzannah Buzzell

Wildlife and Conservation Biology

The Effect of Forest Degradation on the Population Distribution of Mammals in the Bartlett Experimental Forest, New Hampshire

Adviser: Rem Moll

Shayla Callahan

Biomedical Science

Glaucoma in Dogs

Adviser: Inga Sidor

Lindsay Cartmell

Biology

Alexis McGarry

Mechanical Engineering

Katie Swenson

Ocean Engineering

North Atlantic Right Whale (Eubalaena glacialis) Entanglement: A Scaled Model Simulation Offers Potential Mooring System Engineering Solutions

Adviser: M. Robinson Swift

Justine Cassel

Marine, Estuarine and Freshwater

Biology, Sustainability

Cyanobacteria Monitoring in Brackish Lakes Using Phycoerythrin, Phycocyanin and Size Fraction Analysis

Adviser: James Haney

Emily Chen

Environmental Sciences

Impact of Drought Stress on Oak Stomatal Size and Density at Thompson Farm, NH

Adviser: Heidi Asbjornsen

Madeleine Clement**Evelyn Proctor**

Biochemistry, Molecular and

Cellular Biology

Reese Yeatman

Biomedical Science

Investigating the Roles of PRMT5-Mediated Epigenetic Regulations of RBPs and Histone

Adviser: Jingwei Cheng

Isabel Cole

Sustainable Agriculture and Food Systems

The Four R's: A Framework to Evaluate the Environmental Impact of

Environmental Research

Adviser: Adam Wymore

Isabella Collamati

Wildlife and Conservation Biology

Effects of Aging on the Reproductive Success of Female Saltmarsh Sparrows (Ammodramus caudatus)

Adviser: Adrienne Kovach

Haylee Crowle

Animal Science

Noise Pollution and Its Effect on Mate Quality Choice of Cricket, Teleogryllus commodus

Adviser: Jessica Briggs

Alyssa Daigle

Environmental Conservation and

Sustainability

Katherine Dennehy

Biology

Effect of Lake Air and Water Temperature on Toxic Aerosols

Advisers: Hailey Carter, James Haney, Amanda McQuaid

Olivia Deblois-Hill

Biomedical Science

Tracking and Identifying Sources of Bacterial Fecal Contamination in Northern New England: The Significance of Avian and Human Sources

Adviser: Stephen Jones

Victoria Denovellis

Neuroscience and Behavior

EEG Brainwave Pattern of App23 Mice (an Alzheimer's Disease Mouse Model) under Anesthesia

Adviser: Xuanmao Chen

Brendan Deschenes

Biomedical Science

Allelic Exchange of binK in Vibrio fischeri

Adviser: Cheryl Whistler

Maxim Desjardins

Biology

Root and Soil Carbon Responses to Long-Term Warming

Adviser: Serita Frey

Christi Donatelli

Biomedical Science

The Alterations of Gene Expression in the Cactus Mouse (Peromyscus eremicus) Due to Dietary Changes

Adviser: Matthew MacManes

Angelica Dziurzynski

Earth Sciences, Marine, Estuarine and

Freshwater Biology

Assessing Controls of Methane and Carbon Dioxide Emissions from a Temperate Reservoir

Adviser: Ruth Varner

Cheyenne Elliott

Animal Science

Anticoagulant Rodenticide Accumulation in Free-Ranging Fishers (Pekania pennanti) from Maine, USA

Adviser: David Needle

Sarah Fasanaro

Animal Science

Potential Loss of Lysine from Various Rumen Protected Lysine Products When Mixed with a Total Mixed Ration

Adviser: Nancy Whitehouse

Abigail Ferreira

Neuroscience and Behavior

Mitchell Norris

Marine, Estuarine and Freshwater Biology

Influence of Surface Tension on Production of Toxic Aerosols

Adviser: James Haney

Olivia Fortin

Zoology

Secilya Williams

Wildlife and Conservation Biology

Relative Energy Content of Stream Macroinvertebrates and Their Potential Value as a Food Source to Brook Trout

Adviser: Nathan Furey

Sydney Gendreau

Environmental and Resource

Economics, Sustainability

Sustainability in the New England Ski Industry

Advisers: John Halstead, Cameron Wake

Rachael Girroir

Animal Science

Determining Plasma Methionine or Lysine Concentrations for Lactating Holsteins Supplemented with 12 g/d and 24 g/d of Methionine from Infusion or a RP-Met Supplement Using the In Vivo Plasma Dose-Response Method

Adviser: Nancy Whitehouse

Marley Gonsalves

Marine, Estuarine and Freshwater

Biology, Sustainability

Interactions between Emiliana huxleyi, HHQ, and Emiliani huxleyi Virus

Adviser: Elizabeth Harvey

Anna Gray

Animal Science

Supplementation of Sodium Butyrate in Postweaned Limit-Fed Heifer Diets: Effects on Coccidia Counts

Adviser: Peter Erickson

Jason Hansen

Biomedical Science

*Relationship between α -Defensins, Gut Microbiome, and Glycemic Status in Bhutanese Refugees*Advisers: Sherman Bigornia,
Maria Carlota Dao**Katherine Harpster**

Neuroscience and Behavior

Analyzing Misinformation with Twitter

Advisers: Laura Allen, Sarah Creer

Kiely Hoyt

Biomedical Science

The Effects of Estradiol on the Angiogenic Factor CCN1 in Human Tumor Granulosa Cells

Advisers: Donnelly Hutchings, Paul Tsang

Ellie Hulit

Genetics

Use of Hybrid Genes to Investigate the Function of Protein Phosphatase 2A in Arabidopsis thaliana

Adviser: Estelle Hrabak

Em Irvine

Zoology

Predation Driven Phenotypic Plasticity in a Daphnia laevis/Chaoborus americanus System

Adviser: Istvan Miko

Delaney Jean

Biochemistry, Molecular and Cellular Biology

Processing Soil Cores from Adams Point in Durham, NH to See the Effect of TLP on the Salt Marsh

Adviser: Gregg Moore

Maeve Kelley

Wildlife and Conservation Biology

*Mapping Landscape Connectivity for Conservation of the Endangered Blanding's Turtle in New Hampshire*Advisers: Jennifer Purrenhage,
Rebecca Rowe**Carolyn Kennedy**

Biomedical Science

Methionine Prototype Trial Using the Area under the Curve Method

Adviser: Nancy Whitehouse

Michael Lawson

Biochemistry, Molecular and Cellular Biology

Breast Cancer Treatment: Targeting Transcription Factors

Adviser: Sarah Walker

Jessica Leach

Neuroscience and Behavior

Analyzing Differences in Functional Connectivity in Veterans with Mild Traumatic Brain Injuries Using Graph Theory Metrics

Adviser: Amy Ramage

Rachel Lewis

Marine, Estuarine and Freshwater Biology

Assessing Shifting Phytoplankton and Bacteria Population Abundances in Response to Environmental Instability

Adviser: Elizabeth Harvey

Jaxson Libby

Biochemistry, Molecular and Cellular Biology

Ovarian Cancer Treatment: Targeting STAT3

Adviser: Sarah Walker

Samantha Lynch

Biomedical Science

Determining the Effectiveness of Adi-Flow on Natural Mixed Mycotoxin Contaminated Feed Fed to Lactating Dairy Cows

Adviser: Nancy Whitehouse

Laura Lynch

Nutrition

Exploring the Impact of COVID-19 on Food Security among New Hampshire Communities

Adviser: Jesse Stabile Morrell

Forest MacKenzie

Vladimir Tkachev

Neuroscience and Behavior

Elucidating the Role of Splice Variants for the Presynaptic N-Type Calcium Channel on Thermal and Mechanical Nociception

Adviser: Arturo Andrade

Stuart Mackersie

Zoology

Evaluating Dispersal Behavior in White-Tailed Deer

Adviser: Rem Moll

Hannah Manning

Biomedical Science

Ethan O'Keefe

Biochemistry, Molecular and Cellular Biology

Identifying Individuals Vulnerable to Alcohol Abuse and Their Endophenotype

Adviser: Sergios Charntikov

Sydney Mapley

Biology

Impacts of Sampling Gear on Stream Macroinvertebrates Observed

Adviser: Nathan Furey

Trevor Massey

Biological Sciences

A Molecular Source, Field-Based Approach to Assist Wastewater Management with Implications for Public Health

Advisers: Semra Aytur, John Bucci

Anna Metzler

Biomedical Science

Looking at the Effects of M0-, M1- and M2-Polarized Macrophages on Waldenstroem Macroglobulinemia Cell Viability and Proliferation

Adviser: Sherine Elsawa

Stephen Mrenna

Marine, Estuarine and Freshwater Biology

Integrative Studies on Photobehavior and Visual Physiology in Pectinatella magnifica

Adviser: David Plachetzki

Kiara Muca

Biomedical Science

Comprehensive Avian Pathology Results of Zoo New England Submissions to the New Hampshire Veterinary Diagnostic Laboratory (2011-2021)

Adviser: Colleen Monahan

Brittney Nalesnik

Biomedical Science

Prevalence of Vaping and the Association with Cardiometabolic Risk in College Students

Adviser: Jesse Stabile Morrell

Erica Oliver

Biomedical Science

Determining the Effectiveness of Adi-Flow on Natural Mixed Mycotoxin Contaminated Feed Fed to Lactating Dairy Cows - Blood Constituents

Adviser: Nancy Whitehouse

Harrison Parent

Biochemistry, Molecular and Cellular Biology
Targeting the BCL6 Transcription Factor in Ovarian Cancer
 Adviser: Sarah Walker

Valerie Pascetta

Biochemistry, Molecular and Cellular Biology
Watching Conformational Changes of a Single Hemoglobin upon Oxygen Binding
 Adviser: Krisztina Varga

Demetrius Phofolos

Neuroscience and Behavior
Comparative Analysis of Dominant Halophyte Species' Percent Cover at Two Massachusetts Salt Marshes Following Mosquito Ditch Remediation
 Adviser: David Burdick

Emily Pratt

Biochemistry, Molecular and Cellular Biology
Targeting STAT3 in Triple Negative Breast Cancer
 Adviser: Sarah Walker

Caterina Roman

Sustainable Agriculture and Food Systems
Influence of Reducing Tomato Fruit Load on Fruit Size, Quality and Yield
 Adviser: Rebecca Sideman

Savannah Salvage

Neuroscience and Behavior
Meta-Analytic Connectivity Modeling of Psychopathic Inmate and Non-Inmate Functional Brain Networks
 Adviser: Donald Robin

Lara Santos

Environmental Conservation and Sustainability
Impacts of Roads on Predator Presence in Southeastern New Hampshire
 Adviser: Rem Moll

Samantha Schultz

Genetics
Investigating the Effects of STAT3 as a Drug Target in Breast Cancer Cells
 Adviser: Sarah Walker

Alexander Searing

Environmental Sciences
Impacts of Storm Events on Sediment Mobilization into Streams and Rivers
 Adviser: Wilfred Wollheim

Audrey Sharp

Animal Science
Using Social Media for Developing an Animal Advocacy Toolkit
 Adviser: Vanessa Grunkemeyer

Natalie Smith

Biomedical Science
Genetic Diversity of Free-Ranging Fishers (Pekania pennanti) in the Northeastern United States
 Adviser: David Needle

Charles Staff

Zoology
Evolutionary Novelty in the Male Terminalia of Mining Bees (Hymenoptera: Andrenidae)
 Adviser: Istvan Miko

Samantha Swartz

Genetics
Determining the Essentiality of Key Transcription Binding Proteins in Toxoplasma gondii through the Tetracycline Off Inducible Knockdown System
 Adviser: Vicki Jeffers

Catherine Taylor

Environmental and Resource Economics
Landscaping with Native Plants: Are Private Landowners Interested?
 Adviser: Kelly Giraud

Massle Thach

Biomedical Science
Diagnostics and Disease Surveillance of Managed New Hampshire Honey Bees (Apis mellifera) with Emphasis on Varroa destructor and Nosema spp.
 Adviser: Colleen Monahan

Vladimir Tkachev

Neuroscience and Behavior
Comparing the Performance of Glutamate Sensors with Conventional Electrophysiology in Vitro Using Hippocampal Slices
 Advisers: Arturo Andrade, Edward Song

Ari True

Biomedical Science
The Novel Erythropoietin (EPO)-Regulated Adaptor Protein, "CIORF186/RHEX", Modulates the EPO-Dependent Proliferation of Human Erythroid Progenitor Cells
 Adviser: Don Wojchowski

Megan Tyler

Biomedical Science
The N-Terminal Region of Cone Phosphodiesterase-6 Catalytic Subunits Enhances Dimerization of Its Regulatory Domains
 Adviser: Rick Cote

Sarah Waleryszak

Nutrition
Challenges and Barriers Associated with Food Security during COVID-19 among UNH Students
 Adviser: Jesse Stabile Morrell

Aidan Walsh

Genetics
Illuminating the Ancestry of Native American DNA Segments Using Genetic and "Paper Trail" Genealogy
 Adviser: Thomas Davis

Catherine Wardinski

Marine, Estuarine and Freshwater Biology, Sustainability
Microplastics in the Hampton-Seabrook Estuary: Analyzing Trends and Comparing Methodologies in Sample Collection
 Advisers: Hanna Mogensen, Gregg Moore

Lauren Welch

Genetics
An Optimized Technique for Single Larva DNA Extraction to Observe MSX in Crassostrea virginica
 Advisers: Bonnie Brown, Alyssa Stasse

Natalie White

Environmental Sciences
Controls on Carbon Gas Fluxes from a Temperate Forest Soil
 Adviser: Ruth Varner

Olivia Williams

Biomedical Science

Screening Ocean Samples from Georgia for the Presence of MSX and Dermo Using PCR and qPCR Methods

Adviser: Elizabeth Harvey

Sophia Zaslow

Zoology

The Relationship between Performance and Coloration in Eastern Red-Backed Salamanders (Plethodon cinereus)

Adviser: David Steinberg

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

Poster Presentations & Oral Presentations

Saturday, April 23

9 a.m.–2 p.m.

Paul College

FIRE is an integrated, team-based, and game-like experience for first-year 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: Energy

Team: Anotha 1

Adviser: Robert Horgan

George Acuil

Emory Bachand

Hailey Deming

Charles Greenberg

Brennan Hynes

Olivia Kennedy

Ethan Leary

Mykyle Merrill

Anthony Moussalli

Gabriel Rock

Sydney Shaw

Andrew Soden

Madison Vangellow

Macey White

Business Administration

Marisa Armer

Jackson Cooney

Matthew Falvey

William Finn

Brayden LaDue

Jordyn LeMay

Undeclared

Team: Laser Sharks

Adviser: Cameron Taatjes

Ryan Astrologo

Drew Bircher

Sean Bradley

Kyle Burditt

Mary Condon

Brendon Cruz

Jaelin Cummings

Alexander Cutter

Will Donaldson

Aidan Dormady

Matthew Fitzpatrick

Aiden Giarnese

Kyle Heidt

Jamie Keep

Jason Lee

Stephen Mague

Ryan O'Malley

Sam Townsend

Colby Walsh

Analytical Economics

Madison Lucas

Undeclared

Team: Stratton Oakmont

Adviser: Emma Zupo

Dylan Barriero

Nathan Brennan

Chloe Doyon

Ryan Drouin

Asa Fiske

Nia Garland

Nicolas Jacobs

Ethan Lyons

Andrew Mahoney

Maddy Mahoney

Mckenna Murphy

Gaia Palamara

Connor Pelletier

Jessica Plumser

Jack Sullivan

Erica Waters

Business Administration

Maurgan McGrath

Undeclared

Team: Claudia's Crew

Adviser: Claudia Fox

Natalie Campbell

Aliana Carbone

Aidan Chane

Anna Cleary

Tanner Cole

Erin Collins

Liam Devlin

Shannon Flaherty

Brayden Kearns

James Lilley

Morgan Maiani

Nikitas Menounos

Jake Rowe

Nathan Spires

Colin Wallace

Business Administration

Robert Cronin

Cameron Sweeney

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Team: Sturdy Thurdy

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Team: Two FireAdviser: Maria Eduarda
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Grand Challenge: Entertainment**Team: Devine Nine**

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Team: Futre 6illionaires

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Team: The Firefighters

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Team: 24 Karat Gold

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 Gracy Mowers
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Team: triskaidekaphobia

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 Joseph DeMeo
 Katelyn Giangregorio
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 Sarah Karwic
 Dana Litzelman
 Ashley Spencer
 Amanda Stewart
 Christiana Vinhateiro
 Matthew Warren
 Business Administration
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 Finance
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 Emily Hannon
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Team: FIRE Breathers

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 Michael Dahlgren
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 Benjamin Holmes
 Kyle Manley
 Carley Markward
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 Dominic Rainville
 Owen Roberto
 Charles Rolls
 Emma Simmons
 Brian Stanzione
 Whitney Wingard
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 Manning Morris
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Grand Challenge: Fashion**Team: F19ht Club**

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Team: The Sparks

Adviser: Emma Battistelli

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Team: Brahim Yatim's Dream Team

Adviser: Brahim Yatim

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 Erich Fischer
 Sofia Gagnier
 Joseph Garvey
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 Christopher Kajunski
 Teddy Norton
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Team: The Mean XVI

Adviser: Sophia Koziell

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 Ava Bisbee
 Nicholas Casey
 Lauren Chance
 Collin Corneau
 Rachel Dargie
 Matt Fischer
 Nolan Grant
 Amanda Hagen
 Charles Hart
 Dominic Mangone
 Holly Reid
 Colby Sherwin
 Alexander Wright
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 Ben Garvin
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 Shea Smolinsky
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Team: Freshman 15

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Grand Challenge: Food**Team: 17-38**

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Team: The Five Hive

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Team: Paulmond Joy

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Team: Paul Blart Paul Cops

Adviser: Derek Long

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Team: The Brady Bunch

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Team: 29ers

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Kassidy Murray
Jack Noon
Peyton Ramsey
Michael Rogers
Matthew Ruggiero
Mason Simone
Colleen Tonczos
Mattison Ward
Business Administration
Skylar North
Austin Swaim
Undeclared

Ann Manchester Kelley Nursing Inquiry Day

**Wednesday, May 4
2–5 p.m.
Health Science Simulation Center**

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

**Wednesday, May 11
12:30–5 p.m.
Paul College, Room G75 and
Great Hall**

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.

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 2022 URC happen.

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Pablo Chavajay, Psychology Department George M. Haslerud URC

Szu-Feng Chen and **Tom Payne**, The Naked Arts—Creativity Exposed!

Leslie Curren and **Pam Wildes**, COLSA 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

Julee Holcombe, Senior B.A. & B.F.A. Exhibition

Stacey Hughes and **Sue Humphrey**, Interdisciplinary Science & Engineering (ISE) Symposium

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Student Index

Abbott, Avery	48	Baker, Emily	18	Bjorklund, Haylie	27	Brown, Haley	7
Abele, Kaitlyn	38	Baker, Patrick	38	Blackwell, Ellen	7, 27	Brown, Liam	47
Abounaja, Ruben	13	Balabanis, Olivia	40	Blair, Jacob	28	Brown, Rowan	50
Abramson, Jason	47	Baldwin, Will	8	Blake, Spencer	15	Brown, Savannah	48
Abrusci, Emily	15, 27, 31	Baral, Ritwik	10	Blampied, Sarah	33, 34	Brown, Tanner	36
Acharya, Ram	10	Barber, Antonia	50	Blandini, Daniel	49	Brucker, Anders	34
Ackels, Paul	9	Barber, Nathaniel	48	Blasi, JP	25	Brush, Spencer	12
Acuil, George	46	Barker, Jessie	13	Bliss, Orrin	12	Brzezinski, Mateusz	49
Agri, Autumn	48	Barnwell, Douglas	48	Blonda, Gavin	47	Buchanan, Dawson	12
Ainley, Jared	49	Barrett, Caroline	47	Bluestein, Benjamin	47	Buchbinder, Lihy	14
Ainscow, Lauren	23	Barriero, Dylan	46	Bobbitt, Ryan	28	Buckenmaier, Audrey	50
Al Zawar, Abrar	18	Barrows, Jenna	34	Bobyock, Julie	42	Buckenmaier, Ava	49
Albanese, Madison	17, 41	Batal, Joseph	12	Bodalwala, Nidhi	49	Buckley, Connor	13
Albert, Joseph	48	Batal, Matthew	12	Boddy, Nathaniel	50	Bufagna, Megan	36
AlHajjiri, Nour	23, 27	Battistelli, Emma	33	Bohan, Jordan	17, 34, 36	Bui, Tasha	32
Alkalay, Razz	8	Battles, Abigail	25	Boisvert, Sarah	8	Bukunt, Dan	7
Allen, Daniel	50	Bauer, Will	25	Bolognino, Emily	34	Burch, Alana	11
Allen, James	27	Baumann, Parker	18	Bonagura, Timothy	47	Burditt, Kyle	46
Allen, Jeffrey	15	Baumer, Michael	10	Bond, Anya	23	Burdon, Brooke	36
Alley, Rye	35	Bayer, Emory	23	Booth, Luccas	22, 41	Burgess, Ethan	49
Almeida, Andrew	27	Beals, Evan	48	Booth, Nicholas	49	Burgess, Kyana	15, 31
Alrai, Ali	50	Bean, David	49	Borak, Mark	33	Burke, Max	47
Altamimi, Mohamed	12	Beard, Callie	8	Boren, Kiara	7	Burke, Tyler	12
Anderson, George	15	Beaudoin, Michael	7	Borges, Caitlin	15, 42	Burns, Daisy	15
Anderson, Jasper	8	Beaulieu, Isabel	9	Bostwick-Pope, Lorna	22, 41	Burzlaiff, Kelley	33
Andrews, Daniel	34	Becker, Jack	32	Botelho, Robert	47	Bushey, Devon	12
Andruk, Ry	42	Bedell, Autumn	6, 18	Botts, Anna	8	Bussey, Bethany	42
Antonides, Kaitlyn	35	Begin, Maxim	13	Bouchard Liporto, Madison	40	Bussiere, Brendon	37
Antonioli, Chiara	42	Bek, Nadire	42	Boudreau, Sean	49	Bussiere, Jordan	24
Apgar, Reece	49	Beka, Nikolaos	50	Boulanger, Sydney	34	Butler, Serena	10
Ardehali, Roya	18	Bell, Emerald	11	Bourgeois, Hayden	50	Butt, Thomas	23
Aref-Adib, Nicholas	49	Bell, Sarah	31	Bourgoin, Sarah	42	Buzzell, Suzannah	42
Ari, Surya	23	Bellino, Ian	32	Boyer, Christopher	10	Byrne, Colin	37
Armer, Marisa	46	Bembenek, Brady	48	Boyle, Miles	48	Byrne, Jack	49
Armstrong, Jaret	12	Berens, Ian	32, 37	Bradley, Luke	10	Byrne, Wilder	8
Arnold, Travis	35	Berg, Anne	11	Bradley, Sean	46	Cagney, Jason	12
Arnone, Owen	9	Berg, Sara	8	Brady, Carly	30	Callahan, Shayla	42
Arsenault, William	48	Bernard, Tyler	47	Brady, Dillon	48	Callery, Will	11
Astrologo, Ryan	46	Bernardini, Alesandra	8	Brady, Meghan	48	Callinan, Jack	7, 15
Aubrey, Alexa	42	Bernasconi, Marco	35	Brady, Samantha	13	Caloiero, Mario	48
Auclair, Gerard	49	Bernfeld, Drew	49	Braga, Nick	8	Camobreco, Joseph	13
Audsley, Logan	38	Berry, Eric	15, 36	Brancato, Jacob	32	Campbell, Jeffrey	14
Augusta, Isabella	47	Berthasavage, Thomas	33	Breault, Douglas	12	Campbell, Natalie	46
Awan, Saba	24	Berube, Justin	12	Brechbuhl, Elza	25	Campbell, Timothy	34
Ayer, Ian	28, 42	Bialous, Zachary	11	Breeland, Dylan	50	Campion, Emma	27
Babina, Karina	42	Bickford, Allison	8	Breen, Charles	48	Canavan, Amy	48
Babonis, Dylan	7	Bickford, Odin	28	Brennan, Nathan	15, 27, 31, 46	Cannon, Genevieve	49
Bachand, Emory	46	Biega, Maggy	15	Bridges, Nicholas	9	Cannon, Grace	16
Badeau, Bryson	22	Bircher, Drew	46	Brinkman, Hannah	25	Cantore, Julia	28
Baer, Ryan	12	Birmingham, Aidan	24	Broadhurst, Lindsey	28	Cao, Benson	13
Baez, Maxwell	50	Birth, Kasey	21	Brockway, Ben	12	Caplette, Molly	47
Baggett, Trevor	50	Bisbee, Ava	48	Broder, Zachary	33, 34	Capobianco, Cole	11
Baidal, Melanie	47	Bishop, Abel	47	Broom, Jill	35	Cappiello, Benjamin	36

Carattini, Marco	13	Chouinard, Maria	28	Cote, Stephen	36	Davis, William	48
Carbone, Alex	25	Christy, Elizabeth	25, 39	Cotton, Patrick	33	Dawe, Kelsie	33
Carbone, Aliana	46	Ciarla, Eric	32	Coulombe, Josiah	47	Dawson, Connor	50
Cardarelli, Matthew	49	Cieplik, Gavin	50	Courtemanche, Andrew	10	Day, Cameron	9
Cardin, Trevor	35	Clachar, Orion	13	Courter, Rachel	25, 39	De Angelis, Ethan	18
Carmichael, Kelsea	11	Clark, Harrison	30	Cowan, Killian	8	Dean, Rebecca	7
Carnevale, Samantha	47	Cleary, Anna	46	Cox, Trevor	12	Dean, Victoria	38
Carney, James	7	Cleary, Noah	13	Coyne, Ezra	23	Deblois-Hill, Olivia	43
Carpenter, Ethan	48	Clegg, Nathan	7	Cramton, Megan	7, 8	DeCristoforo, Bryan	37
Carroll, Delaney	49	Clement, Benjamin	32, 33	Creamer, Tori	50	Defaa, Imane	40
Carter, Alexandria	47	Clement, Madeleine	43	Crean, Maggie	40	Degon, Dylan	36
Cartmell, Lindsay	14, 42, 43	Cliche, Jaedon	47	Crockett, Tanner	24	DeMarco, Olivia	49
Caruso, Megan	15	Clocksins, Timothy	9	Crone, Tristan	36	Demarest, Matthew	28
Casagrande, Ainslee	48	Close, Patrick	12	Cronin, Robert	46	DeMatos, Olivia	49
Casey, Brandon	18	Clow, Michael	37	Crossman, Ethan	28, 40	DeMeo, Joseph	48
Casey, Catherine	47	Cobb, Myah	50	Croteau, Sam	50	Demers, Tyler	50
Casey, Nicholas	48	Cody, Liam	47	Crowle, Haylee	25, 43	Deming, Hailey	46
Casey, Sebastian	50	Coffin, Wesley	6	Crowley, TJ	49	Dempsey, Carson	49
Cashman, Mallory	9	Cohen, Nathaniel	32	Cruz, Brendon	46	Dennehy, Katherine	43
Casner, Kylee	15, 28	Colabatistto, Nicholas	28	Cruz-Krahn, Isabella	15	Denovellis, Victoria	43
Cassel, Justine	15, 43	Colburn, Abigail	49	Cullen, Michelle	18	Denton, Jackson	48
Castellano, Mia	48	Cole, Christopher	32	Cummings, Jaelin	46	Derrigan, Molly	11
Castimore, Julia	18	Cole, Isabel	16, 43	Cummins, William	48	Deschenes, Brendan	43
Cate, Liam	10	Cole, Sarah	18	Cuozzo, Samantha	12	Descoteau, James	13
Caughey, Erin	49	Cole, Tanner	46	Cushing, Michael	24	DeSilva, William	6
Caughran, Ella	13	Coleman, Kevin	38	Cutler, Declan	10	DeSimone, Joey	37
Cava, Luke	13	Coletti, Arianna	23	Cutter, Alexander	46	Desjardins, Maxim	43
Cavero, Leila	48	Collamati, Isabella	43	Dahl, Sierra	7	Desormier, Emily	23
Ceci, Taylor	18	Collette, Jonathan	7	Dahlgren, Michael	48	Despres, TK	47
Cedrone, Olivia	47	Collins, Erin	46	Dahlinger, Gwenyth	48	Devlin, Liam	46
Cehic, Ajlina	49	Collins, Jeb	12	Daigle, Alyssa	43	Dewsnap, Haley	17, 41
Cennamo, Makayla	50	Colson, Thomas	12	Daigle, Jessica	47	Diamantopoulos, Justin	36
Chance, Lauren	48	Conaton, Joseph	47	Daigle, Sam	8	DiBiase, Matthew	10
Chane, Aidan	46	Condon, Mary	46	Daley, Joey	49	Dickinson, Jon	25
Chang, Yifang	25	Cone, Kate	15	Daley, Maggie	47	Dickinson, Kaylyn	28
Charest, Alex	13	Conley, William	8	Daly, Ian	35	Differ, Daniel	28
Charron, Megan	47	Conner, William	13	Daly, Morgan	28	DiFruscio, Anthony	50
Chartier, Seth	11	Connors, Isabel	28	Daly, Nicolas	48	Dillon, Sara	49
Chase, Gregory	7	Connolly, Jake	26	Dambach, Michael	36	DiMambro, Tobey	9
Chasse, Nathan	11	Connolly, Miranda	48	D'Amelio, Maison	39	DiMicelli, Tia	50
Chavez, Joe	33	Connor, Joshua	48	Dansreau, Abby	36	Ding, Jiacheng	9
Chen, Emily	43	Connors, Ethan	49	Dapolite, Adam	25, 27	Dinsmoor, Alexia	50
Chen, Jiawei	10	Cook, Kyle	6	d'Arcy, Jenna	16	Dion, Elizabeth	34
Chen, Kenny	8	Cook, Shoshawna	18	Dargie, Rachel	48	Dionne, Alexandra	49
Cheney, George	47	Cooney, Jackson	46	Darling, Isabella	18	DiProspero, Dane	50
Cherella, Gavin	13	Copeland, William	49	Davidson, Nicholas	50	Distefano, Tyler	15
Cherouvis, Aran	33	Corneau, Collin	48	Davies, Laura	16	Diver, Caitlin	35
Chesley, Alex	12	Cornell, Hank	48	Davies, Samuel	27	Dixon, Ryan	32
Chintamaneni, Meghana	18	Corniel, Maria	6	Davis, Anna	49	D'Mello, Aiden	49
Chiodi, Alyssa	47	Corso, Matthew	10	Davis, Ella	27	Doherty, Patrick	9
Chirila, Andrei	23	Costa, Adam	36	Davis, Sian	8	Doherty, Robert	47
Chisholm, Hannah	6	Costa, Thomas	36	Davis, Steven	24	Doko, Gersi	9
Chock, Sydney	10, 14	Cote, Delaney	18	Davis, Talia	28	Donahue, Erin	16

Donaldson, Will	46	Elsner, Adam	11	Foster, Haylee	28	Gobeil, Samuel	16
Donatelli, Christi	43	Elwell, Derek	13	Fotos, Dia	49	Goich, Nadia	47
Donatello, Sara	26	Emerson, Jacob	33	Foye, Jennifer	49	Goldenberg, Autumn	24
Donavan, Joseph	10	Enderson, Amanda	13	Francis, Zachary	31	Gonsalves, Marley	43
Dondyk, Stephanie	10, 12	Esdale, Sean	12	Frederic, Eric	19	Gorham, Cole	8
D'Onofrio, Jacob	18	Evers, Michael	19	Freeman, Alexander	51	Gouni, Tejaswini	19
Donovan, Emma	47	Facteau, Nathan	11	Frezza, Brianna	51	Gouveia, Chris	7
Dormady, Aidan	46	Fagerson, Ladd-Patrick	35	Frisch, Nathanael	10	Grady, Jaymes	50
Dos Santos Koch, Maria Eduarda	34	Falvey, Matthew	46	Frommer, Kenneth	50	Graf, Madeline	23, 28
Douillard, Kaitlyn	18	Farmer, Bernadette	40	Frost, Colin	50	Grant, Jeffrey	12
Dowd, Andrew	47	Farnham, Emma	15	Fuentes, Angela	6, 18, 19	Grant, Nolan	48
Dowd, Evan	12	Fasanaro, Sarah	43	Gacharna, Nicholas	11	Grant, Taylor	15
Dowst, Robbie	12	Fay, Liam	36	Gaenzle, Graham	49	Graves-Witherell, Olivia	33
Doyon, Chloe	46	Federico-Grome, Trevor	11	Gaffney, Ethan	47	Gray, Adam	7, 8
Dragone, Christopher	49	Feid, Colby	50	Gagnier, Sofia	48	Gray, Anna	9
Drake-Deese, Tanner	17, 34	Feng, Ruicong	12	Gagnon, Natalie	37	Gray, Isaah	19
Drew, Zachary	11	Ferland, Madeline	24	Gagnon, Olivia	37	Greenberg, Charles	46
Driscoll, Dylan	47	Fernandes, Jeffrey	9	Galvin, Shayne	50	Greene, Noah	7
Drouin, Ryan	46	Fernandes, William	12	Garabedian, Cole	47	Greenland, Jake	14
Drum, Miles	48	Fernandez, Elle	50	Garland, Nia	46	Gregorio, Julia	25
Dube, Kayden	14	Ferraro, Anthony	12	Garneau, Colin	49	Greig, Clayton	12
DuBien, Tyler	12	Ferraro, Lauren	19	Garneau, Gabrielle	19, 23	Griffin, Kaitlin	15, 16
Ducharme, Kaleb	25	Ferreira, Abigail	43	Garry, Collin	49	Grimes, Benjamin	9
Dudgeon, Ian	16	Ferreira, Lindsay	47	Garvey, Joseph	48	Grimm, Travis	25
Duggan, Eli	7	Ferrie, Madison	25	Garvin, Ben	48	Grogan, Amy	49
Duggan, Melissa	15	Festa, Moe	16	Gauthier, Mackenzie	31	Grolean, Scott	49
Dumais, Daniel	49	Filipi, Samantha	51	Gebo, Jake	47	Gross, Chloe	16
Dumais, Ryan	12	Fina, Matteo	47	Gehrunge, Kaelli	15	Grundy, Curtis	36
Dunleavy, Stephen	38	Finn, Kevin	50	Gempler, Georgia	28	Guagnini, Emma	49
Dunn, Payson	14	Finn, William	46	Gendreau, Sydney	16, 43	Guertin, Benjamin	8
Duong, Tu Anh	31	Finneran, Caitlin	47	Genet, Brian	8	Guertin, Lindsay	8
Dupuis, Hunter	18, 19	Finnie, Patrick	37	Gennell, Ethan	35	Guida, Casimir	12
Durant, Justin	8	Fioretti, Giavanna	50	Genova, Toby	48	Gunn, Elizabeth	8
Durkin, Jill	16	Fischer, Clifton	49	George, Connor	27	Gushee, Jesse	28
Dustin, Kiyoshi	48	Fischer, Erich	48	Gerhard, Peter	40, 41	Hagen, Amanda	48
Dysart, Emily	36	Fischer, Matt	48	Germany, Gabby	9	Haggerty, Charles	49
Dziurzynski, Angelica	10, 43	Fiske, Asa	46	Gerton, Thomas	19	Hall, Alyssa	25
Earley, Patrick	13	Fitzpatrick, Matthew	46	Giangregorio, Katelyn	48	Hames, Alex	48
Early, Erika	48	Flagg, Harrison	35, 34, 40	Giannasca, Cole	33	Hamilton, Jack	14
Easterling, Jacob	9	Flaherty, Shannon	46	Giarnese, Aiden	46	Hammond, Colby	38
Eaton, Alexis	8	Flanagan, Jack	33	Giberson, Emma	19	Hanley, Timothy	50
Eberhardt, Natalie	17	Flath, Kathleen	34	Gibson, Lauren	49	Hanlon, Alicia	36
Eckert, Matthew	10	Fleming, Collin	50	Gibson, Zach	49	Hannon, Emily	48
Ecklund, John	47	Fleming, Madison	47	Gilbert, Grant	17	Hansen, Jason	44
Edminster, Kayla	36	Fleming, Patrick	33	Gill, Conner	7	Hansford, Carson	25
Edwards, Jeffrey	7	Flemming, Max	49	Gillespie, Matthew	32	Hanson, Kathleen	11
Edwards, Julianne	22	Flood, Caroline	12	Gillis, Jack	33	Harpster, Katherine	11, 25, 44
Ehnot, Jenna	13, 14	Fluet, Victoria	50	Gilmore, Colin	13	Harrington, Conor	8
Eldred, Cerys	28	Flynn, SeanPatrick	32, 37	Gingras, Monique	19	Harris, Abigail	19
Elias, Abraham	10, 12	Foley, Ryan	9	Girroi, Rachael	43	Harris, Ian	19
Elias, Brandon	25	Foltran, Riccardo	48	Giudice, Marc	31	Harris, Jackie	28
Elliott, Cheyenne	43	Fortin, Olivia	43	Glasgow, Benjamin	49	Harrison, Jacob	9
Ellsworth, Ryan	37	Fosberg, Natalie	23	Glover, Riley	9	Hart, Charles	48

Hart, David	25	Holloway, Paul	37	Joyce, Maggie	31	Knuettel, Megan	25, 39
Hart, Libby	36, 37	Holmes, Benjamin	48	Judge, Adam	9	Kobylnski, Calvin	36
Hartford, Tyren	7, 15	Holt, Justin	50	Jutras, Nicole	27, 33, 34	Kofman, Chloe	31
Hartman, Matty	9	Hoppler, Katie	41	Kadariya, Sabrina	29	Kokx, Lydia	18
Hartmann, Michael	48	Horne, Ariana	36	Kajunski, Christopher	48	Kolber, Ella	50
Haskell, Zoie	21, 28, 41	Horvat, Andrew	50	Kalman, Lily	29	Komerska, Emily	28
Hatfield, Nicholas	13	Houle, Kaitlin	16	Kanter, Carley	29	Komoto, Megumi	49
Hatton, Ian	18	Howard, Christopher	14	Kapantais, Victoria	8	Korsh, Augustin	41
Hauer, Amelea	11	Howe, Katelyn	36	Kaplan, Harrison	50	Kotulak, Arielle	10
Haugen, Briggs	32	Hoying, Jonathan	19	Karic, Ervin	19	Kraemer, Andrew	38
Hauschild, Liz	14	Hoyt, Kiely	29, 44	Karim, Fazla	33	Krasinski, Colton	36
Havey, Matthew	36	Hu, Isabelle	11	Karpa, Laura	50	Kreell, Samuel	49
Hawkinson, Katharine	36	Huliselan, Deisry	36	Karwic, Sarah	48	Krein, Sarah	25
Hawkom, Kendall	18	Hulit, Ellie	44	Katsiris, Michael	24	Krenzer, Kaile	47
Hayes, Emma	47	Humphreys, Gail	29	Katumba, Christian	50	Kriete, Madison	20
Hayes-Hunsicker, Max	19	Huntley, Charles	48	Kavanagh, Charlie	49	Krois, Lindsay	51
Hazen, Christopher	12	Hurley, Erin	50	Keane, Cara	50	Krosky, Samuel	50
Heafey, Leah	47	Hussey, Samuel	33	Kearns, Brayden	46	Kunin, Wesley	37
Healy, Brooke	16	Hwang, Geumsol	32	Keeler, Gregory	12	Kurtenbach, Anya	19, 20
Healy, Erin	50	Hynes, Brennan	46	Keep, Jamie	46	Kuryala, Marvin	10
Healy, Maeve	28	Ingalls, Kevin	12	Kelley, Drew	14	Kuznetsova, Daria	36
Heaney, Owen	48	Ippedico, Nicholas	9	Kelley, Maeve	44	LaBrecque, Nick	7
Heath, Madeleine	49	Irvine, Em	44	Kelley, Megan	29	LaCasse, Kathryn	50
Heggie, Nolan	47	Italia, Taylor	29	Kelley, Shane	32	Lacombe, Bryce	15
Heidler, Mitch	7	Ivanyi, Reka	29	Kelly, Aidan	23	LaDue, Brayden	46
Heidt, Kyle	46	Jackson, Patrick	11	Kelly, Amanda	15	Laferriere, Marc	29
Heinze, Adam	48	Jacobs, Nicolas	46	Kempskie, Kyle	49	LaFlamme, Jarret	12
Heirtzler, Stephen	12	Jacques, Colby	8	Kennedy, Carolyn	44	Laflamme, Matthew	11
Helmanis, John	32, 34	Jailaubekova, Nadin	19	Kennedy, Olivia	46	LaFrancois, Sarah	47
Hemond, Joshua	10	Jamieson, Bailey	20	Kennefick, Jack	13	Lagos, Andrew	29
Hennessey, Maximillian	9	Janelle, Spencer	12	Kennish, Marguerite	14	Lagrece, Oliver	47
Herman, Brayden	49	Jaquith, Gabe	8	Kenny, Samantha	50	Laing, David	47
Herman, Madison	17, 34	Jean, Delaney	44	Keohane, Christopher	8	Laizure, Isabelle	20
Hernandez, Paul	36	Jedraszek, Kylee	29	Keokominh, Nadia	20	Lambert, Joseph	47
Heusser, Sophia	48	Jenkins, Cole	28	Kephart, Jason	38	Lambert, Wesley	8
Hevey, Catherine	20	Jennison, Maclane	27	Kerivan, Alexandra	49	Lamers, Christian	13
Hickman, Matthew	37	Jensen, Sarah	49	Khadka, Mihir	9	Lampe, Joseph	33
Hicks, Adison	13	Jerome, Jacob	19	Khalil, Dylan	49	Lamprey, Brighid	42
Hidalgo, Elvis	9	Jesseman, Jared	33	Khan, Rayhan	19	Lamy, Jayden	49
Hidalgo, Joshua	50	Jin, Juhong	27	Khiev, Dawin	18, 19	Lancaster, Shelly	13
Hilberg, Aleigha	27	Johansen, Justin	28	Kibarova, Elvira	20	Landry, Brady	50
Hirsch, Briella	16	Johns, Benjamin	23	Kiburis, Julia	25	Lane, Kristian	11
Hirsch, Ethan	47	Johnson, Elijah	9	Kilkelly, Chloe	29	Langley, Eric	13
Hixon, Kendall	9	Johnson, Ryan	20	Kilson, Hunter	10	LaNigra, Graham	47
Hoadley, Carolyn	33	Johnson, Ryan	37	Kimball, Matthew	12	Lapointe, Noah	34
Hoadley, Madison	19	Johnson, Tyler	16	King, Carson	23	LaPorte, Timothy	7
Hobson, Samantha	19	Johnston, Ellie	33	King, John	36	Lariviere, Josh	10
Hodgson, Molly	40	Jonathan, Justine	33	King, Nicole	7	Larkin, Bryn	41
Hodzic, Lejla	19	Jones, Bailey	8	Kirichok, Daniel	9	Larkin, Shea	50
Hoell, Caleb	17	Jones, Madison	47	Kirkpatrick, Reid	36	Larkin, Tyler	49
Hohn, Tara	41	Jones, Matthew	48	Kislevitz, Charlotte	29	LaRosa, Christian	38
Holland, Justin	50	Jordan, Gracie	47	Knight, Kari-Lynn	18, 20	LaSalle, Jackson	50
Hollasch, Cassandra	16	Jowett, Conor	33	Knightly, Christian	49	Lavertue, Taylene	47

Lavoie, Henry	32	Lotane, Anthony	16, 50	Marcoux, Elizabeth	38	McLellan, Edward	12
Lawrence, Chad	8	Lotti, Meghan	26	Markward, Carley	48	McMahon, Matthew	11
Lawrence, Jillian	15, 37	Louis, Patricia	29	Marland, Hannah	29	McManus, Kyle	50
Lawson, Michael	44	Lovecky, Troy	38	Marnell, Olivia	24, 41	McNally, Cameron	36
Leach, Jeffrey	12	Low, Aislinn	26	Maronie, Ashanti	29	McParland, Evan	32
Leach, Jessica	44	Lowe, Nicholas	8	Marrotte, Tiffany	47	Meade, Jack	7
Leary, Ethan	46	Lubliner, Haley	27	Marsh, Brendyn	36	Meador, Ryan	37
Leary, Rebecca	29	Luby, David	12	Marshall, Cameron	33, 34	Meagher, Thomas	37
LeBlanc, Anabel	50	Lucas, Madison	46	Marston, Sofia	49	Meeker, Nathan	47
Leblanc, Justin	49	Lucci, Tony	49	Martin, Effie	50	Meeker, Nicholas	36
LeBlanc, Taylor	48	Lucier, Emily	48	Martinez, Christopher	28, 42	Megalaitis, Austin	9
Leclerc, Reid	9	Luckern, Erin	29	Martins, Lauren	19	Melvin, Charles	48
LeConti, Kelli	48	Lueckel, Naomi	16	Maruschak, Nicholas	49	Mendoza, Brenda	23
Lee, Anthony	14, 28	Lydon, Keira	47	Masiello, Jason	27	Menichillo, Jack	50
Lee, Jason	46	Lyman, Cameron	50	Mason, Matthew	47	Menounos, Nikitas	46
Lee, Michelle	31	Lynch, Camden	6	Mason, Ryan	47	Mensah, Ofori	20
Lee, William	9	Lynch, Connor	49	Mason, Steven	8	Mercedes, Alexander	8
Leighton, Sarah	14, 28	Lynch, Ethan	24	Masouras, Rita	8	Mercer, Samuel	7
LeMay, Jordyn	46	Lynch, Laura	26, 44	Massey, Trevor	44	Mercier, Virginia	29, 39
Leno, Camden	33	Lynch, Samantha	44	Matai, Samantha	49	Mercurio, Kersten	39
Lentine, Chris	12	Lyons, Ethan	46	Mater, Jamie	26, 29, 31	Merheb, Jonathan	10, 12
Leone, Nicholas	47	Lyons, Molly	47	Mathieu, Caitlin	51	Merrill, Benjamin	37
LePage, Andrew	13	MacDonald, Rachel	49	Mattson, Daniel	9	Merrill, Mykyle	46
Lessard, Caitlynn	50	MacDonald, Steve	29	Mawuntu, Johanna	47	Messmer, Kegan	24
Letzelter, Brooke	50	MacDowell, Rebecca	50	McCabe, Olivia	25	Metzler, Anna	42, 44
Levin, Hudson	49	MacEachern, Kyle	32	McCarthy, Brendan	51	Mexcur, Devon	8
Levy, Mya	12	MacGregor, William	50	McCarthy, Daniel	9	Meyer, Andrew	22, 33, 35
Lewis, Jacob	11	MacKenzie, Forest	44	McCarthy, Justin	47	Michaud, Andrew	50
Lewis, Rachel	44	Mackersie, Stuart	44	McCormack, Kieran	33	Mickune, Madeline	48
Li, Liqi	9	MacKillop, Benjamin	37	McDaniel, James	47	Mierzwa, Thomas	7
Liano, Gabriella	10, 14	Madden, Anna	16	McDonald, Daniel	47	Milbury, Rebecca	35
Libby, Jaxson	6, 29, 44	Madore, Benjamin	20	McDonough, Ethan	16	Miller, Anna	11
Libby, Michael	7	Magelinski, Daniel	29	McDonough, Meghan	49	Miller, Davis	20
Libby, Miles	8	Magner, Cameron	24	McDonough, Taylor	50	Miller, Kaitlin	41
Liberta, Elizabeth	35	Mague, Stephen	46	McDonough, Thomas	24	Miller, Megan	29
Lilley, James	46	Maher, Megan	20	McGarry, Alexis	14, 42, 43	Miller, Raymond	19
Linehan, Megan	38	Mahoney, Andrew	46	McGee, Rebecca	27	Mills, Alex	11
Litka, Madison	36	Mahoney, Maddy	46	McGoldrick, Trent	51	Mills, Carl	38
Litle, Sophia	24	Mahoney, Matthew	47	McGrath, Kevin	35	Mills, Tanner	36
Litzelman, Dana	48	Mahoney, Molly	49	McGrath, Maurgan	46	Mills, Trevor	25
Liu, David	12	Maiani, Morgan	46	McIlroy, Sarah	35	Miloro, Matthew	7
Livingston, Isabella	25	Malloy, Shea	13	McIntire, Jacob	7	Minichiello, Gregory	28
Livingstone, Cameron	49	Manca, Hanna	36	McIntosh, Andrew	36	Minton, Matthew	37
Lo, Brandon	12	Mandravelis, Seth	41	McIntyre, McKenzie	47	Mkabela, Fidel	19
Lo, Michelle	50	Mangone, Dominic	48	McKay, Murray	11	Moats, Jonathan	50
Locke, Jillian	16	Manley, Kyle	48	McKee, Siobhan	49	Moening, Justin	9
Loesch, Zachary	37	Mann, Thurston	34	McKenna, Owen	10	Moheydeen, William	48
Lohnes, Amanda	50	Mannering-Londres, Harrison	12	McKenna, Rachel	49	Mokas, Nicholas	35
Lombardi, Abigail	50	Manning, Hannah	44	McKenney, Max	11	Montanus, Annie	18
Long, Derek	37	Mansour, Zak	48	McKenney, Morgan	15	Montehermoso, Alexander	12
Longa, Elias	16	Manzelli, Ella	50	McKenney, Stephen	11	Montoya, Erik	29
Longua, Kaylie	27	Mapley, Sydney	44	McKinnon, Patrick	13	Mooney, Gannon	49
Lorden, Jacob	12	Marchuk, Anastasia	14	McLean, Jack	47	Mooney, Sabrina	48

Moore, Alison	24	Naggar, Emma	49	Oriente, Matt	16	Pilotte, Joseph	9
Moore, Connor	47	Najam-Ud-Din, Eesa	47	Osterman, Joel	18, 20	Pimental, Alexis	35
Moore, Laura	28	Nalesnik, Brittney	26, 44	O'Toole, Liam	16, 50	Pineault, Ashley	35
Moore, Patrick	49	Napitupulu, Samuel	48	Ott, Bethany	28	Pitino, Eadie	30
Moquin, Angela	27	Napolitano, Ava	50	Ousback, Alexander	16	Pitre, Madison	12
Moran, Merrimac	26	Nardone, Jacob	12	Owens, Madison	29	Pitts, Jeffrey	14
Morana, Nicholas	47	Natola, Christopher	33	Oxendine, Max	26	Plant, Jason	16, 17, 33
Moreschi, Nick	8	Neher, Lily	23	Paganis, Nikolas	48	Pleszkoch, Ronan	31
Moriarty, Katherine	47	Neleber, Joey	9	Page, Avery	47	Plomp, Cornelis	12
Morley, Paxton	40	Nelson, Heather	13	Page, Matthias	13	Plumser, Jessica	46
Morneault, Aidan	50	Nelson, James	49	Paglia, Donny	47	Poetsch, Gwyneth	47
Morris, Manning	48	Nelson, Jonathan	9	Palamara, Gaia	46	Poisson, Samuel	14
Morris, Serenity	38	Nem, Justin	9	Paletthorpe, Jocelyn	21	Polito, Kyle	33
Morrison, Liam	14	Newcomb, Kieran	22, 26	Paolini, Fabiana	32, 37	Pollet, Ethan	35
Morrison, Trevor	9	Ngalula, Marina	38	Pare, Tom	12	Pomeroy, Maddie	49
Morrissey, Liam	33, 35	Nguyen, Anh	38	Parent, Harrison	7, 30, 42, 45	Porter, Aubrey	40
Morse, Ryder	48	Nguyen, Anthony	10	Parilla, Jacob	37	Potter, Patrick	7
Moschitta, Dianne	19, 20	Nguyen, David	12	Parks, Ryan	47	Powers, Caitlin	48
Moss, Christopher	47	Nguyen, Jonathan	38	Parrish, Morgan	40	Powley, Connor	11
Mostoller, Lucas	13	Nichols, Johanne	33	Pascetta, Valerie	45	Powtak, Braian	30
Mottola, Christopher	30	Niziak, Brenna	31	Patrick, Logan	50	Pratt, Emily	7, 45
Moussalli, Anthony	46	Nkounkou, Eman	30	Patterson, Ryan	29	Preble, Kyle	12
Mower, Colin	13	Nolan, Kira	16, 36	Paul, Maria	47	Prescott, Nicholas	7
Mowers, Gracy	47	Noon, Jack	51	Paul, Owen	47	Pribyl, Christian	9
Mozzer, Pamela Lais	6	Nord, Kyle	30	Pavarini, Tristan	32	Price, Andrea	36
Mozzicato, Allison	25	Norris, Maya	8	Pavlik, Isabel	49	Price, Kaitlyn	32
Mrenna, Stephen	44	Norris, Mitchell	43	Payton, Luke	47	Priest, Tess	7
Muca, Kiara	44	North, Skylar	51	Peacock, Emily	13	Proctor, Evelyn	43
Mulgrew, Noah	10	Norton, Teddy	48	Pearson, Emily	29	Proper, Tanner	47
Mulvey, Peter	27	Nystedt, Lisa	50	Pearson, Samantha	11	Pryor-West, Emma	24
Mundy, Tucker	47	Oberholtzer, Nicole	30	Peck, Tyler	47	Purnomo, Kelsey	11
Munro, Aiden	48	O'Brien, Christopher	49	Pelletier, Connor	46	Puzzo, Joshua	6
Munro, Miah	26, 40	O'Connor, Grace	15	Pelletier, Hunter	47	Pysz, Anna	36
Munroe, Leah	48	O'Connor, Timothy	10	Pelletier, Katie	8	Quagliaroli, Isabella	50
Munroe, Michael	22	O'Hara, Avery	49	Perreault, Nicholas	10	Quan, Daniel	47
Munroe, Nicholas	7	O'Hara, James	49	Perry, Jackson	12	Quiles, Anthony	30
Murdock, Emily	50	O'Keefe, Emily	36	Persson, Emily	6	Quinn, Seamus	7
Murphy, Brandon	50	O'Keefe, Ethan	44	Persson, Kate	24	Quinn, Simon	26
Murphy, Brendan	10, 12	Oliver, Erica	44	Pestana, Amber	49	Quitongan, Alex	23
Murphy, Connor	9	Oliver, Madison	49	Peters, Michael	13	Radzelovage, Matthew	13
Murphy, Jamie	7	Oliver, Thomas	12	Peters, Nicholas	47	Raffa, Nathan	8
Murphy, McKenna	46	Olmstead, Benjamin	19	Petry, Nicole	36	Rafferty, Deirdre	7
Murphy, Nicole	47	Olsmats, Ida Eleonora	14	Pettaway, Alana	12	Rafter, Brooke	48
Murphy, Ryan	14	Olson, Ryan	12	Pham, Allison	20	Rahme, Sabrina	18
Murphy, Shane	33	O'Malley, Ryan	46	Phan, Steve	37	Rainville, David	49
Murray, August	8, 26	O'Neil, AJ	31	Phelps, Elizabeth	27, 40	Rainville, Dominic	48
Murray, Cassidy	51	O'Neil, Ana	16	Philbrick, Michael	49	Raja, Durga	12
Murray, Lauryn	35	O'Neill, Matthew	36	Phofolos, Demetrius	45	Ramsey, Peyton	51
Myers, Phoebe	37	Openshaw, Kenneth	12	Piacquad, Henry	37	Randazzo, James	33
Nachatelo, Jennifer	9	Oram, Xander	8	Piekarski, Christopher	7	Rangel, Hayden	20
Naczas, Brooke	49	Orcutt, Riley	49	Pierce, Abigail	11	Rankin, Parker	47
Nadim, Chafik	8	O'Regan, Michael	50	Pierce, Eryn	16	Raouf, Aya	20
Nagashima, Mel	24	O'Reilly, Jack	49	Pike, Justin	47	Rapazzo, Noah	12

Rathod, Sonal	19	Ross, Alec	12	Schultz, Samantha	45	Smith, Jaden	23
Raust, Andrew	49	Rothbard, Adena	36	Schuyler, Cameron	21	Smith, Jordan	50
Rayment, Kyle	37	Rothwell, Tori	36	Schwab, Brian	12	Smith, Kira	6, 18
Reagan, Brendan	13	Round, Ashley	37	Scott, Cameron	9	Smith, Melissa	49
Rebeiro, Joseph	7	Rowe, Jake	46	Scott, Greg	32, 37	Smith, Morgan	11
Redard, Christopher	13	Rowe, Jonathan	49	Scott, Lily	36	Smith, Natalie	45
Redard, Matthew	11	Roy, Ashley	9	Scott, Zakiya	30	Smith, Sophia	10
Reed, Parker	11	Roy, Camden	31	Scully, Colin	31	Smith-Elias, Oneil	12
Regan, John	7	Roy, Grace	26, 39	Searing, Alexander	45	Smolinsky, Shea	48
Regan, Maxwell	7	Roy, Shannon	18	Seguin, William	13	Snitgen, Andrew	38
Reger, Caeleigh	50	Rudaz, Will	37	Seidel, Colton	37	Snocker, Brendan	47
Reid, Holly	48	Ruggiero, Matthew	51	Selby, Catherine	11	Snow, Carter	32
Reid, Tessa-Francesca	29	Russell, Caroline	13	Senosk, Avery	49	Snow, Jon	12
Reitter, Alissa	8, 23	Ryan, Jack	30	Seprosovo, Ben	13	Soden, Andrew	46
Reyes, Allie	33	Ryan, Makenzie	50	Seul, Maiah	33	Solomon, Esther	12
Reynolds, David	6	Ryan, Michael	50	Seymour, Jacob	12	Somphonlug, Russ	12
Reynolds, Gillian	15, 41	Ryan, Tyler	49	Sgarzi, Nicholas	47	Soni, Vishnu	6, 18
Ricard, Jessica	19, 20	Rybecky, Timothy	11	Shabaka, Abeer	6	Sorette, Megan	11
Richard, Nate	15	Ryder, Noah	29	Shabaka, Hebatullah	18, 21	Sott, Gabrielle	15
Richards, Clara	37	Ryder, Roy	48	Shafritz, Emily	18	Soucy, Brook	36
Richards, Selena	9	Saberin, Jaiden	49	Shannon, Catie	47	Soule, Emily	30, 32
Richardson, Madeline	8	Sabin, Lucas	50	Shapazian, Alexandra	27	Spath, Katie	50
Richardson, Maeve	8	Sack, Devan	8, 13	Sharma, Neelam	47	Spencer, Ashley	48
Ricketts, Samuel	47	Sadowski, Dylan	48	Sharp, Audrey	45	Spencer, Benjamin	8
Ridky, Madison	48	Saing, Steven	9	Shaw, Bryce	33, 37	Spencer, Kendra	17, 34
Rieger, Catherine	7	Salazar Sanchez, Mariana	37	Shaw, Kendrick	36	Spezzano, Nicolas	8
Riley, Gavin	14	Salvage, Savannah	45	Shaw, Sydney	46	Spinney, Chance	19
Riley, Patrick	50	Sambuaga, Isabella	47	Sheehan, Kyle	38	Spires, Nathan	46
Ritondo, Thomas	50	Sanchez, Solomon	50	Sheets, Hannah	28	Splagounias, Thomas	13
Rivera, Bryle	10	Sandham, Brian	48	Shepard, Samuel	32	Sprague, Colin	33, 38
Robacher, Alex	13	Santacroce, Jacquelyn	50	Sher, Dana	8	Staff, Charles	45
Robbins, Bryan	20	Santarosa, Annah	17, 34	Sherwin, Colby	16	Stahley, Melanie	19
Robbins, Nova	50	Santos, Lara	30, 45	Shevlin, Joshua	38	Standish, John	33
Roberto, Owen	48	Sanville, Nichole	48	Shields, Joseph	14	Stanley, Tyler	7
Roberts, Jacob	8	Sapienza, Naeleh	20	Shilman, Abigail	50	Stanton, Brianna	49
Roberts, Jessica	14	Saputo, Ryan	21	Siddiqui, Fardeen	19	Stanzione, Brian	48
Roberts, Scarlett	12	Saracina, Hallie	15	Silveria, James	27, 41	Staples, Jason	22
Robertson, Amir	28	Saracina, Peyton	48	Simione, Mason	51	Starz, Markos	13
Robertson, Jacob	47	Sardella, John	19	Simmons, Emma	48	Statham, Julia	49
Robinson, Shania	35	Sasser, Emily	49	Simpkiss, Carlie	48	Steele, Mason	47
Robison, Matthew	25	Saucier, Elizabeth	13	Sinagra, Allison	19	Steuer, Ethan	24
Rocchio, Cailyn	50	Sauerwein, Emma	8	Sinagra, Kristen	39	Stevens, Hailey	30, 39
Rock, Abram	32	Saunders, Christopher	20, 21	Skaff, Robert	21	Stevens, Logan	7
Rock, Gabriel	46	Scanlan, Benjamin	30	Skane, Connor	38	Stewart, Amanda	48
Rogers, Dylan	12	Scanlon, Cathryn	38	Skehan, Joseph	49	Stewart, Willa	49
Rogers, Michael	51	Schamel, Joren	38	Skidmore, Maria	13	Stiles, Dylan	38
Rogers, Sawyer	17, 21, 22, 24	Scharneck, Colin	49	Slattery, Paige	49	Stimpson, Andrew	12
Rohrman, Ben	50	Schiller, Andrew	32	Slaybe, Stephanie	20	Stolberg, Coleman	10
Rolfe, Aidan	33	Schiller, Lilly	49	Smeltzer, Patrick	24	Stoncius, Michaela	30
Rolls, Charles	48	Schnare, Lucas	35	Smith, Abigail	49	Stradley, Luke	33
Roman, Caterina	45	Schnitt, Chloe	30	Smith, Alli	47	Strange, Maddie	15
Rooney, John	15	Schott, Connor	7, 8	Smith, Devon	47	Stukel, Cole	9
Ropp, Sophie	16	Schreiber, Jack	14, 28	Smith, Diego	32, 33	Stultz, Ryan	49

Suga, Nick	30	Tobin, Joshua	48	Wallace, Colin	46	Willard, Michael	47
Sukkar, Mohammed	38	Tolley, Declan	48	Wallace, Madelyn	48	Willeman, Donald	36
Sullivan, Brianna	18	Tolve, Owen	11	Walsh, Aidan	26, 45	Williams, Olivia	46
Sullivan, Cody	12	Tonczos, Colleen	51	Walsh, Colby	46	Williams, Secilya	43
Sullivan, Jack	46	Toner, Cecilia	26	Walsh, Jessica	35	Wilson, Avery	11
Sullivan, James	49	Toulouse, Quinn	38	Walsh, Nicholas	7	Wilson, Jacob	47
Sullivan, Michael	47	Tower, John	47	Walsh, Patrick	26, 30	Wilson, McKenna	33
Sullivan-Hasson, Jacob	7	Townsend, Grace	46	Walsh, Patrick	49	Winders, Matthew	20
Sulva, Julie	21	Townsend, Sam	46	Walter, Matthew	14	Wingard, Whitney	48
Suozzo, Zachary	36	Tozier, Anthony	48	Wang, Sen	11	Winiarski, Charlotte	50
Surprenant, Payton	7	Trasatti, Andrew	12	Ward, Jada	47	Winsmann, Blake	49
Swaim, Austin	51	Tremblay, Kyler	47	Ward, Mattison	51	Winter, Edyn	15
Swartz, Samantha	45	Tremblay, Ryan	9	Wardinski, Catherine	15, 45	Wirth, Hannah	35
Swayze, Orion	48	Trombly, Sean	49	Warouw, Kemal	36	Witkowski, Tristen	20
Sweeney, Cameron	46	Trudel, Shoshana	19	Warren, Matthew	48	Woodhouse, Anthony	12
Sweeney, Connor	47	True, Ari	45	Warriner, William	48	Woods, Morgan	49
Sweet, Caroline	27	Tseng, Eric Tseng	33	Wasylina, Andrew	20	Woodworth, Matthew	19, 20
Sweet, Tori	13	Turner, Caitlin	28	Waters, Erica	46	Worden, Jason	9
Swenson, Katie	14, 42, 43	Twitchell, Alexandra	6	Weatherbie, Nicholas	48	Workman, Christian	13
Swift, Benjamin	32	Twomey, Quinn	50	Webber, Clay	16	Wright, Alexander	48
Switzgable, Megan	27	Tyler, Megan	45	Weber, Jackson	11	Wright, Alina	32
Szajda, Elizabeth	49	Ulrich, Brendan	14	Weeks, Andrew	13, 14	Wunderlich, Nathaniel	8
Taatjes, Cameron	33	Ur, Michela	35	Wegmueller, Finn	27	Wynn, Kelsey	6
Talwar, Ria	49	Urena, Mya	26	Weinbeck, Jackson	30	Xaviera, Equeen	27
Tam, Anthony	12	Vachon, Thomas	31	Weisensee, Sydney	16	Yadav, Shreya	37
Tammaro, Derek	32	Valhos, Alex	9	Weiss, Eve	50	Yatim, Brahim	35
Taranto, Joshua	7	Valhouli, Tanner	7	Welby, Dyllan	50	Yeatman, Reese	43
Taub, Samuel	35	Van Scoy, Sean	7	Welch, Lauren	45	Yekelchik, Abigail	47
Taudvin, Jasmine	23	Vangellow, Madison	46	Weldon, Amelia	50	Yerardi, Lexi	12
Tausanovitch, Marc	11	Vansicklen, Tatum	11	Wells, Hunter	11	Yetton, Emily	25
Tauscher, Isaiah	9	Vaughn, Rachel	49	Wells, Rachel	47	York, Emily	47
Tautkus, Skyler	29	Vazquez, Jayda	29	Wentzel, Austin	36	You, Zhouhai	9
Tavares, Dominick	42	Vezina, Sadie	19	Werchniak, Elias	50	Young, Daisy	17
Taylor, Catherine	17, 45	Vijay, Raunak	19	Wescott, Chase	13	Young, Jacob	6
Taylor, Jonathan	19	Villavicencio, Joslyn	35	Wester, Amanda	14	Young, Natalie	17
Taylor, Zachary	9	Villemure, Chloe	33	Whissel, Luke	29	Youngcourt, Rachel	49
Tber, Nas	9	Vincent, Nick	12	White, Amanda	6	Yuen, Kimberly	25, 34
Tedford, Jake	48	Vine, Mikayla	49	White, Ashley	23	Yun, Jae	33
Teris, Ethan	50	Vinhateiro, Christiana	48	White, Jordan	6	Zaleski, Emily	41
Terwilliger, Kevin	11	Viola, Joseph	36	White, Macey	46	Zamborsky, Kyra	48
Tevepaugh, Kaitlyn	18, 20	Vogler, Adam	11	White, Natalie	10, 45	Zaslow, Sophia	46
Thach, Massle	45	Vogler, Evan	33	Whitman, Ali	30, 39	Zercher, Jacob	22
Thayer, Aidan	14, 28	Volpe, Luke	49	Whitney, Michon	50	Zima, Corey	11
Theriault, William	48	Vona, Ryan	26	Wicander, Britt	17, 34	Zsofka, Nicholas	13
Thibodeau, Emma	10	Vrettos, Tyler	10	Wick, Dalton	47	Zupo, Emma	36
Thibodeau, Lexi	47	Wachenfeld, Alexander	20	Wick, Emma	22		
Thomas, Morgan	40	Wackrow, Austin	47	Wiggin, Meaghan	13, 17		
Thoreen, Dougray	12	Wade, Alice	12	Wigmore, Tanner	49		
Thurston, David	25	Waleryszak, Jason	9	Wilcox, Noah	7		
Tinker-Lamothe, Alexander	49	Waleryszak, Sarah	26, 45	Wilder, Noah	14		
Tkachev, Vladimir	44, 45	Walker, Nathan	35	Wilhelmy, Daniel	35		
Tkaczek, Travis	8	Walker, Rose	14	Wilkinson, Adam	38		
Tobbe, Emma	6, 29	Wallace, Brooklyn	11	Wilkinson, Sarah	16, 33, 35		



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