

The Mount David Summit

The Mount David Summit is an annual celebration of student research, artistic work, and community-engaged scholarship at Bates College. Each year students from all classes present their work in a symposium format at the end of the winter semester. The Summit spotlights the rich and varied academic activities of Bates students across the disciplines and honors the vibrant intellectual life of the college.

Named for the landmark "mountain" on the campus, the Summit is guided by the motto of the college

—*Amore ac Studio*—

loosely translated, With Love and Zeal, With Ardor and Devotion:
devotion to scholarship, creativity, and the life of the mind.

The Mount David Summit is sponsored by the Office of the Dean of the Faculty.
We are grateful to Ralph T. Perry '51 and Mary Louise Seldenfleur,
who have been generous and devoted supporters of the Summit since its first year.

~ About the 2022 Summit ~

The 20th Annual Mount David Summit, held on 8 April, features the research, creative work, and performances of students from all Bates classes. It is organized into three afternoon sessions, with a dance concert in the evening. The summit program is published in this booklet; students' abstracts are available on the Summit website, www.bates.edu/summit.

The faculty believes that all Bates students must develop as scholars in their own right, and should be ready to articulate and defend their ideas in a public forum. The college's major programs of study, and especially the senior thesis/senior project requirement, are designed both to prepare students and challenge them to conduct original research or artistic work and contribute to our knowledge of the world. Many students who present their work at the Mount David Summit are senior thesis writers, approaching the summit of their academic career at Bates. Their presentation—which might be a research poster or a short talk—represents hundreds of hours of work, deep commitment to their studies, and a synthesis of all that they have learned at Bates. Other presenters are at different points in this journey; they may be first-years just beginning to explore ideas in depth, or they may be sophomores or juniors in the process of developing the skills and insights that will serve their senior work in the future. The artists who participate in the summit—the poets, fiction writers, dancers, actors, directors, musicians, media creators, and photographers—bring to their work a combination of technique, cultural and intellectual context, ways of thinking and seeing the world, and raw talent that is nurtured in a liberal arts environment.

The kind of individualized education celebrated at the Mount David Summit would not be possible without the unflagging dedication of faculty advisors. Bates faculty work one-on-one with seniors on the thesis: In this process they are both demanding and supportive, guiding research methods, thoughtful interpretation, and effective writing. Many Bates staff members—assistants in instruction, lab technicians, writing and quantitative reasoning specialists, theater designers, digital media specialists, librarians and archivists, and community-engagement staff—also work closely with student-scholars. These members of the Bates community offer a wide range of skills and expertise that enrich students' liberal arts experience.

Thank you

At Bates we believe that every student is an emerging scholar.

Supporting student research and creative work requires wisdom, time, and resources. Bates student researchers and their faculty mentors thank the many individuals and foundations whose contributions to these funds help make student research vibrant, challenging, and filled with discovery.

We are deeply grateful to alumni, parents, faculty, and friends whose support sustains research opportunities for our students.

The Abelson Family Fund for Biomedical Internships and Research
The Bates Fund
The Arthur and Helen Baer Foundation Student Research Support Fund for Studio Art Majors
The Professor Leland and Claudina Bechtel Fund
The Blanchard Fund for Student-Faculty Research in Economics
The Bonner Leader Program
The Bouley/Creasy Fund for Earth and Climate Sciences
The Bertha A. Bauer, M.D., Student Thesis Support Fund for the Department of Art and Visual Culture
The Gene Alan Clough Fund for Science Education
The John R. Cole Prize for Outstanding Achievement in History
The Class of 2000 Endowment for Community Service
The Penelope L. Ellis Fund
The Moses Feldman Family Foundation Fund
The Hamill Family Fund for Student Fieldwork and Research in Anthropology
The Hoffman Fund for Student Research
The Dorothy Dole Johnson '41 Fund for Student Research in the Sciences
The John and Sally Kelsey Prize for Neuroscience Student Research
The Dennis and Jo-Linda Keith Endowed Fund for Chemistry Research
The Walter A. Lawrance Student Research Fund
The Susan Majeski McKnight '70 Fund for Environmental Studies
The Morrill Family Research Fund
The Vincent Mulford Internship and Research Fund
The Natt Family Fund in Biology
The Philip J. Otis Fund
The Helen A. Papaioanou Fund
The Anthony B. and Raeflyn R. Pelliccia Student Research Fund
The Charles Franklin and Evelyn Minard Phillips Fund
The Jack Pribram and George Ruff Fund for Student Research
The Linda E. Rawlings Student Research Fund for Mathematics
The Ruggles Scholar Research Fund
The Sargent Student Research Fund
The Scher Fellowship Fund
The Ellen Seeling Design Fellowship Fund
The Michael I. Sklar '94 Music Research Fund
The Stangle Family Research Fund for Economics and Law
The Tanaka Memorial Foundation
The Dr. Jason M. Tanzer Student Research Fund
The Sarah H. Trafton Memorial in the Bates-Morse Mountain Reserve Fund
The Aaron R. Winkler '92 Fund for Student Research in Biology

Mount David Summit

Schedule of Events

Friday, 8 April 2022

1:30 -1:45 PM
Perry Atrium

Welcome

Clayton Spencer, President
Malcolm S. Hill, Vice President for Academic Affairs and Dean of the Faculty

1:45 -6PM
Pettengill Hall
Perry Atrium

20th Annual Barlow Off-Campus Study Photography Exhibition

Note: Within each event, students are listed in the order in which they will speak

Concurrent Session I

1:45 – 3:00 PM
Perry Atrium

Poster Session I: Biochemistry, chemistry, neuroscience, physics, and psychology

Pettengill G21

Understanding a Changing World: Sociological Perspectives

Senior sociology majors explore identity, agency, and political and social structures

Nana Baffoe '22: Double Veil, Triple Consciousness: A Du Boisian Examination of Black American Muslim Racialization and Placemaking (*Marcelle Medford, Sociology*)

Emma Block '22: "These People, Do They Care?" Facilitating Connections to Post-Incarceration Reentry Supports (*Emily Kane, Sociology*)

Eben Cook '22: A Voice of Rhyme and Reason: Using Critical Race Theory and Freirean Pedagogy as Frameworks for a Hip-Hop Education on Police Violence (*Michael Rocque, Sociology*)

Daniel Logan '22: Universalized Values: A Sociology of Knowledge View of Affordable Care Act Scholarship (*Francesco Duina, Sociology*)

Hermione Zhou '22: Populist through and through: A Study of the Framing Anchors of Populist Parties' Environmental Agendas (*Francesco Duina, Sociology*)

Moderator: Francesco Duina, Sociology

Pettengill G52

Body and Brain: Psychology and Neuroscience Research

Psychology and neuroscience majors discuss their senior work

Caitie McGlashan '22: Optimizing Data Acquisition in Pain Science: Calibrating to Individual Pain Thresholds May Enable More Sensitive Detection of Pain-related Phenomena (*Jason Castro, Neuroscience*)

Thomas Luiselli '22: The Prospect of Violence: The Influence of Group Identification on Individual Risk-Based Decision Making (*Michael Sargent, Psychology*)

Arya Mohanty '22: Differences in Proactive Interference in Individuals Diagnosed with Attention-Deficit/Hyperactive Disorder (*Katherine Mathis, Psychology*)

1:45 – 3:00 PM
Pettengill G52

Rachel Paradis '22: Suffering amidst COVID-19: A Literature Review on Suffering and Its Effects on Health and Meaning Making (*Michael Buccigrossi, Psychology*)

Moderator: Katherine Mathis, Psychology

Pettengill G65

Learning about Local Ethno-Religious Communities

Students in Religious Studies 113, Religion, Violence, and Nonviolence, present Story Maps based on their research on local religion traditions

Moderator: Cynthia Baker, Religious Studies

Pettengill 116

Visual Representations in China

The vast landscapes of China, interpreted

Maya Benziger '22: A Graphic Novel History of the Silk Roads (*Wesley Chaney, History*)

Saskia Wong-Smith '22: Representing Place: Exploring Artistic Representations of the Fuchun River throughout Chinese History (*Zhenzhen Lu, Chinese*)

Anna Landgren '22: Shanshui Reinterpreted: The Aesthetics of Urbanization in Chinese Contemporary Landscape Art (*Zhenzhen Lu, Chinese*)

Moderator: Zhenzhen Lu, Chinese

Pettengill 162

Actors Roundtable

Acting majors talk about their process

Jacob DiMartini '22, (*Chris McDowell, Theater*); Max Younger '22, (*Tim Dugan, Theater*); QinYing Zuo '22, (*Tim Dugan, Theater*)

Moderator: Chris McDowell, Theater

Pettengill 257

Fat Tails and Tipping Points: Carbon Pricing

Students in ECON 316, Fat Tails and Tipping Points, will present posters on carbon taxes, cap and trade, and energy policy

Moderator: Lynne Lewis, Economics

Concurrent Session II
3:15 – 4:30 PM
Perry Atrium

Poster Session II: Biology, biochemistry, chemistry, earth and climate sciences, environmental studies, French and Francophone studies, Japanese, neuroscience, and physics

Pettengill G10

Literature, Screens, and Language

Wide-ranging talks on language and image, from Joyce to a webseries, to the recent Bates Film Festival

Rabih Chughtai '23: Your BFF: Organizing the Bates Film Festival (*Jonathan Cavallero, Rhetoric, Film, and Screen Studies*)

3:15 – 4:30 PM
Pettengill G10

Jackson Elkins '22: Skiing and Mountaineering in the Alps: Examining the Narratives of Alpine Sport Culture through *Bergfilm* and Its Influence on Interwar Central Europe (*Raluca Cernahoschi, German and European Studies*)

Craig Selbrede '22: *Relic*: An International Fantasy Webseries (*Carolina González Valencia, Art and Visual Culture*)

Pico Banerjee '23: A Sadean Banquet: Transgressive Politics, Tasting Joyce (*Katie Adkison, English*)

Brady Chilson '23: A Sadean Banquet: Transgressive Politics, Tasting Joyce (*Katie Adkison, English*)

Moderator: Jonathan Cavallero, Rhetoric, Film, and Screen Studies

Pettengill G21

Research and the Public Good: Multidisciplinary Explorations

Community-Engaged Research Fellows discuss their research in several fields, conducted with community partners

Lauren Berube '22: Adaptability: Improving Mathematics Engagement and Motivation at Lewiston Middle School (*Katy Ott, Mathematics*)

Mary Corcoran '22: Antiracist Restorative Practice Implementation at Lewiston Middle School: A Community-Engaged Research Study (*Patti Buck, Education; Emily Kane, Sociology*)

Tess Hick '22: Math for Liberation: Exploring the Mathematics of Voting Systems with Lewiston Middle School (*Carrie Diaz Eaton, Digital and Computational Studies*)

Hart Rorick '22: Exploring Urban Climate Resilience: Constructing an Equity Atlas for Climate Change Vulnerabilities in South Portland, Maine (*Carissa Aoki, Environmental Studies*)

Paige Sonoda '22: Liberatory Digital Storytelling: Sharing Stories of Multiracial Asian Americans (*Yun Garrison, Psychology*)

Moderators: Darby Ray and Sam Boss, Harvard Center for Community Partnerships

Pettengill G52

The Impact of Engagement: Psychology Research

Psychology majors discuss wellness, storytelling, and college satisfaction

Ben van Paassen '22: Personality Differences in College: Connecting College Major, College Satisfaction, and Academic Success (*Susan Mangan, Psychology*)

Olivia Piacentini '22: Effects of Wellness Interventions on Adolescent Female Athletes (*Su Langdon, Psychology*)

Michelle Desjarlais '22: Thank You for Sharing: Determining the Impact of a Weekly Storytelling Group in a Retirement Community (*Su Langdon, Psychology*)

Moderator: Su Langdon, Psychology

3:15 – 4:30 PM
Pettengill G65

Cognition, Perception, and Memory: Neuroscience II

Neuroscience majors discuss their senior research

Isabelle Darling '22: Early Life Trauma as a Predictor of Cognition and Pain Tolerance in Early Adulthood (*Nancy Koven, Neuroscience*)

Amina Mohamed '22: Why are Facial Recognition Systems Racist? (*Michelle Greene, Neuroscience*)

Peter Riley '22: Visual and Semantic Capacity Limitations in the Neural Dynamics of Visual Processing (*Michelle Greene, Neuroscience*)

Devanshi Trivedi '22: Do We Remember More than We See? Capacity Limits of Visual Memory (*Michelle Greene, Neuroscience*)

Moderator: Michelle Greene, Neuroscience

Pettengill 162

Moving Academia: Dance as a Vibrant Practice of Scholarship

Student choreographers and dance scholars discuss their work, a prelude to a weekend of dance performances

Isabel Honigman '22; Talia Kurlansky '22; Mia Bernstein '23; Anntonia Taylor '24

Moderator: Carol Dilley, Dance

Concurrent Session III
4:45 – 6 PM
Perry Atrium

Poster Session III: Biology, earth and climate sciences, environmental studies, neuroscience, physics, and psychology

Pettengill G10

Religious Studies at the Cutting Edge: Life and Death, Love and War, Local and Global

Religious Studies majors discuss their senior research

Insha Afsar '22; Maddie Korbey '22; Alex Platt '22; Kang Xiong '22

Moderator: Cynthia Baker, Religious Studies

Pettengill G21

Controlling Bodies: Power, Politics, and Practices

Politics majors discuss governing bodies and control over individual bodies

Niharika Tuladhar '22: Veto Power and Hegemony (*Christopher Price, Politics*)

Joseph Amiel '22: The Electoral Disconnection: How Representatives Take Credit for Opposed Legislation (*Kathryn Bedecarre, Politics*)

Rachel Retana '22: Policing in Education: The Use of COVID-19 Disciplinary Protocols against Black and Brown Students and the Perpetuation of the School-to-Prison Pipeline (*Lisa Gilson, Politics*)

Moderator: Christopher Price, Politics

4:45 – 6 PM
Pettengill G52

Creative Writing Thesis Reading

The Summit's annual literary reading by creative writing majors

Ellie Boyle '22: "A New Routine" and Other Stories (*Jessica Anthony, English*)

Alex Burbelo '22: From Concrete: A Poetry Senior Thesis (*Myronn Hardy, English*)

Alex Gailey '22: *The Bike Thief* (*Jessica Anthony, English*)

Jesse Segalla '22: Creative Thesis Reading (*Jessica Anthony, English*)

Christina Wang '22: Poetry Reading (*Jessica Anthony, English*)

Moderator: Myronn Hardy, English

Pettengill G65

STEM and Beyond: Interdisciplinary Investigations

Access in STEM, and applying digital and computational methods in research

Adriana Pastor Almiron '25: *Stargaze: Diversifying STEM through Children's Literature* (*Carrie Diaz Eaton, Digital and Computational Studies*)

Joaquin Torres '25: *Stargaze: Diversifying STEM through Children's Literature* (*Carrie Diaz Eaton, Digital and Computational Studies*)

Brandon Villalta Lopez '25: *Stargaze: Diversifying STEM through Children's Literature* (*Carrie Diaz Eaton, Digital and Computational Studies*)

Kira Yanagi '25: *Stargaze: Diversifying STEM through Children's Literature* (*Carrie Diaz Eaton, Digital and Computational Studies*)

Grace Acton '24: *Promptitude and Fidelity: Professional Seamstresses in Early Nineteenth-Century New England* (*Laurie Baker, Digital and Computational Studies*)

Ognyan Simeonov '22: *Humans vs. COVID-19: Modeling Disease Spread on College Campuses* (*Carrie Diaz Eaton, Digital and Computational Studies*)

Moderator: Carrie Diaz Eaton, Digital and Computational Studies

Pettengill 116

Identity and Adaptation

Students consider belonging, resistance, and survival, human and nonhuman

Martha Coleman '23: *Bilingual Education in Maine: Exploring the Past, Present, and Future of Bilingual Education Programs in Maine's Public Schools* (*Mary Rice-DeFosse, French and Francophone Studies*)

Zhao Li '22: *Menstruation, Distance, and Female Secondary School Attendance: Evidence from Malawi* (*Nivedhitha Subramanian, Economics*)

Kathleen King '23: *The Embodiment of Spectacle: Queer Art and Resistance in Times of Genocide* (*Claudia Aburto Guzmán, Hispanic Studies*)

Jason Alfandre '23: *The Importance of Snake Education on their Conservation* (*Carla Essenberg, Biology*)

Moderator: Mary Rice-DeFosse, French and Francophone Studies

4:45 – 6 PM
Pettengill 162

Directing, Playwriting, and Technical Design: A Panel Discussion

Olivia Dimond '22: Learning to Fly on the Way Down: Directing Gina Gionfriddo's *Rapture, Blister, Burn* (Clifford Odle, Theater)

Johnny Esposito '22: From Actor to Playwright: The Emergence of a Multifaceted Artist (Clifford Odle, Theater)

Henry King '22: Technology and Technical Direction of *35mm* (Michael Reidy, Theater and Dance)

Noah Pott '22: Directing, Playwriting, and Technical Design (Tim Dugan, Theater)

Moderator: Michael Reidy, Theater and Dance

Evening Sessions
7:30 PM
Schaeffer Theatre

Spring Dance Concert

Carol Dilley, Dance

This program of works by dance students and dance majors also will be presented Sunday, April 10, at 2:00 PM. An alternate program of works by dance students is presented on Saturday, April 9, at 5:00 PM, and on Monday, April 11, at 7:30 PM.

Masks required and proof of vaccination or recent negative test.

Tickets required. Free with a suggested donation of \$5. For tickets, visit <https://www.eventbrite.com/e/spring-dance-concert-tickets-301391358667?aff=ebdssbdestsearch>

Mount David Summit Poster Presenters

Note: The number following each title indicates the location of the poster in the session

1:45 - 3:00 PM	Poster Session I	Wall #
Sarah Abbott '22	Luteoside B: A Synthetic Route to a Plant-derived Potential Therapeutic for RSV (<i>Jennifer Koviach-Côté, Chemistry and Biochemistry</i>)	18
Sean Agrodnia '22	The Antibacterial Properties of Phenylpropanoid Glycosides (<i>Jennifer Koviach-Côté, Chemistry and Biochemistry</i>)	16
Eliana Al-Konsul '22	Race, Sexism, and System Justification: Analyzing Potential Differences of System Justification Prevalence between Black and White Women (<i>Michael Sargent</i>)	36
Jamari Amrham '22	Where's the Humanity? Social Dominance Orientation as a Predictor for Dehumanizing Black Faces (<i>Michael Sargent</i>)	35
Loren Andrews '22	Stability Analysis of Manganese-Oxide Cathode Materials for Sodium Ion Batteries (<i>Geneva Laurita, Chemistry and Biochemistry</i>)	10
Owen Bailey '22	Compositional Control of Local and Long-Range Polarity in the Frustrated Pyrochlore System $Bi_{2-x}RE_xTi_2O_7$ (RE = Y, Ho)	13
Katie Carrier '22	The Impact of Small Molecule Ratios on the Gene Regulation and Pathogenesis of <i>Staphylococcus</i> (<i>Colleen O'Loughlin, Chemistry and Biochemistry</i>)	5
Sam Colesworthy '22	Role of Pyrazinones on <i>S. epidermidis</i> Growth and Biofilm Production at Naturally Occurring Ratios (<i>Colleen O'Loughlin, Chemistry and Biochemistry</i>)	7
Ben Conner '22	The Effects of the COVID-19 Pandemic on the Need for Therapists of Matching Race among Students Attending College (<i>Jennifer LaCosse, Psychology</i>)	33
Gilley Davis-Oakes '22	Recovery-Friendly Workplaces: An Analysis of Current Employers, Employees, and Local Service Providers (<i>Su Langdon, Psychology</i>)	38
Christopher Draper '22	Moral Reasoning Style in Subclinical PTSD (<i>Nancy Koven, Neuroscience</i>)	24
Xavier Fallone '22	Dancing on the Precipice: How People Reason about Threshold Problems in a Socially Rich Real World Context (<i>Michael Sargent, Psychology</i>)	37
Katherine Faulkner '22	Traditional Medicine as a Legitimate Form of Treatment in Ghana: A Biochemical Analysis of Plant-based Treatment (<i>Glen Lawson, Chemistry and Biochemistry</i>)	15
Elysia Garza '22	Exploring the Relationship among Cultural Values, Intergenerational Trauma, and Mexican Americans' Experience and Communication of Emotions (<i>Todd Kahan, Psychology</i>)	41
Darby Glenn '22	Incorporating Cultural Humility and Trauma-Informed Care Practices into Community- based Programming (<i>Su Langdon, Psychology</i>)	40
Anna Gouveia '22	<i>Staphylococcus epidermidis</i> Growth Response to Terpene Molecules (<i>Colleen O'Loughlin, Chemistry and Biochemistry</i>)	8
Andrew Hall '22	Effect of Chronic Bobcat339 Treatment on Memory and Cognition in Wild-type and Pitt-Hopkins Syndrome Model Mice (<i>Andrew Kennedy, Chemistry and Biochemistry</i>)	3
Aidan Hill '22	Synthesis and Biological Evaluation of Phenylethanoid Glycosides (<i>Jennifer Koviach-Côté, Chemistry and Biochemistry</i>)	19
Grace Hoehl '22	Targeting the Tet Enzymes to Enhance Cognition (<i>Andrew Kennedy, Chemistry and Biochemistry</i>)	2
Sebastian Jalowayski '22	The Adoption of Conspiracy Theories: An Examination of Motivations and Circumstances (<i>Amy Douglass, Psychology</i>)	32
Julie Jesurum '22	Transitioning from Commensal to Pathogen: Investigating Gene Expression Changes in <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> (<i>Colleen O'Loughlin, Chemistry and Biochemistry</i>)	6
Crawford Jones '23	Synthesizing Superconductors (<i>Geneva Laurita, Chemistry and Biochemistry</i>)	11
Kyle Jorgensen '22	Characterizing Polarity in Lead-Free Perovskite and Pyrochlore Materials (<i>Geneva Laurita, Chemistry and Biochemistry</i>)	9

1:45 - 3:00 PM	Poster Session I	Wall #
Amanda Kaufman '22	A Community-Engaged Exploration of the Impact of Sports Amongst Women and Girls in Maine (<i>Su Langdon, Psychology</i>)	39
Lily Kinder '22	Motivation and Guilt Associated with Subclinical OCD in Athletes (<i>Nancy Koven, Neuroscience</i>)	25
Fia Marota '22	Pyrazinone Analogs and Their Effect on <i>Staphylococcus epidermidis</i> Biofilms (<i>Jennifer Koviach-Côté, Chemistry and Biochemistry</i>)	17
Thomas Monahan '22	Machine Learning Methods for Bose-Einstein Condensate Generation Optimization (<i>Nathan Lundblad, Physics</i>)	30
Owen Neuman '22	Computational Modelling and Atomic Physics (<i>Nathan Lundblad, Physics</i>)	28
James Peter '22	Visualizing the DNA Methylation Landscape on Memory Genes (<i>Andrew Kennedy, Chemistry and Biochemistry</i>)	1
Danielle Polirer '22	Neuropsychological Mediators of Moral Rigidity in Subclinical OCD (<i>Nancy Koven, Neuroscience</i>)	23
Pierson Rambusch '22	The Dark Tetrad: Exploring Executive Function, Fluid Intelligence, and Social Cognition in Everyday Sadists (<i>Nancy Koven, Neuroscience</i>)	22
Nicholas Reznik '22	Pzn Gene Products and Their Role in Stabilizing <i>Staphylococcal</i> Biofilms (<i>Jennifer Koviach-Côté, Chemistry and Biochemistry</i>)	20
Mia Roy '22	Studying the Effect of Practicing Mindfulness on Productivity during Study Breaks in College Students (<i>Kate Snyder, Psychology</i>)	34
Steve Shea '22	Magnetic Trapping of Rubidium en route to Bose-Einstein Condensate Formation (<i>Nathan Lundblad, Physics</i>)	29
Elektra Smicka '22	Restoration of Tcf4 in Adult Pitt-Hopkins Mice through Gene Reinstatement Therapy (<i>Andrew Kennedy, Chemistry and Biochemistry</i>)	4
Sobie Sobolewski '22	Investigating How the BAP Impacts Long-Term Memory and Global/Local Processing (<i>Nancy Koven, Neuroscience</i>)	27
Steven Sparks '22	Synthesis of Linderofructoside A and Orthoester Used in Glycosylation (<i>Jennifer Koviach-Côté, Chemistry and Biochemistry</i>)	21
Ian Tolis '22	Dielectric Properties and Characterization of Bone Material (<i>Geneva Laurita, Chemistry and Biochemistry</i>)	12
Jake Winter '22	Fluorescence Correlation Spectroscopy of Gold Nanospheres (<i>Travis Gould, Physics</i>)	31
Yilun Wu '22	The Association between Change in Glycosylation Patterns Due to Mutations among SARS-CoV-2 Variants and Transmissibility (<i>Glen Lawson, Chemistry and Biochemistry</i>)	14
Dessy Yang '22	Addiction-related Phenotypes as Predictors of Body-focused Repetitive Behaviors (<i>Nancy Koven, Neuroscience</i>)	26
Alix Zabin '22	Does Socioeconomic Status Affect One's Experience of Awe? Awe in Nature and the Small Self (<i>Helen Boucher, Psychology</i>)	42
3:15 - 4:30 PM	Poster Session II	Wall #
Ellie Bauer '22	Analyzing The Great Resignation and Lying-Flat Movement: 躺平 (<i>Nathan Faries, Chinese</i>)	37
Aaliyah Black '22	A Medical Literature Review on the Chronic Health Disparities and Stress among Black Women as Observed through the Lens of Cardiovascular Disease, Obesity, Prenatal Care, and Cancer (<i>April Hill, Biology</i>)	4
Parker Caswell '22	Methane Emissions, Carbon Sequestration, and Groundwater Hydrology along the Freshwater Margin of the Sprague River Salt Marsh (<i>Beverly Johnson, Earth and Climate Sciences</i>)	29
Elene Chamberlin '22	Characterizing the Gulf of Maine Rocky Intertidal Using NeCSA Protocol (<i>Katie Dobkowski, Biology</i>)	5
Rex Chen '22	Transport Dynamics of Road Salt and Its Impacts on the Water Quality of the Impaired Hart Brook Watershed, Lewiston, Maine (<i>Beverly Johnson, Earth and Climate Sciences</i>)	30

3:15 - 4:30 PM	Poster Session II	Wall #
Yueh Chuah '22	Regulation of Ca ²⁺ Signaling by IRBIT through Binding of Inositol 1,4,5-trisphosphate Receptor (<i>Martin Kruse, Biology and Neuroscience</i>)	11
Charlotte Collins '22	The Effects of Wing Flexibility on Lateral Flight Performance in Bumblebees (<i>Andrew Mountcastle, Biology</i>)	9
Etti Cooper '22	Critical Thermal Maxima and Plasticity in Metabolic Rates: A Comparison of Two Ant Species (<i>Ryan Bavis, Biology</i>)	8
Milly Detels '22	Effects of Optical Feedback on a High Powered Vertical Cavity Surface Emitting Laser (<i>Hong Lin, Physics</i>)	36
Emily Duffy '22	Characterizing the Functional Importance of NSP4 Positions 77 and 78 (<i>Lori Banks, Biology</i>)	6
Chris Dye '22	Plasmonic Effects on Nonlinear Optical Responses and Tip Enhanced Raman Spectroscopy (<i>Matthew Côté, Chemistry and Biochemistry</i>)	17
Abhi Elayidom '22	The Role of Phosphoinositide Metabolism in the Regulation of Neuronal Activity (<i>Martin Kruse, Biology and Neuroscience</i>)	13
Hadia Fatima '22	Phosphoinositide Metabolism in Neurons (<i>Martin Kruse, Biology and Neuroscience</i>)	14
Maddie Feldmeier '22	Characterizing the Functional Importance of NSP4 Positions 77 and 78 (<i>Lori Banks, Biology</i>)	6
Max Freund '22	Ski and Surf Film: Fantasy vs. Realistic Paradigms (<i>Tyler Harper, Environmental Studies</i>)	22
Ceci Gichner '22	Quantifying Crevasse, Deformation, and Damage, on the Vaughan Lewis Icefall, Juneau, Alaska (<i>Michael Retelle, Earth and Climate Sciences</i>)	33
Henry Hardy '22	Characterizing the Gulf of Maine Rocky Intertidal Using NeCSA Protocol (<i>Katie Dobkowski, Biology</i>)	5
Ossie Heard '22	Developing New Antiviral Agents (<i>Lori Banks, Biology</i>)	7
Clay Hundertmark '22	Effects of Optical Feedback on a High Powered Vertical Cavity Surface Emitting Laser (<i>Hong Lin, Physics</i>)	36
Casey Kelemen '22	mRNA Localization in Lyme Disease (<i>Paula Schlax, Chemistry and Biochemistry</i>)	18
Aisling Kelly '22	Investigating the effects of the RNA-binding protein SpoVg in the transmission of <i>Borrelia burgdorferi</i> from tick to vertebrate (<i>Paula Schlax, Chemistry and Biochemistry</i>)	20
Claire Kissane '22	Critical Theory and Identity through Clothing in French Film (<i>Kirk Read, French and Francophone Studies</i>)	23
Hark Lally '22	The Role of TPK-LYN and TRAP5 in <i>Ephydatia muelleri</i> / <i>Chlorella</i> Symbioses (<i>April Hill, Biology</i>)	3
Max Lauster '22	The Impacts of Two Olympics on the Cityscape and Environment of Tokyo (<i>Keiko Konoeda, Japanese</i>)	25
Charlie Lewis '22	Localization of mRNA in <i>E. coli</i> Using a Light-up RNA Aptamer (<i>Paula Schlax, Chemistry and Biochemistry</i>)	21
Hongke Lu '24	Measuring Galaxy Outflow Properties by Stacking Spectra from the Sloan Digital Sky Survey (<i>Aleksandar Diamond-Stanic, Physics</i>)	35
Erik Malm '22	Regulation of Gene Expression in <i>Borrelia burgdorferi</i> , the Lyme Disease Spirochete (<i>Paula Schlax, Chemistry and Biochemistry</i>)	19
Essie Martin '22	Investigation of <i>Laminaria saccharina</i> Burial below Damariscotta River Seaweed Farms Using eDNA and Stable Isotopes (<i>Beverly Johnson, Earth and Climate Sciences</i>)	26
Maya McDonough '22	Holocene Marine Climate Reconstruction through $\delta^{18}\text{O}$ Isotopes of the Bivalve <i>Serrripes groenlandicus</i> (<i>Michael Retelle, Earth and Climate Sciences</i>)	32
Hayley Neighmond '22	Genomic Analysis of the Stem Cell Regulatory Pathway in a Early Branching Animal (<i>April Hill, Biology</i>)	1

3:15 - 4:30 PM	Poster Session II	Wall #
Meg O'Brien '22	Spatial Elevation Dynamics and Carbon Sequestration Variability within Sprague Marsh, Phippsburg, Maine (<i>Beverly Johnson, Earth and Climate Sciences</i>)	28
Seren Parikh '22	Applications of Simulating a Tightly Focused Electric Field in Studying Nonlinear Optics (<i>Matthew Côté, Chemistry and Biochemistry</i>)	16
Sydney Phillips '22	The Development of an Erythrocyte-Specific TRAP Transgenic Zebrafish Line (<i>Larissa Williams, Biology</i>)	10
Clara Porter '22	Characterizing the Functional Importance of NSP4 Positions 77 and 78 (<i>Lori Banks, Biology</i>)	6
Abby Quinn '22	Developmental Abnormalities of Freshwater Sponges Grown in BPS (<i>April Hill, Biology</i>)	2
Zane Rahabi '22	Geochemistry of Three Distinct Lewiston Quadrangle Pegmatites (<i>Eshita Samajpati, Earth and Climate Sciences</i>)	31
Anna Reaman '22	Regulation of Phosphoinositide Metabolism in HEK293-PITPNA and HEK293-PIP5K1C Knockout Cells (<i>Martin Kruse, Biology and Neuroscience</i>)	12
Stella Santucci '22	Critical Theory and Identity through Clothing in French Film (<i>Kirk Read, French and Francophone Studies</i>)	23
Luke Sedor Protti '22	Soil Erosion Rates on Moraine Hillslopes of the Mendenhall Glacier in Southeast Alaska (<i>Raquel de Castro Portes, Earth and Climate Sciences</i>)	34
Julia Slayne '22	The Effects of Wing Flexibility on Lateral Flight Performance in Bumblebees (<i>Andrew Mountcastle, Biology</i>)	9
Alex Stigall '22	Evaluating the Growth Dynamics of <i>Corynebacterium accolens</i> and <i>Corynebacterium striatum</i> in Varying Environments and Hydrocarbon Sources for Their Potential Use in Oil Spill Bioremediation (<i>Colleen O'Loughlin, Chemistry and Biochemistry</i>)	15
Emily Torkelsen '22	A Comparison of Carbon Sequestration and Vegetation History in Two Maine Salt Marshes (<i>Beverly Johnson, Earth and Climate Sciences</i>)	27
Alex Weissman '22	Developing New Antiviral Agents (<i>Lori Banks, Biology</i>)	7
4:45 - 6:00 PM	Poster Session III	Wall #
Grace Beaudet '22	Recess and Developmental Play-based Interventions for Elementary Students (<i>Su Langdon, Psychology</i>)	31
Camden Bibro '22	Brain Hemispheric Asymmetries and the Roots of Creativity Ability (<i>Nancy Koven, Neuroscience</i>)	9
Caleb Bolden '22	Isolated Social Media Use, Anxiety, and Depression during COVID-19 (<i>Michael Buccigrossi, Psychology</i>)	22
Andrew Botelho '22	The Impacts of the Coronavirus Pandemic on Team Cohesion among Bates College Athletes and Possible Solutions to These Impacts (<i>Su Langdon, Psychology</i>)	32
Emma Christman '22	Holocene Climate Clam-ity: <i>Arctica islandica</i> as Proxies for Environmental Change during the Early Holocene in Svalbard (<i>Michael Retelle, Earth and Climate Sciences</i>)	2
Ari Dalia '22	The Effects of Social Media on Young Adult's Perception of Body Image during the COVID-19 Pandemic (<i>Su Langdon, Psychology</i>)	36
Taylor Dionne '22	Anxiety Disorder-related TikTok Videos: A New Generation Z Mental Health Activity? (<i>Susan Mangan, Psychology</i>)	37
Kieran Edmonds '22	Using Optical Spectroscopy to Measure Recent Star Formation Rates for Compact Starburst Galaxies with Fast Outflows (<i>Aleksandar Diamond-Stanic, Physics</i>)	14
Tara Ellard '22	The Stability of Meaning in Life Evaluations: The Relationship Between COVID-19 Pandemic Related-Stress and Meaning in Life (<i>Helen Boucher, Psychology</i>)	20
Liam Evans '22	Dark Personality and the "Evil Genius": Relations among the Dark Tetrad Traits, Intelligence, Executive Function, Social Cognition, and Theory of Mind (<i>Nancy Koven, Neuroscience</i>)	8
Julia Feist '22	Cats '22: An Impact Assessment of the Foster Cat Program at Auburn Public Library (<i>Su Langdon, Psychology</i>)	35

4:45 - 6:00 PM	Poster Session III	Wall #
Alexa Flores '22	Healing as a Binational People: The Yaqui Separated by an Arbitrary Political Border (<i>Yunkyoung Garrison, Psychology</i>)	38
Dewi Henry '22	Marine Climate Reconstruction from Early Holocene <i>Arctica islandica</i> from Erdmannflya Peninsula, Svalbard (<i>Michael Retelle, Earth and Climate Sciences</i>)	3
Neeshi Hullavarad '22	Mapping the Uncanny Valley in Relationship to the Dark Triad (<i>Nancy Koven, Neuroscience</i>)	7
Ky Jenkins '22	Character Creation and Representation in Video Games (<i>Michael Sargent, Psychology</i>)	30
Jack Johnson '22	How Processing Biases Manifests in the Social Skills of Broad Autism Phenotype Individuals (<i>Nancy Koven, Neuroscience</i>)	12
Tasha Jones '22	Quantifying the Uncertainty of Infrared-based Star-Formation Rates for Compact Starburst Galaxies (<i>Aleksandar Diamond-Stanic, Physics</i>)	13
Michelle Kim '22	Women, Age, and Race: Engaging in Different Presentations of Femininity of the Self on Social Media (<i>Michael Sargent, Psychology</i>)	28
Sophie Matt '22	Unicorns at Stake: Gender and Racial Bias in Venture Capital Investing (<i>Michael Sargent, Psychology</i>)	26
Susanne McGrady '22	Let's Talk About Sex: The Potential of School-Led Sexual Health Workshops for Parents (<i>Su Langdon, Psychology</i>)	33
Molly O'Brien '22	Are Self-Esteem and Attention to Environment Related to Perceived Social Pressure around Eating at Bates College? (<i>Amy Douglass, Psychology</i>)	16
Sevigne Pak '22	The Culture of Silence within Asian American Communities: Factors that Contribute and Psychological Impact (<i>Martin Kruse, Biology and Neuroscience</i>)	21
Alexia Perugini '22	Executive Function, Social Cognition, and Vulnerability to Targeting by the Dark Tetrad (<i>Nancy Koven, Neuroscience</i>)	10
Erick Ramos '22	Can the Number of Parents Present Predict Interdependence and Independence? Family Structure and the Self-Construals of the Child (<i>Michael Sargent, Psychology</i>)	29
Jake Ressel '22	Assessing the Suitability of Seed Mix Conservation Strategies for Pollinators in the Northeast (<i>Carla Essenberg, Biology</i>)	5
Tara Rodic '22	Can Body-Focused Gratitude Intervention Reduce the Negative Effect of Viewing the "Ideal" Bodies on Social Media? (<i>Su Langdon, Psychology</i>)	34
Fernando Rojas '22	Legacy of Colorism: Skin Tone's Impacts on African American Men's Racial Identity and Relationship with Liberatory Practices (<i>Helen Boucher, Psychology</i>)	19
Evan Saltman '22	A Structural Analysis of the Plumbago Mountain Fault, Pluton, and Associated Pegmatites (<i>Shreya Arora, Earth and Climate Sciences</i>)	4
Ben Schmandt '22	Impacts of Triphenyl Phosphate on the Development and Gene Expression of Larval Zebrafish (<i>Larissa Williams, Biology</i>)	1
Margy Schueler '22	Predicting Social Mobility: The Relationship between Social Dominance Orientation and Estimates of Future Mobility among Racial Groups (<i>Michael Sargent, Psychology</i>)	24
Quinn Squires '22	Anti-Blackness in the Face of Economic Downturns: The Effects of Inflation on Intergroup Relations (<i>Michael Sargent, Psychology</i>)	23
Riley Strathmann '22	Subclinical Pathology and Creative Ability (<i>Nancy Koven, Neuroscience</i>)	11
Yoyo Tang '22	Maximization on Infidelity and Happiness in Romantic Relationships: Do Maximizers Cheat More and Feel Less Happy (than Satisficers) When in Love? (<i>Michael Sargent, Psychology</i>)	25
Riley Theriault '22	Observing the Role of Diagnosis on the Relationship with Religion in Catholic People with Mental Health Diagnoses (<i>Yunkyoung Garrison, Psychology</i>)	39
Kayta Tsemo '22	Dialectical Behavioral Therapy in Self-harming Adolescents (<i>Amy Douglass, Psychology</i>)	18
Chidubem Umeh '22	Exploring the Relationship between Stellar Mass, Star Formation Rate, and Gas Outflow Velocity in a Large Sample of Galaxies (<i>Aleksandar Diamond-Stanic, Physics</i>)	15

4:45 - 6:00 PM	Poster Session III	Wall #
Sean Vaz '22	How Does the Strength of an Individual's In-Group Identification Moderate Their Perceptions of Black Women Athletes in Mainstream Media? (<i>Michael Sargent, Psychology</i>)	27
Amelia Waite '22	No Such Thing as a Typical Serial Killer: Theoretical Integration and Review of Psychological Literature (<i>Amy Douglass, Psychology</i>)	17

**Fat Tails and Tipping Points: Carbon Pricing
ECON 316 Class Participants**

Salem Alderei '22
Aidan Braithwaite '23
Alexander Campbell '22
Jarod Castro '22
Thomas Dodge '22

Maxwell Elsasser '23
Jamie Gottschalk '23
Max MacAvoy '23
Sam Marchman '23
Daniel McConnell '23

Charlotte Morris '23
Syd Paul '22
Tate Perkins '22
Catie Sanchez '23
Sophie van Leeuwen '23

**Learning about Local Ethno-Religious Communities
REL 113 Class Participants**

Helen Badger '25
Trish Balsler '25
Mathias Boudreau-Golfman '25
Chloe Dwinal '25

Riley Gramley '25
Kaitlin Kavanagh '25
Caroline Keating '25
Amelia Killackey '25

Hope Perrine '25
Daniel Snider '25
Eric Treyz '25
Cassidy Vawter '25

Twentieth Annual Barlow Off-Campus Study Photography Exhibition

Grace Biddle '23
Spencer Danziger '23
Adrian deCola '23
Emily Diaz '23
Gabrielle Frugard '22
Imti Hassan '23
Nathan Huynh '23
Emma Johnston '23

Mariam Josyula '23
MinAh Kim '22
Evan Koch '23
Christina Leonard '23
Sarah Mehrberg '22
Abigail Otterbein '23
Kate Peters '23
Claudia Petrie '23

Adilene Sandoval '23
Margy Schueler '22
Ognyan Simeonov '22
Nicole Smith '23
Isabella Sobolewski '23
Megan Strynar '23
Sandia Taban '22
Bridget Thompson '22
Maya Vernick '23
Ryan Weitzel '23

Bates Spring Dance Concert: Choreographers, Dancers, Technical

Adya Agarwal '24	Nina Gonzalez '23	Lauren Reed '23
Ben Aguilar '22	Adrian Hadley '23	Maria Francisca Pereira Pinto Costeira da Rocha '24
David Allen '24	Osceola Heard '22	Lilah Rousso '25
Jamari Amrham '22	Ulyses Hernandez Felipe '24	Catie Sanchez '23
Chloe Arons '23	Isabel Honigman '22	Linnea Selendy '23
Lola Buczkowski '25	Risa Horiuchi '25	Sarah Senator '25
Katherine Buetens '24	Amelia Ingersoll '22	Madalyn Snyder '22
Jem Costello '23	Sofia Jorgenson '25	Kaidi Stec '25
Bryn Creager '25	Mariana Kaluba '25	Anntonia Taylor '24
Lily D'Addario '23	Claire Kaminski '24	Devendra Thapaliya '25
Michelle Desjarlais '22	MinAh Kim '22	Ava Thomas '22
Emily Dewey '22	Talia Kurlansky '22	Celia Tolan '24
Emily DiBartolo '23	Adrian Madanes '25	Griffin Trygg '25
Jane Drumm '25	Delilah Meyer '24	Willa Wang '25
Chloe Dwinal '25	Imogen Micklewhite '22	Adelle Welch '25
Alexis Evans '24	Bryn Murray '25	Anna Weylman-Farwell '24
Nate Folker '25	Sadie Murray '23	May Whelan '25
Caroline Friedman '25	Ruslan Peredelskyi '25	Yiwen Wu '25
Lydia Frew '25	Abigail Phillips '25	Star Yang '24
Charlotte Gisborne '25	Cate Pope '25	Stella Younkin '24
Maya Golden '23	Muhammad Harris Ramlee '25	Abby Zerbey '23