

2022 Spring Student Symposium

- A** Art Exhibit **G** General Event **O** Oral Presentation **P** Poster Presentation **R** Prerecorded Presentation
- Z** Zoom Presentation

Friday, April 22

JOHNSON MEMORIAL BUILDING

10:00am – 4:00pm A **Art Exhibits**
Art Exhibit

MBH 104

- 9:15am – 9:30am **Opportunistic and Occupational Hunters: Understanding Dynamics of Sea Turtle Harvest in Southwest Madagascar**
Oral Presentation
Presenters: Gabriel Lefkowitz '22
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- 9:35am – 9:50am **Democracy: A Cinematic Poem**
Oral Presentation
Presenters: Daphne West '23.5
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- 9:55am – 10:10am **Exploration of Nutrient Limitation in the Little Colorado River, Grand Canyon, AZ**
Oral Presentation
Presenters: Phoebe Brown '22.5
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- 10:15am – 10:30am **The Power of Mapping: Transforming Data Points Into a Conservation Tool**
Oral Presentation
Presenters: Kathryn Talano '22
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- 11:15am – 11:30am **Underwater: Symbolism of Water & Hydrophilia in Queer Cinema**
Oral Presentation
Presenters: Jean Wan '24
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- 11:35am – 11:50am **The Middlebury Campus: A Documentary**
Oral Presentation
Presenters: Riley Board '22, Cooper Kelley '22
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- 11:55am – 12:10pm **Introducing MIMDB -- A Fullstack Application**
Oral Presentation
Presenters: Jiaqi Li '22
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- 12:15pm – 12:30pm **Taking 3D Pictures with a Pulsed Laser**
Oral Presentation
Presenters: Sam Yurak '22
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- 1:30pm – 1:45pm **To be Free is to be Yourself: How Authentic Selfhood leads to Humility and Selflessness**
Oral Presentation
Presenters: Maximilian Stein '25
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- 1:50pm – 2:05pm **Painting Though Extinction: The Representation and Reclamation of Sinixt Identity in Ric Gendron's Coming Home**
Oral Presentation
Presenters: Alexis Welch '22.5
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- 2:10pm – 2:25pm **From Italian Folk Traditions to TikTok Feeds: Problematizing Assumptions of Authorship in Music through the Dynamic History of "Bella Ciao"**
Oral Presentation
Presenters: Massimo Sassi
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2:30pm – 2:45pm	○ Homeland, Revolution, and Belonging: The Poetry of Marwan Makhoul in Translation Oral Presentation <i>Presenters: Andrew Willis '22</i>
3:30pm – 3:45pm	○ Does Marijuana Reform Improve Racial Disparities in Incarceration Rates? Oral Presentation <i>Presenters: Kavita Patel '22</i>
3:50pm – 4:05pm	○ 'The Snitch': Analyzing the Role of Horizontal Surveillance at Middlebury College During the COVID-19 Pandemic Oral Presentation <i>Presenters: Molly Gallagher '22</i>
4:10pm – 4:25pm	○ Well-being and Mental Health During the Pandemic Oral Presentation <i>Presenters: Tim Hua '23.5</i>
4:30pm – 4:45pm	○ 0 Gorham Lane Housing Research and Analysis Oral Presentation <i>Presenters: Sarah Mines '24.5, Sarah Rifkin '24, Tyler Hadar '25, Beckett Pintair '24.5</i>

MBH 216

9:15am – 9:30am	○ Modeling the Effect of Sleep Deprivation on Pain Sensitivity Oral Presentation <i>Presenters: Carolyn (Carrie) Vanty '23.5</i>
9:35am – 9:50am	○ Mutual Aid & Health Outcomes in Haiti Oral Presentation <i>Presenters: Cecilia Needham '22.5</i>
9:55am – 10:10am	○ Talking About Pandemic Losses Oral Presentation <i>Presenters: Michele Young '22</i>
10:15am – 10:30am	○ Pain Processing at the Peripheral Sensory Level in Drosophila Melanogaster Oral Presentation <i>Presenters: Edith Lopez '22</i>
11:15am – 11:30am	○ At the Intersection: The Housing Crisis and Opioid Crisis in Vermont Oral Presentation <i>Presenters: Grace Getman '22</i>
11:35am – 11:50am	○ Assessing Needs of Low-Income Families in Vermont Oral Presentation <i>Presenters: Grace Boyce '22.5, Patricia Alonso Rivera '22, Tai Nguyen '22</i>
11:55am – 12:10pm	○ Analyzing Lead in Vermont Schools Oral Presentation <i>Presenters: Nicholas Brown '22, Evan Kelly '23, Evelyn Lane '23</i>
12:15pm – 12:30pm	○ Characterization of Viral and Bacterial Dynamics in Lake Champlain Cyanobacterial Harmful Algal Blooms Oral Presentation <i>Presenters: Gifty Atanga '23, Briana Johnson '23</i>
1:30pm – 1:45pm	○ Maybe I'm Q? If I Was, This Is Exactly How I Would Do It: A Communicative Analysis of QAnon Organizing Logic and Content Formation Oral Presentation <i>Presenters: Suria Vanrajah '22</i>
1:50pm – 2:05pm	○ Exploring the Feasibility of Integrating Generated Protocol Parsers into Operating Systems Oral Presentation <i>Presenters: Wayne Wang '22.5</i>
2:10pm – 2:25pm	○ Strange Encounters of the Small Town Kind: On Spirit Possession, Kinship, and Memory Oral Presentation <i>Presenters: Haegan O'Rourke '22.5</i>

2:30pm – 2:45pm	<ul style="list-style-type: none"> ○ Is the Job-to-Job Transition Rate Procyclical? Oral Presentation <i>Presenters: Masataka Mori '23</i>
3:30pm – 3:45pm	<ul style="list-style-type: none"> ○ Pathology as Fiction: The Myth of the Creative Mad Genius in Émile Zola's L'Œuvre Oral Presentation <i>Presenters: Jacqueline Qiu '22</i>
3:50pm – 4:05pm	<ul style="list-style-type: none"> ○ Instagram Innovation Among Disabled "Mommy Bloggers" Oral Presentation <i>Presenters: Mary Moore '22.5</i>
4:10pm – 4:25pm	<ul style="list-style-type: none"> ○ Programming Music: The Art of Live Coding Oral Presentation <i>Presenters: Lukka Wolff '25</i>
4:30pm – 4:45pm	<ul style="list-style-type: none"> ○ Vulnerability: A Senior Thesis in Dance Oral Presentation <i>Presenters: Chloe Zinn '22</i>

MBH 219

9:15am – 9:30am	<ul style="list-style-type: none"> ○ Heredity Threat of Feeble-minded Women: American Eugenic Thought in Missouri Asylums at the Turn of the Twentieth Century Oral Presentation <i>Presenters: Mary Moore '22.5</i>
9:35am – 9:50am	<ul style="list-style-type: none"> ○ The Effect of Increased Access to IVF on Women's Career Oral Presentation <i>Presenters: Lingxi Chen '22.5</i>
9:55am – 10:10am	<ul style="list-style-type: none"> ○ Reducing the Burden: Does Access to Mail-Order Abortion Pills Reduce Trips to Clinics? Oral Presentation <i>Presenters: Frieda Violet Thaveethu '22</i>
10:15am – 10:30am	<ul style="list-style-type: none"> ○ Hormone Projects: Corporeal Correction, Conflict, and Confusion in the Age of Contraceptives Oral Presentation <i>Presenters: Anna Wood '22</i>
11:15am – 11:30am	<ul style="list-style-type: none"> ○ Bad Romance: The Pyroptosis Executioner GSDME Finds a New Binding Partner Oral Presentation <i>Presenters: Margaret Haberle '22</i>
11:35am – 11:50am	<ul style="list-style-type: none"> ○ Synchronization of Electrically Coupled Neurons Oral Presentation <i>Presenters: Bryan Currie '22</i>
11:55am – 12:10pm	<ul style="list-style-type: none"> ○ Socialscape Ecology: Integrating Social Factors into Spatially-Explicit Marine Conservation Planning Oral Presentation <i>Presenters: Katie Concannon '22</i>
12:15pm – 12:30pm	<ul style="list-style-type: none"> ○ Entanglement Entropy in Frustrated Quantum Ferromagnets Oral Presentation <i>Presenters: Tao You '22.5</i>
1:30pm – 1:45pm	<ul style="list-style-type: none"> ○ Evaluating the Impacts of Living near Superfund Sites in New York City Oral Presentation <i>Presenters: Christina Badalamenti '22</i>
1:50pm – 2:05pm	<ul style="list-style-type: none"> ○ Modeling the Secret Weapons of Cancer: An In Vitro System to Recapitulate Extrachromosomal DNA Formation in Tumor Cells Oral Presentation <i>Presenters: Hieu Nguyen '23</i>
2:10pm – 2:25pm	<ul style="list-style-type: none"> ○ Diversity in Start-up Fundraising: Gender, Race & Education Oral Presentation <i>Presenters: Christian Poulsen '22</i>

2:30pm – 2:45pm	○ Examining Theories of Change in the Northeast Native Plant Movement Oral Presentation <i>Presenters: Brett Gilman '24.5</i>
3:30pm – 3:45pm	○ A Comparison of eDNA Metabarcoding to Camera Trapping for Mammal Diversity in Bristol, VT Oral Presentation <i>Presenters: Emma Norton '22</i>
3:50pm – 4:05pm	○ Modeling Runoff in the New Haven River Watershed: A GIS-Based Approach Oral Presentation <i>Presenters: Will Ebby '22</i>
4:10pm – 4:25pm	○ Local Farm Production Output Study for Food Hub Feasibility Oral Presentation <i>Presenters: Aiden Snorek-Yates '22.5, Hannah Sullivan '22.5</i>
4:30pm – 4:45pm	○ Dissolved phosphorus: Unique Indicator or Waste of Resources? Oral Presentation <i>Presenters: Castin Stone '22</i>

MBH 220

9:15am – 9:30am	○ The Impact of Black Lives Matter Protests on Election and Policing Oral Presentation <i>Presenters: Patrick Stevenson '22.5</i>
9:35am – 9:50am	○ School Board Chaos: Impact of the Anti-Critical Race Theory Movement Oral Presentation <i>Presenters: Celia Gottlieb '22</i>
9:55am – 10:10am	○ “A Braid is Stronger”: Weaving Decolonial Research Relationships Oral Presentation <i>Presenters: Jaden Hill '22</i>
11:15am – 11:30am	○ Stillness in Action: Exploring the Power of the Radical Resting Body Oral Presentation <i>Presenters: Maia Sauer '22</i>
11:35am – 11:50am	○ An Innovative, Highly Sensitive and Transferrable Tool for Neurocognitive Monitoring in Congenital Central Hypoventilation Syndrome (CCHS): the NIH Toolbox® Oral Presentation <i>Presenters: Remi Welbel '22.5</i>
11:55am – 12:10pm	○ Analysis of Latency Reversal and Anti-HIV Activity in South African Daphnane Diterpenes Oral Presentation <i>Presenters: Nathan Levitties '23</i>
12:15pm – 12:30pm	○ Antithrombotic Use And Bleeding Risk In Retrobulbar Anesthesia Oral Presentation <i>Presenters: John Eschert '23.5</i>
1:30pm – 1:45pm	○ Development and Social Changes in Rural China Under the Rigorous Poverty Alleviation Policy---Case Study of Longtang Village in Guizhou Province, China Oral Presentation <i>Presenters: Jessica (Zhanqi) Hong '24</i>
1:50pm – 2:05pm	○ Statistical Methods in Olfactory Hardware Production Optimization Oral Presentation <i>Presenters: Jiayi Chen '23, Bo Liu '23, Yiran(Steven) Shi '23</i>
2:10pm – 2:25pm	○ Sacralizing Sunrise: The Religious Dimensions of the Sunrise Movement's Meta-Narrative and Ritualized Practices Oral Presentation <i>Presenters: Connor Wertz '22</i>

2:30pm – 2:45pm	<p>○ Imagining the Future: Christian Apocalypticism and the Modern Environmental Movement Oral Presentation <i>Presenters: Olivia Sommers '22</i></p>
3:30pm – 3:45pm	<p>○ The Effects of AI on College Majors Oral Presentation <i>Presenters: Maxwell Auburn '22</i></p>
3:50pm – 4:05pm	<p>○ “Grades Make Me Depressed”: Re-evaluating Meaning Making in Our Grading Systems Oral Presentation <i>Presenters: Emily Jones '23</i></p>
4:10pm – 4:25pm	<p>○ The Rising Price of Higher Education: A Summary, Analysis, and Hopeful Solution Oral Presentation <i>Presenters: Alex Demoly '22</i></p>
4:30pm – 4:45pm	<p>○ Escaping Meritocracy? Why Korean and Chinese International Students Opt Out of Their Home Countries' Education Systems Oral Presentation <i>Presenters: Raphaella Kim '22</i></p>
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MBH 303	
9:15am – 9:30am	<p>○ The Impact of Second Language Background on The Sensitivity of Emotional Prosody Identification Oral Presentation <i>Presenters: Yuka Tatsumi '22</i></p>
9:35am – 9:50am	<p>○ Learning Glottophobia : Examining Accent Preferences and Prejudices of Middlebury French Students Oral Presentation <i>Presenters: Jennie Bob Bizal-Clark '22</i></p>
9:55am – 10:10am	<p>○ Han Song's "Ancient Desert Ship" and Other Stories in Translation Oral Presentation <i>Presenters: Jackson Evans '22</i></p>
10:15am – 10:30am	<p>○ Issues in Translation: Arabic Short Literature Oral Presentation <i>Presenters: Aidan Wertz '22</i></p>
11:15am – 11:30am	<p>○ Attitudes Towards Expanding the State Sector After Experiencing a Recent Recession Oral Presentation <i>Presenters: Justin Cooper '22</i></p>
11:35am – 11:50am	<p>○ Double or Nothing: The Social Impact of Tribal Casinos on Native American Population Oral Presentation <i>Presenters: Cynthia Chen '22</i></p>
11:55am – 12:10pm	<p>○ The Toll of a Pandemic: Interpellation, Biopolitics, and the Lived Experience of Moral Distress among Frontline Healthcare Workers during COVID-19 Oral Presentation <i>Presenters: Kathryn van der Merwe '22</i></p>
12:15pm – 12:30pm	<p>○ Emotion, Rationality, Self-Actualization: Examining Tensions in Capitalism Through Brené Brown and Ray Dalio Oral Presentation <i>Presenters: Caitlin Barr '22.5</i></p>
1:30pm – 1:45pm	<p>○ Conjuring Legitimacy: The Nabatean Agriculture in Translation Oral Presentation <i>Presenters: Sofia Leathers '22</i></p>
1:50pm – 2:05pm	<p>○ Asian Americans Be(Long) in American History: Intricacies of Labor and Home Reflected in Asian American Literature Oral Presentation <i>Presenters: Queenie Li '22</i></p>

2:10pm – 2:25pm	○ Beds and the Spatial Dynamics of Power in the Odyssey Oral Presentation <i>Presenters: Caitlin Barr '22.5</i>
2:30pm – 2:45pm	○ Two Dantes and Everything in Between: Dostoevsky as a Key to Dante's Underworld Oral Presentation <i>Presenters: David Williams '22.5</i>
3:30pm – 3:45pm	○ A Window into Small Scale Fishing Dynamics: Community Perceptions and Indicator Family Relative Abundance and Biomass Oral Presentation <i>Presenters: Gabriel Lefkowitz '22</i>
3:50pm – 4:05pm	○ Geographies of Migration and Liminality: Placemaking on the Margins of the Calais Jungle Oral Presentation <i>Presenters: Lily Laesch '23</i>
4:10pm – 4:25pm	○ The Muslim Rebellion of 1864: A Regretted Jihad in Qing Xinjiang Oral Presentation <i>Presenters: Indira Yuldasheva '22</i>
4:30pm – 4:45pm	○ “We Will Not Let Our Future Burn”: Interviews with Gen-Z Activists in the Myanmar Spring Revolution Oral Presentation <i>Presenters: Molly Burnett '22.5</i>

MBH 311

9:15am – 9:30am	○ Petrology, Age, and Geochemistry of the Yarmouth Island Formation, Casco Bay, Maine Oral Presentation <i>Presenters: Sophia Johnson '22</i>
9:35am – 9:50am	○ Determining the Origin of Felsic Intrusions in the Champlain Valley Oral Presentation <i>Presenters: Amanda Marks '22</i>
9:55am – 10:10am	○ Shunning the Presence of People: Chinese Landscapes and the Artwork of Bambi Oral Presentation <i>Presenters: Annaliese Terlesky '23.5</i>
10:15am – 10:30am	○ Pronunciation and Appropriation: How Single-Word Choices Reveal the Intersections of Relationships, Identity, Context and Language Oral Presentation <i>Presenters: Riley Board '22</i>
11:15am – 11:30am	○ Decoding Olfactory Receptors in Harpegnathos Saltator Oral Presentation <i>Presenters: Benjamin Morris '22, Aiden Masters '22</i>
11:35am – 11:50am	○ Mapping the Spread of Queer Inclusive Policies in Tokyo Wards Oral Presentation <i>Presenters: Akari Tsurumaki '23</i>
11:55am – 12:10pm	○ Exploring Community Building in an Immigrant Church Oral Presentation <i>Presenters: Lauren Eskra '22</i>
12:15pm – 12:30pm	○ Developmental Consequences of C-Section Delivery in Prairie Voles-(Microtus ochrogaster) Oral Presentation <i>Presenters: Shriya Patel '22</i>
1:30pm – 1:45pm	○ Impregnation, Contamination, and Lethal Melancholy: A Hysteric's Revenge in Sophocles' The Women of Trachis Oral Presentation <i>Presenters: Hana Matsudaira '22</i>

1:50pm – 2:05pm	○ Dangerous Women: (De)Construction of the Gender Binary Through Ultra-Endurance Sports Oral Presentation <i>Presenters: Hannah Gellert '22</i>
2:10pm – 2:25pm	○ The Body of a Nation: Ableism and Constructions of Masculinity Through Primary School Education in Modern China Oral Presentation <i>Presenters: Mira Vance '22.5</i>
2:30pm – 2:45pm	○ Ophelia Underwater: Designing Character through Costume Oral Presentation <i>Presenters: Bella Costantino-Carrigan '22</i>
3:30pm – 3:45pm	○ A Pandemic of Resilience: Creating an Active Reading Strategy to Pursue Resilience in Written and Film Narratives of the Wuhan COVID-19 Lockdown Oral Presentation <i>Presenters: Josh Sims Speyer '22</i>
3:50pm – 4:05pm	○ Amateur Directing in the Real World Oral Presentation <i>Presenters: Ryan Kirby '22</i>
4:10pm – 4:25pm	○ Guston's Golems: Redemption and Revelation in the Late Works of Philip Guston (1969 - 1980) Oral Presentation <i>Presenters: Hunter Parkhill '22</i>
4:30pm – 4:45pm	○ The Effect of Republican Leaders' Testimonials on COVID-19 Vaccine Uptake in the United States Oral Presentation <i>Presenters: Xiaoyu Wu '22</i>

MBH 317

9:15am – 10:30am	○ The Living Building Challenge - Envisioning Middlebury's Future Oral Presentation <i>Presenters: Sanjana Roy '22, Clara Wolcott '22, Lauren Gemery '23, Grace Sokolow '24, Isabelle Gay '23.5</i>
11:15am – 12:30pm	○ Education Studies Senior Seminar Research Projects Oral Presentation <i>Presenters: Julia McClain '22, Leah Smith '22, Michelle Marquez '22, Katherine (Katie) Beadle '22.5, Dana Glackin '22, Bryn Hester '22, Lori Ngo '22, Emma Ramirez-Richer '22</i>
1:30pm – 1:45pm	○ Moving Earth: Revolution, Labor, and Landscape in 20th-Century Egyptian Painting Oral Presentation <i>Presenters: Rhys Glennon '22</i>
1:50pm – 2:05pm	○ Looking Within and Beyond Books During Mughal Emperor Jahangir's Reign Oral Presentation <i>Presenters: Claire Darrow '22</i>
2:10pm – 2:25pm	○ Aggression or Risk-Management?: A Multi-tiered Model of Corporate Lobbying Oral Presentation <i>Presenters: Jacqueline Qiu '22</i>
2:30pm – 2:45pm	○ Miyazawa Kenji's Reception in Interwar Japan Oral Presentation <i>Presenters: Yunzhi Liu '22</i>
3:30pm – 3:45pm	○ Exploring the Middlebury Language Community Oral Presentation <i>Presenters: Nicholas Sliter '23</i>
3:50pm – 4:05pm	○ Analyzing College Admissions Equity through High School Seniors, the Applications Process, and Online Communities Oral Presentation <i>Presenters: Erica Swirsky '23</i>

4:10pm – 4:25pm

- **Free Lunches? Education & Health Impacts of India's 'Mid-Day Meal' School Feeding Program**
Oral Presentation
Presenters: Shridhar Singhania '22

MBH 403

9:15am – 9:30am

- **Improving Weather Forecasts with Machine Learning**
Oral Presentation
Presenters: Katelyn Mei '22, Acadia Hegedus '22, Tom Gause '22

9:35am – 9:50am

- **Using Machine Learning to Identify Supermassive Black Hole Powered Quasars**
Oral Presentation
Presenters: Shirley Mao '22.5

9:55am – 10:10am

- **NPSV2: A Machine Learning Approach to Structural Variant Genotyping in Whole Genome Sequencing Data**
Oral Presentation
Presenters: Eliza Wieman '23, Daniel Brey '22

10:15am – 10:30am

- **Machine Learning to Reverse-Solve Schrodinger's Equation**
Oral Presentation
Presenters: Ellie Suit '24

11:15am – 11:30am

- **Political (Non) Apologies in Argentina and Russia**
Oral Presentation
Presenters: Isabel Larson '22

11:35am – 11:50am

- **Jungle Primaries: Losing The Third Party In The Jungle**
Oral Presentation
Presenters: Michael Matheson '25

11:55am – 12:10pm

- **Nuisance Ordinances, Evictions, and Homelessness**
Oral Presentation
Presenters: Ethan Berner '22

12:15pm – 12:30pm

- **Homosexual Intimacy Within and Beyond The Untamed**
Oral Presentation
Presenters: Charlene Fu '22

3:30pm – 3:45pm

- **Finding Foraminifera: Quantitative Analysis of Microfossils to Reconstruct Deep Ocean Carbon Storage**
Oral Presentation
Presenters: Shane Lusk '22

3:50pm – 4:05pm

- **Governing Digital Disruption: Effects of Competing Global Governance Interests on Cross-Border Mobile Money Adoption**
Oral Presentation
Presenters: Elsa Korpi '22

4:10pm – 4:25pm

- **Observing the Hall Effect in Semiconductors**
Oral Presentation
Presenters: Ruben Vargas '22

4:30pm – 4:45pm

- **Computational Models of The Effects of Intraslow Oscillations on Neuron Ensemble Formation**
Oral Presentation
Presenters: Ev Berger-Wolf '23

MBH GREAT HALL

9:00am – 9:15am

- G **Welcome by Laurie Patton, President of Middlebury College**
General Event

10:30am – 11:15am

- P **05. Gnawing Away at the Family Tree: Adirondack Beaver Lineage**
Poster Presentation
Presenters: Audrey Hsi '22

10:30am – 11:15am	P 07. Constructing a Laser-Scanning Confocal Microscope Using Curved Mirrors Poster Presentation <i>Presenters: Thomas Zodda '22.5</i>
10:30am – 11:15am	P 08. Big Fish: A Spectacle on a Budget Poster Presentation <i>Presenters: Nino Tomas '22, Gayathri Mantha '25</i>
10:30am – 11:15am	P 01. Memor-eyes; Bilateral Saccadic Eye Movements and Episodic Memory Retrieval Poster Presentation <i>Presenters: Olivia Haouchine '22</i>
10:30am – 11:15am	P 17. Caught in the Cross Hairs: Novel Hybrid Sensilla in Ants Detected by SEM Imaging Poster Presentation <i>Presenters: Hannah Gellert '22</i>
10:30am – 11:15am	P 18. Behavioral Responses in Drosophila melanogaster Following Traumatic Brain Injury Poster Presentation <i>Presenters: Laurie Chen '22, Sebin Park '22</i>
10:30am – 11:15am	P 13. Measuring the Superconducting Transition of a High-Temperature Superconductor Poster Presentation <i>Presenters: Willson Moore '22.5</i>
10:30am – 11:15am	P 14. Mechanism of Testosterone: The Effects of Intracerebral Testosterone on Spatial Memory in Adult Male Rats Poster Presentation <i>Presenters: Hieu Nguyen '23</i>
10:30am – 11:15am	P 22. Investigation of Gasdermins as “Executioner” Molecules in Pyroptosis Poster Presentation <i>Presenters: Miriam Weathers '22</i>
10:30am – 11:15am	P 19. Synthesis of Ruthenium-Complexed Fluorene Polymer as Potential Molecular Wire Poster Presentation <i>Presenters: Huiming Liang '22</i>
10:30am – 11:15am	P 21. PFAS Exposure from Ski Wax Application and Implications for General Exposure Pathways Poster Presentation <i>Presenters: Nicola Hartmann '23.5, Emilia Andersen '22</i>
10:30am – 11:15am	P 44. 0 Gorham Lane Research and Analysis Poster Presentation <i>Presenters: Sarah Mines '24.5, Sarah Rifkin '24, Tyler Hadar '25, Beckett Pintair '24.5</i>
10:30am – 11:15am	P 10. Development of a Novel Method to Probe for a Deacetylase in Borrelia burgdorferi, the Causative Agent of Lyme Disease Poster Presentation <i>Presenters: Ming Harris-Weidner '22</i>
10:30am – 11:15am	P 04. The Relationship Between Attendance in a Virtual Exercise Class and Quality of Life for People with Parkinson Disease Poster Presentation <i>Presenters: Nate Stewart '22</i>
10:30am – 11:15am	P 16. Remote Renderings for Restoration: Representations of Wetlands in the Southern Marshes of Iraq Poster Presentation <i>Presenters: Brooke Laird '22</i>
10:30am – 11:15am	P 11. Does Using Moral Foundation Language for Christians Increase Environmental Engagement Poster Presentation <i>Presenters: Maya Saterson '22</i>
10:30am – 11:15am	P 03. Identification of SloR Binding Sites Throughout the Streptococcus Mutans UA159 Genome Poster Presentation <i>Presenters: Emily Bulczynski '22</i>

10:30am – 11:15am	P	20. Understanding Paleoclimate through Packrat Middens Poster Presentation <i>Presenters: Elizabeth Austin '24</i>
10:30am – 11:15am	P	02. Comparison of Phosphorus Determination in Freshwater Invertebrates by Spectrophotometry and Inductively-Coupled Plasma Mass Spectrometry Poster Presentation <i>Presenters: Julia Keon '23, Alexander Kessler '22.5</i>
10:30am – 11:15am	P	29. Direct Imaging of RNA loaded Lipid-Nanoparticles for RNA-based Vaccines Poster Presentation <i>Presenters: Jewel Ashbrook '23</i>
10:30am – 11:15am	P	12. The Diurnal Fluctuations and Effects of UV on Escherichia coli in Jackson, WY Recreational Streams Poster Presentation <i>Presenters: Emma Román '22</i>
10:30am – 11:15am	P	06. Foreign Aid and Corruption: The Case of China's Overseas Lending Poster Presentation <i>Presenters: Claire Moy '22</i>
10:30am – 11:15am	P	09. The Effect of Cell Wall Elasticity on the Desiccation Tolerance of the Common Biocrust Moss <i>Syntrichia caninervis</i> Poster Presentation <i>Presenters: Nuki Neumeister '22.5</i>
10:30am – 11:15am	P	15. A Protein Proof-of-Concept Model of a Photoredox Crosslinking Approach to Drug Target Identification Poster Presentation <i>Presenters: Alden Harring '22</i>
2:45pm – 3:30pm	P	39. Managing and Monitoring Beavers on Middlebury's Campus Poster Presentation <i>Presenters: Andrew Ng '22</i>
2:45pm – 3:30pm	P	32. Elucidating the Individual Functions of Three Borellial PFKs Poster Presentation <i>Presenters: Cady Barns '22.5</i>
2:45pm – 3:30pm	P	42. Testing Taphonomy for Tar Pits of the World Poster Presentation <i>Presenters: Ezra Flint '22.5</i>
2:45pm – 3:30pm	P	38. Where the Woodlots Are: Superfine Tree Gain Mapping in Tanzania Using Planet Labs Imagery Poster Presentation <i>Presenters: Vincent Falardeau '22</i>
2:45pm – 3:30pm	P	37. The Effect of Heat Stimuli on Individual and Group Behavior in <i>D. Melanogaster</i> Poster Presentation <i>Presenters: Ciara Burke '22</i>
2:45pm – 3:30pm	P	36. Determining Whether Testosterone's Effect on Spatial Memory Strategy in Male Rats is Androgen- or Estrogen-Dependent Poster Presentation <i>Presenters: Abby Griffin '23, Em Luber '22</i>
2:45pm – 3:30pm	P	34. Island Extinctions Biases throughout the Holocene Poster Presentation <i>Presenters: Maggie Swanson '22.5</i>
2:45pm – 3:30pm	P	25. Initial Methods for an Environmental Health Survey of <i>Toxoplasma gondii</i> in Alaskan Shellfish Poster Presentation <i>Presenters: Kaja Aagaard '22</i>
2:45pm – 3:30pm	P	40. Role of the Neuropeptide NPLPL4 in Alcohol Tolerance and Sensitivity in the Fruit Fly Poster Presentation <i>Presenters: Francesca Whitecross '23.5</i>

2:45pm – 3:30pm	P	35. Investigating Groundwater as a Control on Algal Blooms in Lake Carmi, Franklin VT Poster Presentation <i>Presenters: Maxwell Memeger '22</i>
2:45pm – 3:30pm	P	43. The Rohatyn Global Scholars Program Poster Presentation <i>Presenters: Christopher Martucci '25, Maddie Sauders '25, Ciara Murphy '25</i>
2:45pm – 3:30pm	P	28. Toxic Thirst: Exploring PFAS Contamination In Vermont Drinking Water Poster Presentation <i>Presenters: Claire Contreras '23</i>
2:45pm – 3:30pm	P	31. The Investigation of Personal Care Products Usage Role in the Prevalence of Thyroid Cancer in Women in Honduras Poster Presentation <i>Presenters: Seiha San '22</i>
2:45pm – 3:30pm	P	45. An Exploration of Cell-Associated and Cell-Exported Enolase in B. Burgdorferi Poster Presentation <i>Presenters: Sloane Parker '22</i>
2:45pm – 3:30pm	P	26. The Role of GDE6 in Neural Tube Development Poster Presentation <i>Presenters: Maddie McKean '22, Thea Joseph '22</i>
2:45pm – 3:30pm	P	33. Alcohol, Substance Use, and Violence in Male and Female Adolescents Poster Presentation <i>Presenters: Gianna Ferguson '23</i>
2:45pm – 3:30pm	P	23. The Responses of Retail Spending and Real Consumption to Housing Wealth Shocks: Evidence from Geographically-Linked Retail Data Poster Presentation <i>Presenters: Tai Nguyen '22</i>
2:45pm – 3:30pm	P	24. A Chemical-Genetic Dissection of Necroptosis Poster Presentation <i>Presenters: Karina Sharma '22</i>
2:45pm – 3:30pm	P	41. Non-Medical Factors Influencing Lung Cancer Treatment and Survival Outcomes Poster Presentation <i>Presenters: Betsy Romans '23, Sophie Levine '23, Jack Finn '23, Asif Ul-Islam '23</i>
2:45pm – 3:30pm	P	46. Exploring Atypical Chain Formations Constructed by the Ubiquitin ligase Rsp5 Poster Presentation <i>Presenters: Dani Xu '22</i>
2:45pm – 3:30pm	P	27. Assessing Beaver Activity and Mitigating Human Conflict on Middlebury College Lands Poster Presentation <i>Presenters: Jack Cornish '22</i>
2:45pm – 3:30pm	P	30. Encounters with Stone Poster Presentation <i>Presenters: Max Taxman '22.5</i>

ONLINE

10:30am – 5:00pm	R	Undocumented Immigration and California's Agricultural Economy Prerecorded Presentation <i>Presenters: Sylvie Shure '24.5</i>
10:30am – 5:00pm	R	Word and World: Multifaceted Consciousness and Preverbal Movements in Gao Xingjian's Soul Mountain and Nathalie Sarraute's Childhood Prerecorded Presentation <i>Presenters: Qing Zhao '21.5</i>

10:30am – 5:00pm

R **Ableism and Audism in Cochlear Implant Marketing**

Prerecorded Presentation

Presenters: Phaedra Robinson '22

VARIOUS LOCATIONS

12:30pm – 1:30pm

G

**Lunch Break
General Event**

ZOOM (VIEW IN MBH 411)

1:30pm – 1:45pm

Z **The Establishment of the British Museum and the British Society in the Late Eighteenth Century
Zoom Presentation**

Presenters: Yining (Elaine) Zhang '23.5

1:45pm – 2:00pm

Z **Imperialist Legacies of 18th Century British East India Company Tea Trade
Zoom Presentation**

Presenters: Nina Ng '23

2:00pm – 2:15pm

Z **Defining Love: Gender, Sex, and Generational Trauma in Mo Xiang Tong Xiu's Heaven Official's Blessing
Zoom Presentation**

Presenters: Olivia Lee '22

2:15pm – 2:30pm

Z **Bird Diversity in the Ecuadorian Chocó: A proposal for avitourism in Villaflora and Manduriacu Reserve
Zoom Presentation**

Presenters: Elizabeth Kroger '22.5

2:30pm – 2:45pm

Z **Impacts of the Great Recession on Migrant Household's Workforce Participation in Rural Guatemala
Zoom Presentation**

Presenters: Ernesto Cuxil '22
