

2022 Spring Student Symposium

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

Z Zoom Presentation

APRIL 22 • FRIDAY

PINNED 9:00am – 9:15am	G Welcome by Laurie Patton, President of Middlebury College	MBH Great Hall
9:15am – 9:30am	O Heredity Threat of Feeble-minded Women: American Eugenic Thought in Missouri Asylums at the Turn of the Twentieth Century <i>Presenters: Mary Moore '22.5</i> <i>Sponsors: Amy Morsman</i>	MBH 219
9:15am – 9:30am	O Improving Weather Forecasts with Machine Learning <i>Presenters: Katelyn Mei '22, Acadia Hegedus '22, Tom Gause '22</i> <i>Sponsors: Alex Lyford</i>	MBH 403
9:15am – 9:30am	O Modeling the Effect of Sleep Deprivation on Pain Sensitivity <i>Presenters: Carolyn (Carrie) Vanty '23.5</i> <i>Sponsors: Jennifer Crodelle</i>	MBH 216
9:15am – 9:30am	O Opportunistic and Occupational Hunters: Understanding Dynamics of Sea Turtle Harvest in Southwest Madagascar <i>Presenters: Gabriel Lefkowitz '22</i> <i>Sponsors: Mez Baker-Medard</i>	MBH 104
9:15am – 9:30am	O Petrology, Age, and Geochemistry of the Yarmouth Island Formation, Casco Bay, Maine <i>Presenters: Sophia Johnson '22</i> <i>Sponsors: David West</i>	MBH 311
9:15am – 9:30am	O The Impact of Black Lives Matter Protests on Election and Policing <i>Presenters: Patrick Stevenson '22.5</i> <i>Sponsors: Erick Gong</i>	MBH 220
9:15am – 9:30am	O The Impact of Second Language Background on The Sensitivity of Emotional Prosody Identification <i>Presenters: Yuka Tatsumi '22</i> <i>Sponsors: Brandon Baird</i>	MBH 303
9:15am – 10:30am	O The Living Building Challenge - Envisioning Middlebury's Future <i>Presenters: Sanjana Roy '22, Clara Wolcott '22, Lauren Gemery '23, Grace Sokolow '24, Isabelle Gay '23.5</i> <i>Sponsors: Shelly Pottorf</i>	MBH 317
9:35am – 9:50am	O Democracy: A Cinematic Poem <i>Presenters: Daphne West '23.5</i> <i>Sponsors: Spring Ulmer</i>	MBH 104
9:35am – 9:50am	O Determining the Origin of Felsic Intrusions in the Champlain Valley <i>Presenters: Amanda Marks '22</i> <i>Sponsors: Will Amidon</i>	MBH 311
9:35am – 9:50am	O Learning Glottophobia : Examining Accent Preferences and Prejudices of Middlebury French Students <i>Presenters: Jennie Bob Bizal-Clark '22</i> <i>Sponsors: Gyula Zsombok</i>	MBH 303
9:35am – 9:50am	O Mutual Aid & Health Outcomes in Haiti <i>Presenters: Cecilia Needham '22.5</i> <i>Sponsors: Sarah Stroup</i>	MBH 216
9:35am – 9:50am	O School Board Chaos: Impact of the Anti-Critical Race Theory Movement <i>Presenters: Celia Gottlieb '22</i> <i>Sponsors: Bert Johnson</i>	MBH 220

9:35am – 9:50am	O	The Effect of Increased Access to IVF on Women's Career <i>Presenters: Lingxi Chen '22.5</i> <i>Sponsors: Caitlin Myers</i>	MBH 219
9:35am – 9:50am	O	Using Machine Learning to Identify Supermassive Black Hole Powered Quasars <i>Presenters: Shirley Mao '22.5</i> <i>Sponsors: Eilat Glikman</i>	MBH 403
9:55am – 10:10am	O	Exploration of Nutrient Limitation in the Little Colorado River, Grand Canyon, AZ <i>Presenters: Phoebe Brown '22.5</i> <i>Sponsors: Eric Moody</i>	MBH 104
9:55am – 10:10am	O	Han Song's "Ancient Desert Ship" and Other Stories in Translation <i>Presenters: Jackson Evans '22</i> <i>Sponsors: Thomas Moran</i>	MBH 303
9:55am – 10:10am	O	NPSV2: A Machine Learning Approach to Structural Variant Genotyping in Whole Genome Sequencing Data <i>Presenters: Eliza Wieman '23, Daniel Brey '22</i> <i>Sponsors: Michael Linderman</i>	MBH 403
9:55am – 10:10am	O	Reducing the Burden: Does Access to Mail-Order Abortion Pills Reduce Trips to Clinics? <i>Presenters: Frieda Violet Thaveethu '22</i> <i>Sponsors: Caitlin Myers</i>	MBH 219
9:55am – 10:10am	O	Shunning the Presence of People: Chinese Landscapes and the Artwork of Bambi <i>Presenters: Annaliese Terlesky '23.5</i> <i>Sponsors: Cynthia Packert</i>	MBH 311
9:55am – 10:10am	O	Talking About Pandemic Losses <i>Presenters: Michele Young '22</i> <i>Sponsors: Suzanne Gurland</i>	MBH 216
9:55am – 10:10am	O	"A Braid is Stronger": Weaving Decolonial Research Relationships <i>Presenters: Jaden Hill '22</i> <i>Sponsors: Kirsten Coe</i>	MBH 220
10:00am – 4:00pm	A	Art Exhibits	Johnson Memorial Building
10:15am – 10:30am	O	Hormone Projects: Corporeal Correction, Conflict, and Confusion in the Age of Contraceptives <i>Presenters: Anna Wood '22</i> <i>Sponsors: Kristin Bright</i>	MBH 219
10:15am – 10:30am	O	Issues in Translation: Arabic Short Literature <i>Presenters: Aidan Wertz '22</i> <i>Sponsors: Usama Soltan</i>	MBH 303
10:15am – 10:30am	O	Machine Learning to Reverse-Solve Schrodinger's Equation <i>Presenters: Ellie Suit '24</i> <i>Sponsors: Chris Herdman</i>	MBH 403
10:15am – 10:30am	O	Pain Processing at the Peripheral Sensory Level in Drosophila Melanogaster <i>Presenters: Edith Lopez '22</i> <i>Sponsors: Amanda Crocker</i>	MBH 216
10:15am – 10:30am	O	Pronunciation and Appropriation: How Single-Word Choices Reveal the Intersections of Relationships, Identity, Context and Language <i>Presenters: Riley Board '22</i> <i>Sponsors: Shawna Shapiro</i>	MBH 311
10:15am – 10:30am	O	The Power of Mapping: Transforming Data Points Into a Conservation Tool <i>Presenters: Kathryn Talano '22</i> <i>Sponsors: Alex Lyford</i>	MBH 104
10:30am – 11:15am	P	01. Memor-eyes; Bilateral Saccadic Eye Movements and Episodic Memory Retrieval <i>Presenters: Olivia Haouchine '22</i> <i>Sponsors: Jason Arndt</i>	MBH Great Hall

10:30am – 11:15am	P	02. Comparison of Phosphorus Determination in Freshwater Invertebrates by Spectrophotometry and Inductively-Coupled Plasma Mass Spectrometry <i>Presenters: Julia Keon '23, Alexander Kessler '22.5</i> <i>Sponsors: Molly Costanza-Robinson</i>	MBH Great Hall
10:30am – 11:15am	P	03. Identification of SloR Binding Sites Throughout the Streptococcus Mutans UA159 Genome <i>Presenters: Emily Bulczynski '22</i> <i>Sponsors: Grace Spatafora</i>	MBH Great Hall
10:30am – 11:15am	P	04. The Relationship Between Attendance in a Virtual Exercise Class and Quality of Life for People with Parkinson Disease <i>Presenters: Nate Stewart '22</i> <i>Sponsors: Clinton Cave</i>	MBH Great Hall
10:30am – 11:15am	P	05. Gnawing Away at the Family Tree: Adirondack Beaver Lineage <i>Presenters: Audrey Hsi '22</i> <i>Sponsors: Alexis Mychajliw</i>	MBH Great Hall
10:30am – 11:15am	P	06. Foreign Aid and Corruption: The Case of China's Overseas Lending <i>Presenters: Claire Moy '22</i> <i>Sponsors: Will Pyle</i>	MBH Great Hall
10:30am – 11:15am	P	07. Constructing a Laser-Scanning Confocal Microscope Using Curved Mirrors <i>Presenters: Thomas Zodda '22.5</i> <i>Sponsors: Michael Durst</i>	MBH Great Hall
10:30am – 11:15am	P	08. Big Fish: A Spectacle on a Budget <i>Presenters: Nino Tomas '22, Gayathri Mantha '25</i> <i>Sponsors: Mark Evancho</i>	MBH Great Hall
10:30am – 11:15am	P	09. The Effect of Cell Wall Elasticity on the Desiccation Tolerance of the Common Biocrust Moss <i>Syntrophia caninervis</i> <i>Presenters: Nuki Neumeister '22.5</i> <i>Sponsors: Kirsten Coe</i>	MBH Great Hall
10:30am – 11:15am	P	10. Development of a Novel Method to Probe for a Deacetylase in <i>Borrelia burgdorferi</i>, the Causative Agent of Lyme Disease <i>Presenters: Ming Harris-Weidner '22</i> <i>Sponsors: Bob Cluss</i>	MBH Great Hall
10:30am – 11:15am	P	11. Does Using Moral Foundation Language for Christians Increase Environmental Engagement <i>Presenters: Maya Saterson '22</i> <i>Sponsors: Michelle McCauley</i>	MBH Great Hall
10:30am – 11:15am	P	12. The Diurnal Fluctuations and Effects of UV on <i>Escherichia coli</i> in Jackson, WY Recreational Streams <i>Presenters: Emma Román '22</i> <i>Sponsors: Eric Moody</i>	MBH Great Hall
10:30am – 11:15am	P	13. Measuring the Superconducting Transition of a High-Temperature Superconductor <i>Presenters: Willson Moore '22.5</i> <i>Sponsors: Susan Watson</i>	MBH Great Hall
10:30am – 11:15am	P	14. Mechanism of Testosterone: The Effects of Intracerebral Testosterone on Spatial Memory in Adult Male Rats <i>Presenters: Hieu Nguyen '23</i> <i>Sponsors: Mark Spritzer</i>	MBH Great Hall
10:30am – 11:15am	P	15. A Protein Proof-of-Concept Model of a Photoredox Crosslinking Approach to Drug Target Identification <i>Presenters: Alden Harring '22</i> <i>Sponsors: Lindsay Repka</i>	MBH Great Hall
10:30am – 11:15am	P	16. Remote Renderings for Restoration: Representations of Wetlands in the Southern Marshes of Iraq <i>Presenters: Brooke Laird '22</i> <i>Sponsors: Joe Holler</i>	MBH Great Hall
10:30am – 11:15am	P	17. Caught in the Cross Hairs: Novel Hybrid Sensilla in Ants Detected by SEM Imaging <i>Presenters: Hannah Gellert '22</i> <i>Sponsors: Greg Pask</i>	MBH Great Hall

10:30am – 11:15am	P	18. Behavioral Responses in Drosophila melanogaster Following Traumatic Brain Injury <i>Presenters: Laurie Chen '22, Sebin Park '22</i> <i>Sponsors: Amanda Crocker</i>	MBH Great Hall
10:30am – 11:15am	P	19. Synthesis of Ruthenium-Complexed Fluorene Polymer as Potential Molecular Wire <i>Presenters: Huiming Liang '22</i> <i>Sponsors: Jeff Byers</i>	MBH Great Hall
10:30am – 11:15am	P	20. Understanding Paleoclimate through Packrat Middens <i>Presenters: Elizabeth Austin '24</i> <i>Sponsors: Alexis Mychajliw</i>	MBH Great Hall
10:30am – 11:15am	P	21. PFAS Exposure from Ski Wax Application and Implications for General Exposure Pathways <i>Presenters: Nicola Hartmann '23.5, Emilia Andersen '22</i> <i>Sponsors: Kathryn Crawford</i>	MBH Great Hall
10:30am – 11:15am	P	22. Investigation of Gasdermins as “Executioner” Molecules in Pyroptosis <i>Presenters: Miriam Weathers '22</i> <i>Sponsors: Cole Dovey</i>	MBH Great Hall
10:30am – 11:15am	P	29. Direct Imaging of RNA loaded Lipid-Nanoparticles for RNA-based Vaccines <i>Presenters: Jewel Ashbrook '23</i> <i>Sponsors: Michael Durst</i>	MBH Great Hall
10:30am – 11:15am	P	44. 0 Gorham Lane Research and Analysis <i>Presenters: Sarah Mines '24.5, Sarah Rifkin '24, Tyler Hadar '25, Beckett Pintair '24.5</i> <i>Sponsors: John McLeod</i>	MBH Great Hall
10:30am – 5:00pm	R	Ableism and Audism in Cochlear Implant Marketing <i>Presenters: Phaedra Robinson '22</i> <i>Sponsors: Susan Burch</i>	Online
10:30am – 5:00pm	R	Undocumented Immigration and California's Agricultural Economy <i>Presenters: Sylvie Shure '24.5</i> <i>Sponsors: Phani Wunnava</i>	Online
10:30am – 5:00pm	R	Word and World: Multifaceted Consciousness and Preverbal Movements in Gao Xingjian's Soul Mountain and Nathalie Sarraute's Childhood <i>Presenters: Qing Zhao '21.5</i> <i>Sponsors: Thomas Moran</i>	Online
11:15am – 11:30am	O	At the Intersection: The Housing Crisis and Opioid Crisis in Vermont <i>Presenters: Grace Getman '22</i> <i>Sponsors: Pam Berenbaum</i>	MBH 216
11:15am – 11:30am	O	Attitudes Towards Expanding the State Sector After Experiencing a Recent Recession <i>Presenters: Justin Cooper '22</i> <i>Sponsors: Will Pyle</i>	MBH 303
11:15am – 11:30am	O	Bad Romance: The Pyroptosis Executioner GSDME Finds a New Binding Partner <i>Presenters: Margaret Haberle '22</i> <i>Sponsors: Cole Dovey</i>	MBH 219
11:15am – 11:30am	O	Decoding Olfactory Receptors in Harpegnathos Saltator <i>Presenters: Benjamin Morris '22, Aiden Masters '22</i> <i>Sponsors: Greg Pask</i>	MBH 311
11:15am – 11:30am	O	Political (Non) Apologies in Argentina and Russia <i>Presenters: Isabel Larson '22</i> <i>Sponsors: Sarah Stroup</i>	MBH 403
11:15am – 11:30am	O	Stillness in Action: Exploring the Power of the Radical Resting Body <i>Presenters: Maia Sauer '22</i> <i>Sponsors: Lida Winfield</i>	MBH 220
11:15am – 11:30am	O	Underwater: Symbolism of Water & Hydrophilia in Queer Cinema <i>Presenters: Jean Wan '24</i> <i>Sponsors: Louisa Stein</i>	MBH 104

11:15am – 12:30pm	<p>○ Education Studies Senior Seminar Research Projects MBH 317</p> <p><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></p> <p><i>Sponsors: Tracy Weston</i></p>
11:35am – 11:50am	<p>○ An Innovative, Highly Sensitive and Transferrable Tool for Neurocognitive Monitoring in Congenital Central Hypoventilation Syndrome (CCHS): the NIH Toolbox® MBH 220</p> <p><i>Presenters: Remi Welbel '22.5</i></p> <p><i>Sponsors: Clinton Cave</i></p>
11:35am – 11:50am	<p>○ Assessing Needs of Low-Income Families in Vermont MBH 216</p> <p><i>Presenters: Grace Boyce '22.5, Patricia Alonso Rivera '22, Tai Nguyen '22</i></p> <p><i>Sponsors: Alex Lyford</i></p>
11:35am – 11:50am	<p>○ Double or Nothing: The Social Impact of Tribal Casinos on Native American Population MBH 303</p> <p><i>Presenters: Cynthia Chen '22</i></p> <p><i>Sponsors: Caitlin Myers</i></p>
11:35am – 11:50am	<p>○ Jungle Primaries: Losing The Third Party In The Jungle MBH 403</p> <p><i>Presenters: Michael Matheson '25</i></p> <p><i>Sponsors: Ajay Verghese</i></p>
11:35am – 11:50am	<p>○ Mapping the Spread of Queer Inclusive Policies in Tokyo Wards MBH 311</p> <p><i>Presenters: Akari Tsurumaki '23</i></p> <p><i>Sponsors: Linda White</i></p>
11:35am – 11:50am	<p>○ Synchronization of Electrically Coupled Neurons MBH 219</p> <p><i>Presenters: Bryan Currie '22</i></p> <p><i>Sponsors: Jennifer Crodelle</i></p>
11:35am – 11:50am	<p>○ The Middlebury Campus: A Documentary MBH 104</p> <p><i>Presenters: Riley Board '22, Cooper Kelley '22</i></p> <p><i>Sponsors: Rebecca Tiger</i></p>
11:55am – 12:10pm	<p>○ Analysis of Latency Reversal and Anti-HIV Activity in South African Daphnane Diterpenes MBH 220</p> <p><i>Presenters: Nathan Levitties '23</i></p> <p><i>Sponsors: Bob Cluss</i></p>
11:55am – 12:10pm	<p>○ Analyzing Lead in Vermont Schools MBH 216</p> <p><i>Presenters: Nicholas Brown '22, Evan Kelly '23, Evelyn Lane '23</i></p> <p><i>Sponsors: Molly Costanza-Robinson</i></p>
11:55am – 12:10pm	<p>○ Exploring Community Building in an Immigrant Church MBH 311</p> <p><i>Presenters: Lauren Eskra '22</i></p> <p><i>Sponsors: Justin Doran</i></p>
11:55am – 12:10pm	<p>○ Introducing MIMDB -- A Fullstack Application MBH 104</p> <p><i>Presenters: Jiaqi Li '22</i></p> <p><i>Sponsors: Christopher Andrews</i></p>
11:55am – 12:10pm	<p>○ Nuisance Ordinances, Evictions, and Homelessness MBH 403</p> <p><i>Presenters: Ethan Berner '22</i></p> <p><i>Sponsors: Erick Gong</i></p>
11:55am – 12:10pm	<p>○ Socialscape Ecology: Integrating Social Factors into Spatially-Explicit Marine Conservation Planning MBH 219</p> <p><i>Presenters: Katie Concannon '22</i></p> <p><i>Sponsors: Mez Baker-Medard</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 MBH 303</p> <p><i>Presenters: Kathryn van der Merwe '22</i></p> <p><i>Sponsors: Kristin Bright</i></p>
12:15pm – 12:30pm	<p>○ Antithrombotic Use And Bleeding Risk In Retrobulbar Anesthesia MBH 220</p> <p><i>Presenters: John Eschert '23.5</i></p> <p><i>Sponsors: Jeff Byers</i></p>

12:15pm – 12:30pm	O	Characterization of Viral and Bacterial Dynamics in Lake Champlain Cyanobacterial Harmful Algal Blooms <i>Presenters: Gifty Atanga '23, Briana Johnson '23</i> <i>Sponsors: Erin Eggleston</i>	MBH 216
12:15pm – 12:30pm	O	Developmental Consequences of C-Section Delivery in Prairie Voles-(<i>Microtus ochrogaster</i>) <i>Presenters: Shriya Patel '22</i> <i>Sponsors: Marcia Collaer</i>	MBH 311
12:15pm – 12:30pm	O	Emotion, Rationality, Self-Actualization: Examining Tensions in Capitalism Through Brené Brown and Ray Dalio <i>Presenters: Caitlin Barr '22.5</i> <i>Sponsors: Matthew Lawrence</i>	MBH 303
12:15pm – 12:30pm	O	Entanglement Entropy in Frustrated Quantum Ferromagnets <i>Presenters: Tao You '22.5</i> <i>Sponsors: Chris Herdman</i>	MBH 219
12:15pm – 12:30pm	O	Homosexual Intimacy Within and Beyond The Untamed <i>Presenters: Charlene Fu '22</i> <i>Sponsors: Louisa Stein</i>	MBH 403
12:15pm – 12:30pm	O	Taking 3D Pictures with a Pulsed Laser <i>Presenters: Sam Yurak '22</i> <i>Sponsors: Michael Durst</i>	MBH 104
PINNED 12:30pm – 1:30pm	G	Lunch Break	Various Locations
1:30pm – 1:45pm	O	Conjuring Legitimacy: The Nabatean Agriculture in Translation <i>Presenters: Sofia Leathers '22</i> <i>Sponsors: Sam Liebhaber</i>	MBH 303
1:30pm – 1:45pm	O	Development and Social Changes in Rural China Under the Rigorous Poverty Alleviation Policy---Case Study of Longtang Village in Guizhou Province, China <i>Presenters: Jessica (Zhanqi) Hong '24</i> <i>Sponsors: Ellen Oxfeld</i>	MBH 220
1:30pm – 1:45pm	O	Evaluating the Impacts of Living near Superfund Sites in New York City <i>Presenters: Christina Badalamenti '22</i> <i>Sponsors: Julia Berazneva</i>	MBH 219
1:30pm – 1:45pm	O	Impregnation, Contamination, and Lethal Melancholy: A Hysteric's Revenge in Sophocles' The Women of Trachis <i>Presenters: Hana Matsudaira '22</i> <i>Sponsors: Marion Wells</i>	MBH 311
1:30pm – 1:45pm	O	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 <i>Presenters: Suria Vanrajah '22</i> <i>Sponsors: Marybeth Nevins</i>	MBH 216
1:30pm – 1:45pm	O	Moving Earth: Revolution, Labor, and Landscape in 20th-Century Egyptian Painting <i>Presenters: Rhys Glennon '22</i> <i>Sponsors: Sarah Rogers</i>	MBH 317
1:30pm – 1:45pm	O	To be Free is to be Yourself: How Authentic Selfhood leads to Humility and Selflessness <i>Presenters: Maximilian Stein '25</i> <i>Sponsors: Maria Hatjigeorgiou</i>	MBH 104
1:30pm – 1:45pm	Z	The Establishment of the British Museum and the British Society in the Late Eighteenth Century <i>Presenters: Yining (Elaine) Zhang '23.5</i> <i>Sponsors: Grace Egan</i>	Zoom (view in MBH 411)
1:45pm – 2:00pm	Z	Imperialist Legacies of 18th Century British East India Company Tea Trade <i>Presenters: Nina Ng '23</i> <i>Sponsors: Julia Berazneva</i>	Zoom (view in MBH 411)

1:50pm – 2:05pm	O	Asian Americans Be(Long) in American History: Intricacies of Labor and Home Reflected in Asian American Literature	MBH 303
		<i>Presenters: Queenie Li '22</i>	
		<i>Sponsors: Jennifer Wang</i>	
1:50pm – 2:05pm	O	Dangerous Women: (De)Construction of the Gender Binary Through Ultra-Endurance Sports	MBH 311
		<i>Presenters: Hannah Gellert '22</i>	
		<i>Sponsors: Sujata Moorti</i>	
1:50pm – 2:05pm	O	Exploring the Feasibility of Integrating Generated Protocol Parsers into Operating Systems	MBH 216
		<i>Presenters: Wayne Wang '22.5</i>	
		<i>Sponsors: Peter Johnson</i>	
1:50pm – 2:05pm	O	Looking Within and Beyond Books During Mughal Emperor Jahangir's Reign	MBH 317
		<i>Presenters: Claire Darrow '22</i>	
		<i>Sponsors: Cynthia Packert</i>	
1:50pm – 2:05pm	O	Modeling the Secret Weapons of Cancer: An In Vitro System to Recapitulate Extrachromosomal DNA Formation in Tumor Cells	MBH 219
		<i>Presenters: Hieu Nguyen '23</i>	
		<i>Sponsors: Grace Spatafora</i>	
1:50pm – 2:05pm	O	Painting Though Extinction: The Representation and Reclamation of Sinixt Identity in Ric Gendron's Coming Home	MBH 104
		<i>Presenters: Alexis Welch '22.5</i>	
		<i>Sponsors: Katy Smith Abbott</i>	
1:50pm – 2:05pm	O	Statistical Methods in Olfactory Hardware Production Optimization	MBH 220
		<i>Presenters: Jiayi Chen '23, Bo Liu '23, Yiran(Steven) Shi '23</i>	
		<i>Sponsors: Alex Lyford</i>	
2:00pm – 2:15pm	Z	Defining Love: Gender, Sex, and Generational Trauma in Mo Xiang Tong Xiu's Heaven Official's Blessing	Zoom (view in MBH 411)
		<i>Presenters: Olivia Lee '22</i>	
		<i>Sponsors: Thomas Moran</i>	
2:10pm – 2:25pm	O	Aggression or Risk-Management?: A Multi-tiered Model of Corporate Lobbying	MBH 317
		<i>Presenters: Jacqueline Qiu '22</i>	
		<i>Sponsors: Bert Johnson</i>	
2:10pm – 2:25pm	O	Beds and the Spatial Dynamics of Power in the Odyssey	MBH 303
		<i>Presenters: Caitlin Barr '22.5</i>	
		<i>Sponsors: Maria Hatjigeorgiou</i>	
2:10pm – 2:25pm	O	Diversity in Start-up Fundraising: Gender, Race & Education	MBH 219
		<i>Presenters: Christian Poulsen '22</i>	
		<i>Sponsors: Erick Gong</i>	
2:10pm – 2:25pm	O	From Italian Folk Traditions to TikTok Feeds: Problematizing Assumptions of Authorship in Music through the Dynamic History of "Bella Ciao"	MBH 104
		<i>Presenters: Massimo Sassi</i>	
		<i>Sponsors: Damascus Kafumbe</i>	
2:10pm – 2:25pm	O	Sacralizing Sunrise: The Religious Dimensions of the Sunrise Movement's Meta-Narrative and Ritualized Practices	MBH 220
		<i>Presenters: Connor Wertz '22</i>	
		<i>Sponsors: Rebecca Gould</i>	
2:10pm – 2:25pm	O	Strange Encounters of the Small Town Kind: On Spirit Possession, Kinship, and Memory	MBH 216
		<i>Presenters: Haegan O'Rourke '22.5</i>	
		<i>Sponsors: Kristin Bright</i>	
2:10pm – 2:25pm	O	The Body of a Nation: Ableism and Constructions of Masculinity Through Primary School Education in Modern China	MBH 311
		<i>Presenters: Mira Vance '22.5</i>	
		<i>Sponsors: Ellen Oxfeld</i>	

2:15pm – 2:30pm	Z	Bird Diversity in the Ecuadorian Chocó: A proposal for avitourism in Villaflores and Manduriacu Reserve <i>Presenters: Elizabeth Kroger '22.5</i> <i>Sponsors: Alexis Mychajliw</i>	Zoom (view in MBH 411)
2:30pm – 2:45pm	O	Examining Theories of Change in the Northeast Native Plant Movement <i>Presenters: Brett Gilman '24.5</i> <i>Sponsors: Dan Suarez</i>	MBH 219
2:30pm – 2:45pm	O	Homeland, Revolution, and Belonging: The Poetry of Marwan Makhoul in Translation <i>Presenters: Andrew Willis '22</i> <i>Sponsors: Usama Soltan</i>	MBH 104
2:30pm – 2:45pm	O	Imagining the Future: Christian Apocalypticism and the Modern Environmental Movement <i>Presenters: Olivia Sommers '22</i> <i>Sponsors: Rebecca Gould</i>	MBH 220
2:30pm – 2:45pm	O	Is the Job-to-Job Transition Rate Procyclical? <i>Presenters: Masataka Mori '23</i> <i>Sponsors: Raphaelle Gauvin-Coulombe</i>	MBH 216
2:30pm – 2:45pm	O	Miyazawa Kenji's Reception in Interwar Japan <i>Presenters: Yunzhi Liu '22</i> <i>Sponsors: Otilia Milutin</i>	MBH 317
2:30pm – 2:45pm	O	Ophelia Underwater: Designing Character through Costume <i>Presenters: Bella Costantino-Carrigan '22</i> <i>Sponsors: Olga Sanchez Saltveit</i>	MBH 311
2:30pm – 2:45pm	O	Two Dantes and Everything in Between: Dostoevsky as a Key to Dante's Underworld <i>Presenters: David Williams '22.5</i> <i>Sponsors: Patricia Zupan</i>	MBH 303
2:30pm – 2:45pm	Z	Impacts of the Great Recession on Migrant Household's Workforce Participation in Rural Guatemala <i>Presenters: Ernesto Cuxil '22</i> <i>Sponsors: John Maluccio</i>	Zoom (view in MBH 411)
2:45pm – 3:30pm	P	23. The Responses of Retail Spending and Real Consumption to Housing Wealth Shocks: Evidence from Geographically-Linked Retail Data <i>Presenters: Tai Nguyen '22</i> <i>Sponsors: Andrew Fieldhouse, Phani Wunnava</i>	MBH Great Hall
2:45pm – 3:30pm	P	24. A Chemical-Genetic Dissection of Necroptosis <i>Presenters: Karina Sharma '22</i> <i>Sponsors: Cole Dovey</i>	MBH Great Hall
2:45pm – 3:30pm	P	25. Initial Methods for an Environmental Health Survey of Toxoplasma gondii in Alaskan Shellfish <i>Presenters: Kaja Aagaard '22</i> <i>Sponsors: Erin Eggleston</i>	MBH Great Hall
2:45pm – 3:30pm	P	26. The Role of GDE6 in Neural Tube Development <i>Presenters: Maddie McKean '22, Thea Joseph '22</i> <i>Sponsors: Clinton Cave</i>	MBH Great Hall
2:45pm – 3:30pm	P	27. Assessing Beaver Activity and Mitigating Human Conflict on Middlebury College Lands <i>Presenters: Jack Cornish '22</i> <i>Sponsors: Alexis Mychajliw</i>	MBH Great Hall
2:45pm – 3:30pm	P	28. Toxic Thirst: Exploring PFAS Contamination In Vermont Drinking Water <i>Presenters: Claire Contreras '23</i> <i>Sponsors: Kathryn Crawford</i>	MBH Great Hall
2:45pm – 3:30pm	P	30. Encounters with Stone <i>Presenters: Max Taxman '22.5</i> <i>Sponsors: Ben Allred</i>	MBH Great Hall

2:45pm – 3:30pm	P	31. The Investigation of Personal Care Products Usage Role in the Prevalence of Thyroid Cancer in Women in Honduras <i>Presenters: Seiha San '22</i> <i>Sponsors: Kathryn Crawford</i>	MBH Great Hall
2:45pm – 3:30pm	P	32. Elucidating the Individual Functions of Three Borellial PFKs <i>Presenters: Cady Barns '22.5</i> <i>Sponsors: Bob Cluss</i>	MBH Great Hall
2:45pm – 3:30pm	P	33. Alcohol, Substance Use, and Violence in Male and Female Adolescents <i>Presenters: Gianna Ferguson '23</i> <i>Sponsors: Zu Wei Zhai</i>	MBH Great Hall
2:45pm – 3:30pm	P	34. Island Extinctions Biases throughout the Holocene <i>Presenters: Maggie Swanson '22.5</i> <i>Sponsors: Alexis Mychajliw</i>	MBH Great Hall
2:45pm – 3:30pm	P	35. Investigating Groundwater as a Control on Algal Blooms in Lake Carmi, Franklin VT <i>Presenters: Maxwell Memeger '22</i> <i>Sponsors: Peter Ryan</i>	MBH Great Hall
2:45pm – 3:30pm	P	36. Determining Whether Testosterone's Effect on Spatial Memory Strategy in Male Rats is Androgen- or Estrogen-Dependent <i>Presenters: Abby Griffin '23, Em Luber '22</i> <i>Sponsors: Mark Spritzer</i>	MBH Great Hall
2:45pm – 3:30pm	P	37. The Effect of Heat Stimuli on Individual and Group Behavior in D. Melanogaster <i>Presenters: Ciara Burke '22</i> <i>Sponsors: Amanda Crocker</i>	MBH Great Hall
2:45pm – 3:30pm	P	38. Where the Woodlots Are: Superfine Tree Gain Mapping in Tanzania Using Planet Labs Imagery <i>Presenters: Vincent Falardeau '22</i> <i>Sponsors: Niwaeli Kimambo</i>	MBH Great Hall
2:45pm – 3:30pm	P	39. Managing and Monitoring Beavers on Middlebury's Campus <i>Presenters: Andrew Ng '22</i> <i>Sponsors: Alexis Mychajliw</i>	MBH Great Hall
2:45pm – 3:30pm	P	40. Role of the Neuropeptide NPLPL4 in Alcohol Tolerance and Sensitivity in the Fruit Fly <i>Presenters: Francesca Whitecross '23.5</i> <i>Sponsors: Amanda Crocker</i>	MBH Great Hall
2:45pm – 3:30pm	P	41. Non-Medical Factors Influencing Lung Cancer Treatment and Survival Outcomes <i>Presenters: Betsy Romans '23, Sophie Levine '23, Jack Finn '23, Asif Ul-Islam '23</i> <i>Sponsors: Sam Byrne</i>	MBH Great Hall
2:45pm – 3:30pm	P	42. Testing Taphonomy for Tar Pits of the World <i>Presenters: Ezra Flint '22.5</i> <i>Sponsors: Alexis Mychajliw</i>	MBH Great Hall
2:45pm – 3:30pm	P	43. The Rohatyn Global Scholars Program <i>Presenters: Christopher Martucci '25, Maddie Sunders '25, Ciara Murphy '25</i> <i>Sponsors: Nadia Horning</i>	MBH Great Hall
2:45pm – 3:30pm	P	45. An Exploration of Cell-Associated and Cell-Exported Enolase in B. Burgdorferi <i>Presenters: Sloane Parker '22</i> <i>Sponsors: Bob Cluss</i>	MBH Great Hall
2:45pm – 3:30pm	P	46. Exploring Atypical Chain Formations Constructed by the Ubiquitin ligase Rsp5 <i>Presenters: Dani Xu '22</i> <i>Sponsors: Michael French</i>	MBH Great Hall
3:30pm – 3:45pm	O	A Comparison of eDNA Metabarcoding to Camera Trapping for Mammal Diversity in Bristol, VT <i>Presenters: Emma Norton '22</i> <i>Sponsors: Alexis Mychajliw</i>	MBH 219

3:30pm – 3:45pm	<p>○ A Pandemic of Resilience: Creating an Active Reading Strategy to Pursue Resilience in Written and Film Narratives of the Wuhan COVID-19 Lockdown MBH 311</p> <p><i>Presenters: Josh Sims Speyer '22</i></p> <p><i>Sponsors: Thomas Moran</i></p>
3:30pm – 3:45pm	<p>○ A Window into Small Scale Fishing Dynamics: Community Perceptions and Indicator Family Relative Abundance and Biomass MBH 303</p> <p><i>Presenters: Gabriel Lefkowitz '22</i></p> <p><i>Sponsors: Mez Baker-Medard</i></p>
3:30pm – 3:45pm	<p>○ Does Marijuana Reform Improve Racial Disparities in Incarceration Rates? MBH 104</p> <p><i>Presenters: Kavita Patel '22</i></p> <p><i>Sponsors: Erick Gong</i></p>
3:30pm – 3:45pm	<p>○ Exploring the Middlebury Language Community MBH 317</p> <p><i>Presenters: Nicholas Sliter '23</i></p> <p><i>Sponsors: Alex Lyford</i></p>
3:30pm – 3:45pm	<p>○ Finding Foraminifera: Quantitative Analysis of Microfossils to Reconstruct Deep Ocean Carbon Storage MBH 403</p> <p><i>Presenters: Shane Lusk '22</i></p> <p><i>Sponsors: Allison Jacobel</i></p>
3:30pm – 3:45pm	<p>○ Pathology as Fiction: The Myth of the Creative Mad Genius in Émile Zola's L'Œuvre MBH 216</p> <p><i>Presenters: Jacqueline Qiu '22</i></p> <p><i>Sponsors: Julien Weber</i></p>
3:30pm – 3:45pm	<p>○ The Effects of AI on College Majors MBH 220</p> <p><i>Presenters: Maxwell Auburn '22</i></p> <p><i>Sponsors: Erick Gong</i></p>
3:50pm – 4:05pm	<p>○ Amateur Directing in the Real World MBH 311</p> <p><i>Presenters: Ryan Kirby '22</i></p> <p><i>Sponsors: Alex Draper</i></p>
3:50pm – 4:05pm	<p>○ Analyzing College Admissions Equity through High School Seniors, the Applications Process, and Online Communities MBH 317</p> <p><i>Presenters: Erica Swirsky '23</i></p> <p><i>Sponsors: Kristin Bright</i></p>
3:50pm – 4:05pm	<p>○ Geographies of Migration and Liminality: Placemaking on the Margins of the Calais Jungle MBH 303</p> <p><i>Presenters: Lily Laesch '23</i></p> <p><i>Sponsors: Guntram Herb</i></p>
3:50pm – 4:05pm	<p>○ Governing Digital Disruption: Effects of Competing Global Governance Interests on Cross-Border Mobile Money Adoption MBH 403</p> <p><i>Presenters: Elsa Korpi '22</i></p> <p><i>Sponsors: Sarah Stroup</i></p>
3:50pm – 4:05pm	<p>○ Instagram Innovation Among Disabled "Mommy Bloggers" MBH 216</p> <p><i>Presenters: Mary Moore '22.5</i></p> <p><i>Sponsors: Susan Burch</i></p>
3:50pm – 4:05pm	<p>○ Modeling Runoff in the New Haven River Watershed: A GIS-Based Approach MBH 219</p> <p><i>Presenters: Will Ebby '22</i></p> <p><i>Sponsors: Eric Moody</i></p>
3:50pm – 4:05pm	<p>○ 'The Snitch': Analyzing the Role of Horizontal Surveillance at Middlebury College During the COVID-19 Pandemic MBH 104</p> <p><i>Presenters: Molly Gallagher '22</i></p> <p><i>Sponsors: Rebecca Tiger</i></p>
3:50pm – 4:05pm	<p>○ "Grades Make Me Depressed": Re-evaluating Meaning Making in Our Grading Systems MBH 220</p> <p><i>Presenters: Emily Jones '23</i></p> <p><i>Sponsors: Genie Giaimo</i></p>
4:10pm – 4:25pm	<p>○ Free Lunches? Education & Health Impacts of India's 'Mid-Day Meal' School Feeding Program MBH 317</p> <p><i>Presenters: Shridhar Singhania '22</i></p> <p><i>Sponsors: Erick Gong</i></p>

4:10pm – 4:25pm	○ Guston's Golems: Redemption and Revelation in the Late Works of Philip Guston (1969 - 1980) <i>Presenters: Hunter Parkhill '22</i> <i>Sponsors: Katy Smith Abbott</i>	MBH 311
4:10pm – 4:25pm	○ Local Farm Production Output Study for Food Hub Feasibility <i>Presenters: Aiden Snorek-Yates '22.5, Hannah Sullivan '22.5</i> <i>Sponsors: Alex Lyford</i>	MBH 219
4:10pm – 4:25pm	○ Observing the Hall Effect in Semiconductors <i>Presenters: Ruben Vargas '22</i> <i>Sponsors: Susan Watson</i>	MBH 403
4:10pm – 4:25pm	○ Programming Music: The Art of Live Coding <i>Presenters: Lukka Wolff '25</i> <i>Sponsors: Peter Hamlin</i>	MBH 216
4:10pm – 4:25pm	○ The Muslim Rebellion of 1864: A Regretted Jihad in Qing Xinjiang <i>Presenters: Indira Yuldasheva '22</i> <i>Sponsors: Maggie Clinton</i>	MBH 303
4:10pm – 4:25pm	○ The Rising Price of Higher Education: A Summary, Analysis, and Hopeful Solution <i>Presenters: Alex Demoly '22</i> <i>Sponsors: Gary Winslett</i>	MBH 220
4:10pm – 4:25pm	○ Well-being and Mental Health During the Pandemic <i>Presenters: Tim Hua '23.5</i> <i>Sponsors: Julia Berazneva</i>	MBH 104
4:30pm – 4:45pm	○ 0 Gorham Lane Housing Research and Analysis <i>Presenters: Sarah Mines '24.5, Sarah Rifkin '24, Tyler Hadar '25, Beckett Pintair '24.5</i> <i>Sponsors: John McLeod</i>	MBH 104
4:30pm – 4:45pm	○ Computational Models of The Effects of Infralow Oscillations on Neuron Ensemble Formation <i>Presenters: Ev Berger-Wolf '23</i> <i>Sponsors: Michael Dash</i>	MBH 403
4:30pm – 4:45pm	○ Dissolved phosphorus: Unique Indicator or Waste of Resources? <i>Presenters: Castin Stone '22</i> <i>Sponsors: Will Amidon</i>	MBH 219
4:30pm – 4:45pm	○ Escaping Meritocracy? Why Korean and Chinese International Students Opt Out of Their Home Countries' Education Systems <i>Presenters: Raphaella Kim '22</i> <i>Sponsors: Ellen Oxfeld</i>	MBH 220
4:30pm – 4:45pm	○ The Effect of Republican Leaders' Testimonials on COVID-19 Vaccine Uptake in the United States <i>Presenters: Xiaoyu Wu '22</i> <i>Sponsors: Erick Gong</i>	MBH 311
4:30pm – 4:45pm	○ Vulnerability: A Senior Thesis in Dance <i>Presenters: Chloe Zinn '22</i> <i>Sponsors: Meshi Chavez</i>	MBH 216
4:30pm – 4:45pm	○ “We Will Not Let Our Future Burn”: Interviews with Gen-Z Activists in the Myanmar Spring Revolution <i>Presenters: Molly Burnett '22.5</i> <i>Sponsors: Sarah Stroup</i>	MBH 303