The Mount David Summit

The Mount David Summit is an annual celebration of student research, artistic work, and community-based scholarship at Bates College. Each year at the end of the winter semester, students from all classes present their work to each other and to faculty, staff, families, and community members in a symposium format. 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 2014 Summit ~

The 2014 Mount David Summit, held on March 28, is organized into four sessions: three in the afternoon and one in the evening. Several concurrent events are scheduled during each of the afternoon sessions. Afternoon events take place in Pettengill Hall. This program includes a detailed schedule; presentation abstracts are available in a separate booklet.

In Session I (beginning at 1:45 PM), a poster session takes place, featuring research posters on African studies, biochemistry, biology, chemistry, economics, history, mathematics, and psychology. Short talks and panel discussions focus on Latin America, J. R. R. Tolkien, contemporary rhetoric, anthropology, community-based research, form and meaning in dance, visual narratives of Lewiston, and psychology. There is a literary reading by creative thesis writers in English.

Session II (beginning at 3:15 PM), features a poster session with research posters in African studies, biochemistry, biology, chemistry, geology, neuroscience, physics, and psychology. Talks and panel discussions focus on thesis research in dance, history, and sociology. Math students present talks on mathematical modeling in biology. Session II also features panels on museum internships and on research conducted while studying abroad, and screening of video-documentaries by senior rhetoric majors.

In Session III (beginning at 4:45 PM), a poster session features research posters on African studies, biochemistry, biology, chemistry, economics, neuroscience, physics, and psychology. Another poster session considers environmental justice in the Americas. Session III talks explore thesis research in biological chemistry, biology, geology, German, music, and neuroscience. Students present talks and video on public health and theater. Politics students screen videos on political organizations in Maine. English students offer a literary reading, and students tell stories of their study-abroad experiences with 20 slides each, 20 seconds per slide.

In the evening session, the Bates Dance Company presents its spring concert at 7:30 PM in Schaeffer Theatre.

Visitors to the Summit are encouraged to talk with students and ask them challenging questions. We invite you to move among events during each session, but we respectfully request that you do not leave a program while a student is speaking.

The 2014 Mount David Summit is dedicated to the memory of Ed Muskie ’36 and Ted Coulombe ’91
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 Bates Fund
The Arthur and Helen Baer Foundation Student Research Support Fund for Studio Art Majors
The Brian S. Baldwin ’80 Biology Student Travel Fund
The Professor Leland and Claudina Bechtel Fund
The Blanchard Fund for Student-Faculty Research in Economics
The Bonner Leader Program
The Bruce Bouley Fund for Geology
The Bertha A. Bauer, M.D. Student Thesis Support Fund for the Department of Art and Visual Culture
The Class of 2000 Endowment for Community Service
The Penelope Ellis Fund
The Moses Feldman Family Foundation Student Research Grants
The J. Robert Griffith ’54 Incremental Student Research Fund
The Hamill Family Fund for Student Fieldwork and Research in Anthropology
The Hoffman Fund for Student Research
The Dorothy Dole Johnson ’41 Endowed Student Research Fund
The Howard and Gail Loeb Kunreuther Endowed Fund for Faculty Research in Economics
The Walter A. Lawrance Student Research Fund
The Susan Majeski McKnight ’70 Fund for Environmental Studies
The Morrill Family Research Fund
The Mount David Research Fellowship 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 Fund
The Charles Franklin and Evelyn Minard Phillips Fund
The John Pribram and George Ruff Fund for Research in Physics
The Linda E. Rawlings Student Research Fund for Mathematics
The Whitney Richey ’05 Fund
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 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, 28 March 2014

1:30 - 1:45 PM  
**Perry Atrium**  
Call to the Summit: *Fanfares of St. Charbel*, by Michael Rondeau  
performed by James Jhun ’16 and Alexander Perrone ’16

Welcome  
A. Clayton Spencer, President  
Matthew R. Auer, Vice President for Academic Affairs and Dean of the Faculty

Pettengill Hall  
14th Annual Barlow Off-Campus Study Photography Exhibition

Concurrent Session I  
1:45 – 3:00 PM

**Perry Atrium**  
**Poster Session I:** African Studies, Biochemistry, Biology, Chemistry, Economics, History, Mathematics, and Psychology

**Pettengill G10**  
The Symbolism of J.R.R. Tolkien: Reading of *The Lord of the Rings*  
Patrick Griffin ’17: Lineage and Identity: Family Values in Gondor  
Max Millslagle ’17: Ships and Seas: J.R.R. Tolkien's Universalizing Trope  
Nathan Moreau ’17: To Guide, to Save: Gandalf as a Christ Figure  
W. Parker Nelson ’17: Samwise the Chef: Food as Hope  
Moderator and Respondent: Sanford Freedman, English

**Pettengill G21**  
Research and the Public Good  
Elisabeth Baird ’14, Emily Diepenbrock ’14, Gretchen Kaija ’14, Hannah Mitchell ’14, Aisling Ryan ’14, and Simone Schriger ’14 discuss community-based research.  
Moderator: Darby Ray, Harvard Center for Community Partnerships

**Pettengill G50**  
Form and Meaning in Dance  
Tomisha Edwards ’15: The Black Female Body in Dance  
Talia Mason ’15: Repetition: Investigating Artistic, Musical, and Choreographic Methodologies  
Moderator: Rachel Boggia, Dance

**Pettengill G52**  
Literary Reading by Creative Thesis Writers  
Emma Timbers ’14, Collin McCullough ’14, Tessa Hathaway ’14, Matthew Goldfarb ’14, and Kayla Hertz ’14 read their poetry and fiction.
Moderator: Robert Farnsworth, English

1:45 – 3:00 PM
Pettengill G63
Visual Narratives of Lewiston
Cameron Griffin ’15, Krista Prouty ’15, and Martha Schnee ’15 discuss community and culture.

Moderator: Myron Beasley, American Cultural Studies and African American Studies

Pettengill G65
Perception, Memory, Motivation: Research in Psychology
Mariya Manahova ’14: How Do We Visually Perceive Objects?
Abigail Weinreb ’14: The Effect of Brief Mindfulness Meditation on Working Memory Capacity
Ali Millard ’14: The More the Merrier: An Exploration of the Effectiveness of Using Foreign Supernatural
Daniel Bell ’15, Christopher Eddy ’15, Anna Lanoue ’15, and Katherine Yannopoulos ’15: The Effect of Environment on the Sexual Objectification of Women

Moderator: Helen Boucher, Psychology

Pettengill 116
Identity, Cultural Resilience, and Civil Society in Latin America
Scotland Long ’14: Christianity and the Inca Past: Writings of Post-Conquest Peru
Hannah Miller ’14: Within the Words of the Mothers of the Plaza de Mayo
Alexandra Hill ’14: Afro-Colombian Displacement in Colombia's Civil War

Moderator: Claudia Aburto Guzmán, Spanish

Pettengill 162
Unpacking Culture: Senior Thesis Research in Anthropology
Sarah Krischer ’14: Evidence of "Romanization" in Pottery Assemblages from Early Roman Britain
Sabina Frizzell ’14: The Anthropology of Think Tanks: Democracy Promotion after the 2011 Arab Uprisings
Heather Monty ’14: Understanding the Gendered Construction of Birth among the Amish in Lancaster, PA
Devin Tatro ’14: Tribe (™): An Investigation of Ethnic Agency in Sebei, Uganda

Moderator: Loring Danforth, Anthropology

Pettengill 257
Decoding the Message: Thesis Research in Rhetoric
Sarika Subramaniam ’14: The Boston Bombing: An Analysis of Media Framing and Conspiracy
Alexandra Sejersted Bodtker '14: Breasts without Borders: A Pentadic Analysis of the Ukrainian Feminist Group Femen

Deanna Rivkin '14: An Analysis of Transmedia Storytelling in Contemporary Webseries

Moderator: Stephanie Kelley-Romano, Rhetoric

Concurrent Session II

3:15 – 4:30 PM

Perry Atrium

Poster Session II: African Studies, Biochemistry, Biology, Chemistry, Geology, Neuroscience, Physics, and Psychology

Pettengill G10

Organizing Exhibitions in Academic Museums: The Role of a Curatorial Intern

Rebecca Rosen '14 and Madeline Smit '14 discuss exhibition, research, and design.

Moderator: Anthony Shostak, Bates College Museum of Art

Pettengill G21

Mathematical Models in Biology and Fair Division

Josephine Davis '15, Lei Lei '14, and Caroline Richards '14: Modeling Diabetes through Mathematical Estimations

Hallie Balcomb '14, Devon Brown '14, and Courtney Doyle '14: Combating the Spread of Malaria with the Power of Mathematics

Matthew Perejda '14, William Pollard '14, and Ansel Tessitore '14: A Declaration on Vaccination Relations

William Green '14 and Albert Shi '14: Fair Division of Desirable Commodities

Moderator: Meredith Greer, Mathematics

Pettengill G52

Individual and Society: Senior Thesis Research in Sociology

Molly Huffaker '14: Community Response to Sexual Assault: A Study of the Sexual Assault Nurse Examiner Program in Lewiston, ME

Kaitlin McDonald '14: What Should We Call Me?

Evelyn Hartz '14: Social Entrepreneurship and the New American Sustainable Agricultural Project

Moderator: Emily Kane, Sociology

Pettengill G65

Identity, Morality, Justice: Senior Thesis Research in History

Noah Sleeper '14: Resources and Identity in the Aroostook Conflict

Rachel Spence '14: Victorian Sexual Scandals: Understanding the Fragility of Moral Codes and National Reputation

Emma Perkinson '14: Women's Negotiation, Consumption, and Engagement with the American Eugenics Movement 1900-1930

_Moderator: Joseph Hall, History_

3:15 – 4:30 PM
_Pettengill 116_

**Moving Stories: Scholarship through Documentary**

Sheryl Todman '14: Dying with Support: History Chapter

Joshua Ajamu '14: The Contrasting Perspectives of Africa in Western and African Cinema

_Moderator: Jonathan Cavallero, Rhetoric_

_Pettengill 162_

**Scholarship in Country: Research from Off-Campus Study**

John Barbadoro '14: Rural Health and Infectious Disease in Southern China

Jacqueline Ordemann '15: Motorcycle Safety in Rural Thailand

Clara Maeder '14: _La Educación para la Liberación_: The Chilean Student Movement in 2011

_Moderator: Stephen Sawyer, Office of Off-Campus Study_

_Pettengill 257_

**Three Dance Theses and How They Came to Be**

Bridgette Chandhoke '14: Experiencing Time through Movement

Kathryn Ailes '14: Making _Homing_: Collaborative Choreographing from Personal Histories


_Moderator: Carol Dilley, Dance_

**Concurrent Session III**

4:45 – 6:00 PM

_Perry Atrium_

**Poster Session III**: African Studies, Biochemistry, Biology, Chemistry, Economics, Neuroscience, Physics, and Psychology

_Pettengill G04_

**Poster Session IV**: Another World is Possible: Learning from Environmental Justice Movements across the Americas

Students in ENVR 350, Environmental Justice in the Americas, present findings of environmental justice in North America and Latin America.

_Pettengill G10_

**The Highs and Lows of My Study-Abroad Experience in 6 Mins. and 40 Secs.**

Mildred Aroko '14, Kelly Kruger '14, Alexander McKenzie '14, Meredith Miles '15, and Sean Murphy '15

_Moderator: David Das, Office of Off-Campus Study_
**4:45 – 6:00 PM**

**Pettengill G21**

**Image and Sound: The Artist, the Self, and the World**

Students in ENG 121W, Image and Sound: Reading and Writing Poems, and ENG 395P, Worldly Women as Artists: Transnational Women Writers, offer readings of poetry and prose.

*Moderator: Lavina Dhingra, English*

**Pettengill G50**

**Image and Metaphor in Europe**

Wil Muller '14: Images of the 2004 Eastward Expansion of the European Union in the German Press: A Case Study of Poland

Peter Cowan '14: Food, Work, and Love: *For beyond the Forests* and Survival in Post-World War II Transylvania

Joshua Arenstam '14: Food as Metaphor: The Use of Food Symbolism in French and German Film

*Moderator: Jakub Kazecki, German*

**Pettengill G52**

**Engaging with Maine: Documentaries on Ten Political Organizations**

Students in PLTC 215, Political Participation in the United States, screen their short videos on Maine political organizations.

*Moderator: John Baughman, Politics*

**Pettengill G63**

**Creative and Purposeful Work in Theater**

Lucas Wilson-Spiro '15: The Edinburgh Fringe Festival: The World's Largest Arts Festival from a Technician's Perspective

Ryan Symancek '14: The World of Motorsport Journalism

*Moderator: Michael Reidy, Theater and Dance*

**Pettengill G65**

**From Cells to Ecosystems: Senior Thesis Research in the Sciences**

Sarah Logan '14: Intermittent Hyperoxia and the Developing Respiratory System

Abigail Alexander '14: Opioidergic Modulation of Mitral Cells in Accessory Olfactory Bulb Processing

Daniel Birkhead '14: Long-term Exposure to Male Status Specific Odors Elicits Mitral Cell Synaptic and Intrinsic Plasticity in the Accessory Olfactory Bulb of Female Mice

Caleb Glassman '14: The Role of Glutamate Receptors in the Feeding Rhythm of the Pond Snail, *Helisoma trivolvis*

Ashley Braunthal '14: Spatial Patterns of Anthropogenic and Forest Combustion-derived Surface CO₂ in Alaskan Boreal Ecosystems and the Urban Dome of Fairbanks, AK

*Moderated by Jason Castro, Psychology*
Pettengill 116  
**Music, Cultural Production, Identity, and Ownership**

Brendan Davidson '14: Self-Transportation in Video Games; How Musical Expectation May Facilitate the Incorporation of Character Traits by Players

Rebecca Sale '14: The Musical Emotionality of Baz Luhrmann's Adaptation of *The Great Gatsby*

Easton Morang '14: The Functions of Reference and Cultural Capital in Hip-Hop

Benjamin Vanasse '14: Hip-Hop and Copyright

*Moderator: James Parakilas, Music*

Pettengill 162  
**Diverse Perspectives on Public Health Issues**

Rachel Levine '15: Nurturing the Whole Body: The Benefits of Supplementing Tuberculosis Chemotherapy with Traditional Chinese Medical Practices

Erin Kelley '14: Public Health Awareness of Tuberculosis in the Lewiston-Auburn Community

Kara Stefaniak '14: Consequences of Concussions at Bates College: Awareness, Incidence, Reporting, and Impact on Student Daily Life

*Moderator: Karen Palin, Biology*

**Evening Session**

**7:30 PM  
Schaeffer Theatre**

**Bates Dance Company Spring Dance Concert**  
*Carol Dilley and Rachel Boggia, Dance*

This program of works by dance students and dance majors also will be presented Sunday, March 30, at 2:00 PM. An alternate program of works by dance students is presented on Saturday, March 29, at 5:00 PM, and on Monday, March 31, at 7:30 PM.

Tickets required. $6 general admission; $3 Bates faculty, staff, senior citizens, and non-Bates students; free for Bates students. For tickets, visit [www.batestickets.com](http://www.batestickets.com)
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<th>Presenter</th>
<th>Title</th>
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<td>John Allard '16</td>
<td>Women's Grassroots Organization in Africa</td>
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<td>Connor Bair-Cucchiaro '15</td>
<td>HIV/AIDS in Botswana and the Effects of President Bush's Emergency Plan for AIDS Relief</td>
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<td>W. Evan Beinecke '14</td>
<td>Investigating Higher Harmonic Generation in Plasmonic Gold Nanorods</td>
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<td>Halward Blegen '14</td>
<td>Caffeine, Hyperoxia, and the Hypoxic Ventilatory Response</td>
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<td>Erik Bou '14</td>
<td>Variability of Growth Line Deposition and Growth of the Common Cockle (Cerastoderma edule) and Effect of Temperature in the Pool of Virkie, Mainland, Shetland</td>
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<td>Alexa Bourque '16</td>
<td>Coltan in the Congo: Who Makes the Call of Defining Human Rights?</td>
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<td>Andrew Bradley '14</td>
<td>HIV/AIDS in Botswana and the Effects of President Bush's Emergency Plan for AIDS Relief</td>
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<td>Michaela Brady '14</td>
<td>Scotland within Empire: The Quest for Independence with or without Union</td>
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<td>Benjamin Breger '14</td>
<td>Ecological Interactions between Insects and Invasive Fallopia spp. in a Northeastern United States Urban Environment: Flower Visitation, Herbivory by Popillia japonica, and Anti-Plant Protection Mutualism</td>
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<td>Michaela Britt '17</td>
<td>Grassroots Initiatives and Educational Equality in Post-Apartheid South Africa</td>
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<td>Melissa Carp ’16</td>
<td>Somali Perspectives on Language of Instruction</td>
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<td>Sara Chari '14</td>
<td>Permutation Polynomials over Finite Fields</td>
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<td>Paige Collins '14</td>
<td>Environmental Regulation and Growth Rate Variation of Serripes groenlandicus from Bjørnøya</td>
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<td>Jedd Countey '14</td>
<td>Detroit's Development of a Rebellion: Understanding the 12th Street Rebellion in a Spatial Framework</td>
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<td>Caroline Cramer '14</td>
<td>The Collective Effect of Appearance Change Instruction and Co-Witness Manipulation</td>
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<td>Michael Creedon '14</td>
<td>Somali Perspectives on Language of Instruction</td>
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<td>Tara Das '16</td>
<td>Women's Grassroots Organization in Africa</td>
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<td>Caroline Depew '16</td>
<td>Somali Perspectives on Language of Instruction</td>
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<td>Tess Ferguson '14</td>
<td>Protein Kinase c-Src Phosphorylation Changes in Estrogen-Stressed Breast Cancer Cells</td>
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<td>Emily Foden '14</td>
<td>Growth of Softshell Clams in Coastal Maine</td>
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<td>Emilie Geissinger '14</td>
<td>Determining Diet of Wrymouth (Cryptacanthodes maculatus) in Maine Mudflats Using Carbon and Nitrogen Stable Isotopes</td>
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<td>Sean Gemunden '14</td>
<td>Function and Effect of Ribosomal S6 Kinase 2 (RSK2) on Cell Apoptosis in Human Skin Cells</td>
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<td>April Graham '16</td>
<td>Women's Grassroots Organization in Africa</td>
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<td>1:45 - 3:00 PM</td>
<td><strong>Poster Session I (continued)</strong></td>
<td><strong>Logan Greenblatt '14</strong> Plasmonic Behavior of Gold Nanorod Self-Assemblies</td>
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<td><strong>Cora Hirschfeld '16</strong> Grassroots Initiatives and Educational Equality in Post-Apartheid South Africa</td>
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<td><strong>Kyoung-June Lee '14</strong> Defining Promise: Optional Standardized Testing Policies in American College and University Admissions</td>
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<td><strong>McNally Lee '14</strong> Grassroots Initiatives and Educational Equality in Post-Apartheid South Africa</td>
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<td><strong>Emily Meade '14</strong> The Economic Cost of Childhood Lead Poisoning in Maine</td>
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<td><strong>Simone Prioli '14</strong> Are Emotion-Laden Words Identified More Easily than Non-Emotional Words when Seen in Continuous Flash Suppression?</td>
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<td><strong>Sarah Ratsimbazafy '17</strong> HIV/AIDS in Botswana and the Effects of President Bush's Emergency Plan for AIDS Relief</td>
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<td><strong>Keyana Sandridge '14</strong> Cationic Cyclodextrins as Chiral NMR Solvating Agents</td>
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<td><strong>Anabel Schmelz '14</strong> Maine Summertime Blooms: Variability in Populations of Gloetrichia in Three Maine Lakes</td>
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<td><strong>Sarah Mae Silverberg '15</strong> The Morphological History of Patella vulgata at Sandwick, Unst, Shetland Islands</td>
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<td><strong>Gabriel Whitehead '17</strong> Coltan in the Congo: Who Makes the Call of Defining Human Rights?</td>
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<td>3:15 - 4:30 PM</td>
<td><strong>Poster Session II</strong></td>
<td><strong>Margaret Carey '14</strong> Gestational Diabetes Mellitus in Somali Women of Lewiston, Maine: The Creation and Assessment of Culturally Relevant Educational Material</td>
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<td><strong>Joan Castellanos '14</strong> Follow-up to Microbial Sampling at Bates Dining</td>
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<td><strong>Adam Cervenka '14</strong> Application of a Directed C-H Activation Approach to the Synthesis of Carbazole-Derived Ureas</td>
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<td><strong>Helen Chyz '14</strong> Enhanced Cognitive Control in Task-Switching for Varying Levels of Bilinguals</td>
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<td><strong>Peter Dixon '14</strong> The Effect of Rho Kinase Inhibition on Helisoma Neuron Growth Rates</td>
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<td><strong>Margaux Donze '14</strong> The Effects of Breast Self-Exam Training on Breast Cancer Awareness and Prevention among Undergraduates</td>
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<td><strong>Rachel Ellis '14</strong> Assessing Spatial Distribution of Poachers' Snares to Direct Chimpanzee Conservations Efforts in Kibale National Park, Uganda</td>
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<td><strong>Heather Fisher '14</strong> Comparing the Effects of Helisoma and Mammalian Gonadotropin Releasing Hormone on the Feeding Central Pattern Generator in Helisoma trivolvis</td>
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<td><strong>Destany Franklin '14</strong> Neuromodulators of the Feeding Behavior Network in Pond Snail, Helisoma trivolvis: Mapping of Immunoreactivity in the CNS and Digestive System</td>
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<td><strong>Caroline Hinkle '14</strong> Analysis of Cognitive Mediators in the Relationship between Peripheral Oxytocin and Affective Processing</td>
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<td><strong>Cody Jenkins '14</strong> The Effect of MHC Class II Genes on Mate Choice in Vertebrate Populations</td>
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| 3:15 - 4:30 PM | Poster Session II (continued) | Justin Johal '14 Use of a Microfluidic Chamber to Study the Biology of Bacteria 20  
Daniel Jordan '14 Control of the Developmental Hedgehog Pathway through the Transcription Factor Nfe2 15  
Taylor Kniffin '14 Localization and Expression of μ Opioid Receptors in the Mouse Accessory Olfactory Bulb 25  
Andrea Lauden '14 A Sedimentary Core Analysis for Evidence of Anadromous Alewife Runs of Nequasset Lake, Woolwich, ME 23  
Emma Lutz '15 Baseline Assessment of Early Childhood Caries and Malnutrition, Cusco, Peru 10  
Michael Martin '14 Effects of Di-(2-ethylhexyl)-phthalate (DEHP) and Mono-(2-ethylhexyl)-phthalate (MEHP) on the Embryos of Zebrafish (Danio rerio) 13  
Jillian Miller '14 Testing Propositions of the Blackmail Hypothesis in Birds: Avian Nesting Habits and Conspicuous Egg Coloration 2  
Gabrielle Naranja '14 I Kissed a Girl…Did I Like It? Understanding the Role of Sexual Attitudes and the Media on Perceptions of Girl-on-Girl Kissing 30  
Mitchell Newlin '17 Impact of Colonialism on Education in Kenya 18  
Camilla Nivision '14 Population Genetics of Invasive European Green Crab in the Gulf of Maine 14  
Tara Notarianni '14 E6AP/UBE3A-Catalyzed Ubiquitylation of EMCV E3 Protease 17  
Marisa Palacio '14 The Relationship between Hypoxia and Chemoresistance in Leukemic Cells 12  
Matthew Record '14 Measuring the Performance of Photo-Voltaic Panels and Materials 24  
Curtis Rheingold '14 Investigation of an Opioid Antagonist on Rat Olfactory Social Memory 27  
Jacob Sandor '14 Opioidergic Modulation and Role of the Accessory Olfactory Bulb in Social Recognition Memory in Rats 26  
Briana Silva '17 Impact of Colonialism on Education in Kenya 18  
Conor Smith '14 Operant Novelty and Personality in Canines and Humans 3  
Santina Snow '14 Factors Affecting mRNA Degradation in Borrelia burgdorferi, the Causative Agent of Lyme Disease 19  
Emmanuel Toroitich '15 Urban Lead Pollution 22  
Allison Tsomides '14 Transcriptional Regulation of Nfe2 Suggests Interaction with Hematopoietic/Erythropoietic Pathways in Developing Zebrafish 16  
Grace VanNoy '14 Effects of Hyperbaric Oxygen Therapy on Chronic Wound Biofilms Grown with Normal Human Skin Fibroblasts 1  
Jessica Wilson '17 Impact on Colonialism on Education in Kenya 18  
| 4:45 - 6:00 PM | Poster Session III | Michael Arsnow '14 DNA Vaccines, A Potential Cure for Type 1 Diabetes 10  
Jennifer Bergeron '14 mRNA Processing in Borrelia burgdorferi 11  

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<td>4:45 - 6:00 PM</td>
<td>Poster III</td>
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<td>Anne Carroll '14 The Effect of Grapheme-Color Synesthesia on Object Trimming and Binding</td>
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<td>Yuying Chen '16 Transcriptional Regulation of the Nuclear Factor Erythroid-2-related Factor (nrf) Family by the Aryl Hydrocarbon Receptor (AHR)</td>
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<td>Mohdis Delijani '14 Horizontal Transfer of Livestock-associated Methicillin-resistant <em>Staphylococcus aureus</em> ST398 to Hospitals or Communities and its Effect on Public Health</td>
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<td>Omosede Eholor '14 Kenya's National Climate Change Action Plan</td>
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<td>Joaquin Espinosa '16 Sexual Orientation Policies and Perspectives in Uganda and South Africa</td>
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<td>Bisola Folarin Sexual Orientation Policies and Perspectives in Uganda and South Africa</td>
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<td>Daniel French '14 Nutrient Consumption and Resistance Training</td>
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<td>William Fubini '14 Advertising Death</td>
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<td>Tamara Gonzalez '14 The Neuropsychological Validity of Mu Wave Suppression as a Measure of Theory of Mind in Autism Spectrum Disorders</td>
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<td>Taylor Guss '14 Effects of Power and Money Priming on Empathy</td>
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<td>Angeleque Hartt '14 Synthesis of Ashitabaol A</td>
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<td>Tyler Harwood '14 The Effect of Athletic Identity on Susceptibility to Stereotype Threat Associated with the &quot;Dumb Jock&quot; Stereotype</td>
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<td>Mitchell Hildreth '17 A Comparative Glance at the Arab Springs in Tunisia, Egypt, and Algeria</td>
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<td>Jocelyn Hoye '15 Background Subtraction in Fluorescence Photoactivation Localization Microscopy</td>
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<td>Stephanie Jefferson '14 Correlation between Variation in Working Memory Capacity and Feature-Based Attention Only for the Ipsilateral Presentation of Visual Stimuli During 200-240 ms Time Interval</td>
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<td>Linnea Kaye '14 Construction of a STED Microscope</td>
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<td>Bo Ra Kim '14 Why Protest? A Look into Causes of Protest Bids in Contingent Valuation Willingness to Pay Surveys</td>
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<td>Hope King '14 Attention Deficit Disorder and the Event Related Potential Correlates of Cross-Modal Attention</td>
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<td>Olivia Kronemeyer '14 The Influence of Cultural Display Rules on Expression of Emotions in Collectivistic and Individualistic Cultures</td>
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<td>Lindsey Loy '14 When Eating Healthy Becomes Unhealthy: Exploring the Definitional Aspects and Distinguishing Factors of Orthorexia Nervosa</td>
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<td>Emmaleigh Loyer '14 An Investigation of the Trends of Neural Noise and Its Potential Role in the Impairment of Attentional Brain Circuitry</td>
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<td>Kathryn Meade '14 The Relationship between Self-Efficacy and Performance Satisfaction: An Investigation of Labor Method, Childbirth Satisfaction, and the Cold-Pressor Task</td>
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<td>James Meyo '14 Transcriptional Regulation of the Nuclear Factor Erythroid-2-related Factor (nrf) Family by the Aryl Hydrocarbon Receptor (AHR)</td>
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<td>Sarah Murphy '14</td>
<td>A Comparison of Two Sanitation Methods for Stainless Steel Test Thermometers Used in Institutional Food Service Departments</td>
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<td>Bong Nguyen '14</td>
<td>The Influence of Stereotyping in the Judicial System</td>
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<td>Rebecca Otley '14</td>
<td>Kinetic and Product Determination of Phenylpropanoid Glycoside Analogs with DPPH</td>
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<td>Emma Reichart '14</td>
<td>The Videotape Inoculation Technique: Self-Awareness and the Post-Identification Feedback Effect</td>
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<td>Zena Sabath '14</td>
<td>Synthesis of Novel Phenylpropanoid Glycosides and Determination of Radical Scavenging Activity in vitro and in vivo</td>
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<td>Gabrielle Sergi '14</td>
<td>Stress and Physical Health Behaviors in Parents of Children with Autism Spectrum Disorders</td>
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<td>Fiona Stuart '14</td>
<td>Exploratory Evaluation of the Purposeful Work Infusion Project</td>
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<td>Cormac Walsh '17</td>
<td>Kenya's National Climate Change Action Plan</td>
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<td>The Slope Relating Neural Frequency to Power and Attentional Control</td>
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<td>John Wisener '14</td>
<td>Stereoselective Aldol Reaction of 3-Methyl-2-Cyclohexen-1-one Using (-)DIP-CI</td>
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</table>
Image and Sound: The Artist, the Self, and the World
ENG 121W and 395P Class Participants

Elizabeth Erbafina '17
Jessica Plotnikov '16
James Preiss '14
Fatima Saidi '17
Rebecca Salzman-Fiske '14
Maxwell Silverman '16

Another World is Possible: Learning from Environmental Justice Movements across the Americas
ENVR 350 Class Participants

Gwyn Browning '15
Caroline Daniels '14
Sonja Favaloro '14
Tyler Greens '14
Kristen Kelliher '16
Gracey Kenney '16
Mark McCauley '15
Owen Minott '14
Benjamin Pardee '15
Rachel Ryan '15

Engaging with Maine: Documentaries on Ten Political Organizations
PLTC 215 Class Participants

Jacob Barbato '15
Emily Baumgarten 16
Hally Bert '14
Benjamin Bogard '14
Adam Buchbinder '15
Maitri Chittidi '17
Mollie Corcoran '14
Jack Frye '14
Margaux Joselow '16
Eileen Lam '15
Xintao Li ’16
Owen Mahan '15
Sarah Maneval '14
Ryan McInerney '17
Catherine Pagano '14
Alex Parker '15
Molly Ryan '17
Andrew Segal '17
Alexandra Skaperdas '15
John Stewart '14
James Walsh '16

Fourteenth Annual Barlow Off-Campus Study Photography Exhibition

Eliza Barkan '15
Hally Bert '14
Benjamin Breger '15
Sarah Cancelarich '15
Lexie Carter '14
Helen Chyz '14
Evan Cooper '15
Sara Cuddeback '15
Kathryn Davis '15
Edward Donaldson '15
Christine Dong '15
Alison Dowey '15
Erica Gagnon '15
Tamara Gonzalez '14
Audrey Grauer '15
Tyler Guss '14
Alexandra Hakusui '15
John Kay '15
Gretchen Kaia '14
Caroline Kern '15
Olivia Kronemeyer '14
Kelly Kruger '14
Vasu Leaphon '15
Lei Lei '14
Rachel Levine '15
Emma Kate Lindsay '15
Talia Mason '15
Erin Milligan '15
Alexandra Millstrom '15
Hannah Mitchell '14
Sean Murphy '15
Julie Ofman '15
Jacqueline Ordemann '15
Molly Palet '15
Lauren Piccirillo '15
Fiona Robins '15
Nyle Rioux '14
Rebecca Rosen '14
Simone Schriger '14
Emily Schwalbe '14
Alexandra Skaperdas '15
Jonathan Strain '15
Fiona Stuart '14
Chelsea Thompson '14
Jillian Verde '14
Shana Wallace '15
Wesley Warner '15
Kelly Yardley '14

14
Bates Dance Company

Dancers
Kathryn Ailes '14         Elise Krims '16         Julia Yankelowitz '17
Afifa Avril '15           Anna Lanoue '15          
Kendra Asklof '15         Julia Lipner '16
Leroy Barnes '14          Brennen Malone '17
Mary Anne Bodnar '16      Mariya Manahova '14
Michaela Britt '17        Talia Mason '15
Madeline Bruno '17        Clare McGlave '15
Cecelia Carey-Snow '17    Johan Mohtarudin '16
Sarah Centanni '17        Danielle Muñoz '15
Bridgette Chandhoke '14   Hannah Otten '16
Mallory Cohen '17         Caroline Paikoff '16
Tara Das '16              Laura Pietropaoli '17
Elizabeth Durney '14      Brett Ranieri '16
Tomisha Edwards '15       Alison Ricciardi '17
Sonja Favaloro '14        Kelsey Schober '16
Colleen Fitzgerald '14    Jonathan Schwolsky '15
Hilary Gibson '14         Conor Smith '14
Patreece Joseph '14       Emma Stern '16

Choreographers
Leroy Barnes '14          Kathyrn Ailes '14
Mary Anne Bodnar '16      Mariya Manahova '14
Michaela Britt '17        Talia Mason '15
Madeline Bruno '17        Clare McGlave '15
Cecelia Carey-Snow '17    Johan Mohtarudin '16
Sarah Centanni '17        Danielle Muñoz '15
Bridgette Chandhoke '14   Hannah Otten '16
Mallory Cohen '17         Caroline Paikoff '16
Tara Das '16              Laura Pietropaoli '17
Elizabeth Durney '14      Brett Ranieri '16
Tomisha Edwards '15       Alison Ricciardi '17
Sonja Favaloro '14        Kelsey Schober '16
Colleen Fitzgerald '14    Jonathan Schwolsky '15
Hilary Gibson '14         Conor Smith '14
Patreece Joseph '14       Emma Stern '16

Lighting Designers and Technical Staff
Asaad Miller '15
Hannah Miller '14
Daniel Paseltiner '16
Lucas Spiro-Wilson '15
Gabriel Weisman '17
Samuel Wheeler '17
Gavin Wray '16

Costume Designers and Costume Shop Crew
Tomisha Edwards '15
Khi Dong Kim '16
Andrea Lauden '14
Rachel Levine '15
Julia Lipner '16
Alexis Martinetti '17
Ann Otis '14
Rociel Peña '14
Kathy Polanco '15
Kelsey Schober '16
Sarah Mae Silverberg '15
Ellen Southworth '16
Upcoming Student Presentations and Performances

**Saturday, March 29**
3:00 PM, Gomes Chapel
Bates Gospelaires Spring Benefit Concert

**Sunday, March 30**
5:00 PM, Little Room, Chase Hall
Crosstones CD Release and Alumni Concert

**Tuesday, April 1**
4:15 PM, Mays Center
Concert: The Bates Gamelan Ensemble

**Wednesday, April 2**
2:15 – 6:30 PM, Commons, Upper Floor
Education Symposium, sponsored by the Department of Education
Student Presentations, 2:15 – 5:30 PM
4:00 PM, Hedge Hall
Poster Session: Program in Environmental Studies
4:30 PM, Olin Concert Hall
Voice Recital: Students of Luette Saul
7:00 PM, Olin Concert Hall
Concert: The Bates Jazz Band

**Thursday, April 3**
4:15 PM, Olin Concert Hall
Voice Recital: Students of John Corrie
7:00 PM, Muskie Archives
Poster Session: Math 219, Differential Equations

**Friday, April 4**
6:00 PM, Museum of Art
Opening: Senior Thesis Exhibition 2014
Exhibition runs through May 24
7:30 PM, Olin Concert Hall
Computer Music Concert

**Saturday, April 5**
4:15 PM, Olin Concert Hall
Voice Recital: Students of John Corrie
5:30 PM, Olin Concert Hall
Piano Recital: Students of Bridget Convey and Chiharu Naruse

**Thursday, May 15-18**
Thursday, May 15, 7:30 PM, Gannett Theater
Friday, May 16, 7:30 PM
Saturday, May 17, 5:00 PM
Sunday, May 18, 2:00 PM
Little Egypt, a play by Lynn Sieffert

**Wednesday, May 21**
5:00 PM, Schaeffer Theatre
Short Term Dance Variety Show
Featuring works by student choreographers and student dance groups