

# 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 Seldenfleuer,  
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  
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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

Gabriella Bilotta '14: Michoacán: The Rise of Self-Defense Forces and Their Impact on Mexican Counterdrug and Security Efforts

*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 Frizell '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

Andrew Carranco '14: A Peruvian Japanese Mexican Tortilla Tofu Press in Texas: The Forgotten Story of Latin American Japanese Internment

*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

Colleen Fitzgerald '14: Contemporary Interpretations of Argentine Tango: The Complexities of Global Dance Forms and the Artists Who Choreograph Them

*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 CO<sub>2</sub> 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)

## Mount David Summit Poster Presenters

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

1:45 - 3:00 PM	Poster Session I	Easel #
John Allard '16	Women's Grassroots Organization in Africa	19
Connor Bair-Cucchiaro '15	HIV/AIDS in Botswana and the Effects of President Bush's Emergency Plan for AIDS Relief	17
W. Evan Beinecke '14	Investigating Higher Harmonic Generation in Plasmonic Gold Nanorods	11
Halward Blegen '14	Caffeine, Hyperoxia, and the Hypoxic Ventilatory Response	6
Erik Bou '14	Variability of Growth Line Deposition and Growth of the Common Cockle ( <i>Cerastoderma edule</i> ) and Effect of Temperature in the Pool of Virkie, Mainland, Shetland	5
Alexa Bourque '16	Coltan in the Congo: Who Makes the Call of Defining Human Rights?	24
Andrew Bradley '14	HIV/AIDS in Botswana and the Effects of President Bush's Emergency Plan for AIDS Relief	17
Michaela Brady '14	Scotland within Empire: The Quest for Independence with or without Union	26
Benjamin Breger '14	Ecological Interactions between Insects and Invasive <i>Fallopia spp.</i> in a Northeastern United States Urban Environment: Flower Visitation, Herbivory by <i>Popillia japonica</i> , and Ant-Plant Protection Mutualism	7
Michaela Britt '17	Grassroots Initiatives and Educational Equality in Post-Apartheid South Africa	23
Melissa Carp '16	Somali Perspectives on Language of Instruction	21
Sara Chari '14	Permutation Polynomials over Finite Fields	29
Paige Collins '14	Environmental Regulation and Growth Rate Variation of <i>Serripes groenlandicus</i> from Bjørnøya	3
Jedd County '14	Detroit's Development of a Rebellion: Understanding the 12 <sup>th</sup> Street Rebellion in a Spatial Framework	25
Caroline Cramer '14	The Collective Effect of Appearance Change Instruction and Co-Witness Manipulation	30
Michael Creedon '14	Somali Perspectives on Language of Instruction	21
Tara Das '16	Women's Grassroots Organization in Africa	19
Caroline Depew '16	Somali Perspectives on Language of Instruction	21
Tess Ferguson '14	Protein Kinase c-Src Phosphorylation Changes in Estrogen-Stressed Breast Cancer Cells	9
Emily Foden '14	Growth of Softshell Clams in Coastal Maine	4
Emilie Geissinger '14	Determining Diet of Wrymouth ( <i>Cryptacanthodes maculatus</i> ) in Maine Mudflats Using Carbon and Nitrogen Stable Isotopes	1
Sean Gemunden '14	Function and Effect of Ribosomal S6 Kinase 2 (RSK2) on Cell Apoptosis in Human Skin Cells	8
April Graham '16	Women's Grassroots Organization in Africa	19

<b>1:45 - 3:00 PM</b>	<b>Poster Session I (continued)</b>	<b>Easel #</b>
Logan Greenblatt '14	Plasmonic Behavior of Gold Nanorod Self-Assemblies	10
Cora Hirschfeld '16	Grassroots Initiatives and Educational Equality in Post-Apartheid South Africa	23
Kyoung-June Lee '14	Defining Promise: Optional Standardized Testing Policies in American College and University Admissions	13
McNally Lee '14	Grassroots Initiatives and Educational Equality in Post-Apartheid South Africa	23
Emily Meade '14	The Economic Cost of Childhood Lead Poisoning in Maine	14
Simone Prioli '14	Are Emotion-Laden Words Identified More Easily than Non-Emotional Words when Seen in Continuous Flash Suppression?	32
Sarah Ratsimbazafy '17	HIV/AIDS in Botswana and the Effects of President Bush's Emergency Plan for AIDS Relief	17
Keyana Sandridge '14	Cationic Cyclodextrins as Chiral NMR Solvating Agents	12
Anabel Schmelz '14	Maine Summertime Blooms: Variability in Populations of <i>Gloetrichia</i> in Three Maine Lakes	28
Sarah Mae Silverberg '15	The Morphological History of <i>Patella vulgata</i> at Sandwick, Unst, Shetland Islands	2
Gabriel Whitehead '17	Coltan in the Congo: Who Makes the Call of Defining Human Rights?	24
<b>3:15 - 4:30 PM</b>	<b>Poster Session II</b>	<b>Easel #</b>
Margaret Carey '14	Gestational Diabetes Mellitus in Somali Women of Lewiston, Maine: The Creation and Assessment of Culturally Relevant Educational Material	9
Joan Castellanos '14	Follow-up to Microbial Sampling at Bates Dining	11
Adam Cervenka '14	Application of a Directed C-H Activation Approach to the Synthesis of Carbazole-Derived Ureas	21
Helen Chyz '14	Enhanced Cognitive Control in Task-Switching for Varying Levels of Bilinguals	31
Peter Dixon '14	The Effect of Rho Kinase Inhibition on <i>Helisoma</i> Neuron Growth Rates	7
Margaux Donze '14	The Effects of Breast Self-Exam Training on Breast Cancer Awareness and Prevention among Undergraduates	29
Rachel Ellis '14	Assessing Spatial Distribution of Poachers' Snares to Direct Chimpanzee Conservation Efforts in Kibale National Park, Uganda	5
Heather Fisher '14	Comparing the Effects of <i>Helisoma</i> and Mammalian Gonadotropin Releasing Hormone on the Feeding Central Pattern Generator in <i>Helisoma trivolvis</i>	6
Destany Franklin '14	Neuromodulators of the Feeding Behavior Network in Pond Snail, <i>Helisoma trivolvis</i> : Mapping of Immunoreactivity in the CNS and Digestive System	8
Caroline Hinkle '14	Analysis of Cognitive Mediators in the Relationship between Peripheral Oxytocin and Affective Processing	32
Cody Jenkins '14	The Effect of MHC Class II Genes on Mate Choice in Vertebrate Populations	4

<b>3:15 - 4:30 PM</b>	<b>Poster Session II (continued)</b>	<b>Easel #</b>
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 $\mu$ 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 ( <i>Danio rerio</i> )	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 <i>Borrelia burgdorferi</i> , 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
<b>4:45 - 6:00 PM</b>	<b>Poster Session III</b>	<b>Easel #</b>
Michael Arsnow '14	DNA Vaccines, A Potential Cure for Type 1 Diabetes	10
Jennifer Bergeron '14	mRNA Processing in <i>Borrelia burgdorferi</i>	11

<b>4:45 - 6:00 PM</b>	<b>Poster Session III (continued)</b>	<b>Easel #</b>
Anne Carroll '14	The Effect of Grapheme-Color Synesthesia on Object Trimming and Binding	27
Yuying Chen '16	Transcriptional Regulation of the Nuclear Factor Erythroid-2-related Factor (nrf) Family by the Aryl Hydrocarbon Receptor (AHR)	5
Mohdis Delijani '14	Horizontal Transfer of Livestock-associated Methicillin-resistant <i>Staphylococcus aureus</i> ST398 to Hospitals or Communities and its Effect on Public Health	2
Omosede Eholor '14	Kenya's National Climate Change Action Plan	20
Joaquin Espinosa '16	Sexual Orientation Policies and Perspectives in Uganda and South Africa	19
Bisola Folarin	Sexual Orientation Policies and Perspectives in Uganda and South Africa	19
Daniel French '14	Nutrient Consumption and Resistance Training	4
William Fubini '14	Advertising Death	22
Tamara Gonzalez '14	The Neuropsychological Validity of Mu Wave Suppression as a Measure of Theory of Mind in Autism Spectrum Disorders	14
Taylor Guss '14	Effects of Power and Money Priming on Empathy	23
Angeleque Hartt '14	Synthesis of Ashitabaol A	9
Tyler Harwood '14	The Effect of Athletic Identity on Susceptibility to Stereotype Threat Associated with the "Dumb Jock" Stereotype	24
Mitchell Hildreth '17	A Comparative Glance at the Arab Springs in Tunisia, Egypt, and Algeria	18
Jocelyn Hoye '15	Background Subtraction in Fluorescence Photoactivation Localization Microscopy	33
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	15
Linnea Kaye '14	Construction of a STED Microscope	34
Bo Ra Kim '14	Why Protest? A Look into Causes of Protest Bids in Contingent Valuation Willingness to Pay Surveys	12
Hope King '14	Attention Deficit Disorder and the Event Related Potential Correlates of Cross-Modal Attention	17
Olivia Kronemeyer '14	The Influence of Cultural Display Rules on Expression of Emotions in Collectivistic and Individualistic Cultures	25
Lindsey Loy '14	When Eating Healthy Becomes Unhealthy: Exploring the Definitional Aspects and Distinguishing Factors of Orthorexia Nervosa	29
Emmaleigh Loyer '14	An Investigation of the Trends of Neural Noise and Its Potential Role in the Impairment of Attentional Brain Circuitry	21
Jane Mayer '14	Neurocinematics: An Empirical and Theoretical Investigation of Visual Attention and Event Segmentation during Dynamic Scene Viewing	13
Kathryn Meade '14	The Relationship between Self-Efficacy and Performance Satisfaction: An Investigation of Labor Method, Childbirth Satisfaction, and the Cold-Pressor Task	31
James Meyo '14	Transcriptional Regulation of the Nuclear Factor Erythroid-2-related Factor (nrf) Family by the Aryl Hydrocarbon Receptor (AHR)	5
Amanda Moore '14	Sexual Orientation Policies and Perspectives in Uganda and South Africa	19

<b>4:45 - 6:00 PM</b>	<b>Poster Session III (continued)</b>	<b>Easel #</b>
Sarah Murphy '14	A Comparison of Two Sanitation Methods for Stainless Steel Test Thermometers Used in Institutional Food Service Departments	3
Bong Nguyen '14	The Influence of Stereotyping in the Judicial System	28
Rebecca Otley '14	Kinetic and Product Determination of Phenylpropanoid Glycoside Analogs with DPPH	6
Emma Reichart '14	The Videotape Inoculation Technique: Self-Awareness and the Post-Identification Feedback Effect	30
Zena Sabath '14	Synthesis of Novel Phenylpropanoid Glycosides and Determination of Radical Scavenging Activity in vitro and in vivo	7
Gabrielle Sergi '14	Stress and Physical Health Behaviors in Parents of Children with Autism Spectrum Disorders	32
Fiona Stuart '14	Exploratory Evaluation of the Purposeful Work Infusion Project	26
Cormac Walsh '17	Kenya's National Climate Change Action Plan	20
Emily White '14	The Slope Relating Neural Frequency to Power and Attentional Control	16
Nina Wineburgh '14	A Comparative Glance at the Arab Springs in Tunisia, Egypt, and Algeria	18
John Wisener '14	Stereoselective Aldol Reaction of 3-Methyl-2-Cyclohexen-1-one Using (-)-DIP-CI	8

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

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

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

**Fourteenth Annual Barlow Off-Campus Study Photography Exhibition**

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

## **Bates Dance Company**

### *Dancers*

Kathryn Ailes '14  
Afifa Avirl '15  
Kendra Asklof '15  
Leroy Barnes '14  
Mary Anne Bodnar '16  
Michaela Britt '17  
Madeline Bruno '17  
Cecelia Carey-Snow '17  
Sarah Centanni '17  
Bridgette Chandhoke '14  
Mallory Cohen '17  
Tara Das '16  
Elizabeth Durney '14  
Tomisha Edwards '15  
Sonja Favaloro '14  
Colleen Fitzgerald '14  
Hilary Gibson '14  
Patrece Joseph '14

Elise Krims '16  
Anna Lanoue '15  
Julia Lipner '16  
Brennen Malone '17  
Mariya Manahova '14  
Talia Mason '15  
Clare McGlave '15  
Johan Mohtarudin '16  
Danielle Muñoz '15  
Hannah Otten '16  
Caroline Paikoff '16  
Laura Pietropaoli '17  
Brett Ranieri '16  
Alison Ricciardi '17  
Kelsey Schober '16  
Jonathan Schwolsky '15  
Conor Smith '14  
Emma Stern '16

Julia Yankelowitz '17

### *Choreographers*

Kathryn Ailes '14  
Leroy Barnes '14  
Mary Anne Bodnar '16  
Bridgette Chandhoke '14  
Tomisha Edwards '15  
Sonja Favaloro '14  
Colleen Fitzgerald '14  
Anna Lanoue '15  
Mariya Manahova '14  
Talia Mason '15  
Hannah Otten '16  
Kelsey Schober '16  
Jonathan Schwolsky '15

### *Lighting Designers and Technical Staff*

Asaad Miller '15  
Hannah Miller '14  
Daniel Pasettiner '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 Lurette 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

7:00 PM, Olin Concert Hall  
Concert: The Bates Steel Pan Orchestra

### **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