# 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 2013 Summit ~

The 2013 Mount David Summit, held on March 29, 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 topics in African studies, biochemistry, biology, and chemistry, English, mathematics, physics, politics, and psychology. Short talks and panel discussions focus on the visual arts at Bates, contemporary Chinese art and culture, and thesis research in anthropology, biology, economics, English, French and Francophone studies, geology, politics, psychology and neuroscience, and Spanish. In addition, costumed English students will be role-playing medieval Londoners and engaging Summit goers in conversation.

Session II (beginning at 3:15 PM), features a poster session with research posters in African studies, biochemistry, biology, chemistry, French and Francophone studies, geology, and mathematics. Another poster session will explore mathematical modeling in biology. Talks and panel discussions focus on thesis research in neuroscience, politics, rhetoric and sociology. Session II will also feature a panel on research conducted while studying broad, a reading by creative writing thesis students, and screening of films and photo-documentaries inspired by Argentine filmmaker Fernando Birri.

In Session III (beginning at 4:45 PM), a poster session will feature research posters on African studies, biochemistry, biology, chemistry, economics, geology, neuroscience, philosophy, and psychology. Session III talks explore thesis research in biochemistry, biology, and Spanish. Panel discussions will address community engagement both here and abroad, museum internships, and a 2012 Short Term anthropology course in Saudi Arabia. Rhetoric students will examine women's rights through their short films, and classics students will perform excerpts from two ancient plays, in Greek and Latin (with translations).

In the evening session, the Modern Dance Company will present its spring concert at 7:30 PM in Schaeffer Theatre. The College Choir will present a concert featuring Fauré's *Requiem* and Lauridsen's *Lux Aeterna* at 8:00 PM in the Olin Concert Hall.

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.

# 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 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 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, 29 March 2013

1:30 -1:45 PM Perry Atrium Call to the Summit

Welcome

A. Clayton Spencer, President

Pamela J. Baker, Dean of the Faculty

Pettengill Hall 13th Annual Barlow Off-Campus Study Photography Exhibition

1:30 - 2:30 PM

Perry Atrium Encountering the Middle Ages: Roving Medieval Londoners

Convener: Sylvia Federico, English

Concurrent Session I 1:45 – 3:00 PM

Perry Atrium Poster Session I: African Studies, Biochemistry, Biology, Chemistry, English,

Mathematics, Physics, Politics, and Psychology

Pettengill G10 The Research and Writing of Strong Graduate Fellowship Proposals

Spencer Collet '13, Olivia Krishnaswami '15, Daniel Peach '13, Cameron Sheldon '13, Destinee

Warner '13

Moderator: Robert Strong, English

Pettengill G21 Thesis Research in Neuroscience, Part 1

Laura Max '13: Peripheral Levels of Oxytocin, Affective Processing, and Attention in Relation to

Schizotypy

Cherelle Connor '13: The Effects of Emotional Intelligence on the Uncanny Valley

Lindsey Gwynne '13: Attentional Bias in Orthorexia Nervosa

Lauren Demers '13: Meta-Affective Processing and Its Relationship to Serotonin and BDNF

Systems

Moderator: Nancy Koven, Psychology

Pettengill G50 The Power of Language in Literature, Film and Translation

Hannah Miller '14: Patterns of Inclusion/Exclusion in State-Funded Argentinean Theater

Catherine Djang '13: Translating Gender and Violence in the Poetry of Brian Turner, Daisy Zamora,

and Claribel Alegría

Anne Cravero '13: French Translations of the Poetry of W. B. Yeats: A Bilingual Recitation

Natalie Thompson '13: Jane Austen and the Art of Revision: Reading, Fiction, Feminism

Moderator: Claudia Aburto Guzmán, Spanish

1:45 – 3:00 PM Pettengill G52

Gray Matter: Thesis Research in Psychology and Neuroscience

Olivia Coleman '13: Stress and Decision-Making Ability: Does the Type of Stressor Impact Outcome?

Zoe Livingston '13: The Relationship between Self-Efficacy, Labor Method, and Birth Satisfaction

Marisa Mohrer '13: Mainstreaming and Specialty Programs for Children and Adolescents with Autism Spectrum Disorders in Lewiston, ME: A Community-Based Thesis

Moderator: Rebecca Fraser-Thill, Psychology

Pettengill G63

Zines, Yarn Bombing, and the Arts House: Student Action in the Arts

Douglas Welsh '14, Grace Glasson '14, Julia Foxworth '13

Moderator: Isaac Thompson '13

**Pettengill G65** 

**Biological and Geochemical Systems and Their Impact** 

Margaret Pickoff '13: Maine's Blue Carbon: Estimating Marine Carbon Stocks in Maine Salt Marshes

Carla Tilchin '13: A Comparative Study of Songbird Immune Response to the Causative Agent of Lyme Disease, *Borrelia burgdorferi* 

Elisabeth White '13: Microsatellite Analysis of Genetic Drift Spotted in Salamanders (*Ambystoma maculatum*) from Vernal Pools in Central Pennsylvania

Edward Wells '13: Latent Tuberculosis in Maine's Refugee Population: The Process, Problems, and Potential Solutions

Moderator: Donald Dearborn, Biology

Pettengill 116

Moving Ideas: Dance and Circus Arts

Zoë Fahy '13 and Kirsten Pianka '13: Workings of a Dance Thesis

Talia Mason '15: Understanding Spirituality through Movement

Travis Jones '13: Exploring Circus Arts

Moderator: Rachel Boggia, Dance

Pettengill 127

Art, Culture, and the Politics in Contemporary China

Clay Baldo '13: Picturing the Enemy During the Great People's Cultural Revolution

Eleanor Anaclerio '13: Ai Weiwei and the Art of Politics

Maura Maloney '13: Dating Programs in the People's Republic of China

Moderator: Xing Fan, Chinese

1:45 – 3:00 PM

Pettengill 162 Thesis Research in the Social Sciences

Kate Fetrow '13: Reclaiming Rights: Indigenous Peoples and State Sovereignty

Desmond Mushi '13: Microfinance as Ambivalence: Kilimanjaro Women's Experiences of Capitalist Development

Courtney Lemenze '13: The Behavioral Economic and Neuroeconomic Analysis of Alcohol Consumption and Hyperbolic Discounting

Moderator: Heather Lindkvist, Anthropology

Concurrent Session II

3:15 - 4:30 PM

Perry Atrium Poster Session II: African Studies, Biochemistry, Biology, Chemistry, French and Francophone

Studies, Geology, and Mathematics

Pettengill G10 Exploring the World: Research while Studying Abroad

Joshua Ajamu '14: Changing Africa through Its Youth

Lucy Brennan '14: TIPNIS: Development or Conservation

Lauren Farnsworth '13: Antes Era Mas Lindo Vivir (Life was More Beautiful Before)

Patrick Jeffries '14: Warriors of Shangri-La: Oral Histories of Tibetan Resistance to Chinese Occupation and the Lives of Rebels after Defeat

Moderator: Stephen Sawyer, Office of Off-Campus Study

Pettengill G21 Thesis Research in Neuroscience, Part 2

Samantha Forrest '13: The Effects of Synaptic Vesicle Acidification Perturbation on Proton Pump Subunit Targeting in *Caenorhabditis elegans* 

Phi Nguyen '13: Tracking How Neurons Talk with Acid

Torben Noto '13: Genomic-Scale Analysis of Olfactory System Heterogeneity

Samantha Landino '13: Intrinsic and Synaptic Properties of Accessory Olfactory Bulb Mitral Cells in Female Mice Following Exposure to Dominant versus Subordinate Male Odors

Moderator: Jason Castro, Psychology

Pettengill G50 Issues in Contemporary Politics: Turkey, Egypt, South Sudan

Nora Hanagan '13: Turkey's Gender Equality Puzzle: Navigating the Difference between Action and

Intent

Andre Gobbo '13: How South Sudan Became the Newest Country in the World

Lauren Hadiaris '13: The Egyptian Military

Moderator: Senem Aslan, Politics

3:15 - 4:30 PM

Pettengill G52 A Literary Reading by Creative Thesis Writers

Ashley Brunk '13, Eryn Gilchrist '13, Joanna Harran '13, Mollie Kervick '13, Ashley Lepre '13, and

Matthew Williams '13

Moderator: Robert Farnsworth, English

Pettengill G65 Birri Film School: Imagery and Ideas Influenced by Fernando Birri

Students in SPAN 217, Literature and Society, present photodocumentaries and videos made in the

spirit of the Argentine filmmaker

Moderator: David George, Spanish

Pettengill 116 Thesis Research in Sociology

Francesca Aborn '13: Healthy Food: The Newest Guard against Incarceration Aggression

Taylor Gartley '13: Trade Unions and Deregulation

Victoria Zapack '13: The Potential for Conflict between the Lobstering Industry and Offshore Wind

Development in the Gulf of Maine

Moderator: Heidi Taylor, Sociology

Pettengill 162 Invention and Analysis in the Humanities

Daniel Friedman '13: Robots and Forward Models

Holly McLaughlin '13: Protecting Life: A Metaphorical Analysis of the Pro-Life Anti-Abortion

Movement and the Conservation Movement

Jessica Washington '13: Black Onyx: Shadeism within the Black Community

Logan Greenblatt '14: The Photographic Process: Creating "That" Image

Moderator: Kirk Read, French and Francophone Studies

Pettengill 257 Poster Session: Mathematical Modeling in Biology

Class projects from BI/MA 255A

Moderator: Bonnie Shulman, Mathematics

**Concurrent Session III** 

4:45 - 6:00 PM

Perry Atrium Poster Session III: African Studies, Biochemistry, Biology, Chemistry, Economics, Geology,

Neuroscience, Philosophy, and Psychology

Pettengill G10 Getting Engaged Abroad: Service and Action while Studying Abroad

Kathryn Ailes '14, Devin Tatro '14, and Catherine Strauch '14

Moderator: David Das, Office of Off-Campus Study

4:45 - 6:00 PM

Pettengill G21 Bates to Saudi: Short Term in the Kingdom

Leah Schulz '14, Eliza Kaplan '15, Natacha Danon '15, Adnan Shami Shah '15, and Gintare

Balseviciute '15

Moderator: Loring Danforth, Anthropology

Pettengill G50 Language, Linguistics, Literature, and Film: Thesis Research in Spanish

Elizabeth Hallett '13, Andrea Newman '13, Kevin Crotty '13, Deana Lorenzo '13, and Catherine

Tuttle '13

Moderator: Francisca López, Spanish

Pettengill G52 Lights, Camera, Classics! Euripides' Bacchae and Plautus's Captivi, Performed Live and on

Video

Jackson Fleming '15, Charles Munn '14, Michaela Brady '14, Andrew Carranco '14, Emily Clark '15,

Michael Creedon '15, and Nicholas Steverson '15

Moderator: Dolores O'Higgins, Classical and Medieval Studies

Pettengill G63 Internships in Museums and Galleries

Cara Garcia-Bou '13, Rosalie Philip '13, and Samantha Rothberg '13

Moderator: Rebecca Corrie, Art and Visual Culture

Pettengill G65 "That's What She Said": Video Interviews, Feminist Views

Students in RHET 265, The Rhetoric of Women's Rights, screen their videos

Moderated by Stephanie Kelley-Romano, Rhetoric

Pettengill 116 Thesis Research in Biology and Biochemistry

Jenna Burke '13: Purification Optimization of the UbcH5 and UbcH7 Dependent E3 Ubiquitin Protein-

ligase that Targets the EMCV 3C Protease for Ubiquitylation and Degradation

Corey Hill '13: Plasticity in the Central Control Mechanism of the Biphasic Ventilatory Response

Following Developmental Hyperoxia: Effects of the P2X Receptor Antagonist PPADS

Kailey Worboys '13: Grasshopper Body Size Patterns over an Altitudinal Cline and through Time:

Different Apparent Effects of Warming on Nymphal and Egg Diapausing Grasshopper Species

Hansen Johnson '13: Characterizing Songs in the Bering-Chukchi-Beaufort Population of Bowhead

Whales (Balaena mysticetus) during Their Annual Spring Migration

Moderator: T. Glen Lawson, Chemistry

Pettengill 162 Research and the Public Good

Emily Egan '13, Taryn O'Connell '13, and Raisa Sharmin '13

Moderator: Darby Ray, Harward Center for Community Partnerships

## **Evening Session**

#### 7:30 PM Schaeffer Theatre

#### **Bates Modern 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 31, at 2:00 PM. An alternate program of works by dance students is presented on Saturday, March 30, at 5:00 PM, and on Monday, April 1, 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.

# 8:00 PM Olin Concert Hall

#### The Bates College Choir

Conducted by John Corrie, Music

This program features Faure's *Requiem* and Lauridsen's *Lux* Aeterna. This concert also will be presented on Saturday, March 30, at 8:00 PM.

Free admission but tickets are required. Call 207-786-6135 or email olinarts@bates.edu

# **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

Note: The number following each 1:45 - 3:00 PM	Poster Session I	Easel #
John Albanese '16	Conserve to Preserve: How Sub-Saharan Africans Protect Their Ecosystems, Cultures, and Communities	25
Christopher Barr '13	The Relationship between High-Risk HPV E6, Cell Immortalization, and Cervical Cancer	20
Allison Beaulieu '13	Effects of Mutant Ubiquitin in the Ubiquitin-26S Proteasome System of 3C Protease in the Encephalomyocarditis Virus	21
Emily Bechtold '13	Effects of Habitat Diversity on Genetic Variability of the Jefferson Salamander	9
Andria Bhagwandeen '15	Sexual Violence and State Accountability: Citizens Put Women on the Agenda	31
Gabriel Borland '13	Timing of Growth Line Deposition in the Soft-Shell Bivalve Mya arenaria	7
Jennifer Brown '13	Synthesis and Antioxidant Activity of Phenylpropanoid Glycoside Analogs	18
Kate Carlucci '13	Identifying the Nuclear Localization Sequence of Ribosomal S6 Kinase 2 (RSK2)	13
Greer Chapman '13	Understanding the Nature and Spatial Distribution of Human-Chimpanzee Encounters around Kibale National Park, Uganda	11
Lianna Cohen '13	Delivery of EMCV 3C Protease into Cultured Mouse Cells by Direct Protein Transfection	19
Kathryn DeAngelis '13	The Effects of Chronic Hyperoxia on the Neurochemical Development of the Caudal NTS	8
Amanda Eller '13	Extended Chronology of Serripes groelandicus from a High-Arctic Fjord on Svalbard, Norway	2
Rachel Ellis '14	Assessing Spatial Distribution of Poachers' Snares to Direct Chimpanzee Conservation Efforts in Kibale National Park, Uganda	10
Emily Foden '14	Conserve To Preserve: How Sub-Saharan Africans Protect Their Ecosystems, Cultures, and Communities	25
Mikayla Foster '13	How to Maintain One-Party Control: A Case Study of the Political Strategies Used by New Hampshire Republicans	30
Colleen Garvey '13	Identifying the Nuclear Localization Signal of p90 Ribosomal S6 Kinase 3 (RSK3) through Fragment and Mutant Protein Subcellular Localization	12
Henry Geng '13	Economic Valuation of Alewives on the Androscoggin and Kennebec River Watersheds Using Split Sample Surveying	22
Joshua Giesler '16	Gender Parity: Necessity or Imposition?	24
Alyson Goldstein '13	Does the Timing of Corroborating Evidence Affect Investigative Interviewers Behavior?	32
Munroe Graham '13	Exploring the Maine NAACP Archives	26
Terry Horowitz '13	The Effects of Chronic Hyperoxia on the Neurochemical Development of the Caudal NTS	8
Kathilee Kenlock '14	Photothermal Imaging	27
Eric Kimball '13	Frobenius Pseudoprimes and a Cubic Primality Test	29

1:45 - 3:00 PM	Poster Session I (continued)	Easel #
Christopher Lane '13	Rescaling of Environmental Governance in the Wadden Sea	23
Stephanie LaRosa '13	Growth Variability and Heavy Metal Concentrations in <i>Margaritifera margaritifera</i> from Karpelva Fjord, Norway	5
Michael Lavallee '13	Chemotherapeutic Efficacies of Monoclonal Antibody Treatments in Breast Cancer Patients with Over-expression of HER2	15
Elizabeth Lawson '13	Determination of Mytilus edulis Growth from Kongsfjord in Svalbard, Norway	6
Louisa Lee '13	Spisula solidissima from Maine as Environmental Proxies	1
Alexandra LeFevre '16	Gender Parity: Necessity or Imposition?	24
Nicholas Luther '16	Gender Parity: Necessity or Imposition?	24
Ryan MacDonald '13	Geographic Variation of Growth Rates in Adult Soft-shelled Clams, <i>Mya arenaria</i> , along the Maine Coast	4
Sheena Malik '13	Observer Perspectives on Eyewitness-Investigator Interactions: Are Interactions with Matching Goals Rated More Positively?	33
Ryan March '13	The Effects of Chronic Hyperoxia on the Neurochemical Development of the Caudal NTS	8
Henry Mauck '13	Soft-Shelled Clam Growth	3
Megumi Milla '16	Gender Parity: Necessity or Imposition?	24
Joanna Moody '14	Cooling Gaseous Atoms toward Absolute Zero	28
Danielle Morris '13	Construal Level Theory and Psychological Distance: Israeli Policy Decisions and Sacred Values	34
Nolwazi Ngwenyama '16	Conserve To Preserve: How Sub-Saharan Africans Protect Their Ecosystems, Cultures, and Communities	25
Tara Prasad '13	Mouthful of Cavities: Pediatric Dental Procedures Conducted under General Anesthesia	14
Lisa Reedich '13	The Effects of Chronic Hyperoxia on the Neurochemical Development of the Caudal NTS	8
Conor Smith '14	Conserve To Preserve: How Sub-Saharan Africans Protect Their Ecosystems, Cultures, and Communities	25
Katharine Straw '13	A Partial Synthesis of Ashitabaol A	17
Griffin Wagner '13	The Assessment of Radical Scavenging Activity of Phenylpropanoid Glycosides by the ABTS Assay	16
3:15 - 4:30 PM	Poster Session II	
Hakimah Abdul-Fattah '13	Projet Stéréotype: France and the French	24
Canice Ahearn '13	Increasing Exclusive Breastfeeding Practices in Somali Mothers Living in Lewiston, ME	9
Hannah Archibald '13	The Effects of Hyperbaric Oxygen on Chronic Wound Biofilms	3

3:15 - 4:30 PM	Poster Session II (continued)	Easel #
Jordan Banez '14	Projet Stéréotype: France and the French	24
David Born '13	Structural and Mechanistic Characterization of the Integral Membrane Non-heme Diiron Protein, Alkane Monooxygenase, from the Oil-degrading Bacterium, <i>Alcanivorax borkumensis</i>	14
Blaine Brown '13	Examining the Effectiveness of Antimicrobial Solutions in Food Service Facilities	1
Michael Burton '13	Analytical Methods for the Determination of the Presence of Nuisance Compounds and the Structural Elucidation of Novel Natural Product Antimicrobials	4
Winnie Chelangat '13	Purification of Alkane Hydroxylase(AlkB) with Various Detergents	15
Chester Chiao '13	The Effects of the 2012 Alewife Migration on Nutrient Dynamics in Nequasset Lake, Woolwich, ME	27
Kaira Cody '13	Using Photovoice to Gain Insight and Perspective on the Navajo Tribal Community about Public Health Concerns	10
Jamilia Davis '15	Tending Orphans – African Strategies	25
Emily Depew '14	Projet Stéréotype: France and the French	24
Colin Dowey '13	Paleoclimate Reconstruction from a Varved Sediment Record Linnévatnet, Svalbard, Norway	29
Araceli Duran '14	Projet Stéréotype: France and the French	24
Bridget Feldmann '16	Tending Orphans – African Strategies	25
Astrid Gleaton '13	Purification of Metallothionein-3 and its Role in Lead Metabolism	13
Maxwell Goldberg '13	New Calix[4]resorcinarenes for Chiral NMR Analysis	20
Amanda Goss '13	Analysis of Brittle Paleogene Structures in the Svea Region, Eastern Spitsbergen, Svalbard	30
Jayme Gough '13	Synthesis and Activity of Supported Ruthenium Catalysts for the Deoxygenation of Phenol as a Model Compound for Fast Pyrolysis Oil	16
David Harning '13	A Geochemical Investigation of Late Holocene Sediment Cores from Pyramid Lake, Fiordland, New Zealand	22
Amna Ilyas '13	Graph Theoretic Model for Music Information Retrieval	32
Valerie Jarvis '13	An Investigational Study of Gestational Diabetes Mellitus in Somali Women in Lewiston	8
Nicholas Karlson '13	Diamagnetic Lanthanide Complexes as Chiral NMR Shift Reagents	21
Mary Lewis '13	Synthesis and Activity of Supported Ruthenium Catalysts for the Deoxygenation of Phenol as a Model Compound for Fast Pyrolysis Oil	16
Madeleine McCabe '16	Projet Stéréotype: France and the French	24
Rachel Morrison '13	Isotopic Reconstructions of Swordfish Diets in the Gulf of Maine	23
Trinh Nguyen '13	Effects of Elderberry Juice on Growth of Staphylococcus saprophyticus	6

3:15 - 4:30 PM	Poster Session II (continued)	Easel #
Colin O'Leary '13	Identification and Characterization of the Nuclear Export Signal of p90 ribosomal S6 kinase 1	12
Scott Olehnik '13	Interactions of Lead with Metallothionein-3	17
Kevin Regan '13	Analyzing the Proprieties of Gold Nanorods through Theoretical and Experimentation Work	18
Ashley Roche '13	The Art Gallery Problem	31
Hendrik Schless '14	Projet Stéréotype: France and the French	24
Beau Sperry '15	Projet Stéréotype: France and the French	24
Mackenzie Stelle '13	Examining the Diets of Single Mothers in Lewiston, ME, and Arica, Chile	7
Hannah Turner '13	Understanding the MAPK RAS/RAF/MEK/ERK Signaling Cascade: Implications for Molecularly Targeted Therapies for Cancer Treatment	5
Maria Velasco '13	Projet Stéréotype: France and the French	24
Caroline Watson '13	Projet Stéréotype: France and the French	24
Amanda Wescott '13	Tracking Seasonal and Storm-Induced Recession of the Popham-Seawall Barrier Beach Complex, Phippsburg, ME	28
Jazmine Woodruff '16	Tending Orphans – African Strategies	25
Timothy Woods '13	Calix-(4)-resorcinarenes as Chiral NMR Solvating Agents	19
Ciara Zagaja '13	Methods for Typing and Classification of Hospital-Acquired and Community-Acquired Methicillin Resistant <i>Staphylococcus aureus</i> and Methicilin Sensitive <i>Staphylococcus aureus</i> Strains	2
3:15 - 4:30 PM	BI/MA 255A Poster Session	
Jenna Armstrong '15	West Nile Virus Epidemic	
Kristen Barry '15	Modeling HIV Infection	
Devon Brown '14	Three-Species Lotka-Volterra Predator Prey Model	
Jordan Buetow '14	Modeling Lobstering Policy in Maine	
Jesse Butler '16	Mathematics of Ichthyology: Applying Ivlev's Model to the Feeding Patterns of the Sand Smelt ( <i>Atherina boyen</i> )	
Bryan Carrillo '13	Using Derivations of the "Generalized Two-Parameter Model" in Efficiently Predicting the Rate of Tumor Growth	
Nathaniel Cash '15	Mathematics of Ichthyology: Applying Ivlev's Model to the Feeding Patterns of the Sand Smelt ( <i>Atherina boyen</i> )	
Lila Chalabi '15	West Nile Virus Epidemic	
Mark Charest '15	Mathematical Modeling of the 1918 Spanish Flu Epidemic	

3:15 - 4:30 PM	BI/MA 255A Poster Session (continued)	Easel #
Margaux Donze '14	Mathematical Modeling of Bulimia Nervosa in American Colleges	
Alexander Francis '14	Three-Species Lotka-Volterra Predator Prey Model	
Kathy Guo '14	Using Derivations of the "Generalized Two-Parameter Model" in Efficiently Predicting the Rate of Tumor Growth	
Grace Hamilton '15	Mathematics of Ichthyology: Applying Ivlev's Model to the Feeding Patterns of the Sand Smelt ( <i>Atherina boyen</i> )	
So Hyun Kwon '13	Using Derivations of the "Generalized Two-Parameter Model" in Efficiently Predicting the Rate of Tumor Growth	
Lydia Merizon '16	West Nile Virus Epidemic	
James Meyo '14	Modeling of Interspecific Competition between <i>Psuedomonas aeruginosa</i> and <i>Staphylococcus aureus</i>	
Fergus Moynihan '13	Modeling the Zombie Infection	
Tara Notarianni '14	Mathematical Modeling of Bulimia Nervosa in American Colleges	
Matthew Perejda '14	Three-Species Lotka-Volterra Predator Prey Model	
Kristen Poulin '13	Modeling HIV Infection and the AIDS Epidemic	
Zachary Polich '15	Modeling the Economic and Personal Costs of Diabetes	
Caroline Richards '14	Three-Species Lotka-Volterra Predator Prey Model	
Ursula Sandstrom '13	Mathematical Modeling of the 1918 Spanish Flu Epidemic	
Christina Stiles '15	West Nile Virus Epidemic	
Brenton Talbott '14	Three-Species Lotka-Volterra Predator Prey Model	
Jonathan Woelfel '13	Modeling the Zombie Infection	
Sean Woods '14	Modeling Lobstering Policy in Maine	
4:45 - 6:00 PM	Poster Session III	
Alexandra Abry '13	Social Anxiety and Memory Conformity in Eyewitnesses	14
Bernard Arnell '13	Perceptual Load and Music: Does a Change in Perceptual Load in One Modality Affect Performance in Another?	21
Eric Barry '13	A Comparison of the Major Ion Chemistry of Two Maine Watersheds, Pleasant River (Bethel, ME) and Stetson Brook (Lewiston, ME)	7
W. Evan Beinecke '14	Consciousness Studies	8
Christopher Boyd '13	Examining Perry	16
Stephanie Boyle '13	Reactions to Anti-Egalitarian Humor and Regulatory Focus Theory	33

4:45 - 6:00 PM	Poster Session III (continued)	Easel #
Sarah Brooks '16	Blood, Exploitation, and Murder, All for a Cell Phone?	24
Gilbert Brown '15	Blood, Exploitation, and Murder, All for a Cell Phone?	24
Nicholas Clark '13	Attitudes about Homosexuality among Male Student Athletes: Do Explicit Differ from Implicit?	30
Kathryn Collier '13	Emerging Identities: The Recent Appearance of LGBTI Support in Kenya	9
Larisa Collins '13	Brain-Derived Neurotrophic Factor as a Potential Mediator in the Relationship between Aerobic Exercise and Aspects of Executive Functioning	27
Emily Depew '14	Emerging Identities: The Recent Appearance of LGBTI Support in Kenya	9
Carrie Dillaway '13	Environmental Education in the Moral Curriculum Classroom in China	6
Evan Dowd '13	Step Up and Stand Out	28
Virginia Flatow '13	Numeracy and Health Risk Assessment	23
Leah Humes '16	Blood, Exploitation, and Murder, All for a Cell Phone?	24
Justin Johal '14	Hypothetical Acidification Restoration through Archaerhodopsin Optogenetics in Caenorhabditis elegans	3
Andrea King '13	Social Skills Intervention: Serving Local Adolescent Boys	10
Nikhil Krishna '13	Cationic Cyclodextrins as Chiral NMR Solvating Agents	4
Jeffrey Lathrop '13	The Influences of Asymmetrical Brain Hemisphere Activation on Aspects of Visual Processing	20
Matthew Leary '16	Emerging Identities: The Recent Appearance of LGBTI Support in Kenya	9
Elise Levesque '13	The Effect of Reward on Asymmetry in Eyewitness and Interviewer Goals	15
Conor Maginn '13	Variations in Hypoxia and Productivity along the Oregon Margin during the Younger Dryas and Early Holocene	11
Mariya Manahova '14	Consciousness Studies	8
Desmond McGrath '16	Emerging Identities: The Recent Appearance of LGBTI Support in Kenya	9
Rose Moran '13	Alexithymia and the Rapid Serial Visual Presentation (RSVP) Task: Does Difficulty Identifying Affective Stimuli Eliminate the Attentional Blink?	19
Julie Naidu '13	How Memory for Features of a Business Differs as a Function of Regulatory Focus and Valence	32
Ingrid Norrmen-Smith '13	The Effect of Social Dominance Hierarchies on Neurogenesis in Mice	13
Michael Peiris '13	Testing for Contamination of the Water System at Bates College	1
Gabrielle Perenchio '16	How Do Women Chiefs' Secret Societies Turn Girls into Women?	25

4:45 - 6:00 PM	Poster Session III (continued)	Easel #
Tina Pruyn '13	Gender Differences in Attitudes toward Infidelity	31
Nathaniel Rickler '13	An Investigation into Personal and Perceived Public Stigma toward Mental Healthcare Treatment and Help-Seeking Behaviors among College Students	26
Zena Sabath '14	Consciousness Studies	8
Lillian Salky '13	Understanding the Role of the Dorsal Visual Processing Pathway in Tool Grasp Identification	17
Yessenia Saucedo '16	How Do Women Chiefs' Secret Societies Turn Girls into Women?	25
Gretchen Sellegren '13	"Haha! That's Disgusting!": An Exploration of Moral Judgment as a Function of Humor and Disgust	12
Stephanie Sprague '13	Fat Talk and Weight Bias in Adolescents	22
Amrit Sridhar '13	The Role of UNC-46 in Synaptic Transmission in Caenorhabditis elegans	2
William Strathmann '13	The Neurobiological and Buddhist Function of Meditation	18
Maria Vargas '16	How Do Women Chiefs' Secret Societies Turn Girls into Women?	25
James Walsh '16	Blood, Exploitation, and Murder, All for a Cell Phone	24
Sarah Wason '13	Plugged In: The Effect of Study Music on Reading Comprehension of Students	29

## Encountering the Middle Ages: Roving Medieval Londoners ENG 395Y Class Participants

Robert Cramer '13 as Piers Plowman, rebel

Kevin Davis '14 as Peter Pemberton, merchant oligarch

Jameson Jones '15 as John Gower, poet Samuel Metzger '14 as John Wyclif, heretic Ashley Moore '13 as Alice Perrers, courtesan

Sean Murphy '15 as John/Eleanor Rykener, transvestite prostitute

Megan Ruth '13 as King Richard II

Paul Sandlin '14 as William Norhamptone, false magician

Quincy Snellings '15 as Johanna Ferrour, rebel Juwon Song '15 as Geoffrey Chaucer, poet

Griffin Tewksbury '14 as Thomas Stokes, false taker of the King's ale

Erica Van Sciver '15 as Julia Pouchere, rebel Reid Whelan '13 as Bubonic Plague

Katherine Wilson '14 as Burning Book

# Projet Stéréotype: France and the French FFS 270 Class Participants

Hakimah Abdul-Fattah '13Araceli Duran '14Beau Sperry '15Jordan Banez '14Madeleine McCabe '16Maria Velasco '13Emily Depew '14Hendrik Schless '14Caroline Watson '13

# "That's What She Said": Video Interviews, Feminist Issues RHET 265 Class Participants

Emily Bamford '15 Sean Murphy '15 Jordan Becker '15 Matthew Neckes '14 Alex Daugherty '15 Emma Pagano '16 Alexandra Druck '16 Jonathan Schwolsky '15 Avril Dunleavy '15 Alexandra Bodtker Sejersted '14 Jordana Gluckow '16 Alexandra Skaperdas '15 Sean Keller '14 Sheryl Todman '14 Allaina Murphy '15 Laura Trimble '16

# Birri Film School: Imagery and Ideas Influenced by Fernando Birri SPAN 217 Class Participants

Sugeiry Betances '15 Sarah Logan '14
Jake Davis '13 Jarret-Paul McKallagat '14

Margaret Dembinski '14 Diamond Ramirez '15
Emmelyn Leung '13 Eric Whitebloom '13

## Thirteenth Annual Barlow Off-Campus Study Photography Exhibition

Kathryn Ailes '13 Eric Barry '13 Greer Chapman '13
Joshua Ajamu '14 Emily Bechtold '13 Anne Cravero '13
Clay Baldo '13 Andrew Carranco '14 Sarah Dik '14

Sean Keller '14 Liza Dorison '13 Matthew Record '14 Emily Egan '13 Charles Kenyon '14 Nathaniel Rickler '13 Rachel Ellis '14 Emmelyn Leung '13 Ellen Schneider '13 Zoë Fahy '13 Jacob McIntosh '13 Natalie Shribman '14 Lauren Farnsworth '13 Holly McLaughlin '13 Conor Smith '14 Ellen Gawarkiewicz '13 Mary Millard '14 Caroline Sollman '13 John Gonsalves '14 Hannah Miller '14 Mackenzie Stelle '13 Andrew Grant '13 Lucas Milliken '13 William Stratham '13 Rosalie Hale '14 Heather Monty '14 Catherine Strauch '14 Grady Hogan '13 Fergus Moynihan '13 Carla Tilchin '13 Molly Huffaker '14 Sarah Murphy '14 Alison Travers '14 Rohan Jaffrey '14 Ingrid Norrmen-Smith '13 Sarah Wason '13 Patrick Jeffries '14 Lena Opper '13 Melanie Watson '14 Daniel Jordan '14 Margaret Pickoff '13 Emily White '14 Lundat Kassa '13 Elizabeth Pyne '13 Kailey Worboys '13

#### **Bates College Modern Dance Company**

Dancers		Choreographers	
Kathryn Ailes '14	Patrece Joseph '14	Leroy Barnes '14	
Hannah Archibald '13	Kathilee Kenlock '14	Basnia Braboy '13	
Kendra Asklof '15	Zak Kofos '13	Stephanie Cade '13	
Afifa Avril '15	Chris Lane '13	Tomisha Edwards '15	
Leroy Barnes '14	Julia Lipner '16	Amanda Eller '13	
Jennifer Bergeron '14	Talia Mason '15	Zoë Fahy '13	
Andria Bhagwandeen '15	Orion McBean '13	Colleen Fitzgerald '14	
Mary-Anne Bodnar '16	Danielle Morris '13	Alison Haymes '16	
Basia Braboy '13	Anne Ngo '14	Yi Zheng Hwa '13	
Ashley Bryant '16	Katrina Orlov '13	Travis Jones '13	
Stephanie Cade '13	Caroline Paikoff '16	Patrece Joseph '14	
Cheyenne Cannarozzo '16	Whitney Paine '16	Talia Mason '15	
Andrew Carranco '14	Regan Radulski '15	Claire McGlave '15	
Bridget Chandhoke '14	Junior Ramirez '13	Katrina Orlov '13	
Tara Das '16	Isaiah Rice '15	Kirsten Pianka '13	
Liza DeWitt '13	Lydia Rubenstein '15	ReganRaulski '15	
Tomisha Edwards '15	Rokya Samake '15	Kelsey Schober '16	
Sara El Assad '14	Kelsey Schober '16	Emma Stern '16	
Amanda Eller '13	Tiffany So '13	Katharine Straw '13	
Colleen Fitzgerald '14	Rachel Spence '14	Jessica Washingon '13	
Shoshana Foster '15	Emma Stern '16		
Alexandra Freed '16	Katharine Straw '13		
Ramya Ghantasala '15	Sarah Wainshal '16		
Alison Haymes '16	JessicaWashington '13		
Yi Zheng Hwa '13	Aaron Young '16		
Travis Jones '13			
Crew List			

Kathryn Ailes '14	Russell Epstein '13	Nikhil Krishna '13	Kahea Mueller '15
Remy Albert '13	Zoë Fahy '13	Anna Lanoue '15	Daniel Paseltiner
Daniel Bak '15	Carol Farrell	Rachel Levine '15	Kirsten Pianka '13
Linnea Brotz '15	Guenevere Figueroa '15	Sheena Malik '13	Kathy Polanco '15
Anne Cravero '13	Colleen Fitzgerald '14	Karnes McCarrick '15	Kelsey Schober '16
Brittney Davis '14	Sarah Fusco '13	Samuel Metzger '14	Jennifer Ward '13

#### **Bates College Choir**

Sopranos Caroline Anson '13 Emily Baumgarten '16 Kelsey Berry '16 Sarah Dik '14 Carrie Dillaway '13 Sarah El Assad '14 Julia Eyman '15 Kate Fetrow '13 Laura Franke '15 Lauren Hadiaris '13 Lea Goodman-Herrick '13 Emily Johnson '15 So Hee Ki '16 Carrie Kissick '16 Courtney Lemenze '13 Ingrid Norrmen-Smith '13

Julia Ofman '15 Jacqueline Ordemann '15 Minh-Tam Pham '15 Fiona Robins '15 Catherine Strauch '14 Sarah Wainshal '16 Maud Welch '13 Anna Williams '16

Altos Asantewaa Agyare '15 Rebecca Basell '16 Ashley Bryan '16 Maya Cates-Carney '16 Sara Chari '14 Sophie Dalterio '13 Jeynaba Diallo '15 Alexandra Freed '16 Colette Girardin '16 Madeline Legro '16

Lei Lei '14 Ashley Lepre '13 Frances Leslie '15 Emmelyn Leung '13 Eve Maxson '16 Claire McGlave '15 Caroline Paikoff '16 Corinna Parisi '13 Rociel Pena '14 MacKenzie Pendergast '15 Lane Peterson '15

Cameron Sheldon '13 Caroline Sollmann '13 Devin Tatro '14 Nancy Weidner '13

Tenors

Angel Arango '15 Nicholas Auer '15 William Green '14 Benjamin Merkert '15 Brett Ranieri '16 Guoqing Sun '13 Hank Woolley '13

Basses

Gabriel Borland '13 Hank Geng '13 Jonah Greenawalt '16 Alexander Hadiaris '15 Nikhil Krishna '13 Gunnar Manchester '15 Samuel Spicer '15 Qianli Xiao '13 Matthew Silverman '15 Nicholas Flynn '15 Thomas Fitzgerald '16

#### **Bates College Orchestra**

Violin Gregory Boardman Jessie Boardman Heather Fisher '14 Gabriel Mizrachi '16 Yanying Sheng '16 Linda Vaillancourt Aaron Young

Viola

Gregory Boardman Jessica Cooper '13

Robert Dan

Ramya Ghantasala '15

So Hee Ki '16

Linda Vaillancourt

Violoncello Bassoon

Alexander Bennett '15 Joanne Chandler Henry Bruzzese '16

Julie Chen Horn

Molly Bruzzese '13 Contrabass Grace Kenney '16 Charles Oehrtmann Gary Kersbergen '16 Margery Landis

Flute

Oboe

Clarinet

Rebecca Schwartz '16 Trombone

Christopher Schiff

Billie Jo Britto Harp

Danielle Langord

Steven Staffa '15 Organ

James Parakilas

# **Upcoming Student Presentations and Performances**

# Monday, April 1

7:30 PM, Olin Concert Hall
Senior Thesis Concert: Lea Goodman-Herrick '13

# Tuesday, April 2

7:30 PM, Olin Concert Hall Concert: Computer Music II

#### Wednesday, April 3

7:00 PM, Olin Concert Hall The Bates College Jazz Band

7:00 PM, Pettengill G52 Poster session, MATH 217, Differential Equations

## Thursday, April 4

12:10 – 12:50 PM, Marcy Plavin Dance Studios, Merrill Gymnasium Dance Classes Informal Show Jazz, Ballet, Modern Partnering, Dance Ensemble A&B

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

# Friday, April 5

5:00 PM, Museum of Art Opening: *Senior Exhibition 2013*Exhibition runs through May 25

#### Friday, April 5 (continued)

Time TBD, Bates Mill Complex, off Chestnut Street, facing Canal Street Thesis Dance Performance, Zoë Fahy '13

#### Saturday, April 6

Time TBD, Bates Mill Complex, off Chestnut Street, facing Canal Street Thesis Dance Performance, Zoë Fahy '13

# Sunday, April 7

3:00 PM, Olin Concert Hall Senior Thesis Concert: Jessica Cooper '13, viola

7:30 PM, Gannett Theatre Voice and Speech Performance Final projects by students in THEA 363, Voice and Speech

## Tuesday, April 9

3:45-5:45 PM, Pettengill G52 Women's Health Fair, presented by students in PS/WS 343, Women, Culture, and Health

# Wednesday, May 22

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