



2009

## Schedule of Presentations

Colby College

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# *Colby Undergraduate Research Symposium 2009*

*April 29 - May 1, Colby College, Waterville, Maine*

## *Research Presentations*

*Wednesday, April 29*

**SESSION I: WGSS**  
**WGSS Senior Seminar**  
*9:00 - 11:00 AM*

*Hurd*  
**Session Chair: Margaret McFadden**

- 9:00 am**     **Elizabeth Doran** ('09), Women, Gender, Sexuality  
'The Husband, the Wife, and the Lord in the Middle': Evangelical Women, Mutuality, and Submission
- 9:15 am**     **Ashlee Holm** ('09), Women, Gender, Sexuality  
Fantasies: Staging Feminist Performance Art
- 9:30 am**     **Danielle Crochiere** ('09), Women, Gender, Sexuality  
How Porn has been Normalized into Society: A Closer Look at its Effect on College Campuses
- 9:45 am**     **Naomi Smith** ('09), Women, Gender, Sexuality  
Sexuality, Gender and the Law in the United States
- 10:00 am**    **Katherine Dammann** ('09), Women, Gender, Sexuality  
'Just imagine it being your sister or mom, and then think about how we should talk about that': The Representation and Consumption of Chris Brown, Rihanna, and Domestic Violence
- 10:15 am**    **Pamela Colon** ('09), Women, Gender, Sexuality  
'Grass Without Roots': Social Programs and Women's Empowerment in India
- 10:30 am**    **Cary Finnegan** ('09), Women, Gender, Sexuality  
Pushing Boundaries: Expressions of Love and Sexuality in the Life and Work of Edna St. Vincent Millay

**SESSION II: ENVIRONMENTAL STUDIES**  
**Conservation Biology Presentations**  
*11:00 AM*

*Olin 234*  
**Session Chair: Russ Cole**

**Rachel E. Baron** ('11), **Bryan J. Brown** ('09) and **Brooke E. Wanlass** ('11),  
Conservation Biology Presentations  
What is Ecoagriculture?

**SESSION III: ENVIRONMENTAL STUDIES**  
**Environmental Studies Honors Presentations**  
1:00 - 4:00 PM

**Whitney**  
**Session Chair: Russ Cole**

- 1:00 pm**     **Patrick Roche** ('09), Environmental Studies  
Learning the Lay of Their Land: Data Collection by Maine Land Trusts
- 1:30 pm**     **Megan Saunders** ('09), Environmental Studies  
Factors Influencing Conservation Success or Failure in Tiger Range States
- 2:15 pm**     **Caitlin Dufraine** ('09), Environmental Studies  
An Identification and Assessment of Human-Carnivore Conflict Hotspots and Large Carnivore Policy Implications in the United States
- 2:45 pm**     **Lindsay Dreiss** ('09), Environmental Studies  
Protecting Maine's Mammals: A Model of Human Footprint and Biodiversity in the North Woods

**SESSION IV:**  
**General Session**  
1:00 - 4:50 PM

**Hurd**  
**Session Chair: Suzi Cole**

- 1:00 pm**     **Hilana Bernheimer** ('10) and **Anna Kelemen** ('10), Psychology  
School Readiness: The Underlying Factors of Socio-Economic Status and the Ways in Which Those Factors Affect Waterville Children's Kindergarten Preparedness
- 1:15 pm**     **Carla Jacobs** ('09), Psychology  
Assesing Body Image Concerns in Preschoolers from a Social Cognitive Perspective
- 1:30 pm**     **Nina Gold** ('09), Psychology  
Simon Is Sick: A Therapeutic Book for Pediatric Patients
- 1:45 pm**     **Daniel Heinrich** ('09) and **Dylan Perry** ('09), Biology  
Reaction Latency Period in Response to Tactile Stimuli
- 2:00 pm**     **Eric Braunstein** ('10), Chemistry  
Analysis of the Electron Withdrawing Capability of Acetylene Groups for Nucleophilic Aromatic Substitution.
- 2:30 pm**     **Samantha Richens** ('11), Art  
The American Portrait and the Invention of the Daguerreotype
- 2:45 pm**     **Shelley Payne** ('09), History  
Currents of Aggression: The American Agrarian Dream and Mexican Land Grants in Alta California
- 3:00 pm**     **James Goldring** ('09), Government  
Identity Politics in Post-Genocide Rwanda: Obstacles to Reconciliation and

Stability

- 3:30 pm**    **Michele Chu** ('09), Psychology  
David vs. Goliath: Whose Side Are you on Anyway?
- 3:45 pm**    **Carrie Potter** ('09), Psychology  
The Effects of Eating Behaviors and Exercise Patterns on the Processing of Food and Exercise Related Stimuli
- 4:00 pm**    **Ling Zhu** ('09), Economics  
Central Bank Independence: The Missing Link in Cyclicity of Monetary Policies

**SESSION V: ART**

*Realms of Faith (AR397)*

4:00 - 5:00 PM

*Smith*

*Session Chair: Veronique Plesch/David Simon*

- 4:00 pm**    **Whitney Lynn** ('09), Art  
Byzantine Paten and Chalice
- 4:15 pm**    **Margaret Gribbell** ('09), Art  
A Limoges Reliquary
- 4:30 pm**    **Megan Conroy** ('10), Art  
Ivory Diptych with Nativity, Adoration of the Magi, Crucifixion, and Last Judgment
- 4:45 pm**    **Thomas Winter** ('09), Art  
Façade Relief with Two Birds

*Thursday, April 30*

**SESSION VI:**

*General Session*

1:00 - 4:30 PM

*Whitney*

*Session Chair: Suzi Cole/Marilyn Pukkila*

- 1:00 pm**    **Ellen London** ('09), English  
Romantic Representations: The Intercultural Translation of Body and Commodity in Orientalist Discourse
- 1:25 pm**    **Colin Cummings** ('09), English  
Reading Joycean Comedy and Faulknerian Tragedy: Exploring the Significance of Location, Literary Influence and the Possibilities of Heroism with Leopold Bloom in Joyce's Ulysses and Quentin Compson in Faulkner's The Sound and the Fury and Absalom, Absalom!
- 1:50 pm**    **Lauren Duval** ('09), History

'La Belle Américaine': Sarah Jay's Experience Abroad during the American Revolution

**2:30  
pm**

**Eitan Green** ('09), Anthropology

Re-imagined Communities: Global Climbing on Local Mountains

**3:15  
pm**

**Matthew Von Vogt** ('11), German/Russian

The Concept of the Modern Family in Fassbinder's Group Films of 1960s Germany

**3:35  
pm**

**Sei Harris** ('10), German/Russian

The Sound of Yourself Listening: Faust and the Politics of the Unpolitical

**3:55  
pm**

**Yilin Xu** ('09), Economics

Hydropower Development and Resettlement Policy on China's Nu River

**SESSION VII:**  
*Natural Sciences and Environmental Studies*  
1:00 - 3:45 PM

*Smith*  
**Session Chair: Robert Bluhm**

**1:00  
pm**

**Nathan Hill** ('09), Physics and Astronomy

The Higgs Mechanism and the Search for the Higgs Boson

**1:15  
pm**

**David Connick** ('09), Physics and Astronomy

Noether's and Goldstones theorem in particle physics

**1:30  
pm**

**James Jones** ('09), Physics and Astronomy

Beyond the Standard Model: Supersymmetry and Large Extra Dimensions

**1:45  
pm**

**Seth Johnson** ('10) and **Frances Still** ('10), Biology

Regulation of D-Pax-2 by Proneural Genes

**2:00  
pm**

**Rachel Guest** ('09), Geology

Can Predatory-Prey Arms Races Intensify during a Mass Extinction Event? Strombid Gastropods from Late Neogene of Florida

**2:30  
pm**

**Lauren Harris** ('10) and **Michael MacNicoll** ('09), Mathematics

Three-dimensional Modeling of Vertigo Sensation in Patients Suffering from Benign Paroxysmal Positional Nystagmus.

**2:45  
pm**

**Colin O'Shea** ('10), Biology

The Neurological Phenotyping of Methylmalonic Acidemia

**3:00  
pm**

**Blair Braverman** ('11), Environmental Studies

The Iditarod Trail as a Model for Conservation

**3:15  
pm**

**William Tyson** ('09), Environmental Studies

The Human Landscape of Potential Wolf Habitat in the Northeastern United States: A Spatial Analysis of the Political and Social Suitability of Wolf Re-Colonization

***SESSION VIII: ENVIRONMENTAL STUDIES  
Transboundary Environmental Policy and Dispute  
Resolution Presentations***

*2:30 - 3:45 PM*

*Diamond 223  
Session Chair: Cat Ashcraft*

**Laura Gray** ('09) and **Alexi Greenberg** ('09), Environmental Policy and Dispute Presentations

Conflict and Cooperation Over Water Rights: Cases from the Middle East and Indian Water Rights in the Western United States

***SESSION IX: EAST ASIAN STUDIES***

***East Asian Studies***

*3:00 - 4:00 PM*

*Hurd  
Session Chair: Tamae Prindle*

**3:00  
pm**

**Jesica Chang** ('11), **Lauren McGrath** ('12) and **Sundine Chizzonite** ('09), East-Asian Studies

20th Century Japanese Fiction

***SESSION X: INTERNATIONAL STUDIES***

***International Studies Honors Presentations***

*4:00 - 5:00 PM*

*Hurd  
Session Chair: Jennifer Yoder*

**4:00  
pm**

**Daniela Andreevska** ('09), International Studies

Keys and Orchards: Memory and the Palestinian Diaspora, 1948-Present

**4:30  
pm**

**Christine Shu** ('09), International Studies

Antibiotics, Herbs, and Magic: Health Practices in Contemporary St. Petersburg

***SESSION XI: HISTORY***

***Senior Seminar on the Civil War***

*4:00 - 5:00 PM*

*Smith  
Session Chair: Elizabeth Leonard*

**4:00  
pm**

**Jennifer MacDowell ('09), History**

Wartime Attitudes and Morale of Union and Confederate Women

**4:30  
pm**

**Noel De Freitas ('10), History**

A Study of African American Troops and Their Motives For Fighting in the American Civil War

***SESSION XII: ART***

***Food in Art, Food as Art***

***4:00 - 5:30 PM***

***Bixler 154***

***Session Chair: Veronique Plesch***

**4:00  
pm**

**Virginia Robbins ('10), Art**

Sins of the Flesh: Gluttony and Lust in Medieval Culture

**4:20  
pm**

**Brittany Canniff ('09), Art**

Dutch Food and Identity in 17th Century Still Lives

**4:40  
pm**

**Laure-Helene Caseau ('10), Art**

European Chocolate: the Early Years

**5:00  
pm**

**Fiona Braslau ('10), Art**

Meat in European Art

***SESSION XIII: THEATER AND DANCE***

***New Play Festival***

***7:30 PM***

***Strider Theater***

***Session Chair: Lynne Conner***

**Lucy Dotson ('12), Theater and Dance**

GHOSTS

**Sean Senior ('10), Theater and Dance**

THAT ONE DAMN BUST

**Kathleen Brzozowski ('09), Theater and Dance**

SEXUAL DEBUT

**Frederick Freudenberger ('09), Theater and Dance**

ONLY A THEORY

**Kate Vasconi ('09), Theater and Dance**

THE ELGIN WAR

**Kris Miranda** ('09), Theater and Dance  
SWORD AND SHIELD

**Andrew Bolduc** ('10), Theater and Dance  
A QUICK LESSON IN CAUSE AND EFFECT

**Michael Trottier** ('12), Theater and Dance  
CLARITY

*Friday, May 1*

**SESSION XIV: GERMAN AND RUSSIAN**  
**German Studies Senior Seminar**  
11:00 - 12:45 PM

**Hurd**  
**Session Chair: Arne Koch**

**11:00 am Sommer Engels** ('09), German/Russian

Bernhard Schlinks 'Der Vorleser' und deutsche Vergangenheitsbewältigung

**11:15 am Samuel Morales** ('09), German/Russian

Die Individualisierung der gesellschaftlichen sittlichen Sorgen in 'Frühlings Erwachen' und 'Der Vorleser' (The individualization of societal moral problems in 'Spring Awakening' and 'The Reader')

**11:30 am Nicole Veilleux** ('09), German/Russian

Die Darstellung des Anderen und des Bekannten: Rassenvorurteil, Menschenrecht und Philosophie in Heinrich von Kleists 'Die Verlobung in St. Domingo'

**11:50 am Katherine Dutcher** ('09), German/Russian

Moralphilosophie in Frank Wedekinds 'Frühlings Erwachen': Freiheit plus Ordnung gleich Sittlichkeit

**12:10 pm Justin Mohler** ('09), German/Russian

Die Darstellung moderner Identität in Doris Dörries „Bin ich schön?“

**SESSION XV: CHEMISTRY**  
**Chemistry Senior Research Presentations**  
11:00 AM

**Arey 5**  
**Session Chair: Jeff Katz and Das Thamattoor**

**Andrew Young** ('09), **Tom Sisto** ('09) and **Whitney Miller** ('09)

**SESSION XVI: ENVIRONMENTAL STUDIES**  
**Conservation Biology Presentations**  
11:00 AM

**Olin 234**  
**Session Chair: Russ Cole**

**Lauren E. Corke** ('10), **Amanda R. Lindsay** ('10) and **Sean T. Prockter** ('09),



Conservation Biology Presentations  
Management and Protection of Mangroves

**SESSION XVII: ECONOMICS**  
**Economics Honors Research Presentations**  
1:00 - 4:00 PM

*Whitney*  
*Session Chair: Guillermo Vuletin*

- 1:00 pm** **Ling Zhu** ('09), Economics  
A Nouval Measure of Central Bank Independence
- 1:25 pm** **Ian Cummins** ('09), Economics  
Cyclicality of State Budgeting: A Political-Economy Analysis
- 1:50 pm** **John Roberts** ('09), Economics  
Forecasting Commodity Prices with Parallel Exchange Rates
- 2:15 pm** **Gregory Zartarian** ('09), Economics  
Occupational and Geographic Mobility of Armenian Immigrants
- 2:40 pm** **Po Wong** ('09), Economics  
The Effect of Natural Disasters: The Indonesian Forest Fires in 1997
- 3:05 pm** **Yilin Xu** ('09), Economics  
Public Goods Provision and Local Governance in China: Evidence from Rural Gansu Province
- 3:30 pm** **Prabhav Rakhra** ('09), Economics  
Business-Time

**SESSION XVIII: AMERICAN STUDIES**  
**American Studies Senior Theses**  
1:00 - 3:00 PM

*Hurd*  
*Session Chair: Margaret McFadden*

- 1:00 pm** **Melissa Martin** ('09), American Studies  
America the Beautiful, the Bountiful, the Healthful and the Hungry: Understanding Contemporary American Food Culture
- 1:25 pm** **Hope Rosenfeld** ('09), American Studies  
Friend or Foe? Examining the Impact of Facebook and Social Networking on Modern American Society
- 1:50 pm** **Tiffany Martin** ('09), American Studies  
The Selfish versus The Lazy: Intra-racial Relationships in Aaron McGruder's 'The Boondocks'
- 2:15 pm** **Henry Powell** ('09), American Studies  
Consuming Generations: Race and Society in George Romero's Zombie Films
- 2:40 pm** **Jamie Quine** ('09), American Studies

Disney's Daughters: The Representation of Gender in Popular Animated Disney Films

**SESSION XIX: HISTORY/LATIN AMERICAN STUDIES**

*Smith*

***Counterinsurgency and Violence in Colombia and Guatemala***

***Session Chair: Ben Fallaw***

*1:00 - 2:30 PM*

**1:00 pm** **Catherine Coffman** ('09), History

Dust Between Two Fires: Civilian Militias in Ayacucho, Peru and Middle Magdalena Valley, Colombia in the Late Twentieth Century

**1:40 pm** **Sarah DeLiefde** ('09), Latin American Studies

From Colonization to Civil War: Gendering the Guatemalan Counterinsurgency

**SESSION XX: BIOLOGY**

*Olin 1*

***Biology Honors Research Presentations***

***Session Chair: Russell Johnson***

*1:00 - 3:30 PM*

**1:00 pm** **Zachary Zalinger** ('09), Biology

Characterization of the Incompatibility Group A/C Conjugative Plasmid *Aeromonas salmonicida* subsp. *salmonicida*

**1:15 pm** **Katharine Harmon** ('09), Biology

Engrailed and Other Pax-2 targets

**1:30 pm** **Ruth Langton** ('09), Biology

The Effect of Glutamate on Neurosecretory Cells in the Crustacean Nervous System

**1:45 pm** **Kimberly Cohen** ('09), Biology

Diet Manipulation in Painted Lady Butterfly Larvae, *Vanessa cardui*: Effects on Larvae, Adult Morphology, and Flight Performance

**2:00 pm** **Andrew McEvoy** ('09), Biology

Evaluation of Nocturnal Flight Calls as Useful Tool in the Study of Avian Migration

**2:30 pm** **Philip Crystal** ('09), Biology

Estimation of population reduction and gene flow in the rare orchid *Isotria medeoloides*

**2:45 pm** **Jennifer Myers** ('09), Biology

The Effects of N-acetylserotonin and Prazosin on Fiddler Crab (*Uca pugilator*) X-Organ Cell Neurite Growth

**3:00 pm** **Escar Kusema** ('09), Biology

Cellular Mechanisms of Melatonin-induced Neurite Growth in Crustacean X-organ Cells.

**SESSION XXI: EDUCATION**

*Diamond 122*

***Student Inquiry and Practice in Education and Human***

***Session Chair: Mark Tappan***

*Development*

2:00 - 4:00 PM

- 2:00 pm** **Pamela Colon** ('09), Independent Studies  
'It's not all they are': The Lives of Girls in the South End
- 2:15 pm** **Amanda Mello** ('09) and **Margaret Lancaster** ('09), Education and Human Development  
Student Teaching Portfolio Presentation
- 3:15 pm** **Ruth Langton** ('09), **Danielle Carlson** ('10), **Ozzy Ramirez** ('10), **Aleah Starr** ('11) and **Alyssa Kavanagh** ('10), Education and Human Development  
Coloring Class Lines

**SESSION XXII: RUSSIAN**

**Russian Senior Symposium: Boris Pasternak's Doktor Zhivago**

2:00 PM

*Lovejoy 215*  
*Session Chair: Sheila*  
*McCarthy*

**SESSION XXIII:**

**General Session**

3:00 - 5:15 PM

*Hurd*  
*Session Chair: Suzi Cole*

- 3:00 pm** **Qainat Khan** ('11), Women, Gender, Sexuality  
Representing Harvey Milk in the Media 1973-1988
- 3:15 pm** **Amy Dunlap** ('11), Women, Gender, Sexuality  
The Rise of Second-Wave Feminism at Colby College: The Women's Organization and Women's Health on Mayflower Hill, 1973-1980
- 3:30 pm** **Emma Anastos-Wallen** ('11), Women, Gender, Sexuality  
Improving Lipstick Quotients: The Media's Construction of Gender and Romance in The Colby Echo During the 1950s
- 4:00 pm** **Amy Lu** ('09), East-Asian Studies  
China's Environmental Challenges
- 4:30 pm** **Frederick Freudenberger** ('09), Geology  
Morphological Fluctuations of the Sahara Desert: An Overview of Quaternary Climate Change and Geomorphology with Special Attention to Water.
- 4:45 pm** **Daniel Franklin** ('10), History  
Ibn Khaldun (1332-1406): The Medieval Dar al-Islam's Greatest "Renaissance Man", His Historical and Sociological Contributions, and His Encounter with the Mongol

Conqueror Tamerlane

**SESSION XXIV: HISTORY**  
*Senior Seminar on the Civil War*  
3:00 - 4:00 PM

*Smith*  
*Session Chair: Elizabeth Leonard*

**3:00 pm** Matthew Quinlan ('10), History  
Hollywood's Depiction of Irish Soldiers in the American Civil War

**3:30 pm** Emily Schofield ('09), History  
10th and 29th Maine Regiments

**SESSION XXV: CHEMISTRY**  
*Chemistry Senior Research Presentations*  
3:00 PM

*Keyes 105*  
*Session Chair: Jeff Katz and Das Thamattoor*

Zac Helm ('09)  
A Novel Method for Measuring Antioxidant Activity

Nichole Schmidt ('09)  
The Synthesis of a Biomimetic Mo Complex with a New Bidentate Sulfur Ligand

Becky Thorburn ('09)  
The Synthesis of Chiral Macrocycles Containing BINOL

**SESSION XXVI: RELIGIOUS STUDIES**  
*Religious Studies Senior Presentations*  
4:00 - 6:00 PM

*Lovejoy 213*  
*Session Chair: Carleen Mandolfo*

Elizabeth Byrne ('09)  
Think of the Children: Narratives of Violence in Children's Bibles

Esther Boyd ('09)  
The Popcorn Apocalypse: Judeo-Christian Apocalypticism in Contemporary American Film

Sejal Patel ('09)  
'She Who Lived': Using Film as Means of Examining the Disconnect Between the Subjugation of Women in India and the Reverence for Hindu Goddesses

Joseph Slater ('09)  
There is Neither Greek nor Latin in Christ Jesus

**SESSION XXVII: SOCIOLOGY**  
*Sociology Honors Research Presentations*  
4:00 - 6:00 PM

*Diamond 122*  
*Session Chair: Terry Arendell*

**4:00 pm** Abigail Sussman ('09), Sociology

Midwifery in the USA: An Exploration of the Decline and Rise in Midwife Use.

**4:40 pm** Elizabeth Doran ('09), Sociology

'Contentment in My Heart': Evangelical Women and Spiritual Journeys

**SESSION XXVIII: THEATER AND DANCE**

***New Play Festival***

***7:30 PM (see Thurs.)***

***Strider Theater***

***Session Chair: Lynne Conner***