2008

Schedule of Presentations

Colby College

Follow this and additional works at: https://digitalcommons.colby.edu/ugrs

Recommended Citation

https://digitalcommons.colby.edu/ugrs/60

This Abstract is brought to you for free and open access by the Student Research at Digital Commons @ Colby. It has been accepted for inclusion in Undergraduate Research Symposium (UGRS) by an authorized administrator of Digital Commons @ Colby. For more information, please contact mfkelly@colby.edu.
Colby Undergraduate Research Symposium
April 30 - May 2, 2008
Colby College, Waterville, Maine

Research Presentations
Wednesday, April 30th

SESSION I: BIOLOGY
Olin 335
Behavior and Physiological Ecology Presentations
11:00 AM

Jessica Harold ('08)
Assessment of the dose-effect response of atrazine on behavior, oxygen consumption, and gonadal malformations in Xenopus laevis

SESSION II: SCIENCE, TECHNOLOGY, AND SOCIETY
Diamond 242
Science, Technology, and Society Studies
Session Chair: James Fleming
1:00-3:00 PM

1:00 pm  Noah Bonnheim ('11) and Caitlin Dufraine ('09), Science, Technology, and Society
Feasibility Study: Solar Water Heating at Colby's Harold Alfond Athletic Center

1:20 pm  Katherine Klepinski ('08), Science, Technology, and Society
Kennebec Valley Co-op: All Local, All Affordable

1:35 pm  Stephen Erario ('10), Science, Technology, and Society
Moving Toward a Sustainable Waterville

1:50 pm  Megan Browning ('10) and Alice Evans ('10), Science, Technology, and Society
Climate Change Education and Action in Local High Schools

2:10 pm  Brooke Wanlass ('11) and James Pinkston ('08), Science, Technology, and Society
The State's Benefits from the Maine Solar Rebate Program

2:45 pm  Benjamin Many ('09), Science, Technology, and Society
Visualizing Energy Use: 10,000 Whatts?

SESSION III: ENVIRONMENTAL STUDIES
Smith Room
Environmental Studies Presentations
Session Chair: Russell Cole
1:30-5:00 PM

1:30 pm  Bethany Darling ('08)
Smart Growth and Quality of Place: Options and Opportunities in Planning for Rural Maine

2:00 pm  Lauren Bizzari ('09)
Nitrate Removal in Nitrex(TM) Permeable Reactive Barriers: Investigating Denitrification Using a 15NO3 Tracer
2:15 pm  BREAK

Environmental Studies Honors Presentations Follow

2:30 pm  Alaina Clark ('08)
Designing a Green Graduation at Colby College

3:00 pm  Courtney Larson ('08)
Separating People and Wildlife: Zoning as a Conservation Strategy for Large Carnivores

3:30 pm  Jamie O'Connell ('08)
Carbon Neutrality at Colby College

4:00 pm  Kerry Whittaker ('08)
Using Variable Stomatal Sensitivity to CO2 in Conifers to Reconstruct Ancient Atmospheres and Predict Future Implications of Climate Change

4:30 pm  Charles Carroll ('08)
An Analysis of Carbon Sequestration Potential in Maine

SESSION IV: General Session
Hurd Room
Session Chair: Suzi Cole
1:45-3:30 PM

1:45 pm  Yin Li ('08), East-Asian Studies
The Relationship Between Unreality and Strength in 'Kafka on the Shore'

2:00 pm  Annelene Fisher ('08), African Studies
Coloured Identity and Experience in South African Theatre (Goldfarb Center Student Research)

2:30 pm  Daniel Franklin ('10), German/Russian
Revenge, Relocation, Integration, and Recovery: The Expulsion of Germans from Eastern Europe and their Role in West Germany's Post-WWII Reconstruction

2:45 pm  Andrei Roman ('08), Economics
Living Arrangements and Subjective Well-being of Older Adults: A Comparison Between China and Japan

3:15 pm  Ivan Balbuzanov ('09), Economics
Thou Shalt Not Kill… Thyself: The Effect of Religious Participation on Suicide

SESSION V: LATIN AMERICAN STUDIES
Whitney Room
Latin American Studies
Session Chair: Ben Fallaw
4:00-5:30 PM

4:00 pm  Stephanie Bowman ('08), Latin American Studies
In the Absence of Family: How Private Honduran Childrens Homes Meet the Needs of At-Risk Youth

4:30 pm  Abigail Hall ('08), Latin American Studies
The Penguins' Revolution: An Analysis of Student Response to the Multi-Dimensional Chilean Educational Crisis.

SESSION VI: ART
Hurd Room
Session Chair: Veronique Plesch
4:00-5:30 PM
4:00 pm  Justine Ludwig ('08)
        From the Kunstkammer to the Art Museum
4:20 pm  Laure-Helene Caseau ('10)
        Jean-Honoré Fragonard: A Sentimental Affair
4:40 pm  Virginia Robbins ('09)
        Written on the Face: The Grotesque Physiognomy in Northern Renaissance Art
5:00 pm  Grant Netzorg ('08)
        If it's the Devil's Music, Satan Must Be Awfully Proud

SESSION VII: GERMAN
Sex, Madness, and Transgression in German Literature

5:15-6:30 PM
5:15 pm  Michael Hempel ('11), German/Russian
        'Der Reigen als kritisches Bild der Wiener Gesellschaft' (Der Reigen as a Critical Image of Viennese Society)
5:45 pm  Gretchen Markiewicz ('08), German/Russian
        Eine zu große Rolle: Zufall in 'Das Versprechen: ein Requiem auf den Kriminalroman' und Dürrenmatts Warnung, ihn in der Wirklichkeit anzuerkennen (Too Great a Role: Chance in Dürrenmatt's 'Das Versprechen')
6:15 pm  Melanie Ungar ('08), German/Russian
        Die Frauen in Schnitzlers 'Reigen': Widerstehen gegen stereotype Geschlechtsrollen und gesellschaftliche Heuchelei (The Women in Schnitzler's 'Reigen': Resisting Stereotypical Gender Roles and Societal Hypocrisy)

Thursday, May 1st

SESSION VIII: ANTHROPOLOGY
Asia Pacific Modernities Presentations

11:00 PM
Diana Sternberg ('09)
The Sex Trade in Thailand and its Effect on Gender Roles

Katie-Elyse Turner ('09)
Narratives of China: Bodies and the 2008 Beijing Olympics

Silas Gill ('09)
Localization in Chinese Rock Music

Ethel Chou ('10)
Taiwan’s Foreign Brides

SESSION IX: RELIGIOUS STUDIES
Death and Spirituality Presentations

11:00 AM
Fran Still ('10)
Families, the State, and the Church of Christ, Scientist: Balancing Religious Autonomy and Child Welfare

Becky Feldman ('08)
The Complicated Relationship between Music, Religion, and Suicide

SESSION X: AMERICAN STUDIES
Hurd Room
American Studies Honors Presentations
Session Chair: Margaret McFadden
11:00-12:45 PM

11:00 am Julie Bero ('08)
Coalitions for Victory: The Necessity of Alliance Creation for Progressive Ballot Initiative Campaigns

11:30 am William Fong ('08)
Kung Fu Fighting and Masculinity

12:00 pm Carolyn Lovejoy ('08)
Portrayal of Masculinity in American Society as seen Through The Pickup Artist

12:15 pm Lindsay Tolle ('08)
Seeing Through Color-Blindness: Negotiations of Multiracial Relationships on 'Six Feet Under,' 'The L Word,' and 'Ugly Betty'

SESSION XI:
Smith Room
General Session
Session Chair: Clem Guthro
1:00-3:30 PM

1:45 pm Meaghan Jerrett ('08), Religious Studies
Western Converts to Eastern Religious Traditions: Authenticity or Escapism

2:00 pm William Kinder ('08), Geology
Societal Implications and Management of Coastal Erosion in Chatham, Massachusetts

2:15 pm Escar Kusema ('09), Kirsten Duda ('09) and Jennifer Myers ('09), Biology
Cellular Mechanisms of Melatonin-Induced and Calmodulin-Inhibited Neurite Growth in Uca pugilator X-Organ Cells.

2:30 pm T. U ('08), East Asian Studies
Advocating at the Margins: Women’s NGOs in China

2:45 pm Nahita Nishmin ('08), East-Asian Studies
The West's Impact on the East: Perceptions of Women through Times

3:00 pm Melyn Heckelman ('08), Anthropology
The Language of Sex: Moral Socialization and Reproductive Education in Public Schools

SESSION XII: WOMEN, GENDER, AND SEXUALITY STUDIES
Whitney Room
Women, Gender, and Sexuality Studies
Session Chair: Lisa Arellano
1:00-3:00 PM

1:00 pm Lindsay Tolle ('08), Women, Gender, Sexuality
'I'm a Carrie' becomes 'I'm a Cutter': Selling Girls Self-Harming Behavior in Young
1:30 pm **Patrick Sanders ('08), Women, Gender, Sexuality**
Failing Women and the Failures Who Dress Them: How Gay Male Hosts of Lifestyle Makeover Shows Fail to Address the True Failure, Heteronormativity

2:00 pm **Laura Webb ('08), Women, Gender, Sexuality**
Creating PIP: Conveying the Feminist Movement to the Next Generation

**SESSION XIII: BIOLOGY**

*The Cell Cycle and Cancer Symposium*  
Olin 234  
Session Chair: Paul Greenwood  
1:00 PM

**Dylan Perry ('09)**
Familial adenomatous polyposis (FAP) and Lynch syndrome: two forms of hereditary colorectal cancer

**Jessica Egan ('08)**
Improving treatment of ALL in adults and infants

**Megan Watts ('08)**
Surviving pediatric acute myeloid leukemia: Emily’s story of relapse and remission

**Jennifer Zuar ('08)**
Proteasome inhibitors: a treatment for multiple myeloma and applications to other cancers

**Richard Katz ('08)**
Viruses, parasites, and cancer: a critical interplay between Epstein-Barr virus, malaria, and Burkitt lymphoma with implications on public health

**Cadran Cowansage ('08)**
Ewing's sarcoma: an overview of symptoms, treatment, and current research

**SESSION XIV: RELIGIOUS STUDIES**  
Lovejoy 344  
Session Chair: Debra Campbell  
2:30 PM

**Nicole Raheja ('10)**
The Struggles and Triumphs of Muslim Women In America

**Amanda Burgess ('10)**
The Habit: Official Vatican Position, Impact of Vatican II, Modern Roadblocks to Wearing It

**SESSION XV: ECONOMICS**  
Diamond 341  
Session Chair: Tom Tietenberg  
2:30 PM

**Brett McNeice ('08)**
Electricity Deregulation: Theory and Evidence

**Bobby Gorman ('08)**
The Economics of Green Architecture

**SESSION XVI: FRENCH**  
Hurd Room
The Other French Empire, Then and Now  Session Chair: Adrianna Paliyenko
2:30-5:00 PM

2:30 pm  **Kristin Weigle** ('08), French/Italian
Catholic Missionary Efforts in the Antilles and French Guyana Under Colonial Rule:
History, Motivation, and Methods

3:00 pm  **Nathalie-Claire Chiavaroli** ('08), French/Italian
The Black Napoleon: Post-Colonial Figures of Toussaint Louverture

3:30 pm  **Alexandra Kenyon** ('08), French/Italian
War on the Seas: Franco-British Scramble for Mauritius Island

4:00 pm  **Amber Collins** ('08), French/Italian
Rhetoric and Reality: Changing Principles and Ambivalent Implementation of Colonial
Policy in French Indochina

4:30 pm  **Sarah Goldstein** ('08), French/Italian
The Role of Gender in French Colonial Indochina

SESSION XVII: ENVIRONMENTAL STUDIES
Dammed Maine Biographies

2:30 PM

**Hannah Lafleur** ('11)
Edwards Dam

**Anders Nordblom** ('10)
Passamaquoddy/ St Croix

**Amanda Lindsay** ('11)
Veazie Dam and Penobscot River Restoration Project

**Sarah Stevens** ('09)
Harris Station

**Megan Saunders** ('09)
Churchill Dam

SESSION XVIII: General Session

3:45-6:00 PM

3:45 pm  **Emily Parker** ('08), English
Moral Philosophy in Twentieth-Century Legal Dramas

4:00 pm  **Hillary Smith** ('08), English
Representations of Grief in Akhmatova's Requiem and Pushkin's The Bronze Horseman

4:30 pm  **Julie Casper** ('08), Religious Studies
A Comprehensive Examination of New Immigrants: The Reverse Diaspora of
Argentinean Jews to Israel

5:00 pm  **Kristen Kouttab** ('08), International Studies
Urban Islamists: Reshaping Moroccan Politics in the 21st Century

5:20 pm  **Evan Phelps** ('08), International Studies
The Informal Economy in Urban Dakar: What Role Can Formalization Play?

SESSION XIX: HISTORY
History Honors
4:00-5:00 PM
4:00 pm Caroline Brooks ('08)
A Movement in Moments: Exploring Women's Rights and The Iranian 1979 Revolution
4:15 pm Laura Perille ('08)
Fashioning an Ideal: Constructions of Honor Leading Up to the English Civil War
4:30 pm Jason Hayes ('08)
Western Missionary Perspectives of the Taiping Rebellion (1850-1864)
4:45 pm Timothy Regele ('08)
A Difficult Beginning: American Educational Reform in Post-World War II Germany

Friday, May 2nd

SESSION XX: BIOLOGY
Behavior and Physiological Ecology Presentations
11:00 AM
Lauren Bizzari ('09)
The effects of melatonin on thermoregulation in the nocturnal gecko, Hemidactylus turcicus

SESSION XXI: CHEMISTRY
Senior Chemistry Presentations
11:00 AM
Katie Harris ('08)
Hydrogen Peroxide Production in Deep, Suboxic Lake Waters
Doug Rooke ('08)
The Synthesis Of Oxacalixarenes Using Nucleophilic Aromatic Substitution Catalyzed By Cesium Fluoride
Tyler Schleicher ('08)
The Inhibition of Thioredoxin Reductase by the Anticancer Drug Cloretazine

SESSION XXII: ECONOMICS
Economics Honors Presentations
12:30-3:00 PM
12:30 pm Andrei Roman ('08)
Developing Reliable Estimates of Poverty and Inequality for Chile’s Ethnic Groups
1:00 pm Joerose Tharakan ('08)
Demographic Differences in Household Expenditure for Low Income Families: Evidence from the United States
1:30 pm **Ishan Singh ('08)**
Stock Markets and Household Wealth: Can a Stock Market Crash Cause a Recession in The US Economy?
2:00 pm **Yauheniya Sidarchuk ('08)**
How Widely Watched Stock Market Indexes Predict Future Economic Activity: Two Centuries of Evidence Since 1800 Until Present
2:30 pm **Kyle Smith ('08)**

**SESSION XXIII: BIOLOGY**
**Olin 1**
**Biology Honors Presentations**
**Session Chair: Frank Fekete**

1:00-4:15 PM

1:00 pm **Leslie Wardwell ('08)**
Pervasiveness of Heavy Metal and Antibiotic Resistance Due to Co-selection in Sphagnum Core Samples Dating Back 2000 Years
1:15 pm **Sarah Clark ('08)**
The Identification of a Chloramphenicol Inducible Multidrug Efflux Pump in *Flavobacterium johnsoniae*-like Isolates
1:30 pm **Victoria Work ('08)**
The Antibiotic Chloramphenicol Induces Bacterial Slime and Biofilm Formation in *Pseudomonas putida*
1:45 pm **Megan Watts ('08)**
Cytotoxicity of Diepoxybutane and Epichlorohydrin in Relation to Stages of the Cell Cycle
2:00 pm **MaryClaire McGovern ('08)**
The Effects of Alcohol and Training on Exercise Recovery Metabolism and Sprint Performance in the Brown Anole (*Anolis sagrei*)
2:15 pm Fifteen Minute Break
2:30 pm **Timothy Miller ('08)**
The Pollination Biology of a Peripheral Population of *Witheringia solanacea* (Solanaceae)
2:45 pm **Emily Lyczkowski ('08)**
Microhabitat Selection by the Tortoiseshell Limpet, *Tectura testudinalis*, in Tide Pools on the Mid-Maine Coast.
3:15 pm **Joshua Lord ('08)**
Movement Patterns and Feeding Behavior in the Limpet *Tectura testudinalis* Along the Mid-Maine Coast
3:45 pm **Jennifer Mizen ('08)**
Spring Arrival Dates of Maine Migratory Breeding Birds: 1896-1911 vs. 1994-2006

**SESSION XXIV: EAST ASIAN STUDIES**
**Hurd Room**
Between Tradition and Modernity: Reconfiguration of Public Spaces in Urban China

Session Chair: Hong Zhang

1:00-2:30 PM

1:00 pm

Jessie Tang ('08), Thomas Huff ('08), Robert Ferriter ('08), Hye Kim ('08) and Keane Ng ('08), East-Asian Studies

Between Tradition and Modernity: Reconfiguration of Public Spaces in Urban China

SESSION XXV: PSYCHOLOGY

Research in Psychology

Whitney Room

Session Chair: Thane Pittman

1:30-3:15 PM

1:30 pm

Walter Campbell ('08)

Movement Coordination in Joint Action

1:45 pm

Stacey Dubois ('08)

Stereotype Threat Affects False Memory Susceptibility in Older Adults

2:00 pm

Cheryl Hahn ('08)

The Effects of Reproductive Experience and Maternal Behaviors on Mother Rats’ Cognitive Abilities and Anxiety Responses

2:15 pm

Linsey Walker ('08)

The Effects of Contextual Backgrounds of Natural and Artifactual Images on ERPs

2:45 pm

Madeline Ragan ('08)

Group Decision Making in the Dictator Game: The Effect of Gender and Offer Method

3:00 pm

Raven Adams ('08)

The Effects of Prenatal Choline Availability on Behavioral and Neural Reactions to Social Isolation Rearing in the Rat

SESSION XXVI: EDUCATION AND HUMAN DEVELOPMENT

Research and Practice in Education and Human Development

Diamond 122

Session Chair: Mark Tappen

2:00-4:00 PM

2:00 pm

Justin Dunn ('08), Education and Human Development

Prospects for Reauthorization of the No Child Left Behind Act

2:20 pm

Terri Bello ('10), Education and Human Development

Learning Differences and Higher Education

2:40 pm

Jake Obstfeld ('09), Education and Human Development

Teach for Who? Teach for America's Effects on Inner City Schools

3:00 pm

Heidi Donahue ('08) and Sophia Newbury ('08), Education and Human Development

Panel on Student Teaching and Portfolio Presentation

SESSION XXVII: HISTORY

History Honors

Smith Room

Session Chair: Raffael Scheck

3:00-5:00 PM
3:00 pm  **Evan Kaplan ('08)**  
Revolutionary Hijackers in Russia and Iran: How Lenin and Khomeini Seized Control of their Respective Revolutions

3:20 pm  **Brian Sweeney ('08)**  
'A System of Silence': Philadelphia Orphanages and the Limits of Benevolence, 1780s-1830s

3:45 pm  **Adam Boss ('08)**  
A City at War: Daily life and society in Orléans during the 1428-1429 English Siege

4:10 pm  **Hannah Coleman ('08)**  
Jeane Kirkpatrick, the Committee of Santa Fe, and the Origins of the Reagan Administration's Complicity in the Nicaraguan Counterrevolution

4:30 pm  **Lucia Giordano ('08)**  
Lessons on Labor and Loss: Organization, Education, and the Women's Trade Union League of America, 1900-1930

---

**SESSION XXVIII: CHEMISTRY**  
**Senior Chemistry Presentations**  
**Keyes 105**  
**Session Chair: Rebecca Conry and Das Thamattoor**

3:00 PM

**Danny Herrick ('08)**  
New Frontiers in Reactions of Atomic Carbon

**Jenn Bushee ('08)**  
The Effects of Cloretazine, an Anticancer Agent, on Human Apurinic/Pyrimidic Endonuclease-1

**Matt Stein ('08)**  
Determination of the Cytotoxic Mechanism of Epihalohydrins and Diepoxybutane

**Leanne Powers ('08)**  
Reactivity of Superoxide in Natural Waters

**Michael Finnerty ('08)**  
Molecular Dynamics Conformational Study of p-Sulfonatocalix[6]arene with Various Guest Molecules

---

**SESSION XXIX: INTERNATIONAL STUDIES**  
**International Studies Presentations**  
**Hurd Room**  
**Session Chair: Jennifer Yoder**

3:00-5:30 PM

3:00 pm  **Christina Feng ('08)**  
Microfinance through a Governance Lens

3:30 pm  **Nicole Terrillion ('08)**  
Cultivating Urban Ecological Citizenship: NGOs and Environmental Perception in Quito, Ecuador

5:00 pm  **Gautam Nair ('08)**  
The Crisis of Liberalism in Egypt: Workers and the Wafd Party (Goldfarb Center Student Research)
SESSION XXX: GOVERNMENT  Whitney Room
Government Studies  Session Chair: Joe Reisert
3:30-5:00 PM

3:30 pm  **Randi Arsenault ('09)**
Predicting Presidential Performance: What Must a Voter Know?

3:45 pm  **Jacqueline Grady ('08)**
Decisions to Abrogate Personal Liberty: The Ethics of Conscription in the United States

4:00 pm  **Andrei Roman ('08)**
Banco Palmas: Towards a Concept of “Solidarity Economics” - Research Report on a Goldfarb Student Research Grant

4:30 pm  **Andrei Roman ('08)**
Bom Conselho? - A Case Study of Community Involvement Mechanisms in the FUMAC Design of the World Bank Rural Poverty Alleviation Project (RPAP) in Pernambuco, Northeasten Brazil

SESSION XXXI: SOCIOLOGY  Diamond 122
Sociology Honors Presentations  Session Chair: Terry Arendell
4:00-5:00 PM

4:00 pm  **Sara Benjamin ('08)**
A Macro-Sociological Perspective on the No Child Left Behind Act of 2001: Why Reauthorization is Not the Issue

4:30 pm  **Carolyn Curtis ('08)**
Self-Destructive Behaviors of Adolescent Boys and Girls