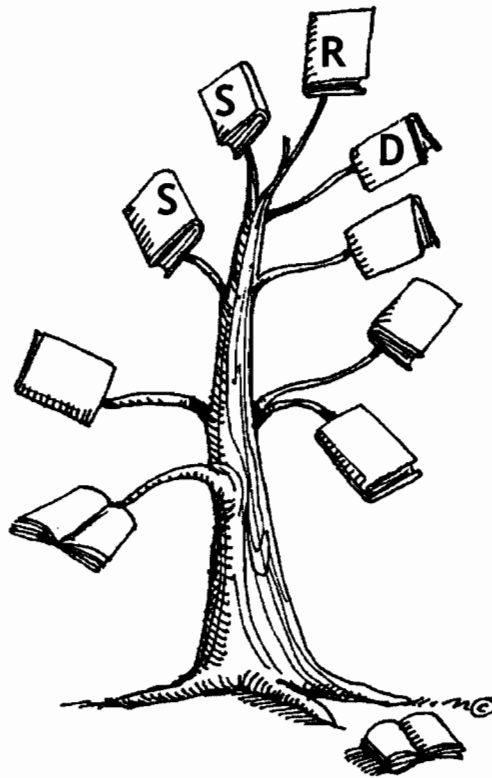


*Fourth Annual*  
Student Scholarship  
Recognition Day



*Wednesday*  
April 14, 2004

*Welcome*  
*to The Fourth Annual*  
*Student Scholarship Recognition Day*

*Wednesday, April 14, 2004*

At large research universities, student research opportunities are generally reserved for graduate students, but at small private liberal arts colleges like Willamette, undergraduates have the opportunity to work closely with faculty as they pursue intellectual questions, devise scientific experiments, create works of art, wrestle with age-old conundrums, and, in so doing, pursue the questions that feed their intellectual curiosity. We are proud of the achievements of our students - of their thoughtful engagement with problems and their dogged pursuit of truth and beauty. We measure our success by theirs.

The students whose work you will see today have been supported in many different ways during their research. Some have earned Carson Undergraduate Grants, others have worked as faculty research assistants, some have completed their work in senior seminars, others have labored with faculty through the Science Collaborative Research Program, and two of them have won awards as Presidential Scholars and have devoted a large part of their senior year to their own research. Patient and wise faculty mentors have guided them all.

Our day of presentations begins at 9:00 a.m. and extends to 4:30 p.m. We believe that student research is at the heart of our educational enterprise, and so we cancel classes for this important day. (And we don't cancel classes lightly.)

We hope that you will enjoy your travels through the minds and passions of our students and our university. Welcome to the heart of Willamette.



# STUDENT SCHOLARSHIP RECOGNITION DAY

Wednesday  
April 14, 2004

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## MORNING ACTIVITIES

9:00 - 11:00 a.m.

### Oral Presentation Panels

*Collins Science Center, Eaton Hall, Smullin Hall*

#### Fingerprints, Lasers, and Graphs (Collins 204)

Moderator: Mark Beilby

*John Boyer*

Are Fingerprints Unique?

*Jeffrey Nickerson*

*Craig Webster*

*Allison Brown*

Determination of the Carbon Disulfide/Methanol Binary Liquid System Phase Diagram Using Laser Light Scanning

*Matt Conner*

An Introduction to Graph Theory

*William Rance*

Vibrational Characteristics of Metallic Glass with Future Application to LIGO

#### International Arts (Smullin 222)

Moderator: John Uggen

*Kevin Chinn*

Surrealism: Clinging onto Another Reality Through the Normal and the Strange

*Shelley Lawson*

Two Versions of the Romantic Aesthetic: The Music of Rossini as Viewed by Stendhal and Berlioz

*Abby Kahl*

Ernst Lubitsch & the German Influence on Hollywood

*Nancee Jaffe*

Cortázar and his Sphere: An Analysis of the Circular Nature of Julio Cortázar's Short Stories

#### Oregon's Natural Resources (Collins 408)

Moderator: David Goodney

*Barrett Ebright*

Community and Individual Networking: A Case Study on One Rural Resource Dependent Community

*Leigh Bernacchi*

Effects and Ethics of Single Species Management at Cascade Head, Oregon

*Kristin Kirschner*

Valley Pine: A Correlation of Ponderosa Pine and Soil Type in the Willamette Valley

*Kenady Reuland*

Establishment of a Model Species for Cognitive Studies in the Field & in Captivity: Western Scrub Jays on an Urban College Campus

**Contemporary American Policy (Eaton 211)**

Moderator: Alison Butler

*Bracken Killpack*

American Prisons: Problems & Alternatives

*Thomas McCloskey*

*Charlotte Hancock*

America Rocks the Blog: A Narrative Analysis of "Generation Dean"

*Matt Buehler*

Homeland Security Public Policy Partnerships

*Christine Greger*

The Medicare Prescription Drug Modernization and Improvement Act of 2003: Why it Passed and What it Reveals About the State of the American Political System

**Human Struggles (Collins 201)**

Moderator: Ortwin Knorr

*Brian Fanning*

Leo Strauss: An Obscure Philosopher and His Contributions to Neoconservative Thought

*Noah Hatz*

French Existentialism in America

*Melissa Robe*

I Shall Die, but That is All I Shall Do for Death: Exploring Nonviolent Alternatives in the Twenty-First Century

*Bethanee Gibson*

The Economics of Corruption and its Effect on Development

**Conflict & Justice (Eaton 412)**

Moderator: Seth Cotlar

*Steve Duman*

Constructing Michael Moore: An Examination of Character & Myth in "Bowling for Columbine"

*Rebecca Legg*

Character Analysis in the Boondock Saints: Exploring Vigilante Justice Through Agent Paul Smecker

*Patrick Keys*

Voices in a Samoan National Park: A Study of US Conservation Efforts in American Samoa

*Roseanne Barker*

Video Activism, Constituting a Politically Active Audience through Video: Amy Goodman's Documentary Film "Independent Media in a Time of War"

## **Religious Themes (Eaton 307)**

Moderator: Mary Bachvarova

*Michelle Harvey*

Religious Themes in the Poetry of Gabriela Mistral

*Erik deBie*

Lucifer, the Ultimate Unreliable Narrator: Unlocking the "Lord of Misrule"

*Thomas Kent*

Methodism & Slavery

*Eoulia Pannas*

The Representations of God in the Writing of Jorge Luis Borges

**11:15 a.m. - 12:15 p.m.**

## **Composers**

*Mary Stuart Rogers Music Center: Rogers Rehearsal Hall*

Moderator: John Peel

*Daniel Esqueda*

Senior Music Composition Project

The process of taking a single chord and creating from it the harmonies and motives for a large-scale piece will be discussed. Procedures for orchestrating for a twelve-player chamber ensemble will also be explained.

[A senior composition project completed in the Spring of 2004.]

*Renée Schwab*

Senior Music Composition Project

A five-part song cycle for choir, solo soprano, and solo violin set to the poems of Emily Dickinson. The songs explore the positive aspects of death from both personal and impersonal points of view.

[A senior composition project completed in the Spring of 2004.]

*Jonathan Westfall*

Concerto for Harp and Chamber Ensemble

This piece encompasses a wide variety of musical and artistic goals. Important among these is the attempt to balance musical hierarchies: first, and primary, the interaction of soloist and ensemble; and second, the variety of musical textures, personal tastes, and tradition included in the concerto. The process of material generation, development, orchestration, and arrangement will be discussed.

[A senior composition project completed in the Spring of 2004.]

**11:15 a.m. - 12:15 p.m.**

## **Julie Carson Undergraduate Research Grants & the Science Collaborative Research Program Panel: *The Impact Independent Research Has on Your Life***

*Hatfield Library: Hatfield Room*

Moderator: Barbara Stebbins-Boaz

*Carson Brown, SCRP*

*Patrick Keys, Carson*

*Natalie Muren, SCRP*

*Marcella Orwick, SCRP*

*Abrie Schroeder, Carson*

*MaryEllen Toomer, SCRP*

These students, who were awarded Julie Carson Undergraduate Research Grants or the Science Collaborative Research Program awards, will discuss how the experience of doing independent research has impacted their lives.

11:15 a.m. - 12:15 p.m.

**Shakespearean Play: *Cardenio***

Montag Center: Compass Plaza (Montag Den if the weather is uncooperative)

Moderator: Jonathan Cole

*Evan Cooney, Director & Actor*

*Ryan Carty, Actor*

*Sarah Hamilton, Actor*

*Scott Herman, Actor*

*Ben Nockles, Actor*

A presentation of several scenes from the Shakespearean play *Cardenio*. Lost for years, this play was considered the Holy Grail of theatre history until Charles Hamilton rediscovered it in the 1990's. There is still controversy over whether the script found is the genuine article or not. Directed by Evan Cooney, who is also an actor in the play.

[A senior thesis completed in the Spring of 2004.]

11:45 a.m. - 12:30 p.m.

**Film Perspective: *Nowhere in Africa: New Perspectives on Exiled Jews in Kenya During World War II as Shown Through German Filmmaking***

Eaton 307

Moderator: Ludwig Fischer

*Maggie DeLancey*

Maggie DeLancey will use the Academy Award-winning film, *Nowhere in Africa*, to illustrate a combination of German, English, Kenyan, and Jewish perspectives of World War II. This film focuses on the true story of a Jewish family exiled to the British colony of Kenya during World War II and the trials they faced in their new homeland. Scenes from the film will be shown to outline the recurring themes of home, idealism, tradition, and prejudice. Specific detail will be given to the German director's decision to include Kenyan traditions and perceptions of Europeans, still applicable to circumstances in today's Kenya.

[An Independent Study for German completed in the Spring of 2004.]

**AFTERNOON ACTIVITIES**

12:15 - 1:00 p.m.

**Nature Walk: *A Pleasant Stroll with the Campus Naturalists, Natural History at Willamette University***

Gather at the South Side of Waller Hall

Moderator: David Craig

*Claire Pichette, stroll leader, group A*

*Joel Shinn, stroll leader, group B*

This is a great opportunity to learn about the Natural History of Willamette University and to hear about the Campus Naturalist position. The walk will consist of a short stroll through the Willamette University campus. Along this stroll participants will learn the importance of local ecology, local mammals, birds, plants and the ecological systems of which all of us are a part.

**12:15 - 1:00 p.m.**

**The Chrysalis: The Release of the 2003-2004 Edition**

*University Center: Autzen Room*

Moderator: Gretchen Moon

*Adrienne Davich, editor*

*Becca Legg, asst. editor*

*Mike Ross, asst. editor*

*The Chrysalis*, a Willamette publication that showcases student and faculty writing and art, is released in the spring of each academic year. Attend this reception to receive a free copy of *The Chrysalis*, enjoy snacks, and meet the writers and artists showcased in this annual publication that recognizes the tremendous talent at Willamette University.

**12:30 - 2:00 p.m.**

**Animated Fun**

*Mary Stuart Rogers Music Center: Rogers Rehearsal Hall*

Moderator: Jenny Orr

**I. Vegetables with Valor, The Computer Animation Process**

*Alice Jolly*

*Jeremy Jones*

*Caitlin Letts*

*Andrew Lorente*

*Carter Warmington*

The computer animation production process followed to complete this project will be discussed and illustrated; from storyboarding, to animatics and modeling, to the final rendering, *Vegetables with Valor*. 3D Studio was used to learn how to model characters, scenery from simple objects, adding textures and special effects, and making the models move in various ways. ProTools and Finale were used to compose an original soundtrack for the animation. All of these tools will be demonstrated, and of course the final product, *Vegetables with Valor*, will be aired.

[A collaboration project completed in the Fall of 2003 for CS330: Computer Animation Production.]

**II. Spork-Fu: Animation with Sound**

*April Greer*

*Amanda Hiti*

*Aaron Young*

This project combines the animation and modeling skills of animation students with the compositional and musical talents of student musicians. As a group, they invented a story line and divided up the multitude of tasks necessary to create an animation with sound. Here they will share the result of many hours of hard work: the story of an otherwise normal kitchen that springs to life in a fury of flying food and clashing silverware.

[A collaboration project completed in the Fall of 2003 for CS330: Computer Animation Production.]

**III. Computer Animation 3D Studio Max: When Projection Screens Go Bad**

*Trevor Levin*

*Jun Zhang*

This animation combines dialogues, soundtrack, and humanoid characters with life-like movement. The story begins with a teacher attempting to pull down a projection screen. The teacher eventually receives assistance from a student, who continues the struggle with the unruly personality of the screen. Every attempt by the student fails miserably. In the end, the viscous screen wins the battle by decapitating the student. You'll laugh, you'll cry, but best of all . . . you'll be touched. Based on a true story.

[A collaboration project completed in the Fall of 2003 for CS330: Computer Animation Production.]

1:30 - 2:30 p.m.

## Music Program

*Mary Stuart Rogers Music Center: Hudson Hall*

*Shelley Lawson*: piano  
*Sonata No. 1 (1990), Carl Vine; First Movement*

*Katherine Hamburger*: clarinet  
*Second Concerto for Clarinet, Carl Maria von Weber; II. Romanze: Andante*

*Noreen Murdock*: piano

*Kristen Friesen*: piano  
*Nutville, Horace Silver, arr. Kristin Friesen*

*Robb Harrison*: baritone  
*"Come Paride vezzoso", Gaetano Donizetti: from L'elisir d'amore*

*Ann Snelling*: piano

*Shobi Dahl*: trombone  
*Ballade pour Trombone Tenor, Eugene Bozza*

*David Ingram*: piano

*Ellen McGhee*: violin  
*Partita no. 3 in E Major, J.S. Bach: Preludio, Gavotte en Rondeau*

*Evan Buechley*: guitar  
*Recordando Essencias, Pepe Habichuela*

*Justin Brown*: congas

*Sarah Abe*: flute  
*Image, Eugene Bozza (1905-1991)*

*John England*: marimba  
*Rhythm Song, Paul Smadbeck*

1:30 - 3:30 p.m.

## Oral Presentation Panels

*Collins Science Center, Eaton Hall*

### Finding Your Way with Chemicals (Collins 210)

Moderator: Tony Hermann

*Christina Walker*

Fatty Findings on Attention: the Probable Link between Trans Fatty Acids and ADHD

*Heather Clifton*

The Effects of Cardiovascular Drift on Energy Expenditure

*Britta Wood*

A Behavioral and Chemical Study of Scent-Marking by Eastern Gray Squirrels

*Jon McNeil*

Characterization of the Early Components in the Renin/Angll Pathway in Protein Restricted Microswine

### Issues in Education (Eaton 412)

Moderator: Colin Starr

*Julie Douglas*

Educating Latino Youth: the Challenges, the Pros, the Cons, and the Future

*Nathan Foster*

The Relationship between Second Language Competence and False Memory of Associated Words

*Beth Phillips*

Planning and Dreaming: Gender, Education, and Poverty Among Capetown Youth

*Juliana Fowler*

Being an Educational Sherpa: Theories of John Dewey and Their Modern Applications

### Asian & Middle Eastern Policy (Eaton 211)

Moderator: Juwen Zhang

*April Choate*

Abortion in Buddhist Japan

*Andrew Cockrell*

Development & the Party-State in China

*Justin Brown*

Reflections on Sustainable Communities, Alternative Monetary Systems, and Neoliberalism: A Historical Impetus for Change

**Policy Dilemmas: Immigration & the Environment (Collins 201)**

Moderator: Elizabeth Stanhope

*Whitney Rolig*

Economic Growth & Inequality: Rural Development in Chile

*Elizabeth Steen*

Air Pollution from Agricultural Burning in the Willamette Valley

*Corrinne Hill*

Economics of a Mexican Immigration Policy

*Kristopher Kraus*

The Positive Feedback Cycle between Cultural Assumptions and Social/Ecological Impacts

**Women in Society (Collins 204)**

Moderator: Yvette Koepke

*Hannah Meisen-Vehrs*

Women and the Welfare State: The Scandinavian Case

*Kara Pierce*

Cutting Away Time and Race: A Study of Cosmetic Surgery in American History

*Sarah Kassel*

Breast Cancer as Mass Media Spectacular

*Alicja Lei*

The Sob Stories that We Love So Much: A Narrative Analysis of the Book and Movie, *The Divine Secrets of the Ya-Ya Sisterhood*.

**Perceptions & Representations (Eaton 106)**

Moderator: Angus Vail

*Suzanne Marsh*

Marx Would Have Been a Muralist

*Risa Cromer*

Situating Women: Lady Mary Montagu's Travel Representation of the Harem

*Stephanie Vandehey*

Saving Private Ryan: A Narrative Analysis

*Abrie Schroeder*

*Miranda Scolari*

Perception and Memory in Grapheme-Color Synesthesia

2:30 - 3:30 p.m.

## Presidential Scholar Presentations

*Hatfield Library: Hatfield Room*

Moderator: Chuck Williamson

*Lori Northcraft*

*Socioeconomic and Cultural Influences on Hispanic Farmworkers' Occupational Healthcare Decisions*

The Willamette Valley is the heart of Oregon's rapidly growing Hispanic farmworker population, who face unique occupational risks, namely musculoskeletal injuries to the back and knees. Various barriers, such as cost, legal status, availability, communication, and cultural health perspectives affect farmworkers' decisions for treatment of labor-related injuries. Untreated occupational injuries often result in chronic debilitating pain. This interview-based study examines the injury prevalence and health practices of permanent and migrant farmworkers in the Willamette Valley. Information from these interviews will be discussed and compared to state and national data regarding farmworkers' occupational injuries.

*Brandon Smith*

*Liquids and Lasers: A Study of the Mixing Phenomena in Methanol/Carbon Disulfide Liquid Mixtures*

Mixtures of liquid methanol and liquid carbon disulfide are partially miscible. They mix in all proportions above the critical temperature of 35.5° C. Below this temperature, mixtures over a range of compositions separate into two phases. This research was done to as an attempt to better understand why the methanol/carbon disulfide system behaves this way. Laser spectroscopy instrumentation was developed to study molecular vibrations in these mixtures as a function of temperature. Special attention was given to how the vibrations change as a single-phase mixture approaches the critical temperature.

4:00 - 4:15 p.m.

## Conductors I

*Mary Stuart Rogers Music Center: Rogers Rehearsal Hall*

Moderator: Martin Behnke

*Kathryn Hamburger*

*Conducting Internship: A Scott Joplin Retrospective*

*A Scott Joplin Retrospective* contains three of Scott Joplin's more well known pieces, including *The Entertainer*, *Maple Leaf Rag*, and *Easy Winners Rag*. These pieces will be discussed as well as Kathryn's personal connections to them.

[A conducting internship completed in the Spring of 2004.]

*Aaron Young*

*Wind Ensemble Conducting Internship*

Aaron will conduct movements I, II, and V of Donald White's *Miniature Set for Band*.

[A conducting internship completed in the Spring of 2004.]

4:15 - 4:30 p.m.

## Conductors II

*Mary Stuart Rogers Music Center: Hudson Hall*

Moderator: Wallace Long

*Sarah Boyer*

*Senior Conducting Internship*

This arrangement for S.A.T.B. chorus is based on *The Power of Song*, an Estonian folk song, and *We Shall Walk Together in the Valley of Peace*, an African-American spiritual. The result is a beautiful and patriotic blend of the two cultural desires for peace.

[A conducting internship completed in the Spring of 2004.]

## EVENING ACTIVITY

7:00 - 8:00 p.m.

### A Unique Film Project: *Willameqqatsi*

Smith Auditorium

Moderator: Ken Nolley

*Craig Webster*

*Willameqqatsi* is a film that Craig put together during the fall semester of 2003. Entirely shot on the Willamette University campus, it is an exercise intended to reflect on the daily realities that are often overlooked. It contrasts various perspectives of life at Willamette in a pseudo-documentary style. Following techniques in Godfrey Reggio's Qatsi series, this film refuses to employ voiceovers and dialogue, in order to create a space in which the audience can contemplate slow motion, time lapse, and other filmic representations of Willamette.

[An Independent Film project completed in the Fall of 2003.]

## All-Day Activities

10:00 a.m. - 5:00 p.m.

### Senior Art Majors' Exhibition

Hallie Ford Museum of Art

*Amanda Asher*: thesis

*Cathleen Candia*: thesis

*Allison DeWilde*: painting

*Caitlin Hansen*: drawing

*Courtney Jensen*: mixed media

*Carrie McIntyre*: video, clay

*Melissa Prieto*: thesis

*Sica Schmitz*: thesis

*Vicki Zielinski*: sculpture

*Molly Bushman*: mixed media

*Jon Clayshulte*: painting

*Courtney Groves*: thesis

*Nancee Jaffe*: thesis

*Emily Martin*: sculpture

*Anastasia Polosukhina*: painting

*Emily Puterbaugh*: thesis

*Rachael Warren-Allen*: painting, photography

*Adrienne Zimmerman*: painting

### Spring Review Art Exhibition

Art Building Gallery

An exhibit by Art and Art History sophomores and juniors. Each student, 37 in all, will have one work of art or one paper written during the 2003-2004 school year on view during the month of April. This exhibit compliments the Senior Art Majors Exhibition at the Hallie Ford Museum of Art.

## ABSTRACTS

*Student's Name: In alphabetical order*

Student's Major

Presentation Panel, Time & Location

Presentation Title

Presentation Abstract

[Reason for project, paper or thesis, & when it was completed.]

*Roseanne Barker*

Rhetoric & Media Studies

**Conflict & Justice 9:00-11:00 a.m. Eaton 412**

*Video Activism, Constituting a Politically Active Audience through Video: Amy Goodman's Documentary Film "Independent Media in a Time of War"*

This presentation provides a rhetorical analysis of a piece of political communication that is a newly emerged form of media, video activism. Amy Goodman's documentary film *Independent Media in a Time of War* is approached through a methodology using concepts from the theory of Constitutive Rhetoric. The primary focus of the analysis is to uncover the communicator's techniques of identifying and defining the audience so as to lead its actions toward the desired direction of becoming politically active.

[An essay completed in the Fall of 2003 for RHET 333: Political Communication.]

*Leigh Bernacchi*

Environmental Science

**Oregon's Natural Resources 9:00-11:00 a.m. Collins 408**

*Effects and Ethics of Single Species Management at Cascade Head, Oregon*

Endangered species have become a focal point for conservation management, ranging from a token character of an ecosystem, allowing the rare feature to increase its value, to a plea for human responsibility in granting intrinsic value to everything. This thesis questions the benefits of the nature conservancy's management policy for Cascade Head, Oregon for the threatened Oregon Silverspot Butterfly. Ethical reasons for valuing certain individuals, species, and ecosystems differently are examined.

[A senior thesis completed in the Spring of 2004.]

*John Boyer*

Psychology

**Fingerprints, Lasers, & Graphs 9:00-11:00 a.m. Collins 204**

*Are Fingerprints Unique?*

John Boyer, Jeffrey Nickerson, and Craig Webster participated in the international *Mathematical Contest in Modeling* in February of 2004, where they were given four days to develop and analyze a mathematical model and present it as a formal paper. The problem put to all of the contestants was: It is a commonplace belief that the thumbprint of every human who has ever lived is different. Develop and analyze a model that will allow you to assess the probability that this is true. Compare the odds (that you found in this problem) of misidentification by fingerprint evidence against the odds of misidentification by DNA evidence. They will present their solution to the problem and share some of the experiences they had while developing a solution.

[A paper completed in the Spring of 2004 for the international *Mathematical Contest in Modeling*.]

*Allison Brown*

Chemistry, Philosophy

**Fingerprints, Lasers, & Graphs 9:00-11:00 a.m. Collins 204**

*Determination of the Carbon Disulfide/Methanol Binary Liquid System Phase Diagram using Laser Light Scattering*

This research project discusses a phase diagram for a carbon disulfide/methanol two liquid system that was generated using a laser light scattering technique. Samples were prepared by distillation, using a vacuum column after the liquids were purified via molecular sieves and freeze/thaw cycles. The prepared samples were flame sealed to ensure fixed compositions, which were determined by mass. Scattered light intensity was measured as a function of temperature to determine the phase transition temperature, or cloud point. Previous studies in the literature, which used inspection by eye to determine the cloud points, will also be discussed.

[A senior research project in chemistry completed in the Fall of 2003 and the Spring of 2004.]

*Justin Brown*

History

**Asian & Middle Eastern Policy 1:30-3:30 p.m. Eaton 211**

*Reflections on Sustainable Communities, Alternative Monetary Systems, and Neoliberalism: A Historical Impetus for Change*

This project is intended to provide background for a historical argument for the effects of neoliberal economic policy in rural areas of Thailand, South Africa, and Australia, and the industrial areas of Wales in the United Kingdom. The historical conditions that motivated people in these locations to pursue community currency systems and cooperative organizations will be described and how these conditions invoked themes of environmental preservation and human rights will be explained. This project is being completed as preparation for a Watson Fellowship, at which time the countries mentioned will be visited and studied.

[A preliminary study completed in the Fall of 2003 for a Watson Fellowship that will be completed in August 2005.]

*Matt Buehler*

Politics, Sociology

**Contemporary American Policy 9:00-11:00 a.m. Eaton 211**

*Homeland Security Public Policy Partnerships*

This project discusses how collaborative public policy partnerships for homeland security can be established between the state, higher education, and industry. Nearly 80% of American critical infrastructure is owned by nongovernmental organizations, making them a necessary partner in any homeland security planning effort. Many in higher education have argued that the USA PATRIOT Act and other pieces of legislation have violated their right to academic freedom. The possibility of public-private partnerships becoming constitutionally sound strategies to help reduce America's vulnerability to acts of terrorism will be explored.

[A project for War on Terrorism and the Academy Conference completed in the Spring of 2004.]

*Kevin Chinn*

Spanish

**International Arts 9:00-11:00 a.m. Smullin 222**

*Surrealism: Clinging onto Another Reality through the Normal and the Strange*

This presentation focuses on Julio Cortázar, a Latin American author popular during the so-called "Boom," and how he uses both the normal and the strange as ways to communicate profound feelings of yearning in his many surrealist short stories. *Axolotl*, *The Night Face Up*, and *The River* were examined. The circumstances that each protagonist faces in these stories will be explained and it will be shown why their realities do not satisfy them. In order to exemplify one aspect of surrealism at work, the stories were analyzed in terms of how the normal and the strange serve as a way to overcome the limits of reality. *The Night Face Up* and *The River* were translated from Spanish to English.

[A paper completed in the Fall of 2003 for SPAN 431: Contemporary Novel & Short Story of Latin America.]

*April Choate*

Japanese Studies

**Asian & Middle Eastern Policy 1:30-3:30 p.m. Eaton 211**

*Abortion in Buddhist Japan*

This project studies the Buddhist philosophy towards abortion and the uniqueness of the Japanese Buddhist response in relation to other Asian nations. Bringing in information about Korea's and Thailand's approaches to abortion for context, this project focuses on how native Shinto beliefs influence Japanese Buddhist philosophy towards this issue. The Jizo cult and the mizuko kuyo ("water baby") guilt-relieving ceremonies, held to commemorate aborted children, will also be discussed. This project is strictly informational and non-biased either for or against abortion.

[A senior seminar project completed in the Spring of 2004.]

*Heather Clifton*

Exercise Science

**Finding Your Way with Chemicals 1:30-3:30 p.m. Collins 210**

*The Effects of Cardiovascular Drift on Energy Expenditure*

This project studied the potential changes in the consumption of energy upon the onset of Cardiovascular Drift (CVD) in endurance-trained athletes. Cardiovascular Drift is a commonly observed response to prolonged exercise at moderately high intensities. The methods used to complete this study and the findings will be discussed.

[A Julie Carson Undergraduate Research Grant project completed in the Summer and Fall of 2003.]

*Andrew Cockrell*

Politics

**Asian & Middle Eastern Policy 1:30-3:30 p.m. Eaton 211**

*Development and the Party-State in China*

The People's Republic of China has seen impressive levels of economic growth and development since the beginning of market-oriented reforms in 1978. Political reform, however, has lagged far behind economic progress. This project examines the roles of the Chinese state in the market, arguing that the party-state bureaucracy has come to act as a political drag on economic development. Identified are four forms of drag and disputed is the main body of literature that prescribes classical liberal reforms as a solution to the problem. Suggestions more acceptable to the political climate in China and a trajectory for long-term change are offered.

[A senior thesis completed in the Spring of 2004.]

*Matt Conner*

Mathematics, Economics

**Fingerprints, Lasers, & Graphs 9:00-11:00 a.m. Collins 204**

*An Introduction to Graph Theory*

The presentation will cover the basic definitions necessary for examining fundamental problems found in graph theory. Several interesting, simple graphs will be examined and the audience will be invited to use their newfound knowledge of graphs to discover whether or not the graphs are planar. It will be demonstrated that if two important simple graphs are not planar, a particular graph with either of the simple graphs as a sub graph will not be planar.

[A senior research seminar project completed in the Spring of 2004.]

*Risa Cromer*

Gender Studies

**Perceptions & Representations 1:30-3:30 p.m. Eaton 106**

*Situating Women: Lady Mary Montagu's Travel Representation of the Harem*

When it comes to one hot topic, harems, Western women's travel writings have historically attracted male scholars. This paper introduces the first Western woman to enter into and write about the harem, Lady Mary Montague. Informed by Donna Haraway's theory of *situated knowledges*, this paper considers Montagu's prejudices, investments, and fantasies. Montagu's letters reveal a relationship between perceptions of home and harem, illuminated through Haraway's theory. One of the matters to be discussed will be how Montagu's representation of the harem reflects what she was denied at home in England: the freedom of movement and the freedom to privacy.

[A paper completed in the Spring of 2004 for ANTH 345: Gender Issues in Anthropology.]

*Erik deBie*

English

**Religious Themes 9:00-11:00 a.m. Eaton 307**

*Lucifer, the Ultimate Unreliable Narrator: Unlocking the "Lord of Misrule"*

This independent study resulted in a novel whose central themes will be explored here. The novel presents a modernist view on the traditional Christian creation story and expresses the inevitable failure of arrogance and pride. It comments on numerous modern questions such as tolerance, war, peace, justice and redemption. On the one hand, it is an adventure story with swords and divine powers, and on the other a very unreliable narrator's (Satan's) personal philosophic war with God and the universe. John Milton's *Paradise Lost* and Dante's *Inferno* will be briefly touched upon.

[An independent study in English completed in the Spring of 2004.]

*Julie Douglas*

Biology, Spanish

**Issues in Education 1:30-3:30 p.m. Eaton 412**

*Educating Latino Youth: the Challenges, the Pros, the Cons, and the Future*

This thesis focuses on bilingual (English/Spanish) education in Oregon public schools. The Latino population is rapidly increasing in Oregon and this growing population of Latino adults has led to an increase in the Spanish-speaking students in public schools, especially at the primary grade levels. The benefits and drawbacks of such an education were examined and a hypothesis about the future of bilingually educated students in Oregon will be presented. A survey of teachers' beliefs and opinions was taken from Bush elementary school and used as a representative sample for bilingual schools. The findings of this research will also be presented.

[A Spanish thesis completed in the Spring of 2004.]

*Steve Duman*

Rhetoric & Media Studies

**Conflict & Justice 9:00-11:00 a.m. Eaton 412**

*Constructing Michael Moore: An Examination of Character and Myth in "Bowling for Columbine"*

This thesis examines Michael Moore's construction of character within his documentary *Bowling For Columbine*. In particular, it focuses upon Moore's construction of himself in relation to the President of the National Rifle Association, Charlton Heston. The images of these two characters are diametrically opposed, thus creating a mythical battle within the narrative between Moore and Heston. This battle between good and evil not only simplifies the complexities of an issue like violence in America; it also makes *Columbine* an extremely accessible and convincing artifact.

[A thesis completed in the Fall of 2003 for RHET 341: Narrative Theory.]

*Barrett Ebright*

Sociology

**Oregon's Natural Resources 9:00-11:00 a.m. Collins 408**

*Community and Individual Networking: A Case Study on One Rural Resource Dependent Community*

This project is a case study on one rural resource-dependent community in the Northwest whose local economy has been adversely affected by the decline in the timber industry. The results from the various types of research used for this project will be discussed. The different types of research methods include participant observation at a local food bank, in-depth interviews, and surveys. It will be shown that individual networking exists as a support system for sharing information and resources and that networking between community entities affects the community's resilience to survive economic hardship. The idea that individual networking affects the production and reproduction of a social system that is conducive to the networking of community entities will be presented.

[An honors thesis completed in the Spring of 2004.]

*Brian Fanning*

German, International Studies

**Human Struggles 9:00-11:00 a.m. Collins 201**

*Leo Strauss: An Obscure Philosopher and His Contributions to Neoconservative Thought*

Until recently, Leo Strauss was known only as an obscure German immigrant to the United States who taught at the University of Chicago and died in 1973. However, the 1987 publication of Allan Bloom's *The Closing of the American Mind* introduced mainstream America to Strauss' esoteric elitism, a powerful influence on American conservatives today. This paper will explain some of the history behind the man who has been referred to as the "intellectual godfather" of the 1994 "Contract with America" and how his ideas continue to shape political discourse in the United States thirty years after his death.

[A paper completed in the Spring of 2004 for GERM 433: Modern German Literature.]

*Nathan Foster*

Psychology

**Issues in Education 1:30-3:30 p.m. Eaton 412**

*The Relationship Between Second Language Competence and False Memory of Associated Words*

This thesis discusses and defines theories of false memory in the context of second language acquisition. It has been shown that people construct "false memories" after reading lists of highly associated words (e.g., seeing table, couch,), and then false intrusions (e.g., chair) are mistaken for real memories during subsequent work-recognition tasks. This thesis hypothesizes that there will be a direct relationship between second language competence and the degree of false memory intrusions across languages. In other words, as one becomes more fluent in a second language, they will be more likely to construct false memories from exposure to words in their native language and then recognize those intrusions as discrete words in the second language and vice versa.

[A senior honors thesis completed in the Fall of 2003 and the Spring of 2004.]

### *Juliana Fowler*

Music, English

**Issues in Education 1:30-3:30 p.m. Eaton 412**

*Being an Educational Sherpa: Theories of John Dewey and their Modern Applications*

Teaching is a shared learning experience between educators and students. The ideal educator is both instructor and learner simultaneously. This project discusses how, by listening, observing, and reflecting on the progress made by students in class, the educator constantly adapts to the needs of students. The idea that, like a sherpa, it is the educator's job to guide students while allowing for individual learning journeys, will be presented.

[A senior research project completed in the Fall of 2003.]

### *Bethanee Gibson*

Economics, International Studies

**Human Struggles 9:00-11:00 a.m. Collins 201**

*The Economics of Corruption and its Effect on Development*

This talk explores why corruption occurs and how strongly it affects development. Although corruption is perceived to be a cultural problem, it is created through economic incentive structures that are unrelated to cultural differences. However, developing countries consistently experience higher levels of visible corruption. Structural issues such as government accountability and rent-seeking will be discussed, and possible solutions to this persistent global problem will be presented.

[A senior thesis completed in the Spring of 2004.]

### *Christine Greger*

Politics

**Contemporary American Policy 9:00-11:00 a.m. Eaton 211**

*The Medicare Prescription Drug Modernization and Improvement Act of 2003: Why it Passed and What it Reveals About the State of the American Political System*

Late in 2003, Congress and President Bush approved the Medicare Prescription Drug Modernization and Improvement Act of 2003 (MPDMIA), adding a prescription drug benefit to Medicare, the primary health care provider for Americans over 65. However, after the drug benefit is implemented in 2006, seniors' out-of-pocket drug costs will remain high and many will lose their retiree benefits as a result of this legislation. Worse yet, Medicare as a whole may be threatened due to privatization mandates in the bill. This paper seeks to explain the puzzles behind MPDMIA's passage, particularly AARP's endorsement of the bill, and the implications for the American Political System.

[A senior seminar paper completed in the Spring of 2004.]

### *Charlotte Hancock*

Politics, Rhetoric & Media Studies

**Contemporary American Policy 9:00-11:00 a.m. Eaton 211**

*America Rocks the Blog: A Narrative Analysis of "Generation Dean"*

With a recent shift from stump-speeches to web campaigning, presidential candidates have had to tailor their campaigns to fit the attitudes of a new generation of constituents, and new media provide innovative opportunities for candidates to be heard. This paper discusses Presidential candidate Howard Dean and his attempt to utilize this new media by positioning himself as the candidate of the youth with his "Generation Dean" website. Methods used by Dean to create a common identity for a new youth constituency will be analyzed and it will be argued that while Dean's website may appear to empower a constituency, it disenchant an already apathetic youth. By applying Lance Bennett and Murray Edelman's criteria for political narratives as well as Ernest Bormann's Symbolic Convergence Theory, implications arise surrounding the use of this new media by all candidates.

[A paper completed in the Spring of 2004 for RHET 341: Narrative Theory.]

### *Michelle Harvey*

Spanish, Religious Studies

**Religious Themes 9:00-11:00 a.m. Eaton 307**

*Religious Themes in the Poetry of Gabriela Mistral*

Named one of the one-hundred most influential women of all time, Chilean poet Gabriela Mistral was both the first woman and the first Hispanic-American to receive the Nobel Prize for Literature in 1945. Friends and scholars alike have compared Mistral to the Old Testament figures of Ruth the Moabite and the prophet Deborah. This project analyzes the multiple religious and biblical references throughout Mistral's poetry and discusses her personal identification with such characters as Sarah, Rachel, Rebecca, and many others.

[A senior seminar project completed in the Spring of 2004.]

### *Noah Hatz*

History

**Human Struggles 9:00-11:00 a.m. Collins 201**

*French Existentialism in America: 1944-1956*

This paper examines the history of French Existentialism in America beginning with its introduction shortly after World War II. It follows it through 1956 when Jean-Paul Sastro's epic *Being and Nothingness* was translated into English. Also examined is the impact of French Existentialism upon two literary groups: the African-Americans and the Beats.

[A senior seminar paper completed in the Fall of 2003.]

### *Corrinne Hill*

Economics, Spanish

**Policy Dilemmas: Immigration & the Environment 1:30-3:30 p.m. Colins 201**

*Economics of a Mexican Immigration Policy*

This thesis explores the economics of President Bush's Mexican immigration policy and the conditions necessary to achieve his objectives. President Bush has proposed a temporary worker program that will facilitate matching Mexican laborers to jobs not filled by natives. He claims this immigration policy will strengthen our economy, return order to the immigration system, and secure the U.S. homeland. But can these objectives be achieved, and if so, how?

[A senior thesis completed in the Spring of 2004.]

### *Nancee Jaffe*

Spanish

**International Arts 9:00-11:00 a.m. Smullin 222**

*Cortázar and his Sphere: An Analysis of the Circular Nature of Julio Cortázar's Short Stories*

This project focuses on Argentine writer Julio Cortázar, and his conviction that a well-written story is created in the form of a sphere; every word necessary, every idea important. The repetitive elements, open finales, and central themes of three stories by Cortázar are analyzed and discussed. In general, three stories, *Axolotl*, *Continuation of the Parks*, and *The Secret Weapons* reflect the spherical nature of Cortázar's short stores and show how his comments take shape and claim significance within his own works.

[A senior seminar project completed in the Fall of 2003 and Spring of 2004.]

### *Abby Kahl*

International Studies

**International Arts 9:00-11:00 a.m. Smullin 222**

*Ernst Lubitsch and the German Influence on Hollywood*

During the 1930's and 1940's, many German directors, actors and writers moved to the United States to escape the Nazi regime. The majority of these German immigrants settled in Hollywood, where they remained active in the film industry. Ernst Lubitsch was one of the most successful of these German immigrants. This project focuses on the impacts Lubitsch and his German colleagues had on the American film industry. The clash between artistic expression and the bottom-line forced a change in the way Hollywood producers and German directors created films. The ways in which many of these impacts have shaped American films today will be discussed.

[A project completed in the Spring of 2004 for GERM 433: Modern German Literature.]

### *Sarah Kassel*

Rhetoric, Spanish

**Women in Society 1:30-3:30 p.m. Collins 204**

*Breast Cancer as a Mass Media Spectacle*

This paper seeks to address the cause and results of the "spectacularization" of the fight against breast cancer and its subsequent commodification. To demonstrate how breast cancer is a commodified spectacle, the Utilizing Spectacle Theory was used to analyze five print ads found in various women's magazines: *New Balance*, *Stila*, *Nomination*, *Ford*, and *Yoplait*. The disease and it's fundraising are the results and perpetuators of the spectacle. How these ads allow sponsoring companies to tap into the nonprofit's success to sell their product will be revealed. The possible ramifications the breast cancer spectacle could have on the American public and the future of the disease will be discussed.

[A paper completed in the Fall of 2003 for RHET 362: Media Framing.]

*Thomas Kent*

History

**Religious Themes 9:00-11:00 a.m. Eaton 307**

*Methodism and Slavery*

This project addresses the question, How do organizations deal with controversy? In our society, religious organizations are normally considered a driving force on moral issues. This talk will discuss how, as the Methodist church gained in membership, it lost its willingness to stand up to the controversial points of view the church's founders had established.

[A senior tutorial completed in the Spring of 2004.]

*Patrick Keys*

Biology

**Conflict & Justice 9:00-11:00 a.m. Eaton 412**

*Voices in a Samoan National Park: A Study of U.S. Conservation Efforts in American Samoa*

This project discusses the result of a summer 2003 trip to the National Park of American Samoa where an effort was made to study the cooperation between indigenous Samoans and the National Park Administration regarding their collective conservation efforts. Members of the American Samoan Government and indigenous Samoans were interviewed in an effort to discover the progress of the conservation of the islands. Details of these interviews will be shared and the communication problem encountered between the indigenous Samoans and American Samoan officials will be revealed.

[A project completed in the Summer and Fall of 2003 for a Carson Undergraduate Research Grant.]

*Bracken Killpack*

Politics

**Contemporary American Policy 9:00-11:00 a.m. Eaton 211**

*American Prisons: Problems and Alternatives*

The American prison system is growing and changing and there is a continuing clash between the punishment and the rehabilitation models for incarceration. In order to combat huge costs, many states are turning to privatization of these facilities to save money. This paper advocates a middle ground for the prison industry to offer humane treatment for inmates, lower costs for states, and an even mix of punishment and rehabilitation mindsets.

[A joint paper done with Thomas McCloskey for Topics in Public Policy in the Fall of 2003.]

*Kristin Kirschner*

Environmental Science

**Oregon's Natural Resources 9:00-11:00 a.m. Collins 408**

*Valley Pine: A Correlation of Ponderosa Pine and Soil Type in the Willamette Valley*

A unique race of ponderosa pine has thrived in the Willamette Valley for centuries. Today however, its distribution has become fragmented due to urbanization, conversion of land for agricultural purposes, and forest succession. The research for this project consisted of an investigation of the relationship between pine stands and soil type, in order to better understand and conserve this native valley pine. GIS technology was used to identify trends in soil properties such as soil depth, drainage, and texture. The results, which will aid in the use of valley pine as a restoration or time species, as well as in the establishment of future plantations, will be discussed.

[A senior thesis completed in the Spring of 2004.]

*Kristopher Kraus*

Environmental Science

**Policy Dilemmas: Immigration & the Environment 1:30-3:30 p.m. Collins 201**

*The Positive Feedback Cycle Between Cultural Assumptions and Social/Ecological Impacts*

This project links a civilization's ecological impacts to the given mode of social organization within the civilization. This mode of social organization is in turn dependent upon not only past ecological impacts but the inertia of the cultural paradigm that initially caused those impacts. The idea of Cartesian subject/object dualism and the need to understand and control the surrounding living world in response to agricultural development and the perceived need of technological "progress" is ultimately linked. This is contrasted to the unity implied by recent socio-biology and post-modernist philosophy.

[A senior thesis completed in the Spring of 2004.]

*Shelley Lawson*

French, Music

International Arts 9:00-11:00 a.m. Smullin 222

*Two Versions of the Romantic Aesthetic: The Music of Rossini as Viewed by Stendhal and Berlioz*

In the early 1800's, the operas of the Italian composer Rossini gained popularity in France. Their melodic passion enchanted the French novelist Stendhal, who wrote a praise filled biography, *La vie de Rossini* ("The Life of Rossini"). However, the French composer Berlioz detested Rossini's music and later decried Stendhal in his *Memoires*. This thesis discusses the disagreement between these two Frenchman. The disagreement highlights the contrasting tendencies that emerged in French Romanticism a generation after its birth: emphasis on tragic grandeur versus emphasis on spontaneous passion. The Rossini debate shows that the fundamental contrast between Berlioz and Stendhal pervades many aspects of romanticism, including nationalism, exoticism, and individualism.

[A senior thesis completed in the Fall of 2003 and Spring of 2004.]

*Rebecca Legg*

Rhetoric & Media Studies, English

Conflict & Justice 9:00-11:00 a.m. Eaton 412

*Character Analysis in the Boondock Saints: Exploring Vigilante Justice Through Agent Paul Smecker*

*The Boondock Saints* became an instant cult classic after its release. It raises a question that already resonates with viewers; it seeks to find a solution to the inadequacies of the current justice system. This project discusses Agent Smecker and how he reflects the conflict within each viewer. While the current legal system is not completely effective, the implications of replacing that with vigilantism may be worse. Also to be presented are Duffy's unique methods of storytelling: manipulating order and time throughout the narrative to communicate this message. This film brings injustice to the forefront of public consciousness, fighting to eradicate indifference to evil and promote steps toward justice.

[A project completed in the Fall of 2003 for RHET 341: Narrative Theory.]

*Alicja Lei*

Rhetoric

Women in Society 1:30-3:30 p.m. Collins 204

*The Sob Stories That We Love So Much: A Narrative Analysis of the Book and Movie, The Divine Secrets of the Ya-Ya Sisterhood*

This project examines two narratives; *Divine Secrets of the Ya-Ya Sisterhood* the novel, and *Divine Secrets of the Ya-Ya Sisterhood* the film. The book is transformed, especially in terms of character development, to fit the profitable genre of a chick flick. In this project, the two narratives are compared using the theories advanced by Mieke Ball, Gerard Genette and Bruce Gronbeck to show how the demands of the chick flick genre necessitate manipulations of the original narrative. It will be argued that despite omissions of the rich character development of the novel, the film succeeds with its female audience because the audience has already identified with the complex characters of the novel and they bring these round characters into their viewing of the film.

[A project completed in the Fall of 2003 for RHET 341: Narrative Theory.]

*Suzanne Marsh*

Sociology

Perceptions & Representations 1:30-3:30 p.m. Eaton 106

*Marx Would Have Been a Muralist*

Murals are a rich, visual documentation of the social history of America in the 20<sup>th</sup> Century. Walls talk through murals telling a story of power struggles to control a wide range of social aspects including the social validation of art, the presentation of social norms and values, and the management of public space. This thesis examines how murals are used as a form of socialization by institutions and marginalized communities in an effort to validate and maintain power. Special attention will be given to the political murals of the 60's and 70's, graffiti, and present day mural movements, including one in Oregon.

[A sociology honors thesis completed in the Spring of 2004.]

*Thomas McCloskey*

Politics

**Contemporary American Policy 9:00-11:00 a.m. Eaton 211**

*American Prisons: Problems and Alternatives*

The American prison system is growing and changing and there is a continuing clash between the punishment and the rehabilitation models for incarceration. In order to combat huge costs, many states are turning to privatization of these facilities to save money. This paper advocates a middle ground for the prison industry to offer humane treatment for inmates, lower costs for states, and an even mix of punishment and rehabilitation mindsets.

[A joint paper done with Bracken Killpack for Topics in Public Policy in the Fall of 2003.]

*Jon McNeil*

Chemistry

**Finding Your Way with Chemicals 1:30-3:30 p.m. Collins 210**

*Characterization of the Early Components in the Renin/AngII Pathway in Protein Restricted Microswine*

This project deals with recent evidence suggesting that a poor fetal diet *in utero* can jeopardize kidney development, leading to an increased risk of hypertension, a broad disorder with many possible origins. Some of the items that will be discussed are the low protein (LP 1%) microswine model used to emulate the human anomaly in this project; the fact that although a number of possible variables may be involved in the development of diet induced hypertension, the Renin/Ang II pathway is of great interest because of its role in regulating blood pressure; and three distinct sets of tissue and plasma, corresponding to different stages of animal development, that were investigated for abnormal levels of the early Renin/Ang II components.

[A project completed in the Summer and Fall of 2003 and in the Spring of 2004 for the Murdoch Research Scholarship and Senior Research Experience.]

*Hannah Meisen-Vehrs*

Politics

**Women in Society 1:30-3:30 p.m. Collins 204**

*Women and the Welfare State: The Scandinavian Case*

This project explores the attributes of the Scandinavian welfare state model and how women fit into the model. Questions regarding the supposed equality between the sexes in Scandinavia, and the potential for socialized wages, health care, child care, and other benefits to create a more egalitarian society are discussed.

[An independent research paper completed in the Spring of 2004 while studying abroad in Bergen, Norway.]

*Jeffrey Nickerson*

Physics

**Fingerprints, Lasers, & Graphs 9:00-11:00 a.m. Collins 204**

*Are Fingerprints Unique?*

Jeffrey Nickerson, John Boyer, and Craig Webster participated in the international *Mathematical Contest in Modeling* in February of 2004, where they were given four days to develop and analyze a mathematical model and present it as a formal paper. The problem put to all of the contestants was: It is a commonplace belief that the thumbprint of every human who has ever lived is different. Develop and analyze a model that will allow you to assess the probability that this is true. Compare the odds (that you found in this problem) of misidentification by fingerprint evidence against the odds of misidentification by DNA evidence. They will present their solution to the problem and share some of the experiences they had while developing a solution.

[A paper completed in the Spring of 2004 for the international *Mathematical Contest in Modeling*.]

*Eoufia Pannas*

Music

**Religious Themes 9:00-11:00 a.m. Eaton 307**

*The Representations of God in the Writing of Jorge Luis Borges*

In the short stories *El fuego*, *La Biblioteca de Babel*, and *El milagro secreto*, Jorge Luis Borges allegorically presents the three essential characteristics of God: the creator, the omnipotent being, and the God of compassion able to work miracles. This presentation will focus on how Borges represents these characteristics in his writing.

[A paper completed in the Fall of 2003 for SPAN 431: Contemporary Novel and Short Story.]

*Beth Phillips*

Anthropology, Gender Studies

Issues in Education 1:30-3:30 p.m. Eaton 412

*Planning and Dreaming: Gender, Education and Poverty Among Capetown Youth*

This project focuses on women's issues and the notions of "education for all" and the "eradication of poverty." Development theorists and agencies say a lot about these concerns without ever really saying much at all. Interested in understanding how Capetown youth perceive poverty and education, this researcher interacted with over forty young people from Capetown townships, the so-called "developing" areas, in South Africa. Using the words and narratives of these youth, it will be shown how gender arose as a key way in which Capetown youth make sense of these concepts in their lives; how the youth construct "gendered" modernities, their real method used for development.

[A senior seminar project completed in the Spring of 2004.]

*Kara Pierce*

English

Women in Society 1:30-3:30 p.m. Collins 204

*Cutting Away Time and Race: A Study of Cosmetic Surgery in American History*

This project discusses aesthetic surgery, or surgery done purely for cosmetic purposes. Not only is aesthetic surgery a widely accepted practice that is on the rise in America, it is becoming more affordable. Things to be discussed are the troubling gender balance of women being the overwhelming majority of cosmetic surgery patients, while surgeons continue to be predominantly male; the ability of men to control the standards of beauty in America; and the idea that ethnic beauty in the United States has become and is continuing to develop into an unattainable, plastic icon.

[A paper completed in the Fall of 2003 for WMST 245: Feminism, Gender & Society.]

*William Rance*

Physics

Fingerprints, Lasers, & Graphs 9:00-11:00 a.m. Collins 204

*Vibrational Characteristics of Metallic Glass with Future Application to LIGO*

It was the goal of this project to find the Q of metallic glass, a new material with an unusual amorphous structure, that might have a high Q. By observing how the vibration in an object dissipates over time it is possible to find the quality factor, or Q, of that material. Besides being a measure of vibrational energy lost, the Q can also reveal the thermal noise in the material. For materials with a high Q, the amount of thermal noise is decreased. These materials are useful in gravitational wave detectors like LIGO. The methods used and the results of this research will be discussed.

[A senior seminar project completed in the Fall of 2003.]

*Kenady Reuland*

Biology

Oregon's Natural Resources 9:00-11:00 a.m. Collins 408

*Establishment of Model Species for Cognitive Studies in the Field and in Captivity: Western Scrub Jays on an Urban College Campus*

The Western Scrub Jay (*Aphelocoma californica*) is a food storing bird that hides its food and later recovers the cache when their provisions become scarce. Caches are at risk of inter-and-intra-specific cache theft when the caching bird is not present. In response to these risks, scrub jays have developed strategies to lessen the risk of cache theft. This project explains how research was done to monitor the scrub jays caching behavior and how they respond to different strategies to prevent such theft. The research results will be revealed and Scrub Jay behavior modification will be discussed.

[A senior thesis completed in the Fall of 2003 and the Spring of 2004.]

*Melissa Robe*

Politics, English

**Human Struggles 9:00-11:00 a.m. Collins 201**

*I Shall Die, But that is all I Shall Do for Death: Exploring Nonviolent Alternatives in the Twenty-First Century*

Recent scholarship in the field of nonviolence has largely abandoned a morally defensible position on the subject and has instead lead to the adoption of the argument that nonviolent tactics are more efficacious in generating political change than are violent means. This thesis discusses how, consequently, we are becoming equipped with the tools necessary to judge whether a nonviolent alternative to the war in Iraq held the potential for greater success, and also whether this shift in the focus of nonviolent scholarship is likely to produce positive change or damaging consequences for democratization in a post-war situation.

[A senior seminar thesis completed in the Spring of 2004.]

*Whitney Rolig*

International Studies, Economics

**Policy Dilemmas: Immigration & the Environment 1:30-3:30 p.m. Colins 201**

*Economic Growth and Inequality: Rural Development in Chile*

Chile's development has created one of the strongest economies in Latin America. Despite its various achievements, however, Chile has been unable to alleviate its extreme income inequality, especially in the rural sector. This presentation will discuss the structural barriers that have hindered Chile's rural development and explore the effectiveness of economics and social policies designed to correct that imbalance, providing the basis of future policy suggestions for the continuing development of Chile and Latin America.

[A senior seminar project for Economics completed in the Spring of 2004.]

*Abrie Schroeder*

Psychology

**Perceptions & Representations 1:30-3:30 p.m. Eaton 106**

*Perception and Memory in Grapheme-Color Synesthesia*

Synesthesia is a neurological condition wherein one perceives a specific color (i.e., photisms) when viewing letters or numbers. This joint presentation will center on a discussion of results from recent work with synesthetes from the Salem area. In particular, the investigations performed explored the manner in which words may elicit photisms, as well as how memory processes are impacted by synesthetic experiences. It will be shown that the data suggest that photism-congruency appears to mediate both perceptual-based and memory-based processing of information.

[A joint senior thesis project completed in the Spring of 2004 with partner Miranda Scolari.]

*Miranda Scolari*

Psychology

**Perceptions & Representations 1:30-3:30 p.m. Eaton 106**

*Perception and Memory in Grapheme-Color Synesthesia*

Synesthesia is a neurological condition wherein one perceives a specific color (i.e., photisms) when viewing letters or numbers. This joint presentation will center on a discussion of results from recent work with synesthetes from the Salem area. In particular, the investigations performed explored the manner in which words may elicit photisms, as well as how memory processes are impacted by synesthetic experiences. It will be shown that the data suggest that photism-congruency appears to mediate both perceptual-based and memory-based processing of information.

[A joint senior thesis project completed in the Spring of 2004 with partner Abrie Schroeder.]

*Elizabeth Steen*

Environmental Science

**Policy Dilemmas: Immigration & the Environment 1:30-3:30 p.m. Colins 201**

*Air Pollution from Agricultural Burning in the Willamette Valley*

Agricultural burning is commonly used to maintain the quality and quantity of crop yields throughout the Western United States. It's also an important source of regional air pollution. This paper addresses Willamette Valley agricultural burning and how it causes environmental degradation in the form of a regional haze that impacts air quality in Class I airsheds. The idea that smoke from field burning can harm human health when it directly intrudes into population centers, and the fact that the Oregon Department of Environmental Quality is currently examining non-burning management alternatives will be discussed.

[A senior seminar paper completed in the Spring of 2004.]

*Stephanie Vandehey*

Rhetoric, History

**Perceptions & Representations 1:30-3:30 p.m. Eaton 106**

*Saving Private Ryan: A Narrative Analysis*

This project presents a rhetorical narrative analysis of the film *Saving Private Ryan*, using the perspectives of rhetoricians Mike Bal and Haden White. Using Bal's character analysis theory of repetition, accumulation, relations and transformation, the purpose and effectiveness of specific characters within the movie create an association with whom the audience members connect. Haden White's theory of historical integrity shows how this realistic film shapes the American Mono-myth about war. These analyses show the importance of this film due to its believability, accuracy, and realistic nature, which frames images of World War II for the viewer.

[A paper completed in the Fall of 2003 for RHET 341: Narrative Theory.]

*Christina Walker*

Psychology

**Finding Your Way with Chemicals 1:30-3:30 p.m. Collins 210**

*Fatty Finding on Attention: the Probably Link Between Trans Fatty Acids and ADHD*

This project presents research on dietary choices in relation to levels of attention and hyperactivity among elementary school children in Salem. With the use of survey results, an analysis of published research in psychology, nutrition science, and alternative medicine, a link will be made between trans fatty acids, such as those in margarine and processed foods, and cognitive functions associate with Attention Deficit Hyperactivity Disorder.

[A senior research project completed in the Spring of 2004.]

*Craig Webster*

Physics

**Fingerprints, Lasers, & Graphs 9:00-11:00 a.m. Collins 204**

*Are Fingerprints Unique?*

Craig Webster, Jeffrey Nickerson, and John Boyer participated in the international *Mathematical Contest in Modeling* in February of 2004, where they were given four days to develop and analyze a mathematical model and present it as a formal paper. The problem put to all of the contestants was: It is a commonplace belief that the thumbprint of every human who has ever lived is different. Develop and analyze a model that will allow you to assess the probability that this is true. Compare the odds (that you found in this problem) of misidentification by fingerprint evidence against the odds of misidentification by DNA evidence. They will present their solution to the problem and share some of the experiences they had while developing a solution.

[A paper completed in the Spring of 2004 for the international *Mathematical Contest in Modeling*.]

*Britta Wood*

Biology

**Finding Your Way with Chemicals 1:30-3:30 p.m. Collins 210**

*A Behavioral and Chemical Study of Scent-Marking by Eastern Gray Squirrels*

Although scent-marking of trees by Eastern gray squirrels has been widely observed, the function and chemistry of these marks remains unknown. The purpose of this study was to observe squirrel behavior to try to learn more about the function of the scent marks and to investigate the chemical composition of scent-marked bark. Squirrel activity at scent marks was observed in the fall of 2002 and the fall and winter of 2003. Scent-marked bark samples and squirrel urine samples were collected and chemically analyzed. The results of these observations and research will be discussed.

[A senior thesis completed in the Fall of 2003 and the Spring of 2004.]

## Acknowledgements

The Fourth Annual Student Scholarship Recognition Day is brought to you by the Academic Council with the assistance of the Office of the CLA Dean.

The following individuals and groups deserve a special *Thank You* for their assistance in making the Fourth Annual Student Scholarship Recognition Day possible:

*Marva Duerksen, Assistant Professor of Music*

*Kelly Moore, Administrative Assistant, Collins Hall*

*Sharon Rose, Professor of Biology*

*Nathan Sivers Boyce, Assistant Professor of Economics*

*Bon Appetit Food Service*

*The Collegian Staff*

*Michelle Maynard, Manager of Publications*

*the Office of Scheduling, Events, and Conferences*

*Gwen Sunken, Administrative Assistant, Office Mgr., WITS*

*Willamette Integrated Technology Services*

And of course, an extra special *Thank You* to the many faculty who volunteered as moderators, and to the students, whom this day is all about





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