



WILLAMETTE
UNIVERSITY

SIXTH ANNUAL
STUDENT SCHOLARSHIP
RECOGNITION DAY

WEDNESDAY APRIL 19TH, 2006

WELCOME TO THE WILLAMETTE UNIVERSITY
SIXTH ANNUAL
STUDENT SCHOLARSHIP RECOGNITION DAY

WEDNESDAY, APRIL 19, 2006

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, and 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, completed their work in senior seminars, labored with faculty through the Science Collaborative Research Program, and three of them have won awards as Presidential Scholars and have devoted a large part of their senior year to their own research.

We invite you also to enjoy the artistic presentations of student musicians, conductors, animators, and studio artists whose work is on display at the Hallie Ford Museum of Art.

Patient and wise faculty mentors have guided them all.

Our day of presentations begins at 9:00 a.m. and extends through the day. 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.



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MORNING ACTIVITIES

9:00 a.m. - 11:00 a.m.

Oral Presentation Panels

Collins Science Center, Eaton Hall

Seeing the Forest for the Trees Collins 205

Moderator: Scott Pike

Jean-Jacques Têtu Sacred Trees: Indonesians, Forestry, and Environmental Movements

Garrett Stephenson Who Needs Forests: The Production of Cultural Boundaries in Community Woods

Brennan Garrelts Sustainable vs. Industrial Forestry: A Comparative Analysis of Timber

Kate D'Ambrosio Collaboration and the Healthy Forests Initiative

All About Oregon Collins 204

Moderator: Inga Johnson

Owen Gabbert The House that Race Built: The Relationship Between Race, Housing Policy, and Inequality in Portland

Carly Smith Midwifery, Biomedical Hegemony, and Cultural Politics in Oregon

Jordan Rash Policy Formation and Implementation in Lake Labish, Oregon

— *Lindsey Young* Project-Based Learning, After-school Academics, and Volunteering at Jane Goodall Environmental Middle School

Social Structures and Structures Collins 201

Moderator: Kelley Strawn

Julie Addicot Implications of Including Caring Labor in Economic Analysis and Valuing It as Economic Activity

Jessica Gurczynski The Relationship Between Family Structure and Treatment Outcome in Children

Katie Têtu Banishing Band-aids: An Evangelical Christian Mission's Permanent Solution to Homelessness

Jessi Christian La traducción de la literatura juvenil: un análisis cultural y social/The Translation of Children's Literature: A Social and Cultural Analysis

Health and Politics in Africa Eaton 307

Moderator: Amadou Fofana

Emily Doerr Women's Health in Rural Africa: Traditional Birth Attendants and the Quest for Medical Authority

Caitlyn Kari The "Wretched of the Earth": The Tragedy of Obstetric Fistula in Rural Africa

Emily Leeding The Others: North African Immigrant Integration in Spain and France

Eric Swinn Analysis of Women Characters as Social Critics in Ousmane Sembene's Novel and Film Adaptation of *Xala*

Privileges and Rights Across the Globe Eaton 211

Moderator: Greg Felker

Ivo Dimitrov Diplomatic Chess: Exploring the Foreign Relations between Bulgaria and Germany (1938-1944)

Megan Flora A Gift for Health: How to Package, Decorate and Deliver an Effective Anti-Smoking Communication Program

Joe Pallett Examining the History of Rights in America through the Civil Rights Movement and the Environmental Rights Movement

Alexis Walker The Shadows of American Citizenship: How Congress' Understanding of the Nineteenth Amendment Impeded First Class Citizenship for Women

Lenses of Morality Eaton 106

Moderator: Ortwin Knorr

Matt Buehler Predicting Islamist Political Behavior

Greg Goodenough Political Thesis: The Right Way

Kristen Iverson What We Were Meant to Be: An Analysis of Kantian Morality in Selected New Testament Writings

Michael Le Chevallier Religion through the Lenses of Morality

→ **11:15 a.m. - 12:15 p.m.**

Presidential Scholars Panel

Mark O. Hatfield Library: Hatfield Room

Moderator: Anthony Hermann

Anton Chiono - Environmental Science

The Effects of Spatial Snag Distribution on Cavity Nesting Bird Species in Ponderosa Pine (*Pinus ponderosa*) Forests of the Eastern Cascades

National fire suppression policy has reduced structural heterogeneity in fire-adapted forests. While management strategies mandate the inclusion of dead standing trees (snags) as a critical habitat element, they fail to address their spatial distribution. In this project, I analyze trends of snag dispersion in increased habitat productivity.

Mike Reich - Politics

Evolving Use: An Analysis of Use-Restricting Management Policies in the National Parks

For most of its history, the National Park Service has encouraged visitor use of the National Parks without any consideration of the ecological impacts of visitors on the Park ecosystems and without plans to mitigate those effects. Yet, in the last ten years an increasing number of Park managers utilized use-restricting policies to limit the effects of visitors upon Park ecosystems. The creation of these new Park-level policies, despite seventy years of contrary institutional history, leads to the two central questions of this paper: a) what factors have changed the decision-making of the National Park System to allow Parks to implement use-restricting policies, and b) what factors affect the successful implementation of these policies? To answer these questions, a theoretical model of interest group participation based on the Advocacy Coalition Framework was used to examine three National Parks - Yellowstone, Yosemite, and Zion. These parks have adopted use-restricting policies with varying success. Unlike most of the prevailing research examining the National Parks Service, this paper assumes that Parks are semi-autonomous policy subsystems influenced predominantly by interest group interactions and the policy preferences of Park managers.

Kirsten Wesselhoeft - Philosophy

Honesty, Humility, and Redemption: A Critical Look Backward and Forward at Reinhold Niebuhr in American Politics

Reinhold Niebuhr was a mid 20th century American public theologian whose teaching, writing, and political activism had wide-ranging impacts in American religion and politics. As a religious intellectual, a preacher, and a progressive activist Niebuhr refused categorization. Even more today than in his own time, the roles Niebuhr played in politics and religion seem improbable at best, inherently contradictory at worst. My research situates Niebuhr's legacy in the contemporary relation of religion to politics in the U.S. and offers, to some degree, a Niebuhrian vision for the future.

AFTERNOON ACTIVITIES

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

Nature Walk: A Pleasant Stroll with the Campus Naturalists - Learning about Willamette University's Natural History

Gather at the south side of Waller Hall

Moderator: David Craig

Stroll Leader I - *Josef Uyeda*

Stroll Leader II - *Mac Campbell*

This is a great opportunity to learn about the natural history of Willamette University. The walk consists of a short stroll through campus. 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 p.m. - 1:15 p.m.

Animation & Film - Original Work

Collins Science Center, Room 408

Moderator: Michael Nord

I. *Book Attack*- animation short

Mike Bennett

Chris Hanson

A student procrastinates on a reading assignment and faces the consequences of his laziness.

II. *Penguins* - animation short

Darren Macomber

Kei Otawa

Joe Spinrad

Music by: Cristiana Bunica & Pierre-Alain Chevalier

III. *Sketch* - film

Jaered Croes

Nathan Brannon

A fictional comedy about a variety of situations on a college campus throughout history. It is a commentary on the society in which we live and shows what happens during conflict when education and understanding of others is not included in the situation.

12:30 p.m. - 1:30 p.m.

Science Collaborative Research Program (SCRP) & Carson Undergraduate Research Grants Panel:

The Impact Independent Research Has on Your Life

Mark O. Hatfield Library: Hatfield Room

Moderator: Mark Beilby

These students, members of the Science Collaborative Research Program and Carson Undergraduate Research Grant recipients, will share their area of research and discuss how the experience of doing independent research has impacted their lives.

Malia Dong, SCRIP

Megan Flora, Carson Scholar

Jacob Swenson, SCRIP

Darrell McGie, Carson Scholar

Yen Tran, Carson Scholar

1:30 p.m. - 3:30 p.m.
Oral Presentation Panels

Collins Science Center, Eaton Hall

<u>Willamettesque</u>	<u>Collins 205</u>	Moderator: Cecily McCaffrey
<i>Jessi Christian</i>	A Semester with the Great Hess: Creating a Masterpiece in Sculpture	
<i>Jessica Lee</i>	My Friends Sucked Me Into <i>Facebook</i> : Examining Social Network Theory and Identity Construction Online	
<i>Kylie Pine</i>	Object Collecting at Willamette University: The Cultural and Historical Responsibilities of Being the First University in the West	
<i>Nathan Brannon</i>	<i>University Diversity</i> - VIDEO PRESENTATION	

<u>The Environmental Challenge</u>	<u>Collins 204</u>	Moderator: Rick Watkins
<i>Alex Compton</i>	Isolation of <i>Trichoderma</i> and <i>Aspergillus</i> Mold Genera from Flood-Damaged Homes in New Orleans Post-Hurricane Katrina and Determination of Antibiosis Patterns	
<i>David Gestaut</i>	The Relationship Between Urban Sprawl & Air Pollution	
<i>Erin Stone</i>	Dilution is Not the Solution to Pollution: Toxic Mixing Zones in the Willamette Valley	
<i>Jacob Swenson</i>	Inhibition of Oocyte Maturation by the Herbicide 2,4-D May Not Require the Endogenous Inhibitor, Protein Kinase A	

<u>Better Living through Chemistry</u>	<u>Collins 201</u>	Moderator: Chuck Williamson
<i>Cheryl Moy</i>	Exploring Alternative Synthesis of Diketones by a Mechanistic Study of Dibenzoate Esters	
<i>Lindsey Patterson</i>	All in a days work: An Investigation of the Neurobehavioral Effects of Pesticides on Adolescent and Adult Migrant Workers	
<i>Mariah Smith</i>	Mistletoe for Epilepsy - Medicine and Magic in the Trees: Pliny the Elder's <i>Natural History</i> and the Beneficial Uses of Trees in Book 24.	
<i>Buck Taylor</i>	Double-Teaming Drugs: Linking Antibiotics Using Molecular Tethers	

<u>Analyze This...and That</u>	<u>Eaton 307</u>	Moderator: Joyce Millen
<i>Gretchen Buettner</i>	A Narrative Analysis of an Abstinence-Only-Until-Marriage Sex Education Curriculum	
<i>Amanda Guile</i>	Judicial Reforms or Insurance Regulation: Examining Attempts to Curb the Growing Costs of Medical Malpractice Premiums	
<i>Heather Hudson</i>	Bilingual Education: A Gateway to Cultural Understanding	
<i>Maribel Naranjo</i>	Prevalence of Diabetes within the Latino Culture: An Investigative Study that Looks at Why This Disease is Ignored	

<u>Found in Translation</u>	<u>Eaton 211</u>	Moderator: Mark Conliffe
<i>Michael Le Chevallier</i>	Pascal's Wager: The Congruence of Rhetoric and Theology	
<i>Eric Swinn</i>	Issues Concerning Translation of Anna Akhmatova's Poem "Three Things Enchanted Him..."	
<i>Jamie Timbrell</i>	Catullus' Adoption of Callimachean Models	
<i>Tamara Wik</i>	Cervantes, the Heretic	

"That's Entertainment" Eaton 106

Moderator: Anna Montero

Tyson Bernhardt What Inspires a Fight Club? An Analysis of the Themes of Masculinity, Class, and the Popular in the 1999 Movie *Fight Club*

Mac Campbell The Myth of Don Juan: from Play to Film

Kalynn Hanley Is the Grass Really Greener on the Other Side? A Cultural Analysis of Reality Television, *Wife Swap*, and *Trading Spaces*

Robyn Southard Authority in the Fascinating and Fabulous Realm of Pageantry

3:30 p.m. - 4:30 p.m.

Music Performance

Mary Stuart Rogers Music Center: Hudson Hall

Amanda Rice, Piano

SONATA IN Bb MAJOR, NO. 8, OP. 84
III VIVACE

Sergei Prokofiev (1891-1953)

Robb Harrison, Baritone

David Ingram, Piano
SEA FEVER

John Ireland (1879-1962)

Kirsten Erwin, Violin

Allison Crollard, Piano

SUITE FOR VIOLIN AND PIANO
SLOVANIC DANCES

Claude Bolling (b.1930)

Amanda Hiti, Flute

David Ingram, Piano
PIANO CONCERTO IN G (2nd mvmt.)
Arranged by Amanda Hiti

Maurice Ravel (1875-1937)

Michelle Levin, Cello

Elise Yun, Piano
HUNGARIAN RHAPSODY

David Popper (1843-1913)

JAZZ QUARTET

John Englund, Piano
Bennet Kling, Bass
Scott Kennedy, Drums
Nick Woolsey, Guitar

Selections to be announced.

4:30 p.m. - 5:30 p.m.

Conductors

Mary Stuart Rogers Music Center: Hudson Hall

Moderator: Wallace Long

Andy Wilson

TONIGHT ETERNITY ALONE

René Clausen (b. 1953)

Pierre-Alain Chevalier
THE CLOUD-CAPP'D TOWERS
OVER HILL, OVER DALE

Ralph Vaughan Williams (1872-1958)
Ralph Vaughan Williams

Darren McCoy
KYRIE

Darren McCoy (b. 1984)

EVENING EVENT

6:30 p.m. - 8:30 p.m.
Spring Art Review - Gallery Reception
Art Building - Student Gallery

The Department of Art and Art History invites you to celebrate the work of the Junior Studio Art Majors and Art History Majors at Willamette. Festivities include live music and fine cheeses and crackers. Come discuss the great art being crafted at Willamette and support our students.

ALL-DAY ACTIVITIES

10:00 a.m. - 5:00 p.m.
Senior Art Majors' Exhibition
Hallie Ford Museum of Art

Mogan Bagge, thesis
Ben Decherd, digital
Allyson Dutko, painting
Kasis Elerath, thesis
Kirsten Erwin, illustrated book
Julia Hansmeier, thesis
Chris Hochendoner, graphic novel
Julia Houha, thesis
Kristin Knutson, painting

Alex MacKenzie, thesis
Read McFaddin, thesis
Ann Mitchell, thesis
Scott Randall, steel sculpture
Nicole Reed, ceramic sculpture
Amber Revoir, thesis
Rachael Sanders, painting
Yen Tran, thesis
Melissa Williams, painting

Spring Review Art Exhibition
Junior Art and Art History Majors
Art Building - Student Gallery

Studio Art

Sally Bullock
Hannah Hall
Caitlyn Hix
Sheelah Hyslop
Nathan Jones
Maya Karp
Trisha Kilgus
Marcie Kriebel
Cheline Lundin

Sean Rawls
Christina Retailiau
Andrew Steers
Shoki Tanabe
John Waltner
Brianna White

Art History

Elise Cherpin
Beth Doughty
Meg Gilbert
Kate Gordon
Raino Isto
Jessica Lawrence
Christine Riippi
Amanda Rose
Kimi Sato

Lauren Pressler
Alyssa Ramp

ABSTRACTS

Student's Name (Alphabetical)
Student's Major
Time & Location
Presentation Title

Julie Addicot
Economics International Studies
9:00 - 11:00 Collins 201

Implications of Including Caring Labor in Economic Analysis and Valuing It as Economic Activity

When one thinks of economic activity, what first comes to mind for most people is the exchange of goods and services in the market which impute rent. Non-market transactions are excluded from most mainstream theories. One example is time spent, often unpaid, taking care of children, called caring labor. Caring labor has tremendously important social benefits, has a very low (if any) measured economic value, and can even have negative value due to foregone earnings. The theory and analytical framework of feminist economics provides an opportunity to examine the challenges and social expectations of gender roles and the implications of giving caring labor value as an economic activity.

Tyson Bernhardt
Anthropology
1:30 - 3:30 Eaton 106

What Inspires a *Fight Club*? An Analysis of the Themes of Masculinity, Class, and the Popular in the 1999 Movie *Fight Club*

Since its 1999 release, the blockbuster film *Fight Club* has stirred a profound public reaction, including the formation of illicit fight clubs around the United States. Why would this movie cause such a response? Using theoretical works on popular culture by Stuart Hall and Elizabeth Traube, this paper seeks an answer in terms of class struggle and an establishment of the "popular" in culture. This paper also examines the fan culture surrounding Chuck Palahniuk, the author of the book that started it all.

Nathan Brannon
Rhetoric and Film Studies
1:30 - 3:30 Collins 205
University Diversity

This is an independent study project inspired by classes that I have taken in American Ethnic Studies. This documentary explores the dynamics of racial groups on Willamette's campus, as well as how this is influenced by greater social ideology. I examine the effects of being a part of these groups through interviews with students, faculty, and staff of Willamette University.

Matt Buehler
Politics and History
9:00 - 11:00 Eaton 106
Predicting Islamist Political Behavior

The purpose of this thesis is to explore the factors that shape the violent and non-violent decision-making of Islamist political movements in non-democratic Arab states. I begin by disconfirming competing predictive models of Islamist political behavior, arguing that there is insufficient evidence to demonstrate that there is a clear and compelling relationship between increases in state repression or declines in socioeconomic development and Islamist political behavior. Subsequently, I posit a model which contends that Islamist political behavior is a product of latent power asymmetries between ethnic and religious groups in the Arab world.

Gretchen Buettner
Rhetoric and Media Studies
1:30 - 3:30 Eaton 307

A Narrative Analysis of an Abstinence-Only-Until-Marriage Sex Education Curriculum

By using a narrative to assert the stance that all people should remain sexually abstinent until marriage, the *Sex Respect* curriculum becomes an authoritative voice in the public moral debate over sex education. Though rhetorically effective, *Sex Respect* is deficient as a school curriculum because of its narrative and rhetorical structure. Through selective documentation and stereotypic characterization, *Sex Respect* presents an opinion-based curriculum on sexuality. This is rhetorically effective because of its unity of purpose and unity of direction, however, school curricula should be based on comprehensive facts not selectively documented opinions.

Matthew (Mac) Campbell
Biology and Spanish
1:30 - 3:30 Eaton 106

The Myth of Don Juan: from Play to Film

The myth of Don Juan is widely known, with origins reaching far back into the oral traditions of Spain. Since the first written interpretation of the donjuanesque myth with Tirso de Molino's *Burlador de Sevilla* in the sixteenth century, many different approaches to this myth have followed. Well-known figures such as Mozart, Byron, and Johnny Depp have participated in portrayals of Don Juan that have diverged greatly from the original. I explore how and why the interpretation of this character has changed by focusing in on the *Burlador de Sevilla* and the film, *Don Juan DeMarco*.

Jessi Christian
Spanish
1:30 - 3:30 Collins 205

La traducción de la literatura juvenil: un análisis cultural y social / The Translation of Children's Literature: A Social and Cultural Analysis

An area of study that has always interested me is translation of text. I am pursuing a degree in bilingual elementary education and through my work noticed that some of the translated texts used in schools are not very accurate. I wondered what the long-term consequences were for using poor translations and looked at specific effects of translation on culture and society. The presentation includes the reading and interpreting of passages from the children's texts used in this study.

Jessi Christian
Spanish
9:00 - 11:00 Collins 201

A Semester with the Great Hess: Creating a Masterpiece in Sculpture

Last semester I worked with a medium I had never used before and pushed myself as an artist to discover the difficult yet exciting process of "birthing" a sculpture. This very physical and hands-on class taught me to expand my boundaries and redefined for me the function art serves. Through my presentation I hope to encourage others to step outside the bounds of paint and pencil and experience the 3-dimensionality of sculpture. This presentation is also a tribute to Robert Hess, a great professor of art.

Alex Compton
Biology
1:30 - 3:30 Collins 204

Isolation of *Trichoderma* and *Aspergillus* Mold Genera from Flood-Damaged Homes in New Orleans Post-Hurricane Katrina and Determination of Antibiosis Patterns

Flooding over an extended period of time provides a nearly optimal opportunity for mold growth, increasing the likelihood of human exposures to mold toxins. I traveled to Louisiana in January 2006 to volunteer in Post-Katrina remediation efforts. The objective of this project was to identify the molds present in several homes throughout the New Orleans area and to assess the pathogenic potential of the genera with the highest occurrence. It was hypothesized that *Trichoderma*, a known antibiotic producer, could be used to minimize toxic mold exposure to humans by inhibiting *Aspergillus* growth in dual cultures.

Kate D'Ambrosio
Politics and History
9:00 - 11:00 Collins 205

Collaboration and the *Healthy Forests Initiative*

With the introduction of the *Healthy Forests Initiative* in 2002, the United States Forest Service adopted two new categorical exclusions pertaining to hazardous fuels reduction and post-fire rehabilitation projects. In contrast with prior categorical exclusions, those introduced under the HFI require federal land management agencies to collaborate with a variety of stakeholders in the implementation of these projects. Through reviewing decision memos and interviewing land managers, this project examines how the Forest Service is using collaboration in the implementation of HFI categorical exclusion projects.

Ivo Dimitrov
History and Spanish
9:00 - 11:00 Eaton 211

Diplomatic Chess: Exploring the Foreign Relations between Bulgaria and Germany (193-1941)

This project examines the economic, political, and military relationship between Bulgaria and Germany during the Second World War. It is useful in demonstrating the economically hegemonic role of Germany in southeastern Europe, how irredentism affected the Bulgarian stance in respect to the war, and in illuminating the diplomatic intrigues between the Axis powers. Furthermore, as secondary topics, I discuss how the Bulgarian committal to the Axis military effort affected the Bulgarian "Jewish Question", how Axis-power territorial aspirations created rifts in the alliance, and how the international pressures of fascism and bolshevism were instrumental in shaping Bulgarian foreign policy.

Emily Doerr
Anthropology
9:00 - 11:00 Eaton 307

Women's Health in Rural Africa: Traditional Birth Attendants and the Quest for Medical Authority

Traditional Birth Attendants (TBA) in Malawi are disrespected and ill-treated by the majority of modern health practitioners in the country. Their practices are deemed "primitive," "unsanitary," and "backward" by the modern health care workers. Yet for ninety percent of the Malawian population, who remain poor and live in rural areas of the country, TBA services are indispensable. Without them, the country's maternal and infant mortality rates would likely surge. Regardless, with the urging of the modern health care providers, the government of Malawi is seeking to outlaw TBAs. What will be the likely outcome of such a strategy? What are the benefits and disadvantages in eliminating the long-standing system of medical pluralism in the country?

Megan Flora
Exercise Science
9:00 - 11:00 Eaton 211

&

12:30 - 1:30 M.O.H. Library, Hatfield Room

A Gift for Health: How to Package, Decorate and Deliver an Effective Anti-smoking Communication Program

This senior project was built upon Carson Grant research conducted with university students in Ecuador that analyzed their beliefs, attitudes, and practices as they relate to tobacco smoking. The resulting project was an anti-smoking health communication program plan. This plan aimed to target the differing motivations behind smoking found in three different socioeconomic classes of Ecuadorian university students. It was therefore necessary to develop three separate communication strategies within this program plan. The final product was a series of posters with relevant messages and images targeted to each class of students, as well as an extensive communication program plan.

Owen Gabbert
History
9:00 - 11:00 Collins 204

The House that Race Built: The Relationship Between Race, Housing Policy, and Inequality in Portland

Many scholars in history and ethnic studies construct a narrative of the United States as a nation built upon racial inequality and systematic privilege for white society. In particular, Whites have gained extraordinary advantages through the institutionalization of racist housing policies. This legacy of racial discrimination has been perpetuated through actions and inactions of those in power. By situating the experiences of my family and community in the larger social context, I illuminate the social processes (and racism) that create the current realities of housing in Northeast Portland. I critically examine the ways in which housing both reflects and reinforces the economic and social benefits of white privilege and, consequently, the "costs" of being Black in the Northwest.

Brennan Garrelts
Environmental Science
9:00 - 11:00 Collins 205

Sustainable vs. Industrial Forestry: A Comparative Analysis of Timber

Forests provide both wood products for human societies and ecological services for earth's ecosystems. Sustainable forestry practices are designed to embrace the economic and ecological values of forests. Industrial forest management focuses on providing an economically sustained yield of timber. I compare two forest stands under each management regime. My results show that sustainably managed stands are more diverse in age and composition, have more spatial heterogeneity, and slower growth rates than the industrial stands. I discuss the implications for meeting human demand for forest products in local and regional economies, while simultaneously supporting important ecosystem functions.

David Gestaut
Economics
1:30 - 3:30 Collins 204

The Relationship Between Urban Sprawl & Air Pollution

The term urban sprawl was born almost thirty years ago, but we still don't have an exact definition. In this paper, I explain the cause and the history of urban sprawl and its different definitions to help my audience determine a meaning for themselves. This project includes a comparison of the highest and lowest urban sprawl areas and their relationship to air pollution. Key findings include that the seven major air pollutants are twice as prevalent in the highest sprawl areas as in the lowest.

Greg Goodenough
Politics
9:00 - 11:00 Eaton 106

Politics Thesis: The Right Way

The aim of this project is to address the concept of rights and acknowledge their connection with responsibilities while depicting their necessary context of relationships. If one's happiness does not negate another's, and in fact one's happiness is in part dependent on another's, then it becomes apparent that man's hope must lie in the context of mutually edifying relationships. Through examining the history of rights theory, the philosophy of rights, along with germane economic and political theory, the goal is to engage in a thorough discussion of current day expectations and actualities in the rights arena.

Amanda Guile
Politics and History
1:30 - 3:30 Eaton 307

Judicial Reforms or Insurance Regulation: Examining Attempts to Curb the Growing Costs of Medical Malpractice Premiums

Rising medical malpractice insurance premiums have caused doctors to believe that they must alter or eliminate their practices. The most common response to the increase physicians' premiums has been to institute caps on non-economic damages. In fact, caps on damages have done little to stem the increase in doctors' premiums. In contrast, California passed legislation that regulated the insurance industry, but this legislation did not gain the widespread appeal that instituting caps did. I explore why legislation that seemed to fail in controlling premiums spread to other states while an effective solution did not.

Jessica Gurczynski
Psychology
9:00 - 11:00 Collins 201

The Relationship Between Family Structure and Treatment Outcome in Children

In this project I explore the relationship between family structure and treatment outcome. Family structures examined included: two-parent families, foster families, single-parent families, and relative care. The sample included 49 children, 34 males and 15 females receiving mental health services. Treatment outcome was assessed by a revised version of the Youth Outcome Questionnaire (Miller, Duncan & Johnson, 2000). There were no significant differences found between family structures and treatment outcome. There was, however, a main effect of time and positive outcome within family structures with regard to how children were feeling about themselves, and how they felt they were doing with treatment goals.

Kalynn Hanley
Anthropology and Spanish
1:30 - 3:30 Eaton 106

Is the Grass Really Greener on the Other Side? A Cultural Analysis of Reality Television, *Wife Swap*, and *Trading Spouses*

In this research I investigate reality television, specifically the shows *Trading Spouses* and *Wife Swap*, as provocative documents of American culture. Using key theorists from the field of visual anthropology and cultural studies, I explore the public appeal of these shows and the families they portray. Textual analysis of sample episodes and investigation of viewer responses shows that dysfunction and didacticism are prominent themes. These themes help explain the role of this type of television program and what their popularity illuminates about the American people.

Heather Hudson
Anthropology
1:30 - 3:30 Eaton 307

Bilingual Education: A Gateway to Cultural Understanding

Over the last thirty years bilingual education has grown into its own field of study and now consists of dozens of theories and models. Scholars in many different fields are asking why test scores of Latinos are so low, why Spanish speaking students consistently drop out of high school, and, more importantly, how bilingual education can help to alleviate these disconcerting problems. Utilizing an anthropological perspective, I examine in this presentation two specific models of bilingual education, evaluating the relation between ideological goals, and implementation.

Kristen Iverson
Religious Studies and Spanish
9:00 - 11:00 Eaton 106

What We Were Meant to Be: An Analysis of Kantian Morality in Selected New Testament Writings

In his *Critique of the Power of Judgment*, Immanuel Kant makes the case for self-legislated morality - that is, the idea that human beings can choose to act morally because they possess freedom. When humans decide to act morally without any kind of self-interest, Kant says, they are fulfilling their capacities to be the "final ends" of nature. In this project I examine the concept of what is moral in three New Testament stories and analyze the characters and their actions from a Kantian perspective of morality.

Caitlyn Kari
French
9:00 - 11:00 Eaton 307

The "Wretched of the Earth": The Plight of Obstetric Fistula in Rural Africa

In this study I discuss the occurrence of obstetric vesico-vaginal and rectal-vaginal fistulae in people of rural sub-Saharan Africa with special emphasis on Hausaland in northern Nigeria. A bio-medical explanation of this severely under-reported condition will be presented, along with an evaluation of the influences of cultural traditions, medical practices, education, religion, governing forms, family structure, gender expectations, and poverty on the prevalence and treatment of fistulae. Conflicts between Western and traditional epistemologies and methods of healing will be addressed as evidence for why fistulae are a growing problem in the developing world. I will also discuss alternative, culturally sensitive solutions.

Michael Le Chevallier
French and Religious Studies
1:30 - 3:30 Eaton 211

Pascal's Wager: the Congruence of Rhetoric and Theology

Pascal's wager, an effort to persuade man of the existence of God by means of possible cosmologies and decision theory, is the crux of his fragmented thoughts which he meant to use for his Christian Apology known as *Pensée*. I maintain that within the wager there is congruence between his rhetoric and his theology. Pascal's work is intended not to convince man logically of God's existence, but to establish a reasonable model that humanity can use to eliminate the obstacles that keep man from believing. This rhetorical effort echoes in his theology which claims no guarantee of God's saving grace.

Michael Le Chevallier
French and Religious Studies
9:00 - 11:00 Eaton 106

Religion through the Lenses of Morality

Kant's philosophical theology, as developed in his third critique, establishes moral development as central to an ideal religion. Religion, furthermore, is identified as the meeting place of the three ideas of the Reason: God, immortality of the soul, and freedom. I specifically focus on the limits of human knowledge and the necessity of an absence of interest in morality. In my project, I explore the implications of Kant's moral system of religion in dogmatic theology, eschatology, and liturgy.

Jessica Lee
Anthropology
1:30 - 3:30 Collins 205

My Friends Sucked Me Into Facebook: Examining Social Network Theory and Identity Construction Online

In my research I investigate the websites *Facebook* and *MySpace*, widely popular among college students, through theories of social networking and the social construction of identity. This multidisciplinary study will explore the function of these sites as community builders as well as media for expression, and will argue that networks and identities expressed through electronic technology serve as mediating structures, situating students between their at-home identities and the world of the university. The purpose of this research is to understand the importance of these sites to their users, who perceive them as a necessity to campus life.

Emily Leeding
International Studies
9:00 - 11:00 Eaton 307

The Others: North African Immigrant Integration in Spain & France

In this presentation I explore the effectiveness of strategies used to integrate North African immigrants in the European Union, specifically in Spain and France and recommendations for further improvements. This topic will be investigated through global immigrant integration models, an examination of the current economic and political situations in Spain and France, as well as examine the role of historical events as a catalyst for conflict. The stratification of cultural identity amongst first, second, and third generation immigrants and how this is affected by education policies, employment discrimination, social programs, and media viewpoint will also be considered.

Darrell McGie
Environmental Science and Politics
12:30 - 1:30 M.O.H. Library, Hatfield Room

Hydrogen from Wastewater: A Collaborative Approach to Establish Oregon's Alternative Energy

Hydrogen is a promising alternative to petroleum oil, especially for transportation. The optimum method to produce hydrogen is electrolysis, which converts water into high-pressure hydrogen and oxygen gas- a method that contributes little to global warming. This research integrates electrolysis with wastewater and cogeneration found in many community treatment facilities, which then become waste-to-energy producers of hydrogen and form the basis of a distributive hydrogen economy. This research also adopts methods of collaboration amongst stakeholders (government, private enterprise, community) to equitably implement a hydrogen-based economy. This provides yet another opportunity for Oregon to lead change in both energy and policy.

Cheryl Moy
Chemistry
1:30 - 3:30 Collins 201

Exploring Alternative Synthesis of Diketones by a Mechanistic Study of Dibenzoate Esters

Chemistry is about understanding what reactions occur and why reactions occur. Investigations of how reactions occur are described through the use of mechanisms. A mechanism is a series of steps explaining the process from reactants to products. My focus was to understand the mechanism by which dibenzoate esters form diketones. The importance of understanding the mechanism of dibenzoate esters is for its possible application to the synthesis of diketones, some of which are difficult to synthesize purely by chemical methods. Diketones are often used as precursors to the synthesis of biologically active compounds. When dibenzoate esters gain electrons in solution they undergo a reaction to alleviate the negative charges by forming neutral diketones. One way to study the mechanism of this reaction is through the use of electrochemistry, specifically cyclic voltammetry. With ethanediol dibenzoate we observed evidence of an intermediate with two negative charges and two radicals. We found that the structure of this intermediate was important for the formation of the diketone product. That intermediate then reacts further to alleviate the negative charges and radicals by forming ethanediolate and benzil (diketone). Our hypothesis for the mechanism of ethanediol dibenzoate to form ethanediolate and benzil was supported by computer modeling.

Maribel Naranjo
Biology and Spanish
1:30 - 3:30 Eaton 307

Prevalence of Diabetes within the Latino Culture: An Investigative Study that Looks at Why this Disease is Ignored
Diabetes continues to be of great concern, especially within the Latino community. Latinos are predisposed to developing type 2 diabetes and often have delayed diagnosis and delayed treatment due to genetics, language barriers, social status, financial difficulties, environment, nutrition, culture, and ignorance. Many of these factors also increase the risk of further complications. In this study I investigate these ideas through an analysis of surveys given to a diverse population of Latinos in Marion County.

Joe Pallett
Politics
9:00 - 11:00 Eaton 211

Examining the History of Rights in America through the Civil Rights Movement and the Environmental Rights Movement

Rights rhetoric appears to dominate political discourse in this day and age and nearly all political groups claim a right to something to further their cause. To better understand what exactly a right is, I will examine the history of rights with a focus on the events and intellectual work that created what a right in America has become socially, politically and legally. The Civil Rights Movement and the Environmental Justice Movement will provide examples explaining how a right can be both used by social justice groups to create beneficial change or how rights can become merely useless rhetoric.

Lindsey Patterson
Psychology and Spanish
1:30 - 3:30 Collins 201

All in a Days Work: An Investigation of the Neurobehavioral Effects of Pesticides on Adolescent and Adult Migrant Workers.

The purpose of this study was to evaluate the differences in neurobehavioral performance between adults and adolescents exposed to organophosphate pesticides. The relationship between acute effects (self-reported illness) and chronic effects (neurobehavioral performance) was examined. To do this, migrant farm worker participants were recruited from agricultural areas around Portland, Oregon. The procedure included an interview about demographic information, work habits and health habits; two biological samples to examine acute exposure; and a neurobehavioral battery known as the Behavioral Assessment and Research System (BARS).

Kylie Pine
American Studies
1:30 - 3:30 Collins 205

Object Collecting at Willamette University: The Cultural and Historical Responsibilities of Being the First University in the West

Willamette University has collected and exhibited objects ever since its incorporation. These objects, spanning from mastodon femurs to spun glass from the 1893 World's Columbian Exposition, have come to the University as part of its educational mission. Yet over one hundred years of collecting, exhibiting, storing and shuffling these objects have created many orphans, mysteries, and ethical dilemmas. This paper reassembles the history of collecting on the Willamette campus and applies theories of material culture to develop possible solutions for improving the University's role as a cultural steward.

Jordan Rash
Politics
9:00 - 11:00 Collins 204

Policy Formation and Implementation in Lake Labish, Oregon

Wetland regulation in the United States is very extensive in the goals of various federal, state and local programs. However, even with this broad umbrella of protection, the United States continues to lose 58,000 acres of wetlands each year. What is the source of this degradation? How do wetland policies promote conservation and restoration? Where do these policies fall short? These are some questions addressed in the project.

Carly Smith

Anthropology and Spanish
9:00 - 11:00 Collins 204

Midwifery, Biomedical Hegemony, and Cultural Politics in Oregon

Childbirth is a biological event that is embedded in particular social and cultural networks of meaning. In the United States, the biomedical management of birth, which relies heavily upon technology and intervention, has gained hegemonic status as the authoritative model. However, the midwifery model offers an alternative that focuses on a woman's innate ability to give birth successfully with minimal intervention. This anthropological study analyzes the complex interactions between these two birth models in the state of Oregon, taking into account the alternative birth movement of the 1970s, the organization and discourse of Oregon midwives, and the current spectrum of birth practitioners.

Mariah Smith

Classical Studies
1:30 - 3:30 Collins 201

Mistletoe for Epilepsy - Medicine and Magic in the Trees: Pliny the Elder's *Natural History* and the Beneficial Uses of Trees in *Book 24*.

Pliny the Elder's prolific work, *Natural History*, offers readers a wide variety of facts and information. In *Book 24* Pliny discusses the medicinal uses of trees. This catalogue gives us an idea of one type of medical care available to the ancient Romans. By examining in depth this selection of work, it is possible to see how Pliny's underlying assumptions influence his writing, to assess the variety of information he thought important to convey, and to explore his inconsistencies, particularly regarding doctors and magic.

Robyn Southard

Sociology and Religious Studies
1:30 - 3:30 Eaton 106

Authority in the Fascinating and Fabulous Realm of Pageantry

Based on a participant observation study, I examine authority and power in the context of the hyper-feminized, competitive setting of a pageant. Authority can be asserted and granted based on a number of factors, for example, age, title, experience, education, and even charisma. The circumstances in which one grants authority to another person are also important to this process. The topics of authority and power will be illustrated by contestants, title holders, and pageant administration. Discussion will include who has authority, how they exhibit it, how attempts at exerting it fail, and how power and authority are related.

Garrett Stephenson

Anthropology
9:00 - 11:00 Collins 205

Who Needs Forests: The Production of Cultural Boundaries in Community Woods

Are indigenous groups enlightened forest protectors? Internationally, both sides of the debate have produced management policies that either inhibit indigenous forest use or attempt to capitalize on it giving local groups the right to use forests in traditional ways. Both use rhetoric that constructs boundaries around indigenous cultures in order to label them as either "good" or "bad" at forest conservation. This process is generally based on incomplete information and assumptions of indigenous forest conservation practices. By looking at the history of state forest policies and their effects on indigenous cultures, this project attempts to deconstruct these ascribed cultural boundaries.

Erin Stone

Environmental Science
1:30 - 3:30 Collins 204

Dilution is Not the Solution to Pollution: Toxic Mixing Zones in the Willamette Valley

With its long history of pollution, it is important to closely monitor all of the components that contribute to a healthy riparian ecosystem in the Willamette River Basin. Toxic mixing zones are "areas within public waters adjacent to point source discharges where pollutants are diluted and dispersed at concentrations that routinely exceed human health and aquatic life water quality standards." (sierraclub.org) These zones have recently emerged as a very controversial issue among local environmentalists, scientists, and politicians. This project uses GIS technology to visually represent the location of mixing zones in Marion County and also analyses data on the types of chemicals that are being discharged in these areas.

Jacob Swenson
Philosophy
1:30 - 3:30 Collins 204

Inhibition of Oocyte Maturation by the Herbicide 2,4-D May Not Require the Endogenous Inhibitor, Protein Kinase A
Many herbicides are known to be endocrine disrupters, chemicals that mimic animal hormones, and adversely affect animal populations. Exposure to these chemicals in adult populations, specifically among amphibians, can result in sterility or hermaphroditism. These chemicals also disrupt gamete development. The herbicide 2,4-D is known to cause morphological and biochemical abnormalities in *Xenopus laevis* oocytes, ultimately inhibiting successful maturation. The purpose of this study was to determine the mechanism through which 2,4-D acts. We hypothesized that 2,4-D may "recruit" Protein Kinase A (PKA) in order to bring about its inhibitory effects; however, our results demonstrate that 2,4-D most likely does not rely on PKA.

Eric Swinn
Russian and French
9:00 - 11:00 Eaton 307

Analysis of Women Characters as Social Critics in Ousmane Sembene's Novel and Film Adaptation of *Xala*
A portion of a French senior thesis, this presentation looks at the role of the four main female characters in Sembene's *Xala* as means of criticizing Senghor's independent Senegal. The presentation is supported by material from both the novel and film adaptation, with respect paid to changes between the two mediums.

Eric Swinn
Russian and French
1:30 - 3:30 Eaton 211

Issues Concerning Translation of Anna Akhmatova's Poem *Three Things Enchanted Him...*
This paper analyzes Stanley Kunitz and Max Hayward's translation of Russian poet Anna Akhmatova's list poem *Three Things Enchanted Him...* from Russian to English in 1967. The focus is on the changes in poetic devices such as assonance, consonance, and anaphora when moving from the original to the target language. The analysis is supported through in-depth analysis of both the Russian and English versions with much respect paid to sound and tone.

Buck Taylor
Chemistry
1:30 - 3:30 Collins 201

Double-Teaming Drugs: Linking Antibiotics Using Molecular Tethers
Antibiotics impede the growth of bacteria by binding to important structures in bacterial cells, where they inhibit essential biological processes. Several types of antibiotics block the production of harmful proteins by binding to bacterial RNA, an information-carrying molecule. This project involves improving the binding effectiveness of two RNA-targeting antibiotics by linking them together using organic synthesis. A tether molecule is used to connect tetracycline and neomycin and the tether length is optimized to fit the binding site. The factors that impact the effectiveness of antibiotics will be discussed, including binding strength, causes of side effects, and development of bacterial resistance.

Jean-Jacques Têtu
Environmental Science
9:00 - 11:00 Collins 205

Sacred Trees: Indonesians, Forestry, and Environmental Movements
There are few better places in the world to investigate human-nature relationships than Indonesia, where environmental degradation occurs at an alarming rate and local cultures have a longstanding (and profound) relationship with their land. Two anthropological case studies will serve as introductions to Indonesian human-nature relationships: the Toba Batak people of Sumatra, and the Dayaks of Kalimantan. Both studies investigate environmentalist reactions to recently introduced modern forestry. Their cultural and economic situations have similarities and yet their approaches to environmental movements produce different results.

Katie Têtu
Sociology
9:00 - 11:00 Collins 201

Banishing Band-aids: An Evangelical Christian Mission's Permanent Solution to Homelessness
In this participant observation study of a Christian shelter I discovered sociological processes of control, conformity, and rebellion similar to those found within total institutions like prisons and mental asylums. However, there is one key difference between the Christian shelter and more traditional forms of total institutions: all inmates are stripped of their identities, but a select few construct new ones under the organization's strict guidance.

Jamie Timbrell

Classical Studies

1:30 - 3:30 Eaton 211

Catullus' Adoption of Callimachean Models

In his poetry Catullus adopted a Callimachean model of poetry to create a previously unseen lyric poetry. This project explores how Catullus propagated this new style of poetry through content, arrangement, technique, style, and even direct translations of Callimachus' work. Neither poet described the feats of ancient heroes and gods. Instead, they focused on small-scale personal themes. Although these poems seem quite superficial and centered on nothing more than everyday matters, they are accomplished works of art intended to evoke emotion and thought.

Yen Tran

English & Art History

12:30 - 1:30 M.O.H. Library, Hatfield Room

Self-Portraits by Nguyen Thi Chau Giang: The Changing Faces of Modern Vietnamese Women

Art by women has always been overshadowed or less well-known than works by men. Contemporary Vietnamese art especially has only recently become more prominent in the art scene. The works by a young female artist living in Vietnam named Nguyen Thi Chau Giang addresses femininity and feminine beauty. Nguyen's works also focus on the changing roles of women in Vietnam. Nguyen illustrates femininity and the changing role of women through those around her, but mostly through her own experiences.

Alexis Walker

Politics & History

9:00 - 11:00 Eaton 211

The Shadows of American Citizenship: How Congress' Understanding of the Nineteenth Amendment Impeded First Class Citizenship for Women

This paper examines the Congressional debates over the Nineteenth Amendment and places them in context of the events surrounding the passage and subsequent impact of women's enfranchisement. Congressmen interpreted the Amendment as not solely about women's equality and elevation to full citizenship; they were often driven by ascriptive and practical reasons that outweighed liberal claims. This paper focuses on four influences on Congress' understanding of women's citizenship: motherhood, racism, immigration, and democratic fitness. Having identified these four themes, this paper maintains that women's citizenship after obtaining the vote was a less clear expression of full citizenship and instead a more confusing array of first and second class elements.

Tamara Wik

Spanish & English

1:30 - 3:30 Eaton 211

Cervantes, the Heretic

This presentation deals with the heretical hidden meanings in Cervantes's classic chivalric novel, *Don Quixote*. Commonly thought to be a mockery of the chivalric tradition, *Don Quixote* will be presented as an expression of Cervantes's bitter and cleverly hidden sentiments toward both the Catholic Church and even God himself. A brief overview of the text will be given, but primarily, the presentation will delve into specific citations from the novel and explicate this hidden meaning, meant to encourage and inspire those who lived lives similar to Cervantes in 17th century Spain.

Lindsey Young

Biology

9:00 - 11:00 Collins 204

Project-Based Learning, After-school Academics, and Volunteering at Jane Goodall Environmental Middle School

The focus of my project was to study the methodologies and benefits of project-based learning, to compose a compilation of laboratory experiments that can be conducted after school hours, and to introduce the audience to volunteering experience at the Jane Goodall Environmental Middle School (JGEMS). JGEMS is a Salem charter school focused on achieving high academic standards through project-based learning (the mode of learning through interdisciplinary, long-term, and real world experiences and issues). Exposure to this form of instruction, coupled with the collection of after-school laboratories, improves skills and increases knowledge needed for effective teaching. Willamette students, particularly those interested in the natural sciences, should consider volunteering at this extraordinary institution.

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