ENAGEMENT:
COMMUNITY
CREATIVITY
CONNECTIONS

Friday, March 7, 2014
9:00am - 4:30pm
EMU
blogs.uoregon.edu/gradforum
#GSRF2014

Hosted by the University of Oregon Graduate School

The 2014 Graduate Student Research Forum is
dedicated to Sandra Morgen in recognition of her
contributions to graduate education at
the University of Oregon.

After serving the University of Oregon Graduate School for more than five years,
Sandra Morgen stepped down from her position as Associate Dean and Vice

Among many other contributions to the Graduate School, Sandi’s leadership was
instrumental in organizing the first Graduate Student Research Forum in 2010. To
show our appreciation for the hours and hours (and hours!) she has dedicated to
going this important event off the ground and ensuring its success year after
year, we are dedicating the 2014 Graduate Student Research Forum to Sandi.

Sandi recently returned to the Anthropology faculty and is slated to teach at both
the undergraduate and graduate levels this spring. Her research interests center
on the intersection of gender, race, class and public policy in the U.S., with a
particular focus on health, social welfare, and tax politics.

Photos courtesy of Robert Hill Long.
It is with great pleasure that we welcome you to the University of Oregon Graduate School’s fifth annual Graduate Student Research Forum, an event showcasing outstanding research from across campus and highlighting the critical role that graduate students play in our research enterprise.

Graduate student research is often at the cutting edge of discovery, and today you will encounter the intellectual work of more than 170 talented graduate students representing more than 50 disciplines from every college and school at the UO.

This event provides an opportunity to showcase graduate student research and creative expression on a grand scale. Throughout the day there will be more than 20 sessions, including panel presentations, literary readings, and dance, music and theatrical performances. Collectively, these sessions represent the diverse range of research being conducted by your colleagues every day in classrooms, laboratories, libraries, studios and performance spaces.

Additionally, more than 100 students will participate in this year’s poster session, which for the first time will offer $1,000 awards to winners in each of six categories. These awards have been made possible by the generous support of our Graduate Student Research Forum partners.

The theme of this year’s forum, “Engagement: Community, Creativity, Connections,” reflects the importance of sharing our research with new audiences. Today’s event is a true interdisciplinary intellectual exchange that opens the door for students to make new connections, spark fresh ideas and jump start their professional careers.

We want to thank everyone who made today’s event possible — our student participants, our industry partners, our faculty panel moderators, and each and every one of you attending today’s forum. Your participation is essential to creating a community of engaged and inspired graduate scholars who will generate the research discoveries of tomorrow.

Michael R. Gottfredson  
President  
University of Oregon

Kimberly Andrews Espy  
Dean  
University of Oregon Graduate School
**ENGAGEMENT: Community, Creativity, Connections**  
*2014 Graduate Student Research Forum*

Schedule of Events (locations in parentheses)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
<th>Speakers/Performers</th>
</tr>
</thead>
</table>
| **9:00—10:15am** | **Panel:** Academic and Personal Growth in Children/Adolescents (Maple Room)  
*Speakers:* Wendy Kincaide | Maple Room                | Aliza Olson | Allison Tackman | Kris Wright                                                                    |
|               | **Panel:** Crosscurrents: Environmental Humanities (Oak Room)  
*Speakers:* April Anson | Oak Room                  | Elizabeth Curry | Shane Hall | Taylor McHolm | Rachel Rochester | Stephen Siperstein | Veronica Vold | Robert Zandstra               |
|               | **Panel:** Language Acquisition and Bilingualism (Mills International Center)  
*Speakers:* Shaji Haq | Mills International Center | Kai Liu | Carla McNelly | Jimena Santillan                                                                 |
|               | **Panel:** Passive Aggressive Architectural Design (Gumwood Room)  
*Speakers:* Joseph Bucchi | Gumwood Room              | Annie Chiang | Lee Eckert | Ashleigh Fischer | Gabriel Greiner | Gabrielle Steffel | Karen Tse | Zachary Vacovsky               |
|               | **Creative Work:** Gender, Embodiment, and Narrative Function in Karlheinz Stockhausen’s Zungenspitzentanz for Solo Piccolo (Walnut Room)  
*Performer:* Sarah Pyle | Walnut Room               | 30 minute dance and music performance | *10:00—10:30                                                                           |
| **10:30—11:45am** | **Panel:** Health and Fitness (Oak Room)  
*Speakers:* Tahisha Buck | Oak Room                  | James Davis | Justin Fontenot | Robert Heinz                                                    |
|               | **Panel:** Addressing Inclusion and Inequality in Education (Maple Room)  
*Speakers:* Spirit Brooks | Maple Room                | Shauna Dyer | Martina Miles | Brandy Todd                                                    |
|               | **Panel:** Issues Related to Sex Education, Pregnancy, and Contraception (Mills)  
*Speakers:* Samantha Gammons | Mills                     | Miriam Lipton | 5. Senyo Ofori-Parku | Aleksandria Perez                                                   |
|               | **Panel:** Narrative Storytelling’s Role in Communicating Historical, Political, and Economic Realities (Fir Room)  
*Speakers:* Tobin Hansen | Fir Room                  | Stephen Murnion | Thomas Schmidt | Stephen Summers                                                |
|               | **Paired Perspective:** Human Interaction and Intervention with Nature (Gumwood Room)  
*Speakers:* Steven Leone | Gumwood Room              | Jessie Nance | *10:30—11:05am  |
|               | **Creative Work:** See the Wilderness (Walnut Room)  
*Performer:* Jacob Rorem | Walnut Room               | *Screening of a theatrical work | *11:00—11:20                                                                   |
|               | **Paired Perspective:** Environmental Issues and Identity (Gumwood Room)  
*Speakers:* Sena Choi | Gumwood Room              | Malori Musselman | *11:15—11:50am  |
|               | **Interactive Workshop:** Ideational Speed Dating: Generating Educational Creativity Through Conceptual Combination (Walnut Room)  
*Presenter:* Jay Breslow | Walnut Room               | *11:30—12:00                                                                         |
| **12:00—1:30pm** | **Poster Session and Event Reception (EMU Ballroom)**  
*Over 100 graduate students representing over 50 disciplines will participate in the poster session.*  
*Reception time with food and beverages.*  
*Vote for your favorite graduate student poster to determine the winner of the People’s Choice Award.* |
| **1:45—3:00pm** | **Panel:** Representing Communities and Histories from the Grassroots (Oak Room)  
*Speakers:* Delphine Criscenzo | Oak Room                  | Sonia De La Cruz | James Miller                                      |
|               | **Panel:** Climate Change (Maple Room)  
*Speakers:* Gordon Levitt | Maple Room                | Laura McWilliams | Sarah Praskievicz | Alanna Young                                                   |
|               | **Panel:** Changing the Professions: Media, Public Interest, and Technology (Fir Room)  
*Speakers:* Shannon Arms | Fir Room                  | Kelsey Cummings | Gregory Gondwe | Jonathon Henderson                                               |
|               | **Creative Work:** Exploring the Woodwind Quintet through Luciano Berio’s Opus Number Zoo (Walnut Room)  
*Performers:* Sam Golter | Walnut Room               | Laura Goben | Colleen White | Raquel Vargas-Ramirez | Eric Grunkemeyer | *Music performance and artist talk | *1:45—2:15 |
|               | **Paired Perspective:** Tools of Narration (Gumwood Room)  
*Speakers:* Kimberly Parzuchowski | Gumwood Room             | Tricia Rodley | *1.45—2:20pm  |
|               | **Paired Perspective:** Democratization (Gumwood Room)  
*Speakers:* Mehmet Celil Celebi | Gumwood Room             | Mu-Lung Hsu | *2:30—3:05pm  |
| **3:15—4:15pm** | **Panel:** Cultural Diversity, Equity, and Access: Center on Diversity and Community’s Award Winning Research (Oak Room)  
*Speakers:* T. Audrey Medina | Oak Room                  | Leilani Sabzalian | Francesco Somaini                                              |
|               | **Panel:** Portraits of Working Conditions and Environments for Women in Central America, South America, and Africa (Maple Room)  
*Speakers:* Sara Clark | Maple Room                | Naomi Kmetza | Amy Price                                                    |
|               | **Panel:** Interdisciplinary Investigations of User Behavior & Information Propagation in Social Computing Systems (Fir Room)  
*Speakers:* Nicole Lawless | Fir Room                  | Christopher Lee | Reza Motamed                                              |
|               | **Panel:** Avant Garde and Experimental Art (Walnut Room)  
*Speakers:* Katlyn Beaver | Walnut Room               | Adam Stanley | Julia Susana Gomez                                          |
|               | **Creative Work:** The Truth of Matin Country, Illinois (Gumwood Room)  
*Performer:* James Gill | Gumwood Room              | *Short story reading and artist talk | *3:15—3:45                                                                   |
|               | **Creative Work:** Ms. (Gumwood Room)  
*Performer:* Ying Xiong | Gumwood Room              | *Poetry reading | *4:00—4:25                                                                   |
Academic and Personal Growth in Children/Adolescents

9:00—10:15am
Maple Room
Panel Session
Moderator: Dare Baldwin, Psychology

Wendy Kincade – Conflict and Dispute Resolution
Influence of Dialogue on Bullying and Interstudent Cooperation
The goal of this research project is to answer the question, “Can dialogic principles and practices be effective in reducing bullying and increasing interstudent cooperation between 6th graders at a middle school in rural Oregon?” The research protocol includes pre- and posttest surveys completed by four 6th grade teachers on various observed student behaviors and an 8-week professionally led dialogue program delivered to four separate 6th grade classes (approximately 100 students in all).

Aliza Olson – Educational Methodology, Policy, and Leadership
New online tool for collaborative student learning
I introduce a new online tool to support student-centered learning that expands opportunities for building technology-supported collaborative learning environments. The main goals of the tool include fostering independent and collaborative skills in a creative process, fostering community awareness and global mindedness, increasing student engagement with learning, promoting 21st century skills, and promoting student opportunities to create projects that have real-world value. I address current research on student-centered technology-supported collaborative learning models. The online tool is designed to address the needs and opportunities observed by Sugata Mitra and his colleagues during their research on student-centered learning models supported by technology.

Allison Tackman – Psychology
Development of Conscientiousness During the Transition from Late Childhood and Adolescence
Previous research has shown that conscientiousness increases from young adulthood to old age, but the development of conscientiousness prior to young adulthood has received less attention. In the current study, I examined average change and individual differences in change of conscientiousness in a sample of children followed longitudinally from ages 10 to 16 years. I also examined correlations between conscientiousness and academic and social variables. Results revealed a significant quadratic trend in the growth trajectory of conscientiousness: on average, children decreased in conscientiousness from ages 10 to 13 and then increased from ages 13 to 16, replicating previous cross-sectional findings. However, there was significant variability around this average trajectory. Multivariate growth curve analyses revealed that increases in conscientiousness were associated with improvement in grades and increases in children’s engagement with school. Changes in conscientiousness also were associated with changes in peer support and peer delinquent behavior. Previous research has demonstrated the benefits of conscientiousness in adulthood; the current research demonstrates that benefits of conscientiousness begin to occur much earlier in life.

(abstracts continue on next page)
Crosscurrents: Environmental Humanities

9:00—10:15am
Oak Room
Moderator: Paula Wright, English

Bringing together a group of scholars dedicated to pursuing interdisciplinary work in the Environmental Humanities, “Crosscurrents” will feature students from the English Literature and Environmental Science, Studies, and Policy programs. The roundtable may also serve as a way to galvanize other interested students and faculty to join this growing scholarly community at Oregon (represented here in part by members of the newly-formed Environmental Humanities RIG).

April Anson – English
Many recent calls for papers in the Environmental Humanities have circulated around the politics of genre in the context of global climate change. Namely, in the face of such sweeping shifts in temperatures, energy policies and transnational investments, what kinds of writing are no longer possible? Conversely, what kinds of writing are urgently necessary? This presentation will examine the ways in which biopolitical thought is often assumed in notions of genre; additionally, it will consider how previous articulations of generic resistance reorient and reframes resilience strategies imperative in a climate change context.

Elizabeth Curry – English
Elizabeth will present on how Victorian landscape literature initiated a cross-country environmental homogenization that persists today. Laws in the twentieth century became a commodity fetish that conceals both the labor that went into their creation and the labor that continues to keep them green. She investigates how literature instigates human restrucutures (conservation and destruction) of nature. That we try to apply structure to nature is an inherently flawed concept and she approaches it from that angle.

Shane Hall – Environmental Science, Studies, and Policy
Ecocriticism grounded in environmental justice concerns has inadequately recuperated texts written before 1950 by authors of color and women into the ‘environmental’ literary canon. I argue the emphasis on contemporary authors of color and women in the environmental literary canon feeds and is fed by the myth of the “sudden emergence” of the environmental justice movement which suppresses readings of earlier texts’ environmental justice concerns. I offer a ecocritical reading of Jean Toomer’s Cane (1923) as an example of the kind of criticism that might disrupt this dialectic and expand the confines of the environmental canon to include early twentieth century environmental justice literary representations.

Taylor Mcholm – Environmental Science, Studies, and Policy
More Fatal Contiguities
Photographer Chris Jordan’s Midway: Message from the Gyre (2009-current) takes as its subject the decomposing bodies of Albatross chicks on Midway Island. I make the argument that Jordan’s photographs employ what Hsuan Hsu calls “environmental metonymy” by focusing on the contiguous relationship between the birds and their undigested, fatal meals. By understanding these fatal contiguities, we can more immediately collapse the boundary between human and non-human environments.

Rachel Rochester - English
With over 20,000 different species worldwide and endemic to every continent except Antarctica, bees are nearly ubiquitous. Perhaps because of this, the bee is one of the most prevalent symbols across global literature, operating in wildly disparate metaphorical ways in various societemtemporal contexts. In The People of Paper, Salvador Plascencia both catalogues the bee as symbol across time and cultures and uses the bee to symbolically parallel the position of Mexican immigrants within mainstream American culture. More importantly, however, Plascencia also strives to demonstrate the importance of allowing the bee to be seen for itself and its critical role in ecosystemic health. By carefully analyzing the deployment of the bee throughout Plascencia’s novel, I aim to show how depictions of bees are evolving as colony collapse disorder and environmental degradation take a more prominent place in the public imaginary, and how the unique symbolic history of the bee can be used to further awareness of these same environmental issues.

Stephen Siperstein – English
Teaching as Research: Engaging Emotions in the Climate Change Classroom
I discuss the benefits and pitfalls of teaching climate change in the humanities, specifically in undergraduate first-year courses, and speak to the importance of bringing emotions to the forefront, and make them an object of inquiry in their own right, in how we engage students with climate change in such a course. Furthermore, I use these pedagogical observations to gesture towards a larger argument about the role of the environmental humanities as a field of research and its place in the University.

Veronica Vold – English
Images of Environmental Justice: Ester Hernández’s Sun Mad and the Chicano@ Poster Movement
This paper analyzes Ester Hernández’s acclaimed Sun Mad poster as it contributes to the visual aesthetics of environmental justice. I contend that Chicano@ protest posters depart from the visual codes of early 20th century conservationism as well as the whitewashed iconography of mainstream environmentalism in the 1970s. In particular, I argue that Sun Mad complicates environmental thinking about embodiment, labor, and ethical consumerism. Hernández delivers a devastating critique of the toxic conditions of migrant labor in the American Southwest by translating the icon of the white-skinned Sun-Made Raisin girl into a haunting Dia de los Muertos skeleton. By examining the poster’s striking visual grammar and composition, I assert that Sun Mad articulates a late-20th century ethic of environmental equity.

Robert Zandstra – English
Robert will discuss the intersection between secularization and changing religious practices and motivations on the one hand and changing attitudes toward “the environment” on the other. He will also address how that is reflected and dealt with in 19th century U.S. literature.

(Abstracts continue on next page)
Shaji Haq – Special Education and Clinical Sciences, School Psychology
Massed Versus Distributed Practice for Acquiring Tacts and Textual Behavior With Typically Developing Children
Examination of the efficiency of massed and distributed practice can provide educators with an indication about how to allocate time towards educational activities. I evaluated the effects of massed and distributed practice on the acquisition of tacts and textual behavior in typically developing children. I used an adapted alternating treatments design embedded within a multiple probe design to compare the outcomes of massed practice (i.e., consolidating all practice opportunities during the week into a single session) and distributed practice (i.e., distributing all practice opportunities into four sessions during the week) on acquisition of textual behavior in English, tacting pictures of common nouns in Spanish, and responses to English text in Spanish. I also examined correct responses during probes occurring 48 hours after training each week. The results indicated that distributed practice was a more effective and efficient training procedure. Maintenance data collected up to 4 weeks after training also indicated that the participants consistently produced higher levels of correct responses for targets that were trained in the distributed format. Thus, distributed practice was a more efficacious training procedure overall. I also discuss implications for practice and potential areas for future research.

Kai Liu – Linguistics
Using Gamification in Chinese Vocabulary Teaching: A Gamified University Chinese Course for Advanced Students in the United States
For advanced Chinese learners in the United States, acquiring formal, genre specific advanced vocabulary can be very challenging. How can teachers make the learning process more fun, engaging, and efficient? A gamified university 400 level course might be the solution. Unlike the regular 400 level advanced Chinese course, this gamified course will include a variety of game elements such as experience points, badges, leaderboards, levels, quests, jeopardy style games, role playing, and reality games. A Google site will be created as a course management platform where students can see their progression (e.g., points or levels) and use Wiki to collaborate and share their learning results. In addition to the game elements, language learning strategies also will be taught. Chinese word formation principles will be introduced systematically. Students will learn vocabulary through a corpus-based approach. Students will look for example sentences generated by native speakers of Chinese in a corpus, summarize the usages themselves, and share them on Wiki. With the advanced vocabulary learned in this course, students will be asked to complete quests (real word tasks) such as creating surveys, interviewing native speakers, and debates. Mobile apps (e.g., “Aris”, an alternate reality game app) might also be used as quests.

Carla McNelly – Education Studies
Language Learning Perspectives and Experiences of Stakeholders in the Community of Flowers Bay, Roatan
Richard Ruiz (1984) and Colin Baker (2011) used a framework of language as a problem, right, and resource to describe how all three viewpoints continually circle the issue of bilingual education in today’s society. No matter where we look within the U.S. public school system, we find the push-pull tensions between language as a problem, right, and resource. The current national trend is assimilation versus pluralism. In January 2013, President Obama stated in his State of the Union address that immigration reform needs to include learning English as a path to citizenship. The assimilation approach or support of the dominant hegemonic culture does not support maintenance of heritage languages, cultures, or histories within U.S. bilingual education programs. However, education programs that maintain bilingualism in the student’s first and second languages throughout the child’s educational experience support cultural and sociopolitical pluralism. When looking for pluralistic models of bilingual education we may be best served to look globally for examples. The overarching global perspective on bilingual and multilingual education supports literacy in the student’s first, second, and possibly third language to attain sociopolitical pluralism. I specifically analyzed parental discourse in a public elementary school in Flowers Bay, Honduras where the mission of bilingual education is a pluralistic society. I identified the language learning perspectives and experiences of parents through the lens of language as a problem, right, and resource of stakeholders in their local community.

Jimena Santillan – Psychology
Bilingual Advantage in Neural Mechanisms for Selective Attention: An Event-Related Potential Study
Researchers have proposed that when bilingual individuals want to produce one of the two languages they speak, both language systems get activated in the brain. The nontarget language must be inhibited to be able to produce the target language, which exercises the ability to inhibit interfering information. This raises the question of whether the practice in inhibitory control that bilingualism affords may translate into benefits that extend beyond the language domain. In previous research, bilingual persons outperformed monolingual persons in tasks that required inhibiting irrelevant information, which has led to the claim that bilingual persons enjoy an advantage in inhibitory control. In the present study, I employed the event-related potential (ERP) methodology, which allows quantification of brain function with excellent temporal resolution, to determine whether there are differences between English monolingual persons and English-Spanish bilingual persons in very early stages of inhibitory control processing. Participants completed an auditory selective attention ERP task in which they listened to two different narrative stories presented simultaneously and were asked to attend to only one story while ignoring the other. We recorded and compared their brain responses to the exact same sound probes when they appeared on the attended story to when they appeared on the unattended story. Compared with the monolingual persons, the bilingual persons had a greater difference between their brain responses to the same sound probes when attended versus when unattended, suggesting that these bilingual persons were more efficient at enhancing the signal of the attended story and inhibiting the signal of the distracting story.
Passive Aggressive Architectural Design

9:00—10:15am  Panel Session
Gumwood Room
Moderator: Alison Kwok, Architecture

Annie Chiang – Architecture
Gabrielle Steffel – Architecture
Karen Tse – Architecture

The Stellar Study
The general nature of the study is to evaluate and monitor energy usage and indoor environmental quality in buildings that are built to the Passive House and Earth Advantage standards. The case study will be Stellar Apartments in Eugene, Oregon. Stellar Apartments consist of a 12 building complex, with one apartment building built to the PH standard and all the others to Earth Advantage. These two apartments buildings (each with 6 units) will be the focus of study and compared over the next 2 years, with measurements taken on-site using Onset’s HOBO Dataloggers and gathered from the e-monitoring system. Monthly reports will be created, Powerpoint presentations, and annual reports to the city/owners. Work will be done with St. Vincent DePaul, Miele Construction, Bergsund Delaney Architects.

The objective of this study is to monitor and evaluate energy usage and IAQ (Indoor Air Quality) data in the two buildings at Stellar Apartments for a period of two years and produce a final report that summarizes the findings. The purpose of the final report will be to evaluate the value of pursuing the Passive House approach for multi-family projects.

Gabriel Greiner – Architecture

Lifecycle assessment comparisons of super-insulated passive house walls
Passive House is a voluntary environmental building certification based on the simple concepts of designing a structure to be insulated enough and air-tight enough to nearly eliminate the buildings heating and cooling load. This standard encourages the construction of super-insulated wall assemblies that are much thicker than traditional building envelopes. This study will explore the embodied impacts of super-insulated wall assemblies. Is this the best use of materials and resources, or could a systematic evaluation lead to clues towards developing a best practice?

Joseph Buccini – Architecture
Lee Eckert – Architecture
Ashleigh Fischer – Architecture
Zachary Vacovsky – Architecture

The Taccogna House Study
Our proposal examines the indoor environmental qualities of the Taccogna Residence, a passive house in Dundee, Oregon. The Passive House is a relatively new building strategy that embodies a high level of design with an extremely low level of energy consumption. Our study looks specifically at the areas of: thermal comfort, light quality, energy use, indoor air quality, and acoustic quality of the space.

We are interested in analyzing the energy efficiency of the residence and recording our findings. We are addressing this topic due to a growing interest in building performance. The process will not only help us understand the performance of Passive Houses, but also will reveal areas within the Passive House Standard that need improvement.

Gender, Embodiment, and Narrative Function in Karlheinz Stockhausen’s Zungenspitzenzantz for Solo Piccolo

10:00—10:30am  Dance and Music Performance
Steffel – Architecture
Karen – Musicology and Music Performance

Sarah Pyle – Musicology and Music Performance
In both modern and more traditional classical music, instrumental performers are not usually required by a composer to incorporate costume, theater, or dance into a performance. An exception to this normality is the piece that I am presenting today, Karlheinz Stockhausen’s Zungenspitzenzantz for solo piccolo, which is a small excerpt from his seven-day opera, Licht. Stockhausen’s belief in the power of visual cues to influence an audience’s perceptive capabilities is evident in this piece by the integration of all of the above techniques with a solo performance. I would argue, however, that comprehension of this piece is incomplete without a deeper understanding of the ways that the musician’s gendered performance affects the way that the narrative is related to an audience in the excerpted scene. Following my live performance of this piece, I will hold a brief discussion on the ways in which motion, narrative, and music interact to create a startlingly gendered concept of death in the opera.

Artist’s Statement
Sarah Pyle is pursuing concurrent master’s degrees in flute performance and musicology at the University of Oregon. She holds a B.A. in environmental studies from Oberlin College and a B.M. in flute performance from Oberlin Conservatory, where she studied flute with Michel Debost and Kathleen Chastain. Sarah is currently a flute student of Molly Barth, and she specializes in contemporary flute performance. When she isn’t engaging in various contemporary music ventures around Eugene, she can be found working on her thesis about Renaissance portraiture of women musicians.
**Tahisha Buck – Human Physiology**  
**Neurovascular Control Following Exercise in Humans**  
Sympathetic vascular transduction is blunted and the arterial baroreflex curve is reset to a lower operating pressure after dynamic large muscle mass exercise in humans. However, whether these neural adaptations contribute to sustained postexercise vasodilation in small muscle mass exercise in unknown. The purpose of this study was to determine whether cardiovagal, vascular, and integrated baroreflex sensitivity and sympathetic neurovascular transduction were altered following dynamic knee extension (DKE) exercise. I hypothesized that sympathetic vascular transduction would be reduced after DKE, the arterial baroreflex would be reset to a lower operating point, and baroreflex sensitivity would be enhanced. Eleven healthy, college-age participants completed one-leg DKE exercise for 1 hour at 60% of peak power. There was no difference in transduction across time in either the exercised (P = 0.46) or rested (P = 0.61) leg and no overall effect of exercise (P = 0.46). There was no difference in integrated baroreflex sensitivity across time (P = 0.77). Cardiovagal baroreflex sensitivity increased 25% relative to baseline and had not recovered at 60 minutes postexercise (P = 0.02). Vascular baroreflex sensitivity was reduced in both the exercised (P = 0.05) and rested (P = 0.09) leg. There is likely no effect of small muscle mass exercise on postexercise sympathetic transduction, the carotid baroreflex set point, or integrated baroreflex sensitivity. Cardiovagal baroreflex sensitivity was augmented and vascular baroreflex sensitivity was reduced after exercise, which has not been previously shown after small muscle mass exercise.

**James Davis – Human Physiology**  
**Breathing 100% O2, but not 40% O2, during Exercise Reduces Blood Flow through Intrapulmonary Arteriovenous Anastomoses**  
Blood flow through intrapulmonary arteriovenous anastomoses (IPAVA), detected using saline contrast echocardiography, is known to increase during exercise when breathing room air but is reduced or eliminated during exercise when breathing a fraction of inspired oxygen (FiO2) = 1.0. Although the mechanism(s) for this hyperoxia-induced reduction in blood flow through IPAVA remain unknown, it is also unknown whether FiO2 values of <1.0 have the same effect. Thus, we sought to determine the effects of various hyperoxic FiO2 values on blood flow through IPAVA. Five participants (four male) without a patent foramen ovale completed five 4-min bouts of constant-load cycle ergometer exercise (males, 250 W; females, 175 W), breathing at FiO2 = 0.21, 0.40, 0.60, 0.80, and 1.0 in a random, balanced order. Each exercise bout was preceded by 15 min of rest breathing the prescribed FiO2 to allow for complete gas partial pressure equilibration. Blood flow through IPAVA was detected using saline contrast echocardiography at rest and 3 min into each exercise bout. Bubble scores at FiO2 = 0.21 and 0.40 did not differ from one another and were significantly greater than scores for all other FiO2 values. These data suggest that hyperoxia-induced decreases in IPAVA blood flow occur in a dose-dependent manner.

(Abserts continue on next page)
Addressing Inclusion and Inequality in Education

10:30—11:45am
Maple Room
Panel Session
Moderator: Lisa Mazzei, Education Studies

Spirit Brooks – Critical and Sociocultural Studies in Education
Fixing the Leaking School-to-College Pipeline: Advancement via Individual Determination and the Role of Teachers in High School Intervention Programs
In the United States, the idea that all public school students will have equal access to a college preparatory curriculum and advance through their merit from high school to college is a myth. As students move through primary and secondary school to college, the number of immigrant, ethnic minority, and low-income youth who continue through high school to college shrinks disproportionately. The high school-to-college transition is a critical process and when successfully navigated establishes a firm foundation for a student's continued educational progress and success. Intervention programs that partner with U.S. public schools are important resources for raising the achievement of underrepresented students, particularly in middle and high school, and provide guidance to students as they progress through the educational system. For underrepresented minority and/or low-income students, intervention programs such as the Advancement via Individual Determination (AVID) program can help compensate for unequal opportunities in learning and access to college knowledge and resources. These intervention programs are designed to help underrepresented students build the social, educational, and cultural capital needed to succeed. This study explores the role of AVID teachers as purveyors of social, educational, and cultural capital for underrepresented students.

Shauna Dyer – Sociology
Late to School
Inequality continues to rise in the United States. Opportunities for economic and social mobility are increasingly limited and narrow. Investments in human capital through education remain the most effective means of moving up the socioeconomic ladder. In recent years, low-income parents have been returning to school in the hopes of gaining skills that will lead to better employment opportunities, but these students face greater obstacles than do traditional college students. What is the role of the government in equalizing opportunity and access to education? Specifically, do public transfers aid or discourage continuing education? Using data from the Fragile Families and Child Wellbeing Study, I examine the effect of social welfare programs on the educational attainment of disadvantaged parents. The Fragile Families and Child Wellbeing Study is a longitudinal study of nearly 5,000 children born in large U.S. cities between 1998 and 2000 (roughly 75% of whom were born to unmarried parents). The Study consists of interviews with both mothers and fathers at birth and again when children are ages 1, 3, 5, and 9 years. The second part of my research examines the outcomes of education for disadvantaged parents. Although the social and economic benefits of education have been repeatedly demonstrated for young people, do older adults with children realize similar types of returns?

(Addressed continued on next page.)
Issues Related to Sex Education, Pregnancy, and Contraception

10:30—11:45am  Panel Session  Moderator: Kristen Yarris, Int’l Studies

Samantha Gammons – International Studies
Parental Expectations and Educational Attainment: Girls as Single Children in Urban China
I explored the links between gender, educational attainment, and family expectations in modern China. A traditionally patriarchal society, China has a gender imbalance that has equalized significantly since 1949. One of the most striking equalizing factors has been access to and application of higher education. In China’s cities, where the majority of children are products of the one-child policy, young men and women alike experience heightened pressure from their families and from themselves to improve their circumstances, typically through the venue of education. In the West, the news media’s bias against the one-child policy and its implications (particularly its relationship to China’s gender gap) has overshadowed the individual experiences of many Chinese people. My research highlights the voices of young Chinese women who may otherwise be grouped into a larger category of “Chinese singletons,” a category that identifies only their family’s adherence to the one-child policy. The “singleton” label may erase many other aspects of their identities as Chinese women, daughters, granddaughters, urban residents, and as is the case of my study collaborators, international students at the University of Oregon. My findings will include recommendations for social science students studying complex, intersectional issues such as China’s one-child policy and provide information and recommendations for university programs and support services upon which this growing international population rely.

Miriam Lipton – Russian, Eastern European, and Eurasian Studies
Sex Education and Contraception in the Soviet Union and Russia
The Soviet Union had the highest abortion rate in the world before its collapse in 1991, accounting for 10–20% of the world’s total abortions. The official data indicate that women had 1.2 abortions for every live birth, but in some regions this number was actually as high as 7 abortions per live birth. Since 1991, Russia has been among the world’s leaders in abortion rates. Statistically, Russia has also had an unusually low rate of acceptance of contraception, and sex education has been virtually nonexistent. The population in Russia has been declining at a rate higher than that of its European counterparts. All of these unusual phenomena are intertwined in the history of family planning, sex education (and the culture surrounding it), and birth control during the Soviet Union and the contemporary efforts to combat these issues that have arisen after the collapse. I will look at the historical context of birth control and sex education and analyze the situation in modern Russia in terms of reproductive health and sex education programs.

(Ababstracts continue on next page)

Issues Related to Sex Education, Pregnancy, and Contraception

10:30—11:45am  Panel Session  Moderator: Kristen Yarris, Int’l Studies

S. Senyo Ofori-Parku – Communication and Society
Purity and Danger in the HPV Debate: A U.S. Newspaper Coverage Study
The latest statistics from the Centers for Disease Control and Prevention (CDC) indicate that 11,818 women in the United States were diagnosed with cervical cancer in 2010, and 3,939 of these women died. The sexually transmitted human papillomavirus (HPV; which has a 45% infection rate in the United States) is a major cause of cervical cancer, although most people who acquire HPV infection experience no symptoms. However, public response was intensely divided following the U.S. Food and Drug Administration approval of an HPV vaccine (Gardasil) and the CDC’s recommendation for universal HPV vaccination among adolescent and young women. Opposition to this recommendation challenged Gardasil’s effectiveness and were concerned about unanticipated (or undisclosed) adverse effects. Opponents also claimed that the vaccination would increase rates of teen pregnancy. Advocates of vaccination dismissed these arguments as motivated by animosity toward violating traditional gender norms. A plausible response to this polarization would be to communicate with, educate, and engage people so they can understand the problem and appreciate the prescribed policy action. Although providing scientific evidence is important in communicating science, health, environmental, and technological risks, people’s responses to such communications are often cultural and political. Based on reports in selected newspapers in the United States, I analyzed how the HPV vaccination controversy has evolved in the United States from 2003 to 2013. I examined the primary definers and adversaries of the debate and how cultural worldviews manifest in the debate and offer some suggestions for media communications and deliberations on this issue.

Aleksandria Perez – Counseling Psychology and Human Services
Gender/Racial Comparisons of Maternal Sexual Communication and Perceived Maternal Disapproval of Adolescent Risky Sexual Behavior
Greater frequency of maternal sexual communication when combined with maternal disapproval of early sexual involvement can protect adolescents from engaging in risky sexual behaviors. I used national longitudinal data to examine gender and racial-ethnic group variations in this effect for three separate sexual risk outcomes: multiple sexual partners, sexually transmitted infections, and inconsistent condom use. Data from waves 1 and 3 of the National Longitudinal Study of Adolescent Health (Add Health) were collected 6 years apart from adolescents who were 12–16 years old at wave 1. The participants were 71% White, 13% African-American, and 11% Hispanic youth and had a near equal gender distribution (53% female). The protective effect of maternal sexual communication in the context of maternal disapproval was significant for only one outcome: the number of lifetime sexual partners. Gender group comparisons revealed that this interactive effect was marginally significant for boys (F(2, 126) = 2.52, p = 0.08) but not for girls. Similar variations were observed in racial-ethnic group comparisons, where the effect was strongest for African-American youth (F(2, 126) = 3.71, p = 0.03) and marginally significant for Hispanic adolescents (F(2, 126) = 2.61, p = 0.07). The implications of these findings are relevant to prevention and intervention programs centered on adolescent risky sexual behaviors. Significant differences in gender and racial-ethnic group outcomes question the effectiveness of a “one size fits all” intervention model.
Narrative Storytelling’s Role in Communicating Historical, Political, and Economic Realities

10:30—11:45am   Panel Session
Fir Room
Moderator: Lauren Kessler, Journalism & Communications

Tobin Hansen – Anthropology
Ethnography of “Criminal Alien” Deportees in Mexico
Ethnographic representation of “criminal alien” deportees presents unique challenges. Individuals born in Mexico who have been incarcerated in the U.S. are vulnerable to broad societal condemnation in times of nativist and anti-offender discourse. Their stories are contrasted with those of “good immigrants.” I explore approaches to maintaining the dignity of “criminal alien” deportees in written ethnography. Each year, tens of thousands of people (e.g., 37,384 in 2011) are forcibly repatriated by the U.S. government to Nogales, Sonora, Mexico. Among them are those removed from the U.S. for criminal offenses and deported to Mexico’s northern border. A few, such as the individuals profiled here, have lived the majority of their lives in the U.S. and thus must adapt to a country of which they have no memory. They struggle to carve out new lives in Nogales, far from family, with limited Spanish skills and few job prospects and are targets of organized crime and police. In this presentation, I focus on how anthropologists tell difficult stories and highlight how criminal offenses complicate the way immigrant narratives are understood.

Stephen Murnion – East Asian Languages and Literatures
Discarded on an August Road: A Textual and Ideological Consideration of Post-Bubble Japanese Literature
Although Japan emerged as an economic powerhouse from the ashes of World War II, the inherent instability of its financial system led to a disastrous and rapid deflation of its economic bubble in the early 1990s. Unemployment rates increased, newly graduated high school and university students were unable to find gainful employment, and faith in the fossilized relationship between politicians and capitalist entrepreneurs evaporated. In the following decade, successive slumps in the local and global economies barred any meaningful recovery from these hardships, resulting in the birth of a generation of lower class poor. I aim to place the Japanese novel Hachigatsu no rojō ni suteru (Discarded on an August Road), written by Itō Takami and winner of the prestigious Akutagawa Literary Prize in 2006, within these historical sociocultural, economic, and political contexts and argue that this novel should be interpreted as an artifact functioning both as an exploration of interpersonal relationships contingent upon and ultimately collapsed by employment within a late capitalist society and as a distinct unit of ideological defiance against the economic system that was instrumental to the novel’s production. This process—textual analysis first and then contextualization within the contemporary sociocultural, economic, and political framework in which it was produced and is consumed—emphasizes the continuing struggle of lower class laborers in Japan still reeling from the economic disaster of the 1990s.

(Abstracts continue on next page)
Human Interaction and Intervention with Nature

10:30—11:05am
Paired Perspective
Gumwood Room

**Steven Leone – History**

**Death and Nature in the Early American Republic**

In this presentation, I explore the physical and spiritual relationship among New Yorkers, corpses, and graveyards from 1790 to 1820. By examining selected burial spaces, mortuary statistics, immigration patterns, spiritual texts, and the physical spaces themselves, I demonstrate that urban Americans maintained a close and intimate connection to the natural world through their dead during the early years of the Republic. More simply, I argue that a key way city dwellers understood nature and natural processes was through death and dying. Tracing late 18th and early 19th century burial practices through three decades required an integration of social, urban, and environmental history. To evaluate urban death from the bottom up, I examined religious journals, magazines, and newspapers and found links between religious ideology and everyday burial practices. In my examination of graveyards located primarily in New York City, I utilized city government data, census reports, and Board of Health records to provide the urban context for my research. To connect this social and urban history to the environment, I also examined landscape journals, cemetery maps, and churchyard images as evidence of the concept of “the nature of death,” which I define as the material reality of preparing bodies for burial, actively mourning in graveyards and cemeteries, and interacting with decomposing dead bodies across a wide variety of urban spaces.

**Jessie Nance – English**

**“Civil Wilderness”: Colonialism, Labor, and Pastoral Landscape in Philip Sidney’s New Arcadia**

This case study was conducted to examine the colonial undertones in Philip Sidney’s use of pastoral in the New Arcadia. Looking primarily at the interaction between Sidney’s characters and his depictions of pastoral environments, I argue that Elizabethan representations of idealized pastoral spaces change as pastoral tropes, such as the promise of a golden world, are used by English explorers and merchant companies to promote the New World project. Authors of the promotional texts use pastoral tropes to show readers the fruitful reward that can come out of England’s investment of labor and money in the promising but uncultivated environment of the Americas. I argue that literary representations of idealized landscapes respond to this use of the mode by depicting pastoral texts that are less concerned with indolent and leisurely shepherds enjoying benign nature and are more focused on how characters influence, build, and maintain the environment around them. By including georigic tropes, such as labor and the passing of time, within the pastoral landscape, authors such as Sidney demonstrate the ways in which the burgeoning colonial project influences English attitudes toward environment, land ownership, and labor. Ultimately, these pastoral-georigic texts illustrate how the beginning of active English colonial enterprises altered understandings of landscape, labor, and genre. When the creation and maintenance of ideal nature is dependent upon proper human intervention rather than persisting effortlessly, courtesy of divine benevolence, the land and natural resources belong to those who can bring the uncultivated environment to its supposedly rightful fruition.

See the Wilderness!

11:00—11:20am
Creative Work (Theatrical Performance)
Walnut Room

**Jacob Rorem – Theatre Arts**

**Summary of Theatrical Performance**

When we designate a place as “wilderness,” how does that newly created border affect our definition of the wild? Ultimately, this piece seeks to make visible what is often invisible: the border between the wild and ourselves and its effects. Rather than merely draw a line in the dirt, I have brought to life two definitions often given for wilderness—natural spectacle and sacred temple—and reduced those definitions to recognizable images: the carnival sideshow and the gospel revival. The huckster and preacher each invite the viewer to enter the simple white gateway that marks the entrance to the Cummins Creek Wilderness. The characters have labeled it as exotic and holy, designated it according to the value it provides humankind—it is fixed and bounded. Their views are not false, merely dependent on a division between nature and culture, the wild and civilization. Borders, by definition, define what is inside and what is outside, but can we ever separate ourselves from the wild? What happens when we try? The text is taken from passages about wilderness written by Henry David Thoreau, John Muir, Theodore Roosevelt, Sigurd Olson, Robert Marshall, and the Congressional Wilderness Act of 1964.

**Artist’s Statement**

I am a student in the Theatre Arts department set to graduate in Spring 2014. As a scholar, practitioner, and teacher I am interested in the stories we tell in order to make sense of the world and our place in it. The power of theatre to reveal and shape these stories has captured my fascination for years. My research interests include site-specific performance, the relationship between theatre and space/place, issues of sustainability and ecology, nature vs. culture, theatre for youth, dramaturgy, and pedagogy. Here at the University of Oregon I’ve directed a collection of Harold Pinter shorts for the Pocket Playhouse, served as dramaturg for University Theatre’s Breaking the Code in Spring 2013, and directed for Mad Duckling Children’s Theatre. This coming summer I will be running Mad Duckling and (hopefully) preparing to begin a PhD in Theatre.

23
Environmental Issues and Identity

11:15—11:50am  Paired Perspective
Gumwood Room

**Sena Choi – Political Science**
**Forging a New Path as a Global Leader: South Korean Climate Change Policy in the New Century**

South Korea adopted a very aggressive climate change policy in Copenhagen that represented a dramatic change from its prior foot-dragging, even as many other major participants, including Canada, Russia, and Japan, backed away from their previous stances on climate change issues. As one of the largest greenhouse gas emitters, South Korea joined other developing countries in the Kyoto Protocol in 1997 without any binding responsibilities. However, in 2009, South Korea declared low-carbon, green growth as the national vision and pledged its 2020 mitigation goal of 30% below the 2009-based business-as-usual projection. Why did South Korea change its climate change policy so drastically and quickly, and what factors best explain these policy changes? Neither increasing income nor economic benefits can explain this phenomenon. Likewise, international institutions such as the United Nations Framework Convention on Climate Change cannot explain South Korea’s big step toward addressing climate change issues while many other countries have gone in the other direction. In reality, changes in Korean identity and norms regarding environmental protection have led South Korea to adopt stronger climate change policies.

Malori Musselman – Political Science
**Prayer as Protest: Evangelical Environmentalism**

Recent scholarship has focused on particular types of evangelical movements in the United States, particularly those emanating from the Religious Right, Christian Coalition, Moral Majority, or any number of more fundamentalist alliterations of evangelical belief. Beyond these stereotypical understandings of evangelism in the United States lies variation at an important intersection of religion, science, and local and global politics. I discuss evangelical environmentalism and its unique position outside of the evangelical and environmentalist norms and the importance of such groups in local political arenas.

Ideational Speed Dating: Generating Educational Creativity Through Conceptual Combination

11:30—12:00pm  Interactive Workshop
Walnut Room

**Jay Breslow – Critical and Sociocultural Studies in Education**
**I Navigate How I’m Able: Disability Studies in Higher Education**

Ideational Speed Dating (ISD) is a community-based exercise in conceptual combination designed to generate ideas for emergent educational ideas. Creativity happens when people use their knowledge and experience to generate novel and useful ideas. How creativity happens, while not mysterious, is also not well understood. This will be a participatory activity in which people combine their individual knowledge and experience with that of others to imagine possibilities for what can be taught, how it can be taught and who can teach it. The activity challenges the idea that only a select few are creative and demonstrates the power of community to imagine novel and useful ways to generate curricular and pedagogical ideas.
Graduate Student Research Forum Reception & Interdisciplinary Poster Session

12:00—1:30pm
EMU Ballroom and Lobby

This year’s poster session includes, for the first time, a contest with prizes made possible by a number of generous partners. All poster presenters have been grouped under five themes. The winner in each group will receive $1,000 to be used for professional or academic development. Visitors are also encouraged to text their vote for their favorite poster to determine the People’s Choice Award winner.

The poster contest themes are as follows:
- Information and Physical Sciences
- Life Sciences
- The Professions, Social Sciences, and the Arts
- Education and Development
- Campus Contribution and Career Development (See page 65)

Abstracts, organized by last name, can be found on the following pages.

After 1pm:

Brief Remarks
Kimberly Andrews Espy
Vice President for Research and Innovation and Dean of the Graduate School

Awards Presentation
President Michael Gottfredson
President of the University of Oregon

The following abstracts are arranged in alphabetical order by the student’s last name.

Fahad Alreeshed – Special Education
Alternative Methods for Synthesizing Single Subject Research
Historically, the synthesis of single subject design has employed visual inspection to determine the significance of results. However, current research is supporting different techniques that will facilitate the interpretation of these intervention outcomes. These methods can provide more reliable data than employing visual inspection as the only source. This presentation includes 10 nonregression effect sizes: PND, PAND, PEM, PEM-T, MBLR, PZD, IRD, PDO, NAP, and PNCD. Among other advantages, nonregression effect sizes are easy to calculate and interpret. The objectives of this presentation are to (a) compare the different techniques presented, (b) compare the benefits of utilizing these techniques over visual inspection, (c) determine the limitations of the techniques being reviewed, and (d) provide evidence for combining traditional statistical measures with visual inspection.

Douglas Anderson – Chemistry
Molecular Evolution of the GK domain
Protein native states are ensembles of dynamically interconverting conformations, but how are dynamics related to function? We addressed this question in an evolutionary context by following protein dynamics along the trajectory from guanylate kinase (GK) enzyme to domain. A dramatic functional change from nucleotide kinase to protein interaction domain during animal evolution gave rise to a protein family that mediates cell adhesion and division. With the aid of ancestral protein reconstruction, we resurrected ancient GK proteins to investigate the role of dynamics in the enzyme-to-domain transition. Our data indicate that the ancestral GK enzyme contains an intact protein binding site that is nonfunctional because of rapid interconversion between “open” and “closed” conformational states (only fully open conformations can bind protein). Mutations that convert the GK from enzyme introduced energetic barriers to the conformational transition, thereby reducing the entropic cost of domain function. Our results indicate that mutations that alter protein dynamics to select for functionally promiscuous conformations may have been key events in protein functional diversification.

Heather Archer – Biology
Evolution of Independent Genetic Pathways for Pathogen Resistance within the Nematode Caenorhabditis remanei
Pathogenic host-microbe interactions can result from continuous evolution of a host’s ability to resist infection and a pathogen’s ability to survive and replicate. Pseudomonas aeruginosa is a versatile and opportunistic pathogen that is ubiquitous in soil and capable of damaging plants, vertebrates, and invertebrates. Previous studies in nematodes suggest that the pathogenic effects of P. aeruginosa can result from multiple distinct pathways: a toxin-based effect that kills within a few hours and a generalized virulence that kills over the course of multiple days. Using experimental evolution in the highly polymorphic nematode Caenorhabditis remanei, I show that nematode resistance to the two modes of pathogenesis in P. aeruginosa evolves through genetically independent pathways. These results demonstrate that multiple virulence factors in a pathogen can result in multiple responses in the host, and the genetic lines established here create resources for further exploration of the genetic basis for resistance to P. aeruginosa.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Ben Armstrong – Chemistry**  
Molecular Mechanisms Controlling Bone Regeneration in the Zebrafish Caudal Fin

My work focuses on the development and regenerative ability of osteoblast cells within the zebrafish fin. Previously, we found that bone regeneration in zebrafish fins occurs via dedifferentiation of lineage-restricted osteoblasts. However, little is known about the mechanisms that control the osteoblast regenerative program from its initiation through bone redifferentiation. Fin amputation induces a Wnt/β-catenin-dependent epithelial to mesenchymal transition of mature osteoblasts, activating Twist2 and Runx2 expression to generate a pool of osteoblast progenitors. Wnt/β-catenin maintains the renewal of these Runx2-expressing progenitors, which cluster towards the distal tip of the regenerating blastema. The progenitors give rise to highly proliferative sp7/Runx2 expressing cells that subsequently mature into re-epithelialized osteoblasts that extend the pre-existing bone. Bone morphogenetic protein (BMP) specifically promotes osteoblast differentiation by activating sp7 expression and opposes Wnt activity by inducing expression of a specific Dickkopf-related Wnt antagonist, dkk3b. Conversely, Wnt signals negatively regulate BMP activity, forming a negative feedback circuit that maintains a balance between progenitor maintenance and differentiation. To support our in vivo findings, we have established parameters to culture primary zebrafish osteoblasts for an extended period of time, allowing me to perform in vitro analysis of these signaling pathways. By treating cells with either Wnt alone or Wnt in conjunction with a BMPR inhibitor, I have been able to recapitulate this Wnt-BMP osteoblast signaling axis.

**Farhad Bahram – Art**  
Global Mission of Art

Global Mission of Art (GMOA) is an arts consortium of more than 30 artists from various nations of the world that I established in 2009. This group conceived and deployed its initial projects to set up a variety of art-based events. My primary intention for establishing this group was to define some practical art projects on the development and presentation of cultural activities according to clearly defined and coherent themes or theories. From art creation to art support, I introduced different activities into GMOA, including organizing exhibitions, publishing books, and initiating conventions and training workshops around the world. Most importantly, I decided to allocate all the funds raised through these events to nonprofit organizations and humanitarian movements such as the Iranian Society to Support Children with Cancer (Mahak) and UNICEF. Another significant aspect of our activities at GMOA is the various methods of communication through virtual templates that we are using for initiating our projects. All of our previous projects have been initiated, developed, and launched through the Internet and social networks. This network has been supported with a website, a fan page, and newsletters about GMOA. GMOA has performed and presented three main projects in Tehran, San Francisco, and Paris. We have also produced four workshops, one each in Tehran; Yerevan, Armenia; Istanbul; and Beirut. Recently, I started working on our fourth project, Reversality, based on the idea of self-determination in contemporary life.

**Matthew Bailey – Chemistry**  
apPKC Polarizes Its Substrates by Phosphorylating a Lipid Binding Site

In nondisease states, animal cells organize their components into discrete domains. These molecular domains establish the organization and identities of cells within a tissue. In animal cells with polarized membrane domains, atypical protein kinase C (aPKC) regulates whereas multiple other proteins localize. Prior work has shown that a phosphorylated substrate does not localize to an aPKC-containing membrane domain. In our work, we have characterized how phosphorylation is able to polarize three substrates of aPKC: lethal giant larva (Lgl), Miranda (Mira), and Numb. With cell culture and in vitro biochemical assays, we have found that aPKC phosphorylates a phospholipid binding site in these substrates. By phosphorylating this site, aPKC displaces these proteins from the plasma membrane. For the protein Lgl, phosphorylation of the phospholipid binding site prevents Lgl from localizing to aPKC-containing membrane domain, thereby recapitulating the phosphoregulated behavior of the full-length protein with a small 35-residue motif. Because the segregation of aPKC from its substrates is a common theme in cell polarity in all animals, we believe phosphorylation of a lipid-binding site is a common mechanism for a kinase to polarize its substrates. Because some human cancers and developmental defects arise from a loss of cell polarity, we believe that this work may provide insights into human health.

**Christopher Banek – Human Physiology**  
Exercise Before and During Pregnancy Does Not Lower Blood Pressure in a sFlt-1 Infusion Model of Preeclampsia in the Rat

Preeclampsia (PE) is a pervasive, pregnancy-specific syndrome defined by new onset hypertension and proteinuria. PE also is often associated with increased soluble VEGF receptor 1 (sFlt-1), decreasing the bioavailability of vascular endothelial growth factor (VEGF) and creating angiogenic imbalance leading to endothelial dysfunction and hypertension. We recently reported that exercise training attenuates placental ischemia-induced hypertension and restores angiogenic balance, but the mechanism of this effect remains unclear. We hypothesized that exercise training before and during (EBD) pregnancy increases plasma-free VEGF and lowers blood pressure in a sFlt-1 infusion model of PE. EBD rats voluntarily exercised on an activity wheel for 6 weeks before and during pregnancy. Age-matched sedentary (Sed) controls were housed without wheel access. After breeding, the dams regained access to the activity wheels. Osmotic minipumps infused sFlt-1 (500 ng/hr) or vehicle from gestational day 14 to day 19, when blood pressure was measured and tissues were collected. In both Sed and EBD groups, sFlt-1 infusion increased blood pressure (p < 0.05), decreased endothelial dependent vascular relaxation of mesenteric vessels via wire myography to acetylcholine (ACH) (p < 0.05), and decreased endothelial tubule formation by HUVECs on Matrigel (p < 0.05). EBD had no effect on sFlt-1 hypertension but improved vascular endothelial relaxation to ACH (p < 0.05) and improved HUVEC tubule formation(p < 0.05). In contrast with our hypothesis, these data suggest that sFlt-1-induced hypertension in pregnancy is not remediated by EBD despite improved tubule formation in vitro and vascular endothelial function ex vivo. These data suggest that improvements in vascular endothelial function as a result of exercise before and during pregnancy may be due to the stimulation of alternative proangiogenic and vasorelaxant pathways. Further studies are underway to elucidate these alternative mechanisms.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Adam Bates – Computer and Information Science**
*Towards A Usable Provenance Reference Monitor*
Provenance is a well-known concept in the art world, but is relatively new to computer science. The idea is that a system can gather and report metadata that describes the history of each object being processed on the system. This allows system users to track, and understand, how a piece of data came to exist in its current state on the system. While the gathering of provenance metadata is something that is done by each provenance-aware system, these systems operate under very different provenance models. Provenance systems can monitor application behavior, filesystem events, or even network activity. We present the Linux Provenance Monitor framework (LPM), the first generalized framework for the development of automatic, whole-system provenance collection on the Linux operating system. The LPM framework is inspired by the Hi-Fi system, for high-fidelity, whole-system provenance collection, itself a modification of the open-source Linux kernel. The framework is designed in such a way to allow for experimentation with new provenance collection mechanisms. LPM is the basis for ongoing work in the area of provenance at the University of Oregon and the Massachusetts Institute of Technology’s Lincoln Laboratory.

**Kara Beasley – Human Physiology**
*Chronic placental ischemia alters expression of placental and fetal Insulin-like growth factor (IGF) proteins in the rat*
Preeclampsia is often characterized by placental ischemia and dysregulation of angiogenic growth factors such as IGF and is a major cause of low birth weight and preterm deliveries. These offsprings are at increased risk for chronic diseases such as bronchopulmonary dysplasia (BPD), a hypoplastic lung disease defined by preterm birth and neonatal O2 therapy. While O2 therapy and preterm birth clinically define BPD, current models of BPD employ hyperoxia in normally grown term neonates without considering the role of low birth weight and altered fetal endocrine milieu. To that end, we hypothesized chronic placental ischemia would decrease expression of insulin like growth factors (IGFs) I and II and related proteins in placental and fetal tissues. Chronic placental ischemia was achieved using the reduced uterine perfusion pressure (RUPP; n ≥ 7) model of preeclampsia and fetal growth restriction. Normal pregnant (NP; n ≥ 8) rats served as controls and tissues were collected on day 19 of gestation. Placental IGF-I was decreased in RUPP compared to NP (p<0.05). Conversely, amniotic fluid IGF-I (p<0.05) and IGF-II (p<0.05) were increased in RUPP vs. NP. Fetal hepatic IGF-2 was increased in RUPP (p<0.05). Finally, fetal lung IGFs were not different between the groups. These data indicate chronic placental ischemia alters expression of IGF proteins in placental and fetal tissues and could alter the developmental trajectory of programming susceptible organs such as the lung and kidney.

**Brianna Bertoglio – Critical & Socio-Cultural Studies in Education**
*Dual-immersion Language Programs as “value added” education.*
A large body of research demonstrates the efficacy of students learning literacy in their first language. Despite this evidence, political forces have led to the reduction or banning of bilingual education programs. The model of instruction that appears to be the solution to the problem of providing an effective teaching strategy without alienating majority language stakeholders is two-way dual-immersion. By positioning bilingual education as not something that takes away resources, but instead provides second language “enrichment” to English speakers it is more likely to be implemented and funded. The question is: are these programs actually providing high quality instruction for minority language students?

**Fern Bosada – Biology**
*Wnt signaling has distinct and dynamic roles in semilunar and atrioventricular canal valve development*
Heart valve development proceeds through a series of highly coordinated steps by which endocardial cushions (EC) develop into mature, elongated, and stratified valves. However, the cell signals that direct these sequential events in valve development and the mechanisms by which they drive discrete processes remain largely unknown. The Wnt signaling pathway is frequently activated during embryogenesis to promote differentiation, proliferation, and morphogenesis. Expression and genetic studies suggest that Wnt and its effector, β-catenin, have roles from endocardial-to-mesenchymal transformation (EMT) through post-natal steps of valvulogenesis. However, due to the broad requirements for developmental Wnt signals, parsing individual roles of this critical pathway at different stages of valve formation is challenging using conventional genetic approaches. We have developed a transgenic mouse system that provides chemically-induced inhibition of canonical Wnt signaling by expression of Dkk1, a specific Wnt inhibitor, in a tissue-restricted manner. Here, we show that Wnt/β-catenin signaling is required for proximal outflow tract EMT by supporting the full differentiation of endocardial-derived mesenchymal cells. We further demonstrate that Wnt signals are necessary for early expansion of atrioventricular canal (AVC) cushion mesenchyme and the subsequent elongation of AVC-derived valve leaflets. Finally, we found that Wnt is required for the establishment of the leaflet-chordae tendineae boundary in the mitral valve during late embryonic development. The ongoing need for Wnt at various stages of valvulogenesis suggest two models: 1) Wnt plays a permissive role in allowing subsets of endocardial-lineage cells to respond to additional growth and patterning cues, or 2) Wnt directly induces distinct developmental processes at different stages of valve formation.

**Mojdeh Bolorzadeh – Architecture**
*“Life Cycle Views on Mud-Brick Architecture and Agriculture” A historic practice in Yazd (Iran), a global potential for future*
Globally, building construction materials like concrete, are often used once and then land-filled or recycled through energy consuming processes. The recycled product is often a less valuable or lower quality material. At the same time, agricultural soils are sometimes depleted faster than they can be replenished. In the traditional architecture of Yazd, Iran, there is a history of re-using soil for mud bricks in agriculture and of using agricultural soil for mud bricks. This is a cradle-to-cradle or cyclical use of material that offers a means of sustaining both construction and agriculture for the long term. This paper looks at the history of unfired mud-brick end of life treatment in Yazd, to understand its global potential to produce natural fertilizer and reduce topsoil loss with mud-brick construction and recycling. This paper also introduces a value-increasing-use of material in construction. In this paper we recount conversational interviews with 4 local people to learn about the history and local traditions in the relationship between unfired mud-brick material and agriculture. There is urgency for learning from these past experiences before these buildings and people who know about them are gone. In this paper we recount conversational interviews with 4 local people to learn about the history and local traditions in the relationship between mud brick material and agriculture.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Kimbree Brown – Counseling Psychology**  
**Perceived Future Career Expectations for Low-Income Middle School Students**  
This study will examine the contextual predictors of the perceived future career expectations of middle school students from low socioeconomic (SES) backgrounds. Middle school is an important time for the development of career expectations, as students often make career plans long before high school (Hossler et al., 1999). Research has also shown that SES often influences an individual’s career aspirations, goals, and occupational opportunities (Hotchkiss & Borrow, 1996; Turner & Lapan, 2003). However, social class has not been well studied in relation to career development (Bluestein, 2001). The present study will use students’ self-reported social class, as some researchers have suggested that SES should be understood subjectively (Liu et al., 2004), to investigate the early career expectations of students from low-income backgrounds. The sample for this investigation includes middle school students from 44 schools throughout the state of Oregon. First, descriptive statistics will be examined for all study variables. Next, we will examine univariate relationships of predictors to the outcome variable and interactions with SES to identify salient predictors for low income students. Third, a multivariate regression will be utilized to determine which predictors from the univariate analysis have the greatest impact on the future career expectations of low SES students. This study will examine the contribution of supports, barriers, and SES to the perceived future career expectations of a group of middle school students from low-income backgrounds. Results may reveal factors amenable to home and school interventions that support the early career development of low-income youth.

**Dustin Carroll – Geological Sciences**  
**Using a coupled observational and modeling approach to investigate buoyant plume structure in a Greenlandic outlet glacial fjord**  
Acceleration in the rate of mass loss from the Greenland Ice Sheet is attributed partly to increased oceanic heat transport to tidewater glaciers. Subaerial melting on the glacier face combines with discharge at the grounding line to generate a turbulent plume, which entrains heat and salt to drive an estuarine circulation. This study seeks to characterize the spatial and temporal evolution of this plume using recently collected hydrographic and velocity data from a glacial fjord in west Greenland. We quantify the structure and transport observed in the plume from the glacier face to the fjord mouth and compare these results to more commonly studied river plume systems. Repeat transects allow an unprecedented look at the temporal variability in plume structure close to the glacier terminus. Finally, we compare the results from a 3D numerical model of the fjord to the observations, in order to isolate the role of tides and wind forcing. We find the fjord circulation is a complex, 3D process that depends on local bathymetry and offshore density fluctuations, in addition to the freshwater buoyancy forcing.

**Nicholas Chaimov – Computer and Information Science**  
**Multi-Target Autotuning for Accelerators**  
Producing high-performance implementations of scientific computing applications from simple, portable compilation specifications understandable by domain scientists is a challenge that compilers have tried to address for several decades. More recently, a relatively stable architectural landscape has evolved into a set of increasingly diverging and rapidly changing CPU and accelerator designs, with the main common factor being dramatic increases in the levels of parallelism available. The growth of architectural heterogeneity and parallelism, combined with the very slow development cycles of traditional compilers, has motivated the development of autotuning tools that can quickly respond to changes in architectures and programming models, and enable very specialized optimizations that are not possible or likely to be provided by mainstream compilers. The Orio autotuning framework enables the rapid development of experimental languages and code optimization strategies aimed at achieving good performance on new platforms without rewriting or hand-optimizing critical kernels. In this research, we develop new support in the Orio autotuning framework for code optimizations for OpenCL, a language for accelerator programming, and introduce detailed performance measurement into the autotuning process. These extensions allow us to evaluate Orio’s autotuning effectiveness across several architectures. We present results of autotuning several numerical kernels used in the iterative solution of sparse linear systems, as well as key computations from a radiation transport simulation code.

**Emily Ciesielski – Communication Disorders and Sciences**  
**The Effects of Professional Development for Early Childhood Educators on Children’s Emergent Literacy Skills: A Meta-Analysis**  
This meta-analysis examines the effects of professional development programs for early childhood educators on children’s literacy development. It analyzes the results of studies published since January, 2000.

**Elaine deLorimier – Chemistry**  
**Modifications to toxic CUG RNAs induce structural stability and rescue mis-splicing in Myotonic Dystrophy**  
Myotonic Dystrophy (DM1) is the most common adult-onset form of muscular dystrophy. DM1 is caused by a genetic mutation that results in the expression of long RNAs containing CUG repeat sequences. Muscleblind-Like1 (MBNL1) is a protein that is sequestered to CUG repeats when they’re expressed. When MBNL1 is sequestered to CUG repeats, it is unable to perform its normal function which is to regulate a process known as alternative splicing. During pre-mRNA processing a complex called the spliceosome removes intronic sequences and stitches together exons to produce mRNA. Cellular signals, like MBNL1, tell the spliceosome when to include or exclude certain exons. DM1 patients have mis-regulated alternative splicing that results in their symptoms. It is therefore important to understand the MBNL1–CUG repeat interaction in order to develop strategies to release MBNL1 in DM1 patients. Here we show that CUG repeats containing the modified nucleic acid pseudouridine (Ψ) have more stable structures. MBNL1 is less able to interact with the stabilized RNA. A crystal structure and molecular dynamics data indicate that Ψ forms a water molecule bridge, which could contribute to structural stability. When we express CUG repeats in our cell culture system, we see mis-regulated exon inclusion of MBNL1-regulated transcripts. CUG repeats containing Ψ do not have this effect in cell culture. Zebra fish embryos injected with CUG repeat RNA develop symptoms relating to muscles, e.g. a reduced ability to coil their tails. If Ψ is incorporated in place of uridine in these repeats, they do not develop these symptoms.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Jekaterina Dunajeva – Political Science**

**Belonging and Identities: Case Study of a Roma Community in Hungary**

By demonstrating the every-day life of one Roma community in Hungary—interactions, negotiations, hardships, celebrations, friendships, hostility, frustrations, and ambitions—I assess the dynamics and formation of Roma identity and sense of belonging. Through data collected during my recent intensive fieldwork, I examine the relationship between the community and the web of institutions that affect their daily routine directly or indirectly. Namely, it is the local school and charity where I observe direct interaction, and indirectly the pro-Roma discourse led by major NGOs, as well as anti-Gypsy messages from mass media and some state-led initiatives—these together form a complex web of interactions that inevitably shape the perception of group identity, their relationship with the majority population, and the state. Relying on bottom-up approaches, this paper strives to illustrate that 1) identities are constructed through every-day interactions; 2) stereotypes are reproduced in many institutions; 3) stereotypes are internalized; 4) identities are performed. Furthermore, this essay problematizes the reductionist view of Roma as a homogenous group, by discussing internal dynamics in this mixed community, and inquires about their sense of unity and belonging, whether that is tied to, or extends beyond, their locality, language, ethnicity, or state of residence. I conclude with implications, suggesting why most policies (state or non-state) were not successful in integrating and/or empowering the Roma communities in the past, and point out certain challenges that are deduced from my daily interactions with the community, attempting to understand how these policies are perceived by, and affect Roma themselves.

**Lee Eckert – Architecture**

**Taccogna Passive House Research**

Our proposal examines the indoor environmental qualities of the Taccogna Residence, a passive house in Dundee, Oregon. A Passive House is a relatively new building strategy that embodies a high level of design with an extremely low level of energy consumption. It provides the opportunity to eliminate conventional heating and cooling equipment in a home, through the use of super insulated walls and heat recovery systems. Our study looks specifically at the areas of: thermal comfort, light quality, energy use, indoor air quality, and acoustic quality of the space. The research methods incorporated in our study include multiple technologies in order to monitor building performance. We value the creation of comfortable and nurturing spaces, and feel that a high level of performance is crucial. In these selected categories encourages healthy and sustainable living. We are addressing this topic due to a growing interest in building performance, and our general health and well-being. The process will not only help us understand the performance of Passive Houses, but also will reveal areas within the Passive House Standard that need improvement.

**Jonathan Elliott – Human Physiology**

**Blood flow through intrapulmonary arteriovenous anastomoses impairs pulmonary gas exchange efficiency**

Sources of venous admixture (QVA/QT) that impair pulmonary gas exchange efficiency, defined by an increased alveolar-arterial PO2 difference (AaDO2), are ventilation-perfusion inequality (VA/Q), diffusion limitation, and shunt. Blood flow through intrapulmonary arteriovenous anastomoses (QIPAVA) increases QVA/QT and the AaDO2. However, it is unclear whether increased cardiac output (QT) or pulmonary artery systolic pressure (PASP) cause the increase in QIPAVA. We hypothesized that an increase in QT alone would increase QIPAVA resulting in an increased AaDO2 at rest breathing room air and 40% O2 to prevent contributions from diffusion and VA/Q. Epinephrine, i.v. at 320 ng/kg/min (EPI), and low dose epinephrine (80 ng/kg/min) combined with 2 mg of atropine (EPI+ATR) were used in healthy human subjects (n=5) to increase QT. When breathing either room air or 40% O2, EPI and EPI+ATR increased QT, (measured by acetylene uptake) from 7.8±1.0 to 13.3±3.4 L/min. Only EPI significantly increased PASP (to 54±14 mmHg), measured with ultrasound, but not with EPI+ATR (to 39±5 mmHg). However, EPI and EPI+ATR, breathing either room air or 40% O2 resulted in equal QIPAVA detected with saline contrast echocardiography. Furthermore, with EPI and EPI+ATR, the AaDO2 increased significantly when breathing either room air or 40% O2. Consistent with our data above, the calculated QVA/QT required to account for the entire AaDO2 was 2.4±0.4% with EPI and EPI+ATR, breathing either room air or 40% O2. We conclude that increased QT alone significantly increases QIPAVA and AaDO2 in healthy humans.

**Meaghan Emery – Geological Sciences**

**Where are all the Warty Jumping Slugs?**

The warty jumping slug (Hemphilla glandulosa) is a sensitive species of slug found in Tillamook National Forest. Very little is known about their preferred habitat, and it is possible that their rarity is inflated by misguided search protocols. Models of habitat using remotely sensed features are increasingly popular for their accuracy and efficiency, but few models also take into account topography. For organisms with limited migration potential like terrestrial mollusks, geological and topographical characters may ultimately dictate appropriate microhabitat distributions. I will compare presence and absence of Hemphilla glandulosa in 7 survey areas of Tillamook National Forest to slope, aspect, basin size, and land movement features like landslides. Additionally I will examine presence and absence data for connection to forest stand features (canopy coverage, forest height), microhabitat data recorded during surveys, mollusk community associations, and tree species distribution information. Ultimately, my work will create predicted range maps and better habitat constraints for these rare mollusks, as well as exploring the role that geological features play in habitat distribution.
12:00—1:30pm  Poster Session  EMU Ballroom

The following abstracts are arranged in alphabetical order by the student’s last name.

Dylan Farnsworth – Chemistry

**Neural progenitors change molecular identity to dynamically regulate proliferation over time**

To develop properly, animals rely on stem cells to make differentiated cells in the correct abundance and identity to form functioning tissues and organs. The rate at which stem cells divide, and the fate of their progeny is dynamically regulated and changes over time. To investigate this process, I study the neural stem cells found in Drosophila, called neuroblasts (NBs). Type II neuroblasts divide asymmetrically to self-renew and produce intermediate neural progenitors (INPs) that expand the entire lineage similar to progenitors in the outer sub-ventricular zone of the human brain. Recently, we have learned that intermediate neural progenitors (INPs) in type II NB lineages utilize the sequential expression of the transcription factors to specify progeny with distinct neuronal fates. We are now investigating how INPs also use identity factors to change their proliferation potential over time. During neural development, Notch signaling is an important regulator of stem cell proliferation and is essential for type II NB formation. I have tested the potential of aging INPs to proliferate in response to hyperactive Notch signaling. I found that while young INPs respond to Notch hyperactivation and form large tumors of type II NB-like cells, old INPs do not. Furthermore, old INPs are dependent upon the expression of Eyeless, a PAX family transcription factor, to resist Notch induced over-proliferation. We now see that progenitors use identity factors to dynamically regulate both the birth rate and specific fate of their progeny over time.

Jessica Farrar – Counseling Psychology

**Cumulative Risk Exposure and Regulatory Capacity in Children**

Exposure to poverty during childhood has been linked to a variety of negative psychophysiological outcomes that last can last throughout a person’s entire lifespan. Research has demonstrated that these negative effects are cumulative. The construct of cumulative risk combines sociodemographic, physical, and psychosocial factors, and has been demonstrated to be associated with chronic physiological and psychological distress, resulting in dysregulation in multiple physiological systems responsible for responding to environmental stressors. For example, research suggests that one such system affected is the parasympathetic nervous system. Respiratory sinus arrhythmia (RSA), an indicator of parasympathetic tone, is a biological marker of regulatory capacity in both children and adults. Increased RSA is an indication of regulatory capacity and ability to respond appropriately in high stress situations, while low RSA indicates withdrawal and is related to high emotional reactivity and dysregulation in the face of challenging situations. The aim of the present study was to test for associations between children’s cumulative risk exposure and their physiological regulation via RSA scores at rest and in response to challenge tasks. Participants were 161 mother-child dyads, with children ranging from 3 to 5 years of age; child maltreatment was present in approximately half of the dyads. Children who experienced greater cumulative risk were hypothesized to show lower resting and challenge task RSA scores, indicating lower physiological regulation. Results will be reported and implications discussed, the study will contribute to the current body of knowledge regardless of the ways in which biological processes are impacted by exposure to cumulative risk.

Tristan Fields – Landscape Architecture

**Swimming Like a European: Designing Natural Swimming Pools in the United States**

The Center for Disease Control currently states that there are close to eleven million swimming pools in the United States, ninety-five percent of which use chlorine (National Swimming Pool Foundation). Researchers are discovering long-term health effects resulting from exposure to chlorine in swimming pools. Even the “healthy” alternatives to chlorine swimming pools rely on chemicals. European companies have created pools void of chemicals, relying on the science of limnology and phytotechnology as the mechanism of cleaning agents. These pools are called “natural swimming pools.” This project gives a framework for implementation of the innovative technologies of natural swimming pools in the United States. The project walks through the history of chlorine pools in the United States; compiles all current studies on human health effects from chlorine pools; analyzes the building technologies behind chlorine and natural pools through the investigation of case studies; examines the unique differences between European and United States pool sanitation policies; and finally, proposes a framework for retrofitting local chlorine swimming pools into natural swimming pools as a prescriptive design in the landscape.

Cary Fontana – Political Science

**‘One Woman’s Prejudice’: Did Margaret Thatcher Cause Britain’s Anti-Europeanism?**

In this paper, we examine Margaret Thatcher’s transformation of the British Conservative Party into a Eurosceptical party. Thatcher ascended to the Premiership in 1979 after an era of strong Conservative support for Britain joining the European Union. Although hostile to the Common Market during the early years of its existence, by the 1970s, the Conservative Party had interpreted four major British governing traditions that originally generated skepticism toward the political project into justifications for British membership. Thatcher’s antipathy toward the European project gradually changed from private perceptions to public rhetoric throughout her tenure and eventually precipitated her downfall. Once her leadership collapsed, her influence on the party actually increased. During the conclusion of her tenure and following her removal from office, the Conservative Party began to perceive membership as incompatible with British traditions again. Her followers exploited a series of contingent events, and Euroscepticism eventually became a shibboleth of the Conservative Party. This paper contends that the development of a Eurosceptical Conservative Party shaped in Thatcher’s image was largely contingent. Using an interpretive approach we analyze the progression of Thatcher’s perspectives on Europe and their eventual infiltration into the Conservative Party’s mainstream. We produce three plausible counterfactuals that demonstrate the transition was not an inevitable event. We argue that standard political science theories that attribute the party’s conversion to Euroscepticism on structural, ideational, or institutional pressures do not provide an adequate explanation, and that Thatcher’s idiosyncrasies provide a more cogent account.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Adrienne Gerg–Heyerly – Architecture**

Evidence-Based Design for the Common House in Danish and U.S. American Cohousing

The cohousing model developed in Denmark in the 1970’s is an emerging housing typology in the United States. Cohousing is a form of intentional community designed, managed and maintained by residents that includes a common house for shared use. Since the development of cohousing, planning, spatial, and building patterns have emerged. This study observes 24 cohousing projects in Denmark and the United States for evidence-based design strategies of the common house. The square footage of the common house per private unit is higher in Denmark, indicative of the maturity of cohousing in the country. Façade and site plan design strategies for the common house—intended to define hierarchy while representing the community as a whole—were observed for seven of the cohousing projects. The two most commonly utilized design strategies identified include 1) the common house containing the highest focal point on the site and 2) an increase in roof complexity as compared to the private units.

**Theresa Gildner – Anthropology**

Associations between sleep duration, sleep quality, and obesity risk among older adults from six middle income countries

Abstract (250 words or less) Global obesity rates have risen considerably in recent years. Previous research indicates that improving sleep patterns represents a promising obesity prevention strategy; however, the association between sleep and obesity in older adults remains poorly understood. Here, we present preliminary results from the World Health Organization’s Study on global AGEing and adult health (SAGE), a longitudinal study of nationally-representative samples of older adults (>50 years old) in six countries (China, Ghana, India, Mexico, Russian Federation, and South Africa). Self-report data collected via questionnaire provided information on sleep quality (n=33,348) and duration (n=32,142) over the previous two nights, and BMI (n=32,137) and waist circumference (n=29,955) were measured to determine obesity levels. One-way ANOVA and chi-square tests were used to examine differences in obesity by age, sleep duration, and sleep quality categories. The percentage of obese individuals was significantly higher in the oldest age category (≥80+) compared to younger individuals (p < .01), suggesting higher BMI may be protective at the end of life. Differences in obesity levels did not vary by sleep duration category. Interestingly, individuals reporting low sleep quality had significantly higher BMI and waist circumference levels (p < .05) in several countries. A high percentage of individuals who reported low sleep quality were categorized as obese according to BMI (e.g., 45.5% of men and 39.7% of women in India) and waist circumference (e.g., 70.6% of men and 92.9% of women in Russia). More research is needed to assess the potential of interventions to improve sleep quality and reduce obesity.

**Haley Gillham – Human Physiology**

Complement components C3a and C5a alter angiogenic balance in placental and endothelial cells

Recent studies have reported excessive activation of complement during pregnancy may contribute to the pathogenesis of preeclampsia, and inhibition of complement activation reduces blood pressure in an animal model of placental ischemia-induced hypertension. As previous studies have shown a role for angiogenic balance in reducing blood pressure in placental ischemia-induced hypertension and the anti-angiogenic effects of complement activation products, we hypothesized complement activation products C3a and C5a would have anti-angiogenic effects in human umbilical vein endothelial cells (HUVECs) and rat placental vill explants. Cells were cultured in physiologic normoxic (8%) or hypoxic (1%) conditions and treated with human C3a, C5a (10 or 100 nmol/L) or vehicle for 24 hours. In placental explants, hypoxia stimulated secretion of vascular endothelial growth factor (VEGF) into the cell media vs. normoxia, and this was decreased by 10nM and 100nM C3a (P<0.05). Secretion of soluble fms-like tyrosine kinase-1 (sFlt-1) from explants was increased (P<0.05) by 10nM and 100nM C3a in normoxic but not hypoxic conditions compared to controls. C3a and C5a (100nM) increased sFlt-1 secretion from HUVECs in normoxic conditions (P<0.05) when compared to controls. VEGF secretion from HUVECs decreased with C5a in both oxygen conditions compared to controls (P<0.05) and there was no effect of C3a. These data suggest products of excessive complement activation have anti-angiogenic effects in endothelial cells, impairing placental development and invasion and leading to poor placental perfusion. Further, complement activation products appear to disrupt angiogenic balance in placental cells, which could contribute to continued placental dysfunction in later pregnancy.

**Gabriel Greiner – Architecture**

Superinsulated envelope design analysis

Passive House is a voluntary environmental building certification process based on the simple concepts of designing a structure to be insulated enough and air-tight enough to eliminate conventional heating systems from building construction. This standard encourages the construction of superinsulated wall assemblies that are much thicker than standard building envelopes. This study will explore the implication on multiple levels, of the impact of superinsulated wall assemblies. By performing a comprehensive analysis of specific exterior envelope assemblies we can tease out differences in approach that will become apparent once a full set of parameters are developed. Designers make assumptions about the best approach to envelope design. This study will test these assumptions and evaluate them based on cost, constructability, and lifecycle assessment. Our current methods of construction may be insufficient to accommodate these increased thermal demands. Is this the best use of materials and resources, or could a systematic evaluation lead to clues towards developing a best practice? If we carefully study existing wall sections that already have contributed to achieving Passive House certification, we can determine the optimal direction to aim further envelope development.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Melissa Hale – Chemistry**  
**Creating a synthetic RNA binding protein with hyper-activity**  
Myotonic dystrophy type 1 (DM1) is the most common form of adult muscular dystrophy and is characterized by symptoms including myotonia and heart abnormalities. DM1 is caused by a CTG repeat expansion in the 3'-untranslated region of the DMPK gene. When transcribed into CUG RNA these repeats sequester the alternative splicing factor muscleblind-like 1 (MBNL1) leading to mis-splicing events responsible for patients’ symptoms. MBNL1 acts as a splicing enhancer or repressor by promoting both exon inclusion and exclusion events. MBNL1 contains four zinc finger (ZF) RNA binding motifs; the first two ZFs fold into one domain and the second set of ZFs fold into another such that the protein contains two distinct RNA binding domains. We recently showed that the ZF pairs do not have equivalent splicing functions for all MBNL1 regulated splicing events and the ZF(1–2) domain binds with higher affinity to several RNA substrates compared to the ZF(3–4) pair. This observation raises a new question regarding MBNL1 function: Can we engineer an MBNL1 protein with increased affinity for its RNA targets resulting in increased splicing activity of the protein? To answer this question I am engineering 1) an MBNL1 chimeric protein in which the ZF(3–4) domain is replaced with ZF(1–2) domain to create a double MBNL1(1,2–1,2) and 2) a double MBNL1(3,4–3,4) in which the ZF(1–2) domain is replaced with the ZF(3–4) domain. These two synthetic proteins and wildtype MBNL1 will be tested in cellular and biochemical assays to determine their RNA binding affinity and splicing activity.

**Sarah Hansen – Special Education**  
**Unlocking Joint Attention: Implications for Best Practices in Intervention From the Literature**  
Joint attention is defined as the shared attention of two or more individuals on an object or event. For young children with autism spectrum disorder (ASD), joint attention is often missing or under-developed. Joint attention is thought to be a pivotal skill for the later development of language, play and social skills. There is a pressing need for more research on joint attention in order to establish evidence-based practices. The proposed study uses a systematic review of literature to examine established practices and emergent research for the teaching of response to and initiation of bids for joint attention. This proposed poster will create a research matrix in order to effectively illustrate current practices in joint attention research. The research matrix will be created through systematic searches of appropriate databases using key terms. Results of systematic searches will be summarized in terms of participants, intervention characteristics, outcomes and effect size. The proposed poster will also provide key focal points for future research including gaps in the current body of research and allow for comparison between interventions.

**Matthew Hartle – Chemistry**  
**Investigation of the Biological Redox Activity of Hydrogen Sulfide Using Metal Phthalocyanines**  
Nitric oxide (NO) and hydrogen sulfide (H2S) are endogenously-produced transmitter-gases that are biologically relevant for inflammatory responses, metabolic regulation, and neurotransmission. H2S is the most recently discovered gaseotransmitter and is harder to study than NO because it is redox-active, a potent nucelophile, and has two biologically relevant pKa’s. Phthalocyanine (Pc) is a useful class of compounds to understanding the redox activity and binding of H2S, and will help elucidate H2S signaling role in biological systems. Reaction of zinc (Zn), cobalt (Co), and manganese (Mn) Pc with the different physiological forms of H2S and thiols results in different interactions depending on the redox activity of the metal and the protonation state of the sulfur compound. Anionic sulfur compounds react with CoPc, whereas both anionic and neutral sulfur compounds react with MnPc, indicating that the protonation state, charge, and relative redox activities of each sulfur compound are significant. Redox inactive ZnPc only reacts with anionic sulfur compounds and does not reverse when exposed to atmospheric O2 for several hours (unlike MnPc and CoPc which quickly oxidize), but can be chemically reversed by addition of acid, indicating it binds anionic sulfur compounds. This work informs the basic reactivity of H2S with metal complexes and establishes the groundwork for investigating more complex interactions.

**Joe Hoover – Psychology**  
**Perceptions of Mind and Humanness: Understanding the Discord Between the Sciences and Humanities**  
The perception of ‘mind’ and ‘humanness’ in others has been shown to have important implications for social cognition. For example, when we deny or fail to see these dimensions in another person, we risk seeing them as less intelligent, less capable of suffering, and even less human. Previous research has demonstrated that differences in others (i.e. race, sex, or occupation) affect the extent to which we see them as having mind and humanness. However, little is known about whether individual differences in perceivers influence their individual perceptions of these dimensions in others. This research program explores this possibility through the investigation of whether differences in perceivers’ ‘systemizing’ and ‘empathizing’ tendencies predict the extent to which they see others as possessing mind and humanness. Another question this research seeks to understand is why the anecdotal relationship between the Sciences and Humanities is so often discordant. Our hypothesis is that the antipathy between these fields is, at least in part, driven by folk beliefs about the extent to which members of these fields perceive mind and humanness in others. More specifically, we expect that, stereotypically, people see members of the Sciences as perceiving less mind and humanness in others, as compared to members of the Humanities. In addition to informing inter-field dynamics in academia, if our predictions are correct, this research will also contribute to our understanding of the larger, more general process of perceiving others as having minds and ‘being human.’
Phillip Irvin – Educational Leadership
Kindergarten Readiness: The Influence of Entering Self-Regulation Skills on Achievement Growth Over Kindergarten

In the initial stage of my dissertation, I will study the effect of self-regulation skills upon entering Kindergarten on growth in early literacy and mathematics achievement over two time points. We identified self-regulation skills as two separate inter- and intra-personal factors based on analyses of the 2012 Oregon Kindergarten Assessment (OKA) pilot data (Tindal, Irvin, & Nese, April 2013), an assessment now required of all Oregon Kindergarteners (Oregon Department of Education, 2013). The OKA was implemented statewide in fall 2013 with full results available in Winter 2014. I use three seasonal easyCBM seasonal benchmark assessments measuring a battery of early literacy and mathematics skills shown to be important for later (higher-order) reading and mathematics skills development (Speech, Ritchey, Cooper, Roth, & Schatschneider, 2004) as the achievement measures in the study. I estimate that approximately 20,000 to 25,000 Kindergarten students will have data for both the OKA and the easyCBM reading and math benchmark assessments, and will comprise the analytic sample for this study. Structural equation modeling (SEM) will be the primary method used to measure and characterize the effect of self-regulation skills upon entering Kindergarten on reading and math growth over students’ first year in public schools. The researcher will iteratively build statistical models, comparing model fit and theoretical appropriateness based on the recommendations of Kline (2010). As part of the broader iterative model building process in my dissertation, I anticipate having fall and winter easyCBM benchmark and OKA data to include in the SEM for this poster.

Christina Jaramillo – Counseling, Family, and Human Services
Cultural Competence development: Therapist perceptions over time

Professional organizations assert that therapists have the ethical responsibility to gain cultural competence in working with culturally diverse clients. In response, training programs are required to include a course on cultural diversity. However, there are no guidelines on how to develop and implement effective diversity training courses in training programs. Educators need to know what helps students engage in meaningful learning regarding cultural diversity and what impedes this process. This information is essential to increase the quality of diversity courses in graduate programs and enhance the multicultural competence knowledge and awareness of therapists. The goal of this research is to examine therapists’ perceptions of cultural competence knowledge and areas for further development. Therapists (n= 102) in a cultural competence course responded to open-ended questions at three time points. Questions assessed salient themes commonly learned and areas for further development. Open-ended questions were analyzed qualitatively by constant comparative analyses. Data was analyzed for themes. Themes were then refined based on the data and through consensus to ensure that agreements between the researchers were established. Following, frequencies of themes were evaluated to identify trends over time. Preliminary results suggest that after completing the course therapists are in need of increased diverse client interaction, learning cultural specific interventions, and in depth cultural knowledge. Over the course of the year there was a progressive increase in thoughtful personal cultural awareness. Further analyses are currently underway to examine therapists’ perceptions regarding cultural competence development. Implications for educators, students, and training programs will be discussed.

Kate Karfilis – Biology
A targeted interrogation of the VEGF gene expression during embryonic angiogenesis

During embryogenesis, the vasculature develops a remarkably complex organization to allow the efficient circulation of blood throughout the body. In adults, the vascular system remains dynamic, able to respond to tissue damage but also leaving the system susceptible to aberrant growth, including when commandeered by growing tumors. As such, a thorough understanding of the molecular mechanisms by which a key signaling molecule, vascular endothelial growth factor (VEGF) directs angiogenesis would improve our understanding of congenital vascular defects and enable the rational design of novel therapies, including those that target cancer, macular degeneration and deficient wound healing. In spite of the obvious importance of VEGF signaling, VEGF-dependent transcriptional responses largely remain a “black box”. As such, the molecular mechanisms of angiogenesis are poorly understood. In a collaboration with Chris Doe’s lab, we have developed a chemical/genetic intersectional technology, known as thio-uracil tagging (TU-tagging), that allows the in vivo labeling of RNA in specific cell types (Gay et al., 2013). My current work combines the transcriptional profiling capabilities of TU-tagging with specific small molecule inhibitors of the VEGF pathway to define direct transcriptional targets of VEGF during mouse embryonic angiogenesis. These studies will characterize the cellular effects of loss of VEGF signaling and uncover the identity of downstream genes that are affected by VEGF activity, a breakthrough opportunity to understand how the vascular system forms and is maintained.
<table>
<thead>
<tr>
<th>12:00—1:30pm</th>
<th>Poster Session</th>
<th>EMU Ballroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following abstracts are arranged in alphabetical order by the student’s last name.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**James Kress – Computer and Information Science**  
*Enabling better tractography understanding through enhanced visualization and high performance computing*

I propose research in applying high-performance computing (HPC) to tractography to better enable advanced neurological research and surgical planning. Tractography — a 3D modeling technique used to visually represent neural tracts — produces large data sets that continue to grow larger and larger as technology develops and evolves. The fundamental problem is timeline: surgical planning often requires tractography to be completed within several days (or less), but tractography’s computational requirements exceed what a desktop computer can do in this amount of time. As a result, the current approach involves compromise, with data underutilized and the integrity of the results under suspicion. Worse, there are multiple techniques for tractography analysis, but current computational limitations generally only allow one technique to be used at a time, leaving many researchers leery of the results as each technique has advantages and disadvantages. For my research, I will explore how we can improve tractography analysis when we incorporate HPC. Through HPC, we can address the data utilization problem, and, moreover, apply more analytical frameworks, creating an ensemble of analyses that will increase confidence in the resulting models. In turn, this will improve our understanding of neural tracts in general, as well as for specific instances for surgical planning.

**Alicia Kristen and Robert Kirkpatrick – Environmental Studies**  
*Augmented-reality Questing for Ethnoecological Engagement*

This research analyzes how meaning, stories, and significance are created in local places and case studies of how significant places are shared through multimedia projects. The research will serve as the foundation to the development of a game for mobile devices that piques the interest of diverse community members then engages them deeper in their local places, with a focus on cultural and natural history. As such, the research focuses on project goals, risks, benefits, and implementation strategies.

**Stephanie Labasan – Computer and Information Science**  
*Assessing the benefit of power-aware simulation code*

Power consumption is a major new actor in the world of high-performance computing (HPC) and we propose research to better understand how to optimize its usage. The research will attack from two directions: (1) understanding how individual workloads can optimize their power usage, and (2) designing an ecosystem that can schedule adapted workloads to optimize overall power usage. The proposed research follows the premise that power constraints will be a major bottleneck for HPC advancement, and that simulation codes will need to be increasingly cognizant of their own power consumption and how to minimize it. We expect this research to make strides in the characterization of current state-of-the-art HPC systems and applications in terms of power, integration of power-aware techniques in applications and throughout the software stack of HPC systems, and techniques that enable power and energy optimizations at different scale levels for HPC systems.

<table>
<thead>
<tr>
<th>12:00—1:30pm</th>
<th>Poster Session</th>
<th>EMU Ballroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following abstracts are arranged in alphabetical order by the student’s last name.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Alexander Ledbetter – Communication Disorders and Sciences**  
*Evaluating the Use of a Computerized Writing Log for Assessing the Writing Process in Individuals with Acquired Brain Injury*

We know virtually nothing about the writing profiles of individuals with acquired brain injury. A limitation to this research is the lack of validated measurements. We report the results of an investigation evaluating the use of a computerized writing log (CWL) for assessing the writing process of 20 individuals aged 16-25 with acquired brain injury. We gather data on participants’ essay writing through analysis of permanent written product and composing process during an initial baseline session plus three sessions and a post-test session using CWL. We obtain time-stamped responses to a directed retrospection task (DRT) using CWL presented at 90-second intervals (+/- 15 s) during the composing process while writers compose expository essays using the word processing function. For the DRT, we train participants to respond each time the log presents on the computer screen by selecting responses from 15 items across four categories representing cognitive processes involved in writing (planning, translating, reviewing) and another category intended to sample unrelated activity (stretching, daydreaming). Process data obtained includes time-stamped responses to each log presentation, time delay in response to log presentation, and keystroke playback. Product data obtained includes number of main ideas, number of supporting sentences, number of transition words, and total words. Trained raters score quality using the Oregon Department of Education Writing Scoring Guide. Analyses describe allocation of time to each writing process and the amount of time spent on unrelated activities, time delay in response to log presentation, as well as quantitative and qualitative characteristics of essays.

**Russell Li – Accounting**  
*Do Public Tax Incentives Spur Innovation? Evidence from An Unfavorable Effect of U.S. R&D Tax Credit*

Innovation is important for a nation’s competitiveness in the global economy, and governments around the globe use tax credits to spur private research spending. The US government introduced its first tax credit for research and expenditure (R&D) in the Economic Recovery Tax Act of 1981 (ERTA 1981). In this paper, I examine the effect of the ERTA 1981 tax credit on firms’ productivity of innovation. Using patents and patent citations as measures of innovation, I find that the ERTA 1981 R&D tax credit reduced the productivity of innovation for U.S. firms. The effect is more pronounced for firms that can use the credit than those who cannot. I further show that competition for research resources and agency issues explain the drop of the productivity of innovation following the ERTA 1981.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Josh Lowry – Chemistry**  
**Using Next-Generation Sequencing to Investigate Mutations in the Nematode C. elegans**  
The basic premise behind all genetics work is to study what happens to an organism when one single gene ceases to function. Traditionally geneticists focus on a particular trait and then work to discover which genes contribute to the development of that trait. A number of methods have been developed over the years to disrupt gene function, but the most common method is the genetic screen, where populations of the organism of interest are treated with a mutagen, introducing random changes in their genomes. The researchers then search through those populations to find individuals where the trait of interest has been altered; subsequently, they can use a number of methods to determine which gene has been affected (called “cloning”). This process is difficult and time-consuming, often taking years of work to complete. Next-generation DNA sequencing techniques have revolutionized many aspects of scientific research, including the cloning process. My work is focused on using whole-genome sequencing to rapidly clone mutants of the nematode species Caenorhabditis elegans. The process involves mating mutants to a closely related strain that carries ~100,000 known mutations. The hybrid animals will produce offspring that are mutant and carry the known mutations, except in the region surrounding the mutation of interest. Whole-genome sequencing can find this region and all the mutations contained within. Using this method, I have been able to successfully clone several mutants in a fraction of the time it would have taken using previously available methods.

**John Maternoski – Architecture**  
**Mobilizing Mobile**  
With over 1/3 of its residents clinically obese and another 1/3 overweight, Alabama has consistently been at the forefront of America’s obesity epidemic. Through a mid-scale urban design scheme, this research seeks to find ways to make the auto-oriented suburbs of Mobile, Alabama more pedestrian and bicycle-friendly, and more connected to Mobile’s urban center. This research also asks the question of how urban design and building design can influence residents’ behavior, encouraging a more active lifestyle as an integral part of daily rituals and activities.

**Timothy Matthews – Counseling, Family, and Human Services**  
**Does Distance of Placement Setting Affect Adjustment?**  
Female delinquency is increasing, with girls now comprising 30% of the juvenile justice population. Multidimensional Treatment Foster Care (MTFC) is one intervention that has been documented to reduce delinquency for juvenile justice-involved girls. An MTFC philosophical principle is to keep youth in their communities and close to their family of origin, so they can have access to their family and so that families can participate in the treatment and learn new skills. The current study examines whether there is a significant difference between distance of MTFC placement setting versus service-as-usual (Group Care; GC) placement setting to home of origin, along with the impact that distance from home may have on youth adjustment. The sample included 166 females [mean (SD) age = 15.3 (1.2) years; 68% Caucasian] who participated in a randomized controlled trial of MTFC during adolescence. In the original study, girls who were referred for out-of-home care due to chronic delinquency were randomized into MTFC (n = 81) versus GC (n = 85). Home of origin addresses and placement setting addresses were used to calculate a new variable, distance (mean (SD) distance = 84.5 (91.7) miles). Analyses indicated that girls in the MTFC condition were placed closer to home of origin than girls in the GC condition (r = -.23**, p = .004). Results indicate that MTFC was successful in keeping youth in their communities and placing them significantly closer to home of origin than service-as-usual conditions. Additional analysis will examine how the placement distance influences adjustment outcomes.

**Marcus Mayorga – Psychology**  
**Valuing the lives you can save in tragic situations**  
Unfortunately, we are not always in a position of saving lives. In many real-world situations, decisions must be made to mitigate death. For example, war strategists must make tactical decisions in the face of collateral deaths of many innocent lives; emergency response teams frequently encounter tragic situations in which not all victims can be saved. Recent research documents a systematic bias favoring saving individual lives in tragic situations. We report a series of studies using identified victims in dichotomous loss of life gambles. A national sample showed a strong preference for an option offering possible zero loss of life but more negative expected value. Preferences for this option dropped dramatically when the zero loss was replaced with a single identified victim. However, as the number of possible identified victims increased, preference for this option also increased. These results support a combination of psychophysical/collapse functions for valuation of human lives. We must consider that decision makers may be vulnerable to the same biases of singularity in loss-of-life scenarios as found in life-saving scenarios. Our study showed that, when choosing hypothetical contingency plans to mitigate deaths, people are averse to an option that risks the death of a single identified victim. When participants were asked to explain their choice, one subject stated, “One specific death made it seem all too real.” Similar to donation study findings, the loss of an identified victim creates an affect-rich scenario. But those feelings are spread more and more thinly as the number of victims increases.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Christy McCarter – English**  
**Torn Identities: Chivalry, Violence, and Social Control**  
The Arthurian legend spans language, geography, and time, and the chivalric knight remains a figure of popular fantasy. An examination of early French romance, the birthplace of the chivalric knight, reveals the extremely unstable nature of the knightly identity and of courtly culture. This paper examines the chivalric code as a social construct reliant upon a set of rituals that mitigate unregulated, destructive violence while linking the men in unbreakable homosocial relationships. This ritualization effectively controls social violence by creating male-to-male bonds, and the most illustrious of these rituals is granting the gift of mercy. The knights are asked to participate in a controlled, one-on-one violence that ends with a victor granting mercy to his opponent. This act requires unrealistic self-control and remains an enduring symbol of the masculine, heroic identity; likewise, it is the knight’s greatest test. When a man engages in the precarious dance of violence as -ritual, he risks breaking the code’s homosocial system while fracturing his own fragile identity. The paper examines the precarious nature of mercy in the early French romances of Chretien de Troyes, focusing on how the code relies on the violence that it seeks to control.

**Jacqueline McGrath – Chemistry**  
**Understanding and Controlling Guest Binding Thermodynamics in Synthetic Barbiturate Receptors**  
Synthetic barbiturate receptors have been utilized for many applications due to their high binding affinities for complementary guests. Although interest in this class of receptors spans from supramolecular to materials chemistry, the effects of receptor steric bulk and pre-organization on guest binding affinity has not been studied systematically. To investigate the roles that steric bulk and pre-organization play in guest binding, we prepared a series of 12 deconstructed Hamilton receptors with varying degrees of steric bulk and pre-organization. Both diethylbarbital and 3- methyl-7-propylxanthine were investigated as guests for the synthetic receptors. The stoichiometry of guest binding was investigated using Job plots for each host-guest pair, and 1H NMR titrations were performed to measure the guest binding affinities. To complement the solution-state studies, DFT calculations at the B3LYP/6-31+G(d,p) level of theory employing the IEF-PCM CHCl3 solvation model were also performed. Calculated guest binding energies correlated well with the experimental findings and provided additional insight into the factors influencing guest binding. Taken together, the results presented highlight the interplay between pre-organization and steric interactions establishing favorable interactions for self-assembled hydrogen-bonded systems.

**Shawna Meechan – Political Science**  
**Resolving Ethnic Conflict: Western versus non-Western ideas of legitimate Mediation**  
The first suggested approach to alleviating conflicts between competing ethnic groups is often mediation. However, legitimate forms of mediation vary by culture and context. In the West mediators are expected to be outsiders who will be impartial in the negotiation process; whereas in traditional societies, legitimate mediators are expected to have a direct interest in the situation at hand. In these cultures, a thorough and personal understanding of the conflict is expected for a mediator to be trusted. This fundamental difference presents an interesting challenge for critical theory. Critical theorists would agree that an immanent critique of any aspect of society needs to start from an understanding of how that society sees itself and what ideals it claims to advance. In order to achieve this, one needs a thorough knowledge of the culture of the society as it is, as well as how it has been formed by historically specific experiences. Additionally, the theorist needs to be at a remove from society in order to see and illuminate those inherent contradictions that do not live up to what society purports itself to be in pursuit of. This paper examines the literature on critical theory and explore how it might be practically applied in mediation of ethnic conflict. I focus on the role of the mediator and what qualities critical theory promotes in a mediator. Finally, this paper highlights the potential for mediators who employ critical theory to contribute to the success of mediation processes in ethnic conflict situations.

**Lindsey Mitzen – German**  
**Kant and Kleist**  
For my thesis I will do a close reading of Kleist’s novella, Michael Kohlhaas and Kant’s Critique of Practical Reason. I will explore Kohlhaas’ confrontations questioning morality and ethics regarding positive law and Kohlhaas’ inner morality compared to Kant’s Categorical Imperative. My paper seeks to explain how the actions of the protagonist Michael Kohlhaas is Kleist reacting to Kant’s views on morality and sense of duty. Michael Kohlhaas strives to be just, however must turn to unjust avenues to achieve what he wants. He seeks relief in the Saxon courts to compensate injury to his horses, however this avenue was closed off to him. In my paper, I want to look at how Kohlhaas consults his inner-moral ideas to seek justice, since the proscribed “lawful” path through the courts is closed. I also want to explore the reason that Kleist chose to surround this story around a 16th century figure. What was it about this particular period in history that interested Kleist? Was Kleist only addressing concepts of morality in a purely historical sense, or was there an analogous situation in Kleist’s lifetime?
The following abstracts are arranged in alphabetical order by the student’s last name.

**Erin Mondloch – Physics**

**Quantum states of light in spontaneously phase-stable frequency combs**

An electromagnetic spectrum composed of light at discrete, evenly spaced frequencies is called a frequency comb. Over the past few decades, frequency combs have been developed and applied extensively in research areas ranging from quantum computation to astronomy. Their significance was recognized by the 2005 Nobel Prize in physics. Useful frequency comb operation usually requires that the relative phases of the light waves that comprise the comb be constant or shift in time in a predictable way. In general it is necessary to enforce this stability by injecting coherence into the frequency comb, which poses an experimental burden. In this poster we present our work in mathematically modeling and experimentally studying a novel type of frequency comb in which a degree of phase stabilization arises automatically. An understanding of this comb may give insight into the role of quantum noise in externally-stabilized state-of-the-art frequency combs developed elsewhere in the physics community. Furthermore, the phase stability of our frequency comb may be attributable to interesting quantum states of the light and matter involved in the comb generation. We investigate these quantum states and their suitability for additional quantum optics research.

**Leticia Montoya – Chemistry**

**Hydrogen Sulfide Deactivates Common Nitrobenzofurazan-Derived Fluorescent Thiol Probes**

Hydrogen sulfide (H2S) is commonly recognized as a colorless, flammable, water-soluble gas produced in all kingdoms of life and is now a rapidly emerging research focus in biomedical science. In particular, scientists are focused on understanding how H2S acts as a gasotransmitter in mammalian tissues. One major difficulty in detecting H2S in biological systems is separating the reactivity of thiols from H2S. Electrophilic thiol labeling reagents including nitrobenzofurazan (NBD) have been shown to react similarly with H2S as they do with thiols, although thiols produce a fluorescent response whereas reactivity with H2S produces a color change. By comparison, the reaction products of H2S with other electrophilic thiol labeling reagents, such as fluorophore-bound maleimides (N-(1-pyrene)maleimide), fluorescent alkyllating agents (monobromobimane), and electrophilic aldehydes (coumarin carbaldehyde) produce a fluorescent turn-on. This response suggested that a reaction between H2S and the fluorescent labeling reagents had occurred, but in a different manner than biologically relevant thiols. Our investigations have revealed that nitrobenzofurazan-based reagents react with H2S to produce a non-fluorescent NBD-thiol product. Alternatively, H2S reacts with N-(1-pyrene)maleimide to produce a fluorescent pyrene excimer, monobromobimane to generate a fluorescent bimane-thioether, and coumarin carbaldehyde to produce a fluorescent mercaptophenyl)methanol product. The different reactivity profiles of commonly-used thiol labeling reagents in the presence of H2S are addressed and provide new insight into which thiol probes are compatible with endogenous H2S levels.
### 12:00—1:30pm Poster Session EMU Ballroom

The following abstracts are arranged in alphabetical order by the student's last name.

**Tyler Nichols – Computer and Information Science**  
**Network Provenance**

Discovering the causes of incorrect behavior in large networks is often difficult. When a network administrator observes a suspicious event – perhaps an unusual log entry, or suspicious connection attempts between unrelated machines – she must decide whether there is an actual attack, or whether there is a benign explanation. The difficulty of this task is compounded when some machines in the network may be compromised, since these compromised machines may use deception or tamper with data in order to frustrate forensic analysis. Recently proposed forensic tools enable administrators to learn the causes of some system states in a partially compromised network, but these techniques are inherently unable to (1) observe covert communication between compromised nodes or (2) detect attempts to exfiltrate sensitive data. We observe that the emergence of 2 technologies offer interesting new opportunities for network forensics: Software-Defined Networking (SDN), and whole-system Provenance Reference Monitors. In this work, we sketch the design of a forensic system that leverages both of these technologies, facilitating the investigation of a wide variety of faults in data center networks, including previously-unobservable attacks such as data exfiltration and collusion between compromised nodes. This system is inspired by two main insights – first, that the network itself can be used as a point of observation; second, that deploying a network monitor via the Linux Provenance Module Framework restricts adversaries in their ability to evade detection. The result is a forensic system that provides a holistic and trustworthy view of network activity.

**Dana Okray – Special Education**  
**Effects of Video Modeling When Implemented in a Special education class for transitioning adults.**

The purpose of this study was to find whether the implementation of iPad video modeling in a High School Special Education transition program would increase the independent performance of students participating in the study. The participants all had a diagnosis of Autism, ages 18-21. The video modeling focused on the participants IEP goals for the year. Videos were implemented in the classroom setting. Videos were created to demonstrate step by step procedures of selected daily activities. The focus was to increase the students ability to complete daily activities independently. The participants showed an average increase of 83% in independent completion of the tasks that were modeled in the videos.

### 12:00—1:30pm Poster Session EMU Ballroom

The following abstracts are arranged in alphabetical order by the student's last name.

**Morgan Peach – Environmental Studies**  
**Yard Soil Carbon: The Stuff of Life**

Outside the front door of many residences of Eugene and Springfield, OR, is a historic front yard prairie, of deep, rich topsoil. Clay loams, black with carbon, reflect this history, a story of biotic activity above and belowground, yielding soil structure and fertility, with these soil characteristics providing valuable services to the human community (e.g. food production, water infiltration and purification). In the residential environment, with the passage of every season, grasses, forbs, shrubs, and trees participate to varying degrees in this story of carbon flow. Human residents, agents of disturbance as yard workers, are an important variable in this everyday ecological system, with management activities perhaps influencing the extent of the soil carbon pool. Management activities range from intensive (frequent mowing, heavy irrigation, as well as herbicide, pesticide, and fertilizer application) to low input techniques (infrequent mowing, clippings left on lawn, no other inputs). In my research, I endeavor to discover whether residents, in managing their yards consistently over the course of many decades, have significantly influenced soil carbon via their specific management activities.

**Carolyn Peterson – Counseling Psychology**  
**International High School Students’ Perceptions of Demands and Challenges in Negotiating Transitions to Adulthood**

According to lifespan developmental theories (e.g., Erikson, 1958; Havighurst, 1972), one of the major developmental tasks in adolescence and young adulthood is the transition from school to work. This developmental task has become more challenging for today’s adolescents and emerging adults partly because of the demands that derive from social change that have been caused by globalization, internationalization, economic and political upheavals, and technological advances. At times when young people make the transition to adulthood in rapidly changing society, individual agency, or one’s capability of controlling an environment, is crucial in his or her successful transition and adjustment to a new life stage (Haase, Heckhausen, & Silbereisen, 2 012; Heckhausen, Wrosch, & Schulz, 2010). Despite empirical evidence of the significant role that individual agency plays in young people’s coping with demands of social change, much evidence has come from the Western region of the world (Haase, Heckhausen, & Silbereisen, 2012) and little is known about what kinds of demands adolescents and emerging adults in non-Western societies perceive in negotiating the transition to work. Therefore, examinations of the transition to adulthood in non-Western contexts will further enhance the understanding of the individual level psychological processes interacting with demands and challenges on the social level. This qualitative study explores twenty-five international high school students from Thailand perceptions of demands and challenges in negotiating transitions to adulthood, particularly transitions from school to work, and their beliefs in personal agency in coping with demands and challenges in making a successful transition to adulthood.
The following abstracts are arranged in alphabetical order by the student’s last name.

Maddelaine Phillips – Art History
From Imprinting to Mark Making: Antony Gormley’s Use of the Index in 1997
Antony Gormley is one of Britain’s most prominent contemporary artists. He creates sculptures and drawings that depict his principle subject matter of the human body, through which he explores metaphysical questions concerning the body and its relationship to space. He considers his work to be an index Unlike a sign, which encodes reality; an index is an uncoded direct imprint or trace of reality such as a photograph of the body’s relationship to a certain space in a specific moment of lived time. His early work, pre-1997, primarily used lead body casts of the artist in order to make an imprint of said relationships. However post-1997, Antony Gormley expanded his method for making sculptures from cast imprints to include constructed sculptures, still taking the form of the human body. By transitioning his artistic practice of making body sculptures, Antony Gormley extended his use of the index to include mark making. This transition in 1997 can be viewed as a result of the increased influence of drawing on his sculpture. My essay will focus on this shift in the artist’s oeuvre, exploring the changing use of the index and its relationship to artist’s drawing practice. This essay will not only focus on the art of Antony Gormley but will consider the greater relationship between the index and sculpture as a plastic art.

Marilynn Parritt – School Psychology
Examining Comprehension and Oral Reading Fluency for Students with Autism
The presentation will provide a summary of a study investigating the relationship between oral reading fluency and reading comprehension in students with an autism spectrum disorder. It will extend prior research demonstrating this relationship in typically developing children. Implications of study findings will be discussed. Session attendees will learn about this relationship, as well as potential modifications to instruction and assessment practices.

Melissa Randel – Biology
Functional Genetic Cis-Regulatory Element Identification in Innate Immune Response
The Drosophila innate immune system can mount rapid responses to bacterial infection through the activation of the Toll and immune deficiency (IMD) pathways, which work to activate expression of antimicrobial peptides (AMPs) tailored to the specific pathogen. There is evidence of cross-talk between these pathways: concomitant activation has been shown to have a greater-than-additive effect on expression of AMPs. Our new high-throughput method, TRIBBEL, identifies functional genetic regulatory elements, such as those involved in AMP expression. This can be used to determine binding site specificity for transcription factors of each pathway as well as the extent of cross-talk given different types of infection.
The following abstracts are arranged in alphabetical order by the student’s last name.

Ellen Robertson – Chemistry
Ordered Macromolecular Assembly: Understanding Peptoid Behavior at an Oil-Water Interface
Peptoid nanosheets are a novel class of 2-dimensional nanomaterials that are made from the assembly of peptoid polymers with very specific chemical structures. These functional materials have potential use in a variety of applications ranging from molecular sensors to artificial enzymes. The formation of peptoid nanosheets is known to occur via the compression of a peptoid monolayer at a fluid interface into a stable bilayer structure. In order to better understand the molecular level factors that lead to successful nanosheet formation, we utilize vibrational sum frequency spectroscopy and interfacial tension measurements to study peptoids adsorbed to an oil-water interface that compose the key monolayer intermediate. Our results show that the specific peptoid chemical structure dictates both the interfacial ordering and molecular interactions of the peptoids in the assembled monolayer and that these factors play a significant role in the formation of peptoid nanosheets. These oil-water interfacial studies have implications for increasing the complexity and functionality of peptoid nanosheets.

Amirmohammad Rooshenas – Computer and Information Science
Learning sum-product networks
Sum-product networks (SPNs) are a deep probabilistic representation that allows for efficient, exact inference. SPNs generalizes many other tractable models, including thin junction trees, latent tree models, and many types of mixtures. Previous work on learning SPN structure has mainly focused on using top-down or bottom-up clustering to find mixtures, which capture variable interactions indirectly through implicit latent variables. In contrast, most work on learning graphical models, thin junction trees, and arithmetic circuits has focused on finding direct interactions among variables. In this paper, we present ID-SPN, a new algorithm for learning SPN structure that unifies the two approaches. In experiments on 20 benchmark datasets, we find that the combination of direct and indirect interactions leads to significantly better accuracy than several state-of-the-art algorithms for learning SPNs and other tractable models.

Jennifer Self – Historic Preservation
Collaborative Partnerships for Rural Preservation Planning: a program evaluation
Downtown centers across Oregon not only provide retail and employment hubs, but also contain the vast majority of local historic resources and can be a sense of pride for a community. The Main Street Approach®, first developed by the National Trust for Historic Preservation in the 1980s, is a proven comprehensive method to revitalize downtown centers. While many rural Oregon communities have the interest and community backing to initiate the Main Street Approach®, some lack the capital or expertise for a hired Main Street Manager. The organization Resource Assistance for Rural Environments (RARE) at the University of Oregon may provide the answer. RARE is an AmeriCorps program that places trained, innovative and energized young professionals within rural communities to provide technical assistance for community development challenges. Now in its 19th year, RARE has placed over 400 individuals in communities all across the state, including five Main Street communities. RARE, committed to making a positive difference in rural Oregon, is interested in knowing more about the impact this partnership has had on Main Street communities. The “Collaborative Partnerships for Rural Preservation Planning” project is designed as an external program evaluation of the RARE-Main Street partnership to determine program successes, areas for improvement, and other direct results. A mix of qualitative and quantitative data will be collected through literature review, interviews, online surveys, and downtown observation tours to provide a holistic perspective of impacts.

Ruth Siboni – Biology
Actinomycin D Inhibits Transcription of CUG RNA in a DM1 Model
Most molecular therapies are aimed at preventing formation of the MBNL1-CUG complex or degrading the CUG repeats of DM1. Previously, we identified pentamide, a bisbenzamidine that binds nucleic acids, as a potential DM1 therapeutic because of its ability to rescue mis-splicing in DM1 tissue culture and mouse models. During the investigation of pentamide’s mechanism, we discovered that pentamide decreases CUG RNA levels in a dose dependent manner, suggesting that pentamide acts by inhibiting transcription of CUG repeat RNA, potentially through binding CTG repeat DNA. This prompted us to investigate other molecules that may inhibit transcription of CTG repeats, since preventing transcription of the repeats is a previously unexplored target for potential therapeutics. A literature search to identify other molecules that may inhibit CUG transcription and identified actinomycin D: a potent transcription inhibitor and chemotherpay drug. Previous reports demonstrate that actinomycin D intercalates DNA at GpC sites and a crystal structure confirms its ability to bind CTG DNA. We demonstrate that actinomycin D decreases CUG transcript levels in a dose dependent manner in our DM1 cell model and does so at significantly lower concentrations (nanomolar) compared to its use as a general inhibitor of transcription. Furthermore, actinomycin D rescued mis-splicing in our cell model and partially rescued splicing defects in a mouse model. We’re currently investigating the details of this mechanism through large-scale genome analysis of treated cells. Collectively, our data indicate that targeting transcription of the CUG repeats has promise as a novel target for potential DM1 therapeutics.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Benedikt Springer – Political Science**  
_Divergence in Higher Education Systems – The Political Economy of Learning; Germany and the US_  
I compare the genesis of the Higher Education Systems of the US and Germany. I look at the introduction of welfare state policies at the end of the 19th/beginning of the 20th and argue that these pushed countries on different trajectories concerning the organization of higher education.

**Adam Struck – Chemistry**  
_Combinatorial effect of trans-acting splicing factors on splicing networks_  
The alternative splicing (AS) of pre-mRNA transcripts is crucial for generating proteome complexity. Through AS, individual genes produce multiple protein isoforms whose properties can often vary acutely. The transcripts of >95% of multi-exon human genes are alternatively spliced; the regulation of this process is cell type and developmentally specific. Alternatively spliced transcripts contain cis-acting splicing regulatory elements (SREs) that, in general, recruit trans-acting splicing factors that interact with the core spliceosome components to promote or suppress the inclusion of an alternative exon. Despite an extensive knowledge of the SRE landscape and the splicing factors that bind these elements, the research community has a poor understanding of how the combinatorial action of these factors determines splicing outcomes. I am studying the functional interplay between MBNL1 and CELF1, two trans-acting factors that antagonistically regulate a global network of AS events. By stringently controlling the concentration of single and multiple splicing factors we can significantly shift the splicing responses of transcripts that are co-regulated by MBNL1 and CELF1. This experimental approach will be complemented by predictions of dose-response behavior in other cell types that are obtained from computational models based on the previously observed dose-responses, the relative levels of other splicing factors and the SRE composition of the alternatively spliced transcript. The results of these ongoing experiments will help to reveal how antagonistic regulatory activities of splicing factors are coordinated between different cell types.

**Lauren Szumita – Art History**  
_Gabriele Basilico (1944-2013) and “Milano ritratti di fabbriche”_  
In 1978, in the age of post-industrialism, the future of manufacturing looked bleak. In that same year, following on the heels of several years of rioting and civil unrest, Italian photographer Gabriele Basilico (1944-2013) began a three year excursion, photographing the factories on the periphery of Milan. The series that resulted from that investigation, “Milano ritratti di fabbriche” (Portraits of Factories in Milan) 1978-1980, marks his foray into photography and the initial recognition of his work in the public domain. The absence of people in Basilico’s photographs and his focus on the exteriors of the factory buildings in context is unusual but not unprecedented in European and American photographic works. The prevailing economic conditions and social revolutions led to a cultural change of thinking in Europe and America, which in turn engendered the new style of photography categorized by the work of Basilico. Beginning with artists Paolo Monti and Mario Giacometti, Italian photography began to move away from the social documentary style of the 1950s towards a more contemporary, conceptual approach. Landscape photography became regarded not as simply a picturesque view, but instead as a marker of cultural and topographical change. Over the next thirty years, Italian photographers refined the practice to reflect the complex social, economic, and political forces at play in their homeland. This paper will explore Basilico’s position within the conceptual shift in landscape photography that occurred between the 1950s and 1970s, when Italy was experiencing a decline in post-war production and economic success.

**Michael Thier – Educational Leadership**  
_Linking Global-Mindedness to Growth Mindset Among Modern-Orthodox Jewish Pre-Service Educators_  
Despite a widespread call to increase education for global-mindedness, there have been few investigations into such preparation for educators. Significant is a lack research about educators in independent school settings or educators who attended religiously specific K-12 schools—communities that typically have lower religious or ethnic diversity as compared to public-school settings. This study examines the interaction effects of global-mindedness and growth mindset among pre-service teachers who attended K-12 Modern-Orthodox Jewish schools. This descriptive study uses a correlational design to characterize relationships between scores on the Hett’s Global-mindedness scale and scores on Dweck’s Growth Mindset scale using juniors and seniors who are currently majoring in education or who graduates who were seniors within the last year at Stern College for Women. Factors investigated will include attitudes toward (a) cultural pluralism; (b) global-centrism; (c) interconnectedness; and (d) personal responsibility. Though a narrow sample size limits generalizability, the researcher views identification of relationships between global-mindedness and growth mindsets as informing how educators might better approach teacher recruitment and professional development in such school settings. Moreover, basic research into this developing field might service to inform broader research about the preparedness for global education among other educator groups. Future research foci include differences in global-mindedness preparation between: pre-service and working teachers; independent and public-school teachers; teachers educated at public and private schools (including religious) colleges/ universities; female and male teachers; and pre-service teachers at rural, suburban, or urban teacher education programs.

**Jing Tian – Computer and Information Science**  
_ARP Security – Leveraging the Power of Logic and Hardware_  
IP networks rely on Address Resolution Protocol (ARP) for the mapping between the IP address and the ethernet hardware address. However, like many other protocols within IP, ARP is subject to a range of security vulnerabilities. For instance, there is no way to tell if the MAC address got from the ARP reply is trustworthy or not, which allows the adversaries to impersonate the hosts, to perform man-in-the-middle attacks or DoS victims. Previous ARP security papers either discard the ARP itself or cost too much in implementation. Recent papers on ARP security focus on using key-based authentication mechanism to enforce the security, including S-ARP and TARP. In this paper, we are trying to leverage the power of logic (an instance of an ARP binding system) and hardware (TPM) to provide a better security solution for ARP. Logic/formal verification has been a hot research direction in the security community. Both network protocols and operating systems are taking the power of formal methods for security enhancement. To incorporate the prior knowledge/experience about the right behaviors of ARP, we provide a bunch of binding logic (rules) to determine if the given MAC address could be bind with certain IP address. The binding logic for ARP reasons about set relations over trust, time and address. When logic layer is not able to determine if the remote is trusted or not, hardware layer provides the next-step attestation. In computing, Trusted Platform Module (TPM) is both the name of a published specification de-tailing a secure crypto processor that can store cryptographic keys that protect information, and the general name of implementations of that specification, often called the “TPM chip” or “TPM Security Device”. The TPM offers facilities for the secure generation of cryptographic keys, and limitation of their use, in addition to a random number generator. It also includes capabilities such as remote attestation and sealed storage. In our case, TPM is used to challenge the remote machine and the corresponding response from the remote’s TPM will be analyzed to determine if the remote machine is reliable or not.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Mohamadali Torkamani – Computer and Information Science**  
*On Robustness and Regularization of Structural Support Vector Machines*  
Previous analysis of binary SVMs has demonstrated a deep connection between robustness to perturbations over symmetric uncertainty sets and regularization of the weights. In this paper, we explore the problem of learning robust models for structured prediction problems. We first formulate the problem of learning robust structural SVMs where there are perturbations in the feature space. We consider two different classes of uncertainty sets for the perturbations: ellipsoidal uncertainty sets and polyhedral uncertainty sets. In both cases, we show that the robust optimization problem is equivalent to the non-robust formulation with an additional regularizer. For the ellipsoidal uncertainty set, the additional regularizer is based on the dual norm. For the polyhedral uncertainty set, we show that the robust optimization problem is equivalent to adding a linear regularizer in a transformed weight space related to the linear constraints of the polyhedron. We also show that similar results can be obtained for a combination of these two uncertainty sets.

**Luke Wheeler – Chemistry**  
*Evolution of Novel Functions in the S100 Protein Family*  
Changes in the molecular components of organisms are the basic driving force behind evolution. Therefore, to fully understand the evolution of biological systems it is necessary to understand it at the molecular level. The diverse and evolutionarily conserved S100 protein family offers unique opportunities to study molecular evolution. Using this system as a model we can gain unprecedented insights into the evolution of novel functions in proteins, ranging in scale from the evolution of a new allosteric site to the modulation of target specificity within the protein family.

**Tina Wong – Architecture**  
*Sketches From China: Expat Town*  
In the United States, Chinatowns can be their own self-sufficient worlds where the inhabitants have little or nothing to do with American society. While I was working in Beijing in 2012, I noticed a curious similar phenomenon with Americans who live in China. Americans in China gather in “Expat -towns” – places where signage is predominantly English and where American imports and venues can be found. The interactions between these foreign neighborhoods and their respective host countries can vary from a mere juxtaposition of two vastly different cultures to an intimate weaving of American and Chinese establishments in everyday life. During the summer of 2013, I traveled back to China to document the architecture of these American (or “Western”) areas in attempt to understand how globalization is affecting the physical built environment in which we live. The drawings created from this project are a study of changing cultural identities and associations, changing social interactions and structures, and changing architectural aesthetics and pursuits.

**Xiao Xiao – Computer and Information Science**  
*Relational dependency network for human behavior prediction in a Health Social Network*  
Health social network is an emerging relational domain to modeling and predicting human behaviors. We construct a real-world health social network as a relational dependency network and use a recently developed statistical relational learning algorithm- relational functional gradient boosting to the task of predicting human behavior. We show that the relational functional gradient boosting method can get better accuracy compared to other propositional learners.

**Huichao Xie – Special Education**  
*A pilot study on providing family-centered early intervention in China*  
Although early intervention for children from birth to six who have or are at risk for developmental delays developed rapidly in the past 30 years in China, the majority of practices are delivered in a child-focused approach in which professionals develop and implement the intervention on the child. Realizing that active involvement of family in early intervention is critical to the outcomes of both the child and the family, researchers in China advocate for more focus on families. In the U.S., there are massive research findings on how to form positive partnerships between professionals and families to empower the competency and confidence of caregivers in supporting their children’s development in daily family life. However, the application of experiences from one country to another requires comprehensive considerations and careful evaluations. This is a small scale pilot study to introduce evidence-based family-centered practices to China by the collaboration of researchers from South China Normal University and University of Oregon with the purpose to inspire future studies and practices. The research team developed a family-centered early intervention model based on intensive literature review. In September, 2013, a pre-service training was provided in Guangzhou, China to a group of 44 Chinese interventionists who are going to work with 15 families. Although these interventionists start practice under the supervision of the research team, data are collected for analysis on child and family outcomes, program effectiveness and cultural appropriateness of the intervention services.

**Jeffrey Xie and Elizabeth Minton – Marketing**  
*Those Mushrooms Smell Bad: How Automatic Mental Simulation Influences Healthy Food Choice*  
Prior research has shown that visual stimuli can evoke automatic (i.e., embodied) mental simulation, which influences consumer behavioral intentions. For example, seeing a picture of a cup automatically makes consumers think of drinking from the cup. This research continues investigation in this automatic mental simulation. Research on instructed mental simulation (i.e., telling a person to “please imagine using a product”) shows that there are two types of mental simulations: process (e.g., picking up the cup and drinking out of it) and outcome (e.g., satisfaction after drinking a cup of coffee). These two types of mental simulations have never been examined with automatic mental simulation, which is the purpose of this research. We propose that process and outcome are two types of automatic simulation which, if taken into account, should influence the way that unhealthy and healthy foods are marketed. Results from two studies provide evidence to support both process (e.g., taste, smells) and outcome (e.g., satisfaction, feelings of fullness) automatic simulation. In general, consumers automatically evoke more outcome thoughts with healthy foods and more process thoughts with unhealthy foods. Results expand these findings to overall attitudes toward a product, purchase intentions, and health perceptions. Implications and suggestions for further research are discussed.
The following abstracts are arranged in alphabetical order by the student’s last name.

**Bahador Yeganeh – Computer and Information Science**  
**Characterizing Video Traffic over UO Campus Network**  
Characterizing various aspects of different Internet protocols often requires detailed measurement over an operational network with a realistic mix of traffic. Campus networks have several characteristics that make them particularly attractive for experimental evaluation of network protocols. In particular, University of Oregon campus network (UONet) provides connectivity for more than 20K resident students to the rest of the Internet and thus offer a promising testbed for such measurement studies. Using the anonymized data of individual flows between UONet and the Internet, we examine several characteristics of traffic associated with UO users. In particular, we identify video flows associated with major content provider (e.g. youtube, Netflix, Amazon and Hulu) that are assumed to make up a significant fraction of UO traffic. We characterize different aspects of video traffic ranging from their deliver mechanism, the popularity, temporal evolution and relative quality of delivered video from these providers and the contribution of each provider to UONet traffic. Our findings collectively shed an insightful light on how these provider deliver video content to a large number of UO users.

**Mingwei Zhang – Computer and Information Science**  
**Internet Routing Anomaly Detection and Visualization**  
The Boarder Gateway Protocol is the De facto inter-domain routing protocol in current Internet infrastructure. Effectively, BGP is used to connect the large Internet Service Providers such as Comcast, AT&T and so on. However, the BGP’s design does not take much security in to consideration, and therefore left BGP a vulnerable spot. BGP anomalies like IP prefix hijacking and route leaks happen more and more frequently. People needs a better way to detect the anomalies and find out the root cause of them. In this proposed research, we will first improve our previous anomaly detection system Buddyguard and i-Seismograph. Besides, we will create intuitive visualization of anomalies, which can provide more straightforward information about the anomalies. The preliminary is shown in the uploaded graphs.

**Yunfeng Zhang – Computer and Information Science**  
**Reshaping the Development and Evaluation of Cognitive Models Using Computational Science and Statistics**  
Cognitive modeling is an important, highly specialized thread of research that has persisted and extensively developed since the inception of the field of human computer interaction. One of the main goals in cognitive modeling research is to provide accurate, engineering models of human information processing, which can be used to evaluate user interface designs just like how computer simulations are used to evaluate the designs of other complex systems such as aircrafts, cars, and bridges. Despite that there has been 30 years of fruitful research in cognitive modeling, there are still some important unaddressed challenges. Particularly, many researchers have pointed out that a good fit between model predictions and the human data may not provide sufficient evidence for the model. However, more principled model evaluation approach have yet been developed, and my dissertation research attempts to provide some viable solutions to this problem. I am currently finishing the last part of my dissertation which relates to applying high-performance computing and advanced algorithms to push forward more rigorous development and evaluation of cognitive models. I have built models for human multitasking and visual search tasks. In each of these models, I not only used modeling to reveal people’s task strategies and perceptual-motor capabilities and constraints, but also experimented with a variety of methods to push forward more principled modeling practices.

**Campus Contribution and Career Development Posters**  
Each year, with central support administered by the Graduate School, approximately 80 graduate students are hired across campus into administrative GTF positions that support the institution’s priorities while, at the same time, provide the students with valuable career-enhancing experiential learning. They work in Student Affairs, International Affairs, the UO Libraries, our university museums, Campus Operations, Research, Innovation and Graduate Education, and more.

At this year’s Grad Forum, more than 20 of these paraprofessionals have volunteered to share with us what they’ve gained from this experience as well as how they and their units meet the needs of our campus community and support the university’s goals for excellence.

**Name** | **Course of Study** | **Hiring Unit**
--- | --- | ---
Daniel Anthony | Architecture | University Libraries
Lindsey Arkfeld | Business Administration | Human Resources
Carrie Bennett | Conflict and Dispute Resolution | Career Center
Derrick Bines | Counseling Psychology | Office of Equity and Inclusion
Caitlin Bradley and Brian Reece | Arts Management | University Libraries
Christine Carolan | Geography | Residence Life
Jennifer Chain | Counseling Psychology | Center on Diversity and Community
Brian Clark | Psychology | Office of the Dean of Students
Nicholas Famoso | Geological Sciences | Museum of Natural and Cultural History
Laurette Garner | Arts Management | Career Center
Amy Keir | Nonprofit Management | First-Year Programs
Holly Lakey | Linguistics | Northwest Indian Language Institute
Robert Larson | Architecture | Capital Construction
Jacob Levernier | Psychology | University Libraries
Jessica Linscott | Counseling Psychology | Office of the Dean of Students
Andrew Low | Landscape Architecture | Office of Sustainability
Colleen McCarthy | Counseling Psychology | Career Center
Emma Oravec | Folklore | Office of the Dean of Students
Luis Sandovol | Public Administration | CAS Social Sciences Data Lab
Bruno Seraphin | Folklore | Oregon Folklife Network (OFN)
Margaret Simons | Curriculum and Teaching | Center for Applied Second Language Studies
Kyle Spradling | Business Administration | Technology Transfer Services
Andrew Stiefel | Music Composition | Office for Research, Innovation and Graduate Education
Sarah Turner | Arts Management | Jordan Schnitzer Museum of Art
Representing Communities and Histories from the Grassroots

1:45-3:00pm  
Oak Room  
Panel Discussion  
Moderator: Gabriela Martinez, Journalism & Communications

Delphine Criscenzo – Multimedia Journalism  
The Power of Voice: World Pulse and Its Citizen Journalism Training for Grassroots Women Leaders  
World Pulse, a media action network, has been teaching citizen journalism to grassroots women leaders worldwide for 4 years. Journalism as a profession and as an academic discipline is not available to all, but World Pulse is changing the rules and training women to tell their stories and impact social change by giving these women a voice. I will explore the opportunities citizen journalism creates for women from the most remote places, rural areas, and disenfranchised communities.

Sonia De La Cruz – Media Studies  
Bridging Knowledge: From the Archives to the Community  
As a way of opening new avenues to preserve, share, research, study, and narrate the history of Latino communities as Oregon and American history, the Oregon Latino Heritage Collaborative (OLHC) was formed at the University of Oregon and is supported by Special Collections and University Archives (SCUA) of the UO libraries. One of the OLHC’s goals is to encourage Latinos and Latino-led organizations in the state of Oregon to document their history, experiences, and contributions to our state and communities and to make this documentation accessible to the broader community. Currently, one of the Latino projects the OLHC has undertaken is with Oregon’s Farmworker Union (PCUN). PCUN provided documents that help highlight labor history in our state. These documents include correspondence, newspaper clippings, photography, posters, and audiotapes that trace the PCUN’s efforts to improve the state’s labor standards and the working conditions of farmworkers and provide insight into the Latino presence in Oregon. For this presentation, I will show documents from the PCUN collection in the SCUA and discuss the importance of this documentation to an understanding of Latino history in our state and the value of such collections to an understanding of our greater Oregon community.

James Miller – Architecture  
Creating Small Island Resilience through Cultural Continuity  
As the sea level rises, atoll nations face dire straits. How does a nation respond to the loss of its lands forever, and how can the cultures of its communities survive without the land in which they are rooted? I examined the issues of cultural continuity through the lens of the underlying cultural processes manifest in the vernacular architecture of Marshallese immigrant communities. Vernacular architecture studies demonstrate the living processes rooted in the local culture of a community. By looking at the underlying processes within the culture, one can discover the persistence of deeply rooted culture manifest in the built environment. The semantic cultural processes of a community provide the bridge for cultural continuity in the new built environment of the immigrant enclave. Using a multisited ethnographic approach, I build upon previous ethnographies of Marshallese culture and examine immigrant communities to uncover what cultural processes persist and manifest themselves in the built environment. I anticipate that the cultural processes of the Marshallese will be apparent in the immigrant communities and will provide evidence of cultural continuity in a new land. The indication of cultural continuity will demonstrate cultural resilience and possibly assuage fears associated with resettlement.

Climate Change

1:45-3:00pm  
Maple Room  
Panel Discussion  
Moderator: Andy Berglund, Chemistry

Gordon Levitt – Conflict and Dispute Resolution/Juris Doctor  
Negotiating Local Climate Recovery in Oregon  
This research is focused on the challenges and opportunities for local communities to address climate change in Oregon. Using Eugene, Oregon as a case study, the city’s 2010 Community Climate and Energy Action Plan and related efforts were examined as initial attempts to prepare for climate change within the confines of contemporary governance and natural resource management paradigms. Innovative approaches to environmental governance—based upon the Public Trust Doctrine—are complementary extensions of Eugene’s existent plan and the building blocks of a new, local approach to climate action. This research reflects on a current youth campaign, spearheaded by Our Children’s Trust, advocating for the passage of a Climate Recovery Ordinance and envisioning a sustainable future for Eugene. Given the unprecedented nature of the proposed ordinance, the expected implementation challenges are discussed through an analysis of major stakeholders’ present and future interests in Eugene’s environmental governance strategy. I also compared the proposed Climate Recovery Initiative in Eugene with the State of Oregon’s plans to address climate change, assessing the areas of potential conflict and synergy and the applicability of the initiative to other communities in Oregon.

Laura McWilliams – Chemistry and Biochemistry  
A Mean Grab: Carbon Capture Studied at a Molecular Level  
In recent years, growing awareness of the cost of greenhouse gas emissions to our global climate, principally from CO2 and methane, has led to international strategies to reduce these emissions. However, the CO2 level in the atmosphere is now 33% higher than preindustrial levels. Currently, the most promising avenue for reduction of industrial CO2 emissions is through amine scrubbing. However, scientific interest in amine scrubbing has chiefly focused on bulk phase macroscopic properties, ignoring the molecular picture. Ongoing studies in our laboratory are using a variety of surface science techniques to explore the adsorption of CO2 gas to liquid amine interfaces. This research will describe the molecular details of an important class of carbon-capture reactions.

(Abstracts continued on next page.)
Climate Change

1:45-3:00pm
Maple Room
Panel Discussion
Moderator: Andy Berglund, Chemistry

(Abstracts continued from previous page.)

Sarah Praskievicz – Geography
Negotiating Local Climate Recovery in Oregon

This research investigates how future climate change may affect the fluvial geomorphology (physical form) of rivers. Climate change and variability is widely acknowledged as a major factor influencing river flow, particularly in mountainous watersheds in which snowmelt makes a large contribution to the annual discharge. Potential climate change–driven changes in the hydrology of such basins have been simulated by hydrologic models. This research contributes to a better understanding of the geomorphic responses of river systems to climate change through development of a hierarchical series of linked models to investigate how climate change influences hydrology, which in turn influences fluvial geomorphology. This modeling framework was applied to three snowmelt-dominated watersheds in the interior Pacific Northwest, with the following objectives: (1) development of downscaled climate change scenarios, which are projections of future changes in climate variables such as temperature and precipitation that are locally specific to the study basins; (2) application of a watershed-scale hydrologic model to project how the study basins' hydrology, including the magnitude and timing of river flow, may change in response to the downscaled climate change scenarios; and (3) examination of the impact of the modeled hydrologic changes on the study rivers’ geomorphology (i.e., channel form, planform, and sediment transport). The reach-scale geomorphic model used can simulate an individual river segment in greater detail than can a watershed model. This hierarchical modeling process is an innovative approach to linking physical processes that occur across multiple scales, from global and regional climate to watershed hydrology to local geomorphology.

Alanna Young – Geography
Wildfire in the Western United States

How does climate influence wildfire across the western United States? Previous studies have focused on climate at a local or regional scale or on the influence on the biogeography of homogenous areas. However, large-scale studies incorporating all of these factors are lacking. My study builds on previous work from our lab, which focused on the spatial and temporal differences and similarities between human- and lightning-caused fires in the western US. Lightning-induced wildfires mostly occur in less-populated areas in the summer; humans fill in the gaps, igniting valleys and recreational areas. Both surge distinctively in the summer, moving northwest with the jet stream. Using a 25-year (1986–2011) record of wildfire start data, I analyzed regional and local climatic and biogeographic controls to assess the spatial and temporal patterns of lightning- and human-caused wildfires. Addition of 15 years to the original study (1986–1996) allowed me to test hypotheses of wildfire-climate correlation. I also expanded the research to incorporate biogeography at local levels and relationships between fire occurrence and large-scale climate oscillations such as the El Niño–Southern Oscillation.

Changing the Professions: Media, Public Interest, and Technology

1:45-3:00pm
Fir Room
Panel Discussion
Moderator: Kim Sheehan, Journalism & Communications

Shannon Arms – Landscape Architecture
Collaborative Capital: Mapping the Gap between Pedagogy and Practice in Public Interest Design

I conducted a preliminary exploration of the gaps between academic training and professional practice within the field of public interest design (PID). PID is a burgeoning movement within the design profession but can be likened to the well-established fields of public health or pro bono law. At its most essential, PID is concerned with finding ways in which design can be used to address significant threats to the health, safety, and welfare of marginalized communities in a rapidly changing world. I have focused my research on defining the strengths that recent graduates (i.e., emerging professionals) in Landscape Architecture can bring to PID projects. I identified and addressed some of the challenges PID must reconcile to gain wider acceptance throughout the design community. Through surveys, project case studies, and in-person interviews, I fill existing gaps in knowledge about PID, illuminate the role of the emerging Landscape Architecture professional in the PID movement, and suggest avenues for translating findings into an applicable framework for design practice.

Kelsey Cummings – Media Studies
Affect and Narrative Rhetoric in News Coverage of Mass Shootings

Mass shootings are a regular feature of American culture. Because of the prevalence of this distinct form of violence, it is important to critique the means by which mass shooting events are covered by the news media. National media’s sociopolitical understanding of reality shapes public opinion, which in turn influences the actions or inactions taken in response to a crisis. I use case studies of mass shooting media coverage to argue that news outlets primarily rely on emotional affect and narrative language to exhibit these events. Affect is expressed in the rhetoric of tragedy and is conveyed visually through specific tropes, such as that of the crying woman, the bloody victim, or the wreaths and stuffed animals of the memorial area. Similarly, the narrative of the mass shooting is expressed via particular archetypes. Recurring characters with particular characteristics include the disturbed villain, the beloved victims, and the courageous heroes. The tragic narrative arc becomes a central fixation of this type of coverage. More specific narratives and counter narratives are introduced by interest groups, the most dominant being provided by the National Rifle Association. The rhetoric at hand in news coverage of mass shootings serves a series of social and political functions, but the most critical of these is a rejection of the potential existence of prevention techniques. Ultimately, the apparently apolitical use of affective and narrative rhetoric actually fails to acknowledge gun control as the means by which future mass shootings could be prevented.

(Abstracts continued on next page.)
Changing the Professions: Media, Public Interest, and Technology

1:45-3:00pm  Panel Discussion
Fiè Room
Moderator: Kim Sheehan, Journalism & Communications

(Abstracts continued from previous page.)

Gregory Gondwe – Media Studies
Reclaiming Media Credibility: Examining the Efficacy of Virtue Ethics on Zambian Media Challenges
The news media in Zambia and in Africa in general are characterized by unethical reporting. African scholars have identified corruption, nonprofessionalism, biases, and conflict of interest as the major challenges in this unethical reportage. Such problems have undermined media credibility. In a quest for solutions, a few theories have been applied, including a call for African values in the African media. However, the challenges are persistent, and I suggest that virtue ethics as the only cure for unethical reporting and the only theory that can reclaim news media credibility in today’s postmodern world.

Jonathon Henderson – Critical and Sociocultural Studies in Education
Digitally Supported Critical Pedagogy
The purpose of the study is to examine prelicensed teachers’ views on digital education technology, critical pedagogy, and the integration of the two concepts. The information about integration will guide the development and refinement of a proposed new construct exploring how digital education technology can deepen critical pedagogy learning experiences. The study follows seven UD Teach Master’s students for 9 months through focus groups, individual interviews, and weekly journal entries. Here, I present the coded and analyzed results from the first 6 months of the study and include new insights into how prelicense teachers who grew up with today’s technology interpret and plan to use education technology in their classrooms. I also report their views on different aspects of social justice and critical pedagogy and how those views impact their teaching and intersect with education technology. I conclude with interpretation of the results and their impact on my development of the proposed new construct called Digitally Supported Critical Pedagogy. This construct will be a valuable tool for prelicensed teacher educators and teacher education programs who want to engage students that have an interest in exploring critical pedagogy and using education technology in their classrooms.

Exploring the Woodwind Quintet through Luciano Berio’s Opus Number Zoo

1:45-2:15pm  Music Performance and Artist Talk
Walnut Room

Sam Golter – Music Performance
Laura Goban – Music Performance
Raquel Vargas-Ramirez – Music Performance and Arts Management
Eric Grunkemeyer – Music Performance and Music Education
Colleen White – Music Performance

Summary of Music Performance
A performance of Luciano Berio’s Opus Number Zoo: A Children’s Play for woodwind quintet will be presented and discussed in the context of a community engagement event with an audience age group of K-6. In addition to a complete performance of the work we will demonstrate the diversity of the woodwind quintet instruments, sounds, and timbres, and their relevance to early music education. Our goal is to encourage a lifelong appreciation of chamber music throughout the local community. Opus Number Zoo, an eight-minute work, is an accessible and intriguing work for all ages, and highlights each member of the woodwind quintet musically, in addition to speaking roles for each member. The combination of solo work, ensemble cooperation, and theatrical performance techniques creates for a unique and diverse performance and listening opportunity for both the ensemble and the audience.

Artist’s Statement
The Oregon Graduate Quintet is dedicated to performing diverse chamber music literature, and educating audiences about the woodwind quintet. Hailing from all corners of the US and Costa Rica the quintet is comprised of Sam Golter, flute, Laura Goben, oboe, Colleen White, clarinet, Raquel Vargas-Ramirez, bassoon, and Eric Grunkemeyer, horn.
Kimberley Parzuchowski – Philosophy
The Enchantment of Ethics: Character, Fiction, and the Cultivation of the Empathic Moral Perception
My dissertation project seeks to explicate the relation between narrative fiction and the cultivation of empathic moral perception. The focus of this work is on exploring the development of moral character as an art that is aided by the cultivation of engaged reading and the development of empathic skills. John Dewey describes the development of habits as leading to what we understand as character. However, the habits we seek to practice need to be intelligently informed and prudently implemented. It will not do to ignore the neurophysiological realities of human nature. Based on empirical research, I claim that humans do not act based on rational principles but rather on intuitions and impulses. Thus, what is needed is the cultivation of such intuitions and impulses. Such development of character is necessarily social because our social milieu both circumscribes and enables possible individual character styles. We frame this social milieu narratively, using narrative structure to explain our actions and interrelations with others. Narratives enable us to grasp the way our own lives fit into the web of intersubjectivity that we inhabit. Narrative also is often the way we justify ourselves morally and the way we learn our roles and responsibilities within our various cultural and familial situations. For this forum, I discuss engaged reading as a means to develop empathic engagement for ethics and as an activity for the strengthening of community.

Tricia Rodley – Theatre Arts
Practical Dramaturgy for Actors
In my dissertation, I propose development of a practical dramaturgy for actors. I encourage a dramaturgical sensibility in the actor, defined as awareness of the ambiguous and slow emergence of meaning that comes from exploring a play’s dramaturgy, i.e., its composition and more specifically its language, structure, and story. Geoffrey Proehl discussed dramaturgical sensibility in relation to the dramaturg’s role in theatrical production; I expand upon his work by investigating the impact for actors. Actors create character in preparation for performance and often build characterization by exploring psychological motivations. My research questions how actors may develop a dramaturgical sensibility in their preparation to interact more fully with a play, beyond a character. I suggest actors must engage with the unique mode of a play’s language as a structure. This dramaturgical preparation requires the actor to pursue layered meanings within language rather than fixed psychological motivations; the actor must be flexible enough to embrace ambiguity and still explore specific action. As a secondary case study related to my dissertation, I will compare findings from research interviews with professionals at the Oregon Shakespeare Festival (OSF) with findings from research interviews with student actors involved in a recent University Theatre production of Arcadia. These interviews will be used to address these questions: What dramaturgical practices emerge from OSF’s resources in relation to the challenges of language, and are such practices echoed in the preparation of student actors?

Mehmet Celbi Celebi – Political Science
Re-interpreting Democracy: The Case of Turkey
Collier and Levitsky’s article “Democracy with Adjectives” set the tone of recent debates about political regimes. In this article, the authors argue that to understand the expanding gray zone between democratic and authoritarian regimes, we should first build rigorous analytical concepts and a terminological consensus. Drawing upon information from contemporary Turkey. which is widely seen as an ambiguous case, I argue that starting an investigation based on a fixed and essentialized concept, which is a common practice in comparative politics, is misleading. Using sociological concepts such as legitimizing myths, global culture, and decoupling, I argue that the recent democratization attempts in Turkey and the associated ambiguities can best be explained by conceiving democracy as a complex idea that lends itself to local re-interpretations rather than as a purely analytical concept. The definition of democracy is essentially contested in the real world, giving the actors who champion democratization the ability to re-interpret this concept while adapting it to local contexts. Analyzing the policy choices and discourse of the Justice and Democracy Party in Turkey, I argue that the ambiguous nature of the regime change in Turkey is the result of such a re-interpretation that prioritizes “the myth of representation” over “the myth of limited government.”

Mu-Lung Hsu – Anthropology
Seeing but Not Seeing: “This Is How We Do Things”
This presentation summarizes the findings of my ongoing research on Myanmar’s informal economies. It focuses on a form of everyday mechanism of governance in response to officially devalued but socially acceptable practices. Research on Myanmar’s informal economy continues to rely on dual economy models, such as formal-informal and regulated-unregulated, and is prone to characterize informal economic activities as accommodation or resistance to flawed policies. My research however disagrees with these discourses because they ignore and sometimes stigmatize the complicated relationship between state agents and the regulated sector. I draw on Robert Weller’s “subjunctive worlds” work on China’s informal politics to reconsider the complexity of legality of some characteristic informal practices, such as informal Chinese schools and motorbike trade. This approach brings attention to an everyday form of governance, in which state agents turn a blind eye to the law or orders being ignored and consequently provide more flexibility for both state agents and the regulated individuals to mitigate the tension between unfavorable socioeconomic practices and state regulations. As Myanmar experiences rapid growth of liberalization and political democratization, further research must be done to better account for the challenges that have faced various urban and cross-border informal economies and the way in which people respond through this informal method of governance.
Cultural Diversity, Equity, and Access: The Center on Diversity and Community’s Award Winning Research

3:15-4:15pm Panel Discussion
Oak Room

T. Audrey Medina – Counseling Psychology
WILD Empowerment: Exploring Empowerment, Experiences, and Identity Salience Among Disabled Women Leaders From 21 Countries
In 2006, Article 6 of the United Nations Convention on the Rights of Persons with Disabilities recognized that “women and girls with disabilities are subject to multiple discrimination” and articulated an obligation to “take all appropriate measures to ensure the full development, advancement and empowerment of women, for the purpose of guaranteeing them the exercise and enjoyment of the human rights and fundamental freedoms set out in the present Convention.” The purposes of the current study are to explore empowerment processes and their relationship to multiple intersecting identities and overlapping environmental systems, specifically among women leaders with disabilities from around the world. Participants included 21 women with disabilities from 21 countries who attended Mobility International’s Seventh International Women’s Institute on Leadership and Disability (WILD) in August 2013. Through semistructured interviews and participant observations, I hoped to learn (1) how the WILD participants describe their ongoing empowerment processes within multiple overlapping environments [e.g., family, school, work, and sociopolitical sphere]; (2) how participants’ empowerment experiences relate to their salient intersecting identities; (3) how participants experienced empowerment during the 2013 WILD program in Eugene, Oregon; and (4) how participants sustain a sense of empowerment upon returning to their home countries. I will analyze interview transcripts using constructivist grounded theory analysis. As themes emerge, I will begin to generate theories about models and metaphors that fit the empowerment process, about the relationship of empowerment to identity salience, and about the role of contexts, supports, and barriers in participants’ leadership experiences.

Francesco Somaini – Media Studies
Essentially Criminals: A Transatlantic Content Analysis of Immigration Coverage and Readers’ Reactions
In recent times, the United States and European Union have been facing immigration issues that are similar in many ways, including the number of immigrants who are more often seen as “undesired” newcomers in relation to the current population. These countries have reacted similarly: with more severe immigration policies that have first been elaborated regionally instead of at the national or supranational level. Tougher laws have initially been proposed and passed in geographic areas that have become entry points for undocumented immigrants because these areas are structurally porous, such as the U.S.-Mexico border in the Sonoran Desert and the coasts of Greece, Italy, and Spain on the north side of the Mediterranean Sea. The news media have played an active role in nurturing some of the anxieties that have “justified” stricter immigration policies, particularly by perpetuating dehumanizing representations of immigrants. Journalists, however, seem to have become more sensitive to the implications of their editorial decisions. This study is a transatlantic comparative content analysis of immigration coverage in Arizona and Italian newspapers, with a twofold goal: (1) to verify whether Arizona and Italian news stories about immigration or involving immigrants present, as recommended by media scholars and style manuals, a reduced use of metaphors that associate immigrants with criminals and (2) to investigate a potential correlation between the positive or negative representations of immigrants emerging from news stories and the reactions to those stories expressed by readers who post online comments.

Leilani Sabzalian – Education Studies/Critical and Sociocultural Studies in Education
Reaching for Educational Practices that Interrupt Colonization and Promote Indigenous Identity and Community
My dissertation will include a field study of an urban Title VII program in Oregon, exploring both the constructive aspects of this program and the complex, unintended consequences it (re)produces. Of particular concern will be the insider/outsider dynamics that are generated by Title VII enrollment criteria. The study will identify what educators need to understand in order to work with indigenous students and families to minimize the cultural and personal costs of those dynamics. Data collection will include participant observation at Title VII sponsored events including tutoring sessions, craft and drumming nights, youth group meetings, and family gatherings and in-depth and focus group interviews with students, families, and Title VII service providers. The goal is to develop case studies that highlight the intelligent and courageous ways Native students, families, and culturally responsive service providers navigate cultural dynamics created by Title VII program implementation. I will draw upon contemporary Indigenous studies and educational ethnographic literature in the analysis of the macrosocial influences of these programs on student experience. I also will utilize the contemporary literature on culturally responsive teaching and teacher practical knowledge in the documentation and analysis of the insights that enable educators, students, and families navigate these influences. This study will have implications for the preparation of teachers and administrators who serve Indigenous students and for national and state policies such as Title VII programs intended to serve Native students and families.

(Abstracts continued on next page.)
Portraits of Working Conditions and Environments for Women in Central America, South America, and Africa

3:15-4:15pm  Panel Discussion
Maple Room  Moderator: Kemi Balogun, Women & Gender Studies

Sara Clark – International Studies
Host Mother Perspectives from Costa Rica
While the impacts of study abroad programs on students have been widely studied, much less is known about the impacts on host communities and in particular the lives of the host mothers. To explore the benefits and challenges of hosting and the role of hosting in women’s empowerment, I spent 11 weeks in Costa Rica and interviewed 31 host mothers and nine school staff members, collecting both qualitative and quantitative data. The work of hosting students in Costa Rica is predominately done by women who take on the roles of teacher, mentor, cook, maid, and mother to students who pay to stay in their homes from 1 week to 1 year. I discuss changes in women’s lives due to hosting, benefits and challenges of hosting, and suggestions for exchange students and homestay programs.

Naami Ketema – International Studies
Female Ethiopian Migrant Domestic Workers: An Analysis of Returning and Reintegration Experiences
The Horn of Africa nation of Ethiopia is experiencing unprecedented migration of particularly young, illiterate, or modestly educated and low-income women seeking better income opportunities. The most popular destination for these women is the Middle East. The short-term and unsustainable nature of the migration policy of the Gulf countries, with no opportunity for naturalization or permanent residency, forces these women to go back to Ethiopia at the end of their contract for domestic work, the duration of which is limited to 2 or 3 years. This research looks at the gendered effect of migration through the lived experience of Ethiopian women returnees and their negotiation with changing and unstable power structures in their families and communities upon their return. I also analyze how their migration experiences shape their way of understanding their status, gender role, and empowerment.

Amy Price – International Studies
Beyond the Beauty of a Dozen Roses: Implications of Free Trade on Women in Colombia’s Cut Flower Industry
I examined the working conditions and impact of globalization and free trade on women workers in Colombia’s cut flower industry. Economic globalization has led to an unprecedented increase in women’s participation in the formal economy across the globe. This trend has undoubtedly provided jobs for women; however, these jobs often provide low-wage work under exploitative conditions with little opportunity for social mobility. Efforts by nongovernmental organizations (NGOs), unions, and policymakers in Colombia to improve these working conditions have achieved limited success. Through fieldwork in Colombia and by drawing from other empirical studies, I found that the “social clause”—the Labor Action Plan—in the U.S.-Colombia Free Trade Agreement that was designed to address labor rights violations in the flower sector has been largely ineffective. I examined the ways in which the repression of unions, the factory work, and the use of double shifts affect women’s participation in unions. I also explored other forms of resistance such as everyday resistance, NGOs, and community organizations. This project provides information on how global processes and local dynamics intersect and shape the lived experiences of women workers. These findings add to the wide range of new and continuing research in the field of gender and development in which there is a lively conversation about the extent to which these types of export-oriented jobs hinder or increase gender equality.

Interdisciplinary Investigations of User Behavior & Information Propagation in Social Computing Systems

3:15-4:15pm  Panel Discussion
Fir Room  Moderator: Reza Rejai, CIS

Nicole Lawless – Psychology
Do you see what I see? Personality judgments in social media
People can make accurate judgments of others’ personalities without ever meeting them. With the rise in popularity of online social media outlets, researchers have turned their attention to how – and to what extent – individuals form coherent impressions of other people with only the information provided in their online profiles. In the current study, we measured the extent to which participants agreed about 100 Twitter users’ personalities. Participants either saw a users’ Twitter profile, a random selection of the accounts following that Twitter user, or a random selection of the accounts that user follows. Participants agreed most about a user’s personality when they viewed the user’s profile, but we found evidence for agreement even when participants only saw a portion of a user’s social network. Moreover, participants made similar judgments about single users across all three types of stimuli. These findings indicate that even limited material can convey potentially meaningful information about an individual’s personality.

Christopher Lee – Marketing
Pronouns and Pro Sports: The Linguistics Behind Social Media
Social media share characteristics such as instantaneous communication, interactivity, and democracy of content (often without editors), which allows some flexibility for the marketer but also the potential for different cues to be passed on to fans. The paper utilizes computational linguistics to review language cues within the context of the messages. The results show the differences in pronoun and article usage among various sports organizations.

Reza Motamedi – Computer and Information Science
Do you see what I see? Personality judgments in social media
Major Online Social Networks represent online societies that are of growing interest among different research communities ranging from Computer Science to Sociology, Psychology, Linguistics and Political Science. However, these communities rely on completely different approaches for data collection and data analysis. Social sciences often rely on small-scale data collection through customized questionnaire that primarily focus on complex user attributes such as personality traits and require human-in-the-loop analysis to answer a very specific (narrow scoped) questions. Alternatively, Computer scientists obtain large-scale datasets through active measurements and conduct data driven analysis that reveals major trends in various user or network characteristics. However, these findings are often general and it is difficult to determine the root causes (e.g. user personality or ONS services) of any discovered characteristics.

The goal of interdisciplinary this project is to bridge the gap in the methodologies of Computer and Social scientists. Toward this end, this project brings together a collection of researchers from different department across UO campus (including CIS, Psychology, Sociology, Business, Linguistic, Political Science, Communications and Economics) to explore a wide range of interdisciplinary research question in the context of one or more major OSNs such as Facebook, Twitter and Google+.

75 76
Katyln Beaver – Art History

Revolutionary Aesthetics: Politics of the Parisian Art Squat

In Paris, France in the late 1980s and 1990s, a cultural movement of artist squats (occupations of an area) developed out of a need for cultural expression, a movement that had gained in notoriety since the 1960s in various forms throughout Europe. The Parisian art squats should be seen as a political reaction to institutional municipal policies and the deindustrialization of the city following the Cold War. I traced the process of legalization of one Parisian art squat located in the first arrondissement to analyze the relationship between contemporary art and activism in postmodern Paris. Through an empirical comparison between the emergence of the squat with the sociological results of the shift from industrial to tourism enterprises over the last two decades in Paris proper, I propose the squat as a mechanism of revolutionary aesthetics that embodies elements from avant-garde and neo–avant-garde practices in a manner of postmodern collectivism.

Julia Susana Gomez – Comparative Literature

León Ferrari and Guillaume Apollinaire: Continuity and Rupture between the Historic European Avant-Garde and Latin American Conceptualism in the 1960s

The experiments with written language developed by conceptualist Argentinian painter León Ferrari in the 1960s are reminiscent of the visual poetry practiced by Guillaume Apollinaire. Both artists understand the work of art as a tri-part composition, but while Ferrari’s priority is to find a way to aesthetically express the ethical-political aspect of his ideas, Apollinaire’s exploration of poetry’s visual forms aims to reify for his readers the spiritual experience he believes characterizes artistic creation. I explored the concept of calligram as Apollinaire conceived it, exemplified through his poem “Coeur, couronne et miroir,” in relation to Ferrari’s “Cuadro Escrito” (“Written Painting”) and the ways in which Ferrari subverts and expands on the ideas of the French poet. Apollinaire’s poems are a pertinent counterpoint to Ferrari’s paintings because they helped establish the principles of visual poetry with which Ferrari’s work is obviously conversant. My conclusion is that Ferrari continues, in terms of the techniques and conceptualization of visual poetry, the tradition established by Apollinaire but that Ferrari applies them from a different point of view, i.e., from a paradigm that seeks to destroy the dogmas that at first actually aided in the understanding and development of modern visual poetics.

Adam Shanley – Music Theory

New Perspectives on Popular Music

I discussed several ways that recent popular music may be analyzed as analogous to serious music, revealing popular music to be equally as interesting and complex and equally important to the evolution of our musical culture. Radiohead, Sonic Youth, Pink Mountain, Autechre, and other artists that have been active in the past 20 years have produced music that provides us with an interesting insight into how the boundaries of music can be expanded, challenging our preconceived notions of how music should act and allowing us to add to our theoretical understanding of how music can act. This critical exploration of new popular music will require us to investigate new analytic approaches appropriate to the literature, providing us with new ways of thinking about and understanding the various layers of function in music no matter how it may be classified.
**Ying Xiong – Comparative Reading**

**Summary of Poetry Reading**

When talking about canopy, one either pictures in mind the uppermost crowns of a forest, or looks up at the night sky, expecting some awe-inspiring majesty to befall human race from the star chart. The magic does befall us when human discourse joins Nature in poetry: In “Let me not mar that perfect dream,” Emily Dickinson shuts out the “Auroral stain,” and lets her life flow with dream consciousness; in “Night Tree” by Bei Dao, people “rhetorically / steal the sky and put up a fake sun / whoever rises whoever wakes”; tree crowns connect night scene with daylight street as the mailman connects the present with oblivion. In poetic territory, “canopy” can be the very crossway of reality and liminality, a terrain on which anything hovering and forthcoming in daily human experience is augmented and scrutinized. It is an angle which, from high above Man’s eye view, enables us to connect singularity with otherness, to reach an intimate place that inhabits us to bring about the desire to share, to express and to communicate. My project to be presented is thus entitled “Lines on the Canopy.” The form of the poetry volume ranges from rhymed ode to unrhymed blank verse, mostly haiku. Everything single poem is an attempt to reach out and connect, just like the tendrils reaching out for light from under the opacity of the tree: A path to transparency. My presentation will be a verbal performance aided visually by PowerPoint slides.

### Index of Student Participants

<table>
<thead>
<tr>
<th>A</th>
<th>Page</th>
<th>B</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alresheed</td>
<td>29</td>
<td>Farhad</td>
<td>30</td>
</tr>
<tr>
<td>Anderson</td>
<td>29</td>
<td>Matthew</td>
<td>31</td>
</tr>
<tr>
<td>Anson</td>
<td>10</td>
<td>Christopher</td>
<td>31</td>
</tr>
<tr>
<td>Anthony</td>
<td>65</td>
<td>Adam</td>
<td>32</td>
</tr>
<tr>
<td>Archer</td>
<td>29</td>
<td>Kara</td>
<td>32</td>
</tr>
<tr>
<td>Arkfeld</td>
<td>65</td>
<td>Katlyn</td>
<td>78</td>
</tr>
<tr>
<td>Arms</td>
<td>69</td>
<td>Carrie</td>
<td>65</td>
</tr>
<tr>
<td>Armstrong</td>
<td>30</td>
<td>Brianna</td>
<td>32</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>Derrick</td>
<td>65</td>
</tr>
<tr>
<td>Bahram</td>
<td>30</td>
<td>Mojdeh</td>
<td>33</td>
</tr>
<tr>
<td>Bailey</td>
<td>31</td>
<td>Fern</td>
<td>33</td>
</tr>
<tr>
<td>Banek</td>
<td>31</td>
<td>Caitlin</td>
<td>65</td>
</tr>
<tr>
<td>Bates</td>
<td>32</td>
<td>Jay</td>
<td>27</td>
</tr>
<tr>
<td>Beasley</td>
<td>32</td>
<td>Spirit</td>
<td>18</td>
</tr>
<tr>
<td>Beaver</td>
<td>78</td>
<td>Kimbree</td>
<td>34</td>
</tr>
<tr>
<td>Bennett</td>
<td>16</td>
<td>Tahisha</td>
<td></td>
</tr>
<tr>
<td>Bertoglio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolorizadeh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bosada</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bradley</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breslow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brooks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buck</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carolan</td>
<td>65</td>
<td>Dustin</td>
<td>34</td>
</tr>
<tr>
<td>Carroll</td>
<td>34</td>
<td>Mehmet Celil</td>
<td>73</td>
</tr>
<tr>
<td>Celebi</td>
<td>35</td>
<td>Nicholas</td>
<td></td>
</tr>
<tr>
<td>Chaimov</td>
<td>65</td>
<td>Jennifer</td>
<td>65</td>
</tr>
<tr>
<td>Chain</td>
<td>14</td>
<td>Annie</td>
<td>14</td>
</tr>
<tr>
<td>Choi</td>
<td>26</td>
<td>Sena</td>
<td>26</td>
</tr>
<tr>
<td>Ciesielski</td>
<td>35</td>
<td>Emily</td>
<td>35</td>
</tr>
<tr>
<td>Clark</td>
<td>65</td>
<td>Brian</td>
<td>65</td>
</tr>
<tr>
<td>Clark</td>
<td>76</td>
<td>Sara</td>
<td>76</td>
</tr>
<tr>
<td>Criscenzo</td>
<td>66</td>
<td>Delphine</td>
<td>66</td>
</tr>
<tr>
<td>Cummings</td>
<td>69</td>
<td>Kelsey</td>
<td></td>
</tr>
<tr>
<td>Curry</td>
<td>10</td>
<td>Elizabeth</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis</td>
<td>16</td>
<td>James</td>
<td>16</td>
</tr>
<tr>
<td>De La Cruz</td>
<td>34</td>
<td>Sonia</td>
<td>66</td>
</tr>
<tr>
<td>deLorimer</td>
<td>35</td>
<td>Elaine</td>
<td>35</td>
</tr>
<tr>
<td>Dyer</td>
<td>18</td>
<td>Shauna</td>
<td>18</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eckert</td>
<td>14, 36</td>
<td>Lee</td>
<td></td>
</tr>
<tr>
<td>Elliott</td>
<td>37</td>
<td>Jonathan</td>
<td>37</td>
</tr>
<tr>
<td>Emery</td>
<td>37</td>
<td>Meaghan</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Famoso</td>
<td>65</td>
<td>Nicholas</td>
<td>65</td>
</tr>
<tr>
<td>Farnsworth</td>
<td>38</td>
<td>Dylan</td>
<td>38</td>
</tr>
<tr>
<td>Farrar</td>
<td>38</td>
<td>Jessica</td>
<td></td>
</tr>
<tr>
<td>Fields</td>
<td>39</td>
<td>Tristan</td>
<td></td>
</tr>
<tr>
<td>Fontana</td>
<td>39</td>
<td>Cary</td>
<td></td>
</tr>
<tr>
<td>Fontenot</td>
<td></td>
<td>Justin</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gammons</td>
<td>20</td>
<td>Samantha</td>
<td></td>
</tr>
<tr>
<td>Garner</td>
<td>65</td>
<td>Laurette</td>
<td>71</td>
</tr>
<tr>
<td>Gerig-Heyerly</td>
<td>40</td>
<td>Adrienne</td>
<td>40</td>
</tr>
<tr>
<td>Gildner</td>
<td>40</td>
<td>Theresa</td>
<td>40</td>
</tr>
<tr>
<td>Gil</td>
<td>79</td>
<td>James</td>
<td></td>
</tr>
<tr>
<td>Gillham</td>
<td>41</td>
<td>Haley</td>
<td></td>
</tr>
<tr>
<td>Gobel</td>
<td>71</td>
<td>Laura</td>
<td></td>
</tr>
<tr>
<td>Golter</td>
<td>71</td>
<td>Sam</td>
<td></td>
</tr>
<tr>
<td>Gondwe</td>
<td>70</td>
<td>Gregory</td>
<td></td>
</tr>
<tr>
<td>Greiner</td>
<td>14, 41</td>
<td>Gabriel</td>
<td>71</td>
</tr>
<tr>
<td>Grunkemeyer</td>
<td>41</td>
<td>Eric</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hale</td>
<td>42</td>
<td>Melissa</td>
<td></td>
</tr>
<tr>
<td>Hall</td>
<td>42</td>
<td>Shane</td>
<td>10</td>
</tr>
<tr>
<td>Hansen</td>
<td>22</td>
<td>Sarah</td>
<td></td>
</tr>
<tr>
<td>Hansen</td>
<td>22</td>
<td>Tobin</td>
<td></td>
</tr>
<tr>
<td>Haq</td>
<td>12</td>
<td>Shaji</td>
<td></td>
</tr>
<tr>
<td>Hartle</td>
<td>43</td>
<td>Matthew</td>
<td></td>
</tr>
<tr>
<td>Heinz</td>
<td>17</td>
<td>Robert</td>
<td></td>
</tr>
<tr>
<td>Henderson</td>
<td>70</td>
<td>Jonathon</td>
<td></td>
</tr>
<tr>
<td>Hoover</td>
<td>43</td>
<td>Joe</td>
<td></td>
</tr>
<tr>
<td>Hsu</td>
<td>73</td>
<td>Mu-Lung</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irvin</td>
<td>44</td>
<td>Phillip</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jaramillo</td>
<td>44</td>
<td>Cristina</td>
<td></td>
</tr>
<tr>
<td>Johnson</td>
<td>45</td>
<td>Kathleen</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karlfis</td>
<td>45</td>
<td>Kate</td>
<td></td>
</tr>
<tr>
<td>Keir</td>
<td>65</td>
<td>Amy</td>
<td></td>
</tr>
<tr>
<td>Ketema</td>
<td>76</td>
<td>Naami</td>
<td></td>
</tr>
<tr>
<td>Kincade</td>
<td>8</td>
<td>Wendy</td>
<td></td>
</tr>
<tr>
<td>Kirkpatrick</td>
<td>46</td>
<td>Robert</td>
<td></td>
</tr>
<tr>
<td>Kristen</td>
<td>46</td>
<td>Alicia</td>
<td></td>
</tr>
<tr>
<td>Kress</td>
<td>46</td>
<td>James</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labasan</td>
<td>46</td>
<td>Stephanie</td>
<td></td>
</tr>
<tr>
<td>Lakey</td>
<td>46</td>
<td>Holly</td>
<td>65</td>
</tr>
<tr>
<td>Larson</td>
<td>65</td>
<td>Robert</td>
<td></td>
</tr>
<tr>
<td>Lawless</td>
<td>77</td>
<td>Nicole</td>
<td></td>
</tr>
<tr>
<td>Ledbetter</td>
<td>47</td>
<td>Alexander</td>
<td></td>
</tr>
<tr>
<td>Lee</td>
<td>77</td>
<td>Christopher</td>
<td></td>
</tr>
<tr>
<td>Leone</td>
<td>24</td>
<td>Steven</td>
<td></td>
</tr>
<tr>
<td>Levernier</td>
<td>65</td>
<td>Jacob</td>
<td></td>
</tr>
<tr>
<td>Levitt</td>
<td>67</td>
<td>Gordon</td>
<td></td>
</tr>
<tr>
<td>Li</td>
<td>47</td>
<td>Russell</td>
<td></td>
</tr>
<tr>
<td>Linscott</td>
<td>65</td>
<td>Jessica</td>
<td></td>
</tr>
</tbody>
</table>
Index of Student Participants

<table>
<thead>
<tr>
<th>Index</th>
<th>Page</th>
<th>Index</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipton</td>
<td>Miriam</td>
<td>20</td>
<td>Roosheanas</td>
</tr>
<tr>
<td>Liu</td>
<td>Kai</td>
<td>12</td>
<td>Rorem</td>
</tr>
<tr>
<td>Louw</td>
<td>Andrew</td>
<td>65</td>
<td>S</td>
</tr>
<tr>
<td>Lowry</td>
<td>Josh</td>
<td>48</td>
<td>Sandoval</td>
</tr>
<tr>
<td>Maternoski</td>
<td>John</td>
<td>48</td>
<td>Santillan</td>
</tr>
<tr>
<td>Matthews</td>
<td>Timothy</td>
<td>49</td>
<td>Schmidt</td>
</tr>
<tr>
<td>Mayorga</td>
<td>Marcus</td>
<td>49</td>
<td>Self</td>
</tr>
<tr>
<td>McCarter</td>
<td>Christy</td>
<td>50</td>
<td>Seraphin</td>
</tr>
<tr>
<td>McCarthy</td>
<td>Colleen</td>
<td>65</td>
<td>Shanley</td>
</tr>
<tr>
<td>McGrath</td>
<td>Jacqueline</td>
<td>50</td>
<td>Siboni</td>
</tr>
<tr>
<td>McHolm</td>
<td>Taylor</td>
<td>10</td>
<td>Simers</td>
</tr>
<tr>
<td>McNelly</td>
<td>Carla</td>
<td>13</td>
<td>Siperstein</td>
</tr>
<tr>
<td>McWilliams</td>
<td>Laura</td>
<td>67</td>
<td>Somaini</td>
</tr>
<tr>
<td>Medina</td>
<td>T. Audrey</td>
<td>74</td>
<td>Spradling</td>
</tr>
<tr>
<td>Meehan</td>
<td>Shawna</td>
<td>51</td>
<td>Springer</td>
</tr>
<tr>
<td>Miller</td>
<td>James</td>
<td>66</td>
<td>Steffel</td>
</tr>
<tr>
<td>Minton</td>
<td>Elizabeth</td>
<td>63</td>
<td>Stiefel</td>
</tr>
<tr>
<td>Mitzen</td>
<td>Lindsey</td>
<td>51</td>
<td>Struck</td>
</tr>
<tr>
<td>Mondloch</td>
<td>Erin</td>
<td>52</td>
<td>Summers</td>
</tr>
<tr>
<td>Montoya</td>
<td>Leticia</td>
<td>52</td>
<td>Susana Gomez</td>
</tr>
<tr>
<td>Monizalve</td>
<td>Manuel</td>
<td>53</td>
<td>Szumita</td>
</tr>
<tr>
<td>Mood</td>
<td>Benjamin</td>
<td>53</td>
<td>Tackman</td>
</tr>
<tr>
<td>Motamed</td>
<td>Reza</td>
<td>53</td>
<td>Thier</td>
</tr>
<tr>
<td>Murnion</td>
<td>Stephen</td>
<td>22</td>
<td>Tian</td>
</tr>
<tr>
<td>Musselman</td>
<td>Malori</td>
<td>26</td>
<td>Todd</td>
</tr>
<tr>
<td>Nance</td>
<td>Jessie</td>
<td>24</td>
<td>Torkamani</td>
</tr>
<tr>
<td>Nichols</td>
<td>Tyler</td>
<td>54</td>
<td>Tse</td>
</tr>
<tr>
<td>Ofori-Parku</td>
<td>S. Senyo</td>
<td>21</td>
<td>Turner</td>
</tr>
<tr>
<td>Okay</td>
<td>Dana</td>
<td>54</td>
<td>V</td>
</tr>
<tr>
<td>Olson</td>
<td>Aliza</td>
<td>8</td>
<td>Vargas-Ramirez</td>
</tr>
<tr>
<td>Oravec</td>
<td>Emma</td>
<td>65</td>
<td>Void</td>
</tr>
<tr>
<td>Parzuchowski</td>
<td>Kimberley</td>
<td>72</td>
<td>Wheeler</td>
</tr>
<tr>
<td>Peach</td>
<td>Morgan</td>
<td>55</td>
<td>White</td>
</tr>
<tr>
<td>Perez</td>
<td>Aleksandria</td>
<td>21</td>
<td>Wong</td>
</tr>
<tr>
<td>Peterson</td>
<td>Carolyn</td>
<td>55</td>
<td>Wright</td>
</tr>
<tr>
<td>Phillips</td>
<td>Maddelaine</td>
<td>56</td>
<td>Xiao</td>
</tr>
<tr>
<td>Porritt</td>
<td>Marilyn</td>
<td>56</td>
<td>Xie</td>
</tr>
<tr>
<td>Prasikievicz</td>
<td>Sarah</td>
<td>68</td>
<td>Xiong</td>
</tr>
<tr>
<td>Price</td>
<td>Amy</td>
<td>76</td>
<td>Y</td>
</tr>
<tr>
<td>Pyle</td>
<td>Sarah</td>
<td>15</td>
<td>Young</td>
</tr>
<tr>
<td>Randel</td>
<td>Melissa</td>
<td>56</td>
<td>Zi</td>
</tr>
<tr>
<td>Reister</td>
<td>Emily</td>
<td>57</td>
<td>Rezayidienne</td>
</tr>
<tr>
<td>Robertson</td>
<td>Ellen</td>
<td>58</td>
<td>Zandstra</td>
</tr>
<tr>
<td>Rochester</td>
<td>Rachel</td>
<td>11</td>
<td>Zhang</td>
</tr>
<tr>
<td>Rodley</td>
<td>Tricia</td>
<td>72</td>
<td>Zhang</td>
</tr>
</tbody>
</table>

Can YOU explain your research in three minutes?

2nd Annual Graduate School Three Minute Thesis Competition

The Graduate School is hosting its 2nd Three Minute Thesis competition this spring. The competition challenges graduate students to effectively explain their research in three minutes using language appropriate to an intelligent but non-specialist audience. Students may present research they are conducting for a thesis, dissertation, terminal project, or any other research project on which they are working.

This year the top three finishers from UO will be sent to Portland for a statewide championship with Oregon State University, Oregon Health & Science University, and Portland State University.

Preliminary Rounds:
Wednesday, April 16 and Wednesday, April 23

Final Round:
Wednesday, May 7

State Championship:
Saturday, May 17

Sign up today at:
gradschool.uoregon.edu/3MT

Linda Konnerth, a doctoral student in linguistics, was the winner of UO’s first Three Minute Thesis Competition last year.

Matthew Goslin, a doctoral student in geography, was the runner-up of last year’s Three Minute Thesis competition.
The Graduate School would like to offer special thanks to its partners for their support of the Graduate Student Research Forum.