2012 Research Day Program

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Research Day 2012

Highlighting and recognizing graduate and undergraduate student research throughout all disciplines at the University of Northern Colorado.

University of Northern Colorado’s Annual Research Conference during Academic Excellence Week

April 12, 2012
University Center

Sponsored and facilitated by the Office of Undergraduate Research, Center for Honors, Scholars & Leadership, Graduate Student Association, and the Graduate School
Direct questions or requests regarding Research Day and Academic Excellence Week to
Loree Crow, Associate Director for Honors
Office of Undergraduate Research
Center for Honors, Scholars and Leadership
University of Northern Colorado
Campus Box 13
Greeley, CO 80639
(970) 351-2940
hsl@unco.edu
www.unco.edu/hsl/aew.html
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Lyda Ellis, Research Day Planning Committee
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Linda Black, Dean of the Graduate School
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Lunchtime music provided by
UNC Radio
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Research Excellence Awards

The Research Excellence Awards program was established to encourage and reward those presentations that exemplify the highest levels of excellence in research. Only a limited number of presentations were accepted into the awards program, and each will be evaluated by a team of faculty on Research Day. Awards will be presented to the top scoring posters and individual presenters within each of the two categories: Graduate and Undergraduate. The winners of each category receive a $200 prize. The awards will be presented at 4 PM in the Council Room on Research Day.

Research Excellence Oral Presentations

Council Room

Undergraduate Research Excellence Oral Presentations:

Session 4
10:00 - 10:15 in the Morning

Aid Effectiveness: Doctors Without Borders/Médecins Sans Frontières How does the Paris Declaration measure aid for a single, neutral development group?
Modern Languages
Presenter(s): West, Jasmine
Faculty Sponsor(s): Moritz, Christine

Aid Effectiveness: Doctors Without Borders/Médecins Sans Frontières
How does the Paris Declaration measure aid for a single, neutral development group?
In 1999 Médecins Sans Frontières (MSF) received the Nobel Peace Prize for their efforts in the maintenance of peace among nations. Their objectives of independent, neutral assistance and funding have been constant for 41 years, and now more than ever, donors and other parties question whether foreign aid is contributing to the development of disadvantaged nations, or worsening their current circumstances. In various political discussions foreign aid is questioned because there are no established rubrics for measuring aid effectiveness. The Paris Declaration was created in 2006 to establish a system for how to measure the quality of aid and development focusing on five key components: accountability, ownership, alignment, harmonization and results. In the review of these criteria, I am able to measure the aid provided by MSF.

My research is based upon interviews from MSF employees as well as an extensive literary review of development issues. I have gathered a thorough analysis of how general aid contributes to a more self-sustained community, or how aid may worsen existing conditions. By including an assessment of MSF financial and international activity reports, I am able to further compare aid effectiveness of MSF to the outlined development system of the Paris Declaration.

Session 5
10:20 - 10:35 in the Morning

The Effect of Presentation Level on the SCAN-3:A
Audiology & speech-language sciences
Presenter(s): Matesi, Chelsea
Faculty Sponsor(s): Stoodly, Tina

The SCAN-3:A is widely used to screen and diagnose Auditory Processing Disorders (APD). The test is meant to be administered through an audiometer at 50 dB HL. The test manual states that it can be administered through a portable CD player when an audiometer is not available. If presented through a CD player, it is to be played at the patient’s most comfortable listening level (MCL), or the clinician may present at their MCL. Because MCL is likely to vary across individuals, even those with normal hearing sensitivity, the question that was asked in this study was whether the presentation level affected scores of the SCAN-3:A.
Twenty-two young adult females from the University of Northern Colorado were recruited to participate in this study and were administered the SCAN-3:A three different times at one month intervals, at 40, 50, and 60 dB HL. Prior to each session, participants passed a hearing screening to ensure normal hearing sensitivity. The stimulus level of the SCAN-3:A was counter-balanced across participants in order to eliminate test order effects. A Repeated Measures ANOVA with Multiple Comparisons were used to determine effects of presentation level on the scaled composite and subtest scores. There were significant differences across all intensity levels for the composite scores (p<.001). Results varied among the subtests. Effect sizes were also calculated and found to be strong.

Several professions outside of audiology, including speech language pathologists and psychologists, are qualified to administer this test. It is likely many of them would be doing this without an audiometer. Depending on the level they present through a CD-player, this could result in incorrect test scores and even misdiagnosis of APD. Because APD is typically diagnosed in children, it would be interesting in the future to evaluate the effect of presentation level on the SCAN-3:C (children’s version).

Session 6
10:40 - 10:55 in the Morning

An Exploration of High and Low Level Processes in Understanding Others’ Minds
Psychology, Social Science
Presenter(s): Gonzales, Christopher
Faculty Sponsor(s): Peterson, Eric

Imagine watching a scene play out between your two friends, Sally and Ann. Sally looks back and forth between Ann and someone else; then makes an angry face and walks away. In an instant, you are able to glean a sense of Sally’s emotional state. You generate a theory about her belief and her plan for action: She looks mad and is going to make a scene!

The ability to generate these rich theories about others’ minds stands with language and a few other cognitive capacities as a unique achievement of the human brain. As this topic of research has burgeoned over the past forty years, the central questions driving the field have evolved. There is a new push beyond the classical theory-of-mind tasks which emphasize a single critical litmus test: the capacity to think about what another person is thinking. New research is starting to show that there are actually multiple levels of processing for this ability, high level (explicit) processes which are cognitively flexible but resource intensive and low level (implicit) processes which are rigid but cognitively efficient.

In the current study, we developed a battery of seven tests that measure these different processes as well as ability in emotion processing, working memory and non-verbal communication. We are currently recruiting UNC undergraduates participating in the Psychology Study Pool and expect a sample size around fifty with an average age between nineteen and twenty-one. We expect one explicit task will be similar to the other explicit task. Similarly, we anticipate a higher performance correlation within the implicit tasks. However, it remains unclear if there is any predictive value from performance in one category in relation to the other. Further exploration into these correlations would still be relatively novel in the field.

Session 7
11:00 - 11:15 in the Morning

Engaged Global Millennials: Preliminary Results on an Qualitative Analysis of a Global Millennial Generation
Anthropology
Presenter(s): Frank, Michaela
Faculty Sponsor(s): Kimball, Michael

Generational studies have primarily focused on American youth, which leaves out perceptions of youth from around the globe; Howe & Strauss, leading authors on the Millennial generation, define seven attributes of American youths: special (i.e. privileged), sheltered, confident, team-oriented, achieving, pressured, and conventional (2000, 44). These general characteristics of millennials that emerge from the literature are seemingly unfit for the recent images of engaged youth conjured up by world events such as the Arab Spring youth movement. The preliminary findings presented in this paper arise from semi-structured ethnographic interviews with six young people that have a strong tendency towards social and political engagement and fit the Millennial generation criteria (born between 1982-2005) within both domestic and international contexts. These interviews elicit participants’ own experiences, which are complicating and even challenging widely held assumptions about the Millennial generation. The global dimension of the study will add to our understanding of engaged millennials who are acting as change agents by creating solidarity through shared experiences, ideas and actions, without the constraints of arbitrary lines of nationality. This study is part of a growing body of research on non-American millennials, youth engagement, and origins of social movements. In using a largely untapped source of perspectives from global youths, this project will contribute to future research on understanding social movements and the youth responsible for driving social change around the globe.
Dracula's reign and eventual downfall. I have also employed literary theory, primarily the work of Jeffrey

This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical examination of these sources I have proven that Vlad Dracula cultivated a hybrid identity, neither fully Western Christian nor Muslim Turk, which left him on the outside of societal boundaries, leading to his depiction as a monster. This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical examination of these sources I have proven that Vlad Dracula cultivated a hybrid identity, neither fully Western Christian nor Muslim Turk, which left him on the outside of societal boundaries, leading to his depiction as a monster. This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical examination of these sources I have proven that Vlad Dracula cultivated a hybrid identity, neither fully Western Christian nor Muslim Turk, which left him on the outside of societal boundaries, leading to his depiction as a monster. This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical examination of these sources I have proven that Vlad Dracula cultivated a hybrid identity, neither fully Western Christian nor Muslim Turk, which left him on the outside of societal boundaries, leading to his depiction as a monster. This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical examination of these sources I have proven that Vlad Dracula cultivated a hybrid identity, neither fully Western Christian nor Muslim Turk, which left him on the outside of societal boundaries, leading to his depiction as a monster. This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical exa

Session 8
11:20 - 11:35 in the Morning

**txtng: a nu POV Human Drivers of Modern Language Change**

**English**

**Presenter(s):** Johnson, Kelli

**Faculty Sponsor(s):** Bovaird-Abbo, Kristin

While writing systems serve only as a record of what has been said or thought, language encapsulates the spoken word as well: that is, speaking and listening in turn. Since 2010, text talk, or textese, has been categorized as a language rather than a writing system. Although languages and writing systems are two distinct aspects of communication and serve different purposes, text talk incorporates both fields of communication equally and flexibly. Never before has a language been able to serve multiple functions from both areas. Previous studies have been analytical studies of a single point in time studying vernacular and syntax: an analysis of the writing system that textese was believed to be. Because the language of texting fills a unique niche in communication, a Psychological analysis method was applied to work within the parameters of texting.

A timeline comparison of the physical, psychological, and sociological drivers of language was used to determine the effects of various changes in textese. This form of analysis takes into account effects such as keyboards, context, and people involved in the conversation that have driven the growth and change of the text talk language since its birth twenty years ago, allowing for an interweaving of historical change that led to the language used today while demonstrating linguistic growth based on external factors. The “change over time” model is an analysis not frequently used that is designed to determine the “health” of language, that is, whether the language is growing or stagnating based on environmental context of the use of the language. Using this new paradigm, the language of textese is found to be not only retaining the original user base; it is gaining new users as both the language itself and the identity it represents change over time.

Session 9
11:40 - 11:55 in the Morning

**Strategic Orientation of Big Pharma in Base-of-the-Pyramid Markets**

**Business Administration**

**Presenter(s):** Metherd, Joshua; Patrick, Meghan

**Faculty Sponsor(s):** Wanasika, Isaac

The purpose of this study is to explore the strategic orientation of big pharma in bottom-of-the-pyramid markets (BOP) and also examine the financial viability of these strategies. Western pharmaceutical markets have continued to decline and are expected to grow by a paltry 3% under conditions of depleted drug pipelines, aging populations, shareholder expectations and pressure reform the delivery of healthcare. On the other hand, BOP markets are growing at 14% and have 5 billion people representing 65% of the world’s population and a market power of $5 trillion. However, most people in BOP economies live on US$3 per day, in addition to deep economic, social and political instability. This calls for a new business model to tap into their potential, despite the obstacles. A viable value creating BOP strategic orientation for big pharma will require an entrepreneurial mindset, innovation through co-creation, multiple developmental pathways, scalable and adaptable logistics, creative marketing through a new price-performance envelope that emphasizes volume rather than margins and utilization of native marketing resources and collaboration with local institutions. Data on strategic orientation of big pharma with respect to BOP markets will be extracted from annual letters to the shareholders using a novel method of historiometry. Sanitized letters will be rated by students with business training to evaluate strategic orientation of each firm. The ratings will be completed on a Likert scale questionnaire for further regression analysis. In addition, the study will analyze the financial viability of BOP markets relative to developed markets using archival data from S & P Capital IQ database. The study will contribute to identifying effective strategies suitable for BOP markets and also provide a business case for investing in such markets. In order for big pharma to sustain competitiveness, there will be a need to pay more attention to BOP markets.

Session 10
12:00 - 12:15 in the Afternoon

**From Prince of Wallachia to Prince of Darkness: An In-Depth Analysis of the Identity of Vlad Dracula**

**History**

**Presenter(s):** Goldfarb, Lindsey

**Faculty Sponsor(s):** Wieben, Corinne

I have used both primary and secondary sources to analyze the life and depictions of the character of Vlad Dracula, Prince of Wallachia (1431 – 1476) and the infamous inspiration for Bram Stoker’s iconic vampire novel Dracula. Through my examination of these sources I have proven that Vlad Dracula cultivated a hybrid identity, neither fully Western Christian European nor Muslim Turk, which left him on the outside of societal boundaries, leading to his depiction as a monster. This hybrid identity helped Vlad Dracula’s critics to demonize him, and inspired his infamous status. The most critical factor in the formation of this hybrid and monstrous identity was the atmosphere in which Vlad Dracula lived. Using anthropological and historical theory on borderlands, I have constructed a depiction of Wallachia during the time of Vlad Dracula’s rule, as an area of intense conflict. The principality of Wallachia was in a delicate situation, stuck between Christian West and Turkish East, and struggling to maintain allegiance to the weakened Eastern Orthodox church. Using these sources, I have found that the presence of permeable borders, both politically and culturally, played a critical role in Dracula’s reign and eventual downfall. I have also employed literary theory on monstrosity, primarily the work of Jeffrey
Lateral Mobility of Prostaglandin F2a Receptors on the Plasma Membrane of Bovine Luteal Cells

Biological Sciences
Presenter(s): Graham, Peter
Faculty Sponsor(s): Burns, Patrick D.; Tatum, Josh C.; Schenk, Adrian C.; Nozykowski, John P.; Zhang, Dongmei; and Roess, Deborah A.

Prostaglandin (PG) F2a is the endogenous luteolysin in domestic farm animals that is synthesized by the uterus and corpus luteum (CL) which causes regression of the CL in the non-pregnant female. It has been postulated that luteal FP receptors bind with PGF2a and anchor to lipid micromdomains to initiate a G-protein signaling cascade that inhibits progesterone synthesis and induces apoptosis. The objective of the current study was to evaluate FP interactions with lipid microdomains when receptors were in the unbound and bound state. Bovine corpora lutea were obtained from a local slaughterhouse and digested using collagenase. Mixed luteal cells were incubated in T-25 culture flasks containing Ham’s F-12 culture medium supplemented with 5% fetal calf serum, insulin (5 mg/ml), transferrin (5 mg/ml), selenium (5 ng/ml), 100 U/ml penicillin, 0.1 mg/ml streptomycin, and 0.25 mg/ml amphotericin B (pH 7.34) in an atmosphere of 95% air, 5% CO2 at 37°C. The cells were then transferred to 35mm microscopy culture dishes and allowed to adhere to cover slips. After adhesion, cells were then cultured for approximately 18 h in serum free medium. Cells were incubated with FP receptor polyclonal antibody (5 mg/ml) conjugated with biotin for 5 min. Cells were washed and subsequently incubated with streptavidin 605 QDot (0.1 nM) for 5 min. Cells were washed and individual FP receptors were monitored using an epifluorescent microscope at 0, 1, 5, and 10 min post-treatment with 1000 nM PGF2a. There was no change in ratio of random and confined diffusions patterns of FP receptors following PGF2a treatment (P > 0.10). However, PGF2a treatment did result (P = 0.08) in a decrease in the mean diffusion coefficient of FP receptors. Although the mean diffusion coefficient did not differ between 0 and 1 min post-PGF2a treatment (P > 0.10), the mean diffusion coefficient was reduced at 5 (P < 0.05) and 10 (P = 0.08) min post-treatment when compared to 0 min. This may indicate FP receptors associate with lipid microdomains during PGF2a stimulation in bovine luteal cells.

The Effect of Preconditioning on Initial Physiological and Psychological Assessments Following Treatment
Sport & Exercise Science
Presenter(s): Peterson, Brent
Faculty Sponsor(s): Schneider, Carole

Exercise has been associated with the improvement of various physiological and psychological variables in cancer survivors post cancer treatment. However, little information exists on the role prior physical activity may have on functional capacity. PURPOSE: To assess the differences between prior physical activity and the initial physiological and psychological assessments in cancer survivors following treatment. METHODS: A total of 412 cancer survivors that had undergone radiation and/or chemotherapy were eligible for this study. Participants completed comprehensive physical assessments and Piper fatigue and Beck depression inventories. Functional capacity was determined during an initial assessment including VO2peak (multistage treadmill protocol). Prior physical activity (PA) was defined as being none (1), low (2), and moderate (3) based on frequency, intensity, and duration according to the ACSM guidelines. A multivariate analysis of variance (MANOVA) determined the group variance differences. RESULTS: There was a significant (P<0.05) main effect for prior PA. Post hoc pairwise comparisons determined that there were significant (P<0.05) differences between groups 1 and 3 for VO2peak (21.23 ± 6.70 vs. 23.46 ± 7.02 mL.kg⁻¹.min⁻¹, respectively), groups 1 and 3, and groups 2 and 3 for fatigue (5.09 ± 2.23 vs. 4.28 ± 2.19 and 5.07 ± 2.03 vs. 4.28 ± 2.19, respectively) and groups 1 and 3 for depression (12.03 ± 7.74 vs. 9.90 ± 6.19, respectively). Moderately active individuals showed greater initial assessment values for functional capacity (VO2peak). Additionally, greater decreases were observed in fatigue and depression in the moderate activity group. CONCLUSION: Cancer treatment-related side-effects lengthen the recovery process post treatment for cancer survivors. The results of this study demonstrate the importance of moderate prior physical activity for the attenuation of treatment-related reductions in functional capacity, fatigue and depression.
 Determinants of Health on the Navajo Nation: Collecting Data through Visual Means

Public Health

Presenter(s): Carroll, Danya
Faculty Sponsor(s): Sharp, Teresa

Social determinants have lifelong implications on health that may limit the ability of individuals and communities to achieve optimum health. Identifying social determinants in underserved populations is a significant focus for public health professionals. The perspectives of remote residing individuals on factors that impact health are crucial for the development and implementation of initiatives to reduce detrimental factors and enhance positive determinants of health for these communities. OBJECTIVE: To describe impeding and promoting factors that impact the health of Navajo people residing on the Navajo Reservation. The Navajo Reservation is the largest American Indian reservation in the United States. It is predominantly rural consisting of communities that are remotely widespread resulting in unique difficulties assessing and rectifying unfavorable social determinants of health. METHODS: Data were collected using photography on the Navajo Nation reservation. The SHOWED method (used with PhotoVoice methodology) was used to analyze the photographs. By using these photographs, community concerns and strengths were visually documented. Use of data collection through visual means and the SHOWED analysis process promotes critical thinking and empowers communities to take action. RESULTS: Social and environmental determinants such as gang activity, poverty, low socioeconomic status, for prevention education were identified as impeding factors of health. Excess consumption of high fat and processed foods typically associated with food deserts was also a detrimental health factor. Intergenerational cultural activities, education, and the availability of natural, traditional foods were health-promoting factors. CONCLUSION: Photographs showed images depicting both positive and negative determinants in Navajo communities. These images provide direction for future and more in-depth research and interventions for Navajos. Data suggest that culture, resiliency, and community engagement may have positive and protective influences on health.

 Your Body as Your Instrument from the Beginning

Music

Presenter(s): Nicolau, Thais
Faculty Sponsor(s): Harris, Caleb

Your Body as Your Instrument from the Beginning

Music performance is often considered a complex activity that triggers both mental and physical aspects of the body. Questions concerning the mental process have been widely discussed in varied perspectives (e.g. the approach to theory teaching, memorization skills, and techniques to overcome stage fright), while broader physical aspects of playing an instrument are rarely addressed in pedagogy courses. When included in such courses, the subject is commonly restricted to discussing parts of the body directly associated to the production of sound (e.g. hand position for pianists).

The awareness of the entire body while playing the piano becomes clearly important when considering its preventive aspects. In addition, this concept potentially provides a broader and perhaps more profound definition of piano technique fundamentals. Developing an awareness of your body as your instrument from the first contacts with the instrument provides the students with a great advantage in technical skills and understanding of physiology.

This study discusses the importance of movement, the relationship between posture, acture and support, the connection of balance and flexibility, and the integration of whole-arm and fingers and its relationship to sound quality. It focuses particularly on the beginner repertoire, providing carefully selected examples in order to convey each topic above and to illustrate how students can engage with the instrument in an interactive way.

 Plurality in Undergraduate Student Impressions of Social Justice from a Gendered Perspective

Higher Education & Student Affairs Leadership

Presenter(s): Cohen, Joshua, Johnson, Lainey
Faculty Sponsor(s): Couture, Rene

With the rise in popularity of college campuses of various notions of social justice and inclusive excellence, student definitions of these concepts have become increasingly fragmented and specified. As a result of such increased specificity, varying notions of social justice have also developed more oppositional positions to one another. While much of the adversarial positioning of plural conceptions of social equity is warranted, an unfair amount of garnered animosity also exists that is the result of misinformation concerning the relation of one position to another. So, the plural growth of social justice definitions has resulted in the development of flawed binaries that are founded on an "either/or" logic. Such duality works to hinder, rather than facilitate, the advancement of individual equality. In response to this obstacle, this project examines varying conceptions of social justice among differing student groups. Employing qualitative analysis and narrative inquiry, this project works to examine the differing definitions provided by students, working to identify the misconceptions that have informed such antagonistic understandings. The result of such an approach is a deconstruction of some of the binaries that currently exist within these different narratives, leading to the identification of networks that connect and link varying definitions. By dispensing with some of the undeserved opposition, this project provides an avenue for future understandings of social equity that are based on an understanding of multiple networks, rather than simplistic duality.
Voluntary Wheel Running does not protect against Doxorubicin-induced Osteopenia in the Growing Rat

Biological Sciences, Sport & Exercise Science

Presenter(s): Parry, Traci
Faculty Sponsor(s): Hayward, Reid

Despite numerous negative side effects, including osteopenia, doxorubicin (DOX) continues to be used clinically because of its high success rate in the treatment of an array of cancers. Currently, it is unclear whether exercise can attenuate the deleterious effects of DOX on bone architecture. PURPOSE: To determine whether voluntary wheel running attenuates the negative effects of DOX on bone in growing male rats. METHODS: Male Sprague-Dawley rat pups (25 days old) were randomly assigned to four groups: sedentary control, SED+C; sedentary DOX, SED+DOX; voluntary wheel run control, WR+C; and voluntary wheel run DOX, WR+DOX. Animals received 2 mg/kg DOX i.p. or saline over 7 successive days. On day one, SED animals did not exercise while animals in WR groups were allowed free access to cage-mounted running wheels for 10 weeks. Upon protocol completion, animals were sacrificed and tibia and femur excised for assessment via dual energy x-ray absorptiometry and micro computed tomography. RESULTS: WR+C animals ran an average of 23 ± 3 km/wk while WR+DOX animals ran an average of 12 ± 3 km/wk. Treatment with DOX resulted in significantly lower tibial length and tibial bone mineral content and density (p < 0.05) compared to SED+C. The negative effects of DOX were observed in both the cortical and cancellous envelopes. Midshaft femur cortical cross-sectional area, cortical volume, and polar moment of inertia were significantly lower in DOX-treated rats compared to SED+C. Distal femur metaphysis cancellous bone volume/tissue volume was also lower in DOX-treated compared to SED+C rats. Voluntary wheel running did not protect against the detrimental effects of DOX treatment on the skeleton in developing rats. CONCLUSIONS: DOX treatment in male rat pups suppressed bone growth and resulted in cancellous and cortical osteopenia. Voluntary wheel running did not protect the growing skeleton against the negative effects of DOX treatment.

Creating a connection between the United States and Saudi Arabia in the special education field

Special Education

Presenter(s): Alabdulwahab, Reem; Alsulaiman, Maha; Alqafari, Shehana; Alsalman, Amani
Faculty Sponsor(s): Banerjee, Rashida

Saudi doctoral students in the special education department at the University of Northern Colorado have a goal of establishing a strong linkage between the United States of America and Saudi Arabia in the field of special education. The aim of this project is to transfer the new trends and issues of special education in the USA to Saudi Arabia and to provide the most recent scientific research. Our effort is to address how the knowledge fits our Saudi culture. This website would support and enlighten the parents, educators, and other parties interested in special education. In order to implement this linkage we will be developing a partial space on a Saudi governmental special education website. This space would include five components:
• Most recent foreign studies and sources.
• Articles addressing how to implement recent strategies into Saudi culture.
• A guide for recent international seminars with briefings.
• International experts.
• A discussion board.

Our targeted audience would experience the importance of international communication, cooperation, and progress in services of special education field. Our presented project would be beneficial to promote the significance of sharing knowledge among different countries and cultures.
write and read a social story to help understand the community activity, how to use communication devices/tools to communicate.

implement the following steps:
How to develop a weekly parents' process will help to include the children into their local communities. Through these strategies, parents will learn how to implement the following steps: How to develop a weekly visual schedule, how to inform a child about the location of the activity, how to teach effective integration strategies. First, using strategies delineated by Day (2000) and Souza & Kennedy (2003), a process was designed to address the problem of Saudi Arabian parents' fear in integrating their children with disabilities into the community. Teaching the parents this process will help to include the children into their local communities. Through these strategies, parents will learn how to write and read a social story to help understand the community activity, how to use communication devices/tools to communicate with other people, how and when to reinforce the child and how to teach new behaviors.
Historical analysis of women's participation in the American Revolution reveals about the Christian altruism and spiritual values that motivated women to participate in the bees, and how this influenced political expression and involvement?

Answering these questions requires examining specific ministers who hosted bees, such as Ezra Stiles of Newport, Rhode Island. It also means looking at the context of spinning in colonial culture, and what its role reveals about women's perceived place and duties within their society. The focus of the research however, investigates what the presence of the ministers reveals about the Christian altruism and spiritual values that motivated women to participate in the bees, and how this influences historical analysis of women's participation in the American Revolution.
Using Self-Determination Theory to Examine the Motivation of Ethnic College Students

Psychology

Presenter(s): Martin, Elia

Faculty Sponsor(s): Caufman, Krista

The purpose of this study is to examine the relationship among academic self-concept, motivation and academic achievement amongst African American and other ethnic college students. Self-Determination Theory is used as a framework to help understand college students' academic motivation. Existing research in this area has tended to not focus much on ethnicity; yet preliminary information suggests that associations among academic self-concept, academic motivation and achievement of African American college students take distinct forms from other ethnic groups. This study uses the Academic Motivational Scale (AMS, 1992) to measure intrinsic and extrinsic motivation for college students, the Academic Self-Concept Scale (ASCS, 1988) to measure self-concept, and self-reported GPAs are used to measure academic achievement. This research is currently in progress and it is anticipated that the variations of intrinsic and extrinsic motivation, academic self-concept, and academic achievement vary according to ethnicity. This research is intended to be beneficial for educators, so more colleges may be structured in a way that meet the motivational needs of all ethnic students. Data for this study will be collected using quantitative methods by conducting surveys using Qualtrics online surveying system.

The effect of discrimination on balance concentration and health-information processing and retention.

Psychology

Presenter(s): Zivotic, Johanna; Breitenbach, Danette; Callahan, Myraiah

Faculty Sponsor(s): Pascoe, Elizabeth

Previous research has demonstrated that experiencing discrimination can have negative effects on a person’s psychological and physical well-being. It is suggested that this may occur by disrupting working memory. This study will examine the relationship discrimination has on one’s physical performance and the ability to remember health-related information. Participants will be randomly assigned to one of six conditions, each involving two variables: whether the participant will be included or excluded from an interactive online ball tossing game called CyberBall, and whether the sex of the other game players is different from or the same as the participant’s own sex. Participants excluded from a different sex group have the potential to attribute their exclusion to gender discrimination. First, the participants will take part in a balancing task to determine their initial balancing ability which will be recorded for comparison later in the study. Afterwards they will engage in the CyberBall activity. All players aside from the participant will be computerized, have been assigned race-neutral names and have been programmed to eventually stop tossing the ball to the participant (exclusion) or continue to throw the ball to the participant (inclusion) for the duration of the activity. Next, participants will be given a nutrition pregnancy brochure. Following a second phase of the balancing task, where results will be compared to initial balancing task scores, participants will be asked to take a test regarding the brochure’s information. It is hypothesized that the participants who have been discriminated against will have a decrease in concentration ability demonstrated by decreased balancing performance and decreased memory retention based on the test scores. If supported, this information may suggest that racial disparities in health may partially be due to decreased information processing ability following discrimination within health care settings.

Song types, repertoires and patterns of song sharing among canyon wrens, Catherpes mexicanus

Biological Sciences

Presenter(s): Rose, Anne

Faculty Sponsor(s): Benedict, Lauryn

Natural history studies provide insight into the evolution and function of communicative behaviors such as bird songs. The canyon wren, Catherpes mexicanus, is a non-migratory, monogamous bird species occurring in western North America. Earlier studies describe the vocal repertoire of C. mexicanus as simple and comprising of only three song types. Our study provides a quantitative description of C. mexicanus song. We recorded fourteen wrens, including at least twenty naturally occurring songs from each, over the summer of 2011 in Larimer County, Colorado. In total, we recorded over 1400 songs and subsequently visualized these as sonograms. We assessed the number of different song types and their use by individual males in different territories. We identified five main song types, and eight total song types, for C. mexicanus in Larimer County; these main song types were remarkably conserved across the study group. In addition, we characterized the structure of song bouts and the use of the different song types. Birds generally sang with event variation, meaning a single song type was repeated for a long period before the wren switched types. Future work will compare song types of Larimer County wrens with other regional populations. Our results indicate that the canyon wren has stability in song type use and previously unrecognized complexity in its vocal repertoire.
Cloning of Immunoglobulin cDNAs from the Jamaican Fruit Bat (Artibeus jamaicensis)

Presenter(s): Lee, Benjamin
Faculty Sponsor(s): Hawkinson, Ann

Bats have recently been identified as reservoirs of infectious agents that cause disease in humans, including rabies virus, SARS-like coronaviruses, Ebola and Marburg viruses, and Nipah and Hendra viruses. Little research has been done on how bats host these viruses without developing pathology. It has recently been determined that the Jamaican fruit bat (Artibeus jamaicensis) is highly susceptible to Tacaribe virus (TCRV), which is closely related to the viruses that cause the South American hemorrhagic fevers (SAHF). Previous work from our lab suggested Jamaican fruit bats infected with TCRV to be a viable animal model for SAHF; the presence of neurogenic tremors is a key symptom seen in both bat and human pathology. Characterization of the immunoglobulins (Ig) is a fundamental process to developing this animal model. The purpose of this study is to examine Ig mRNAs to clone and characterize IgG, IgA, and IgM genes. This study will allow us to identify segments where immunoglobulin genes differ between classes and reveal variable, diversity, and joining regions that contribute to immunoglobulin diversity. Total RNA was extracted from a bat spleen sample and reverse transcribed to cDNA. Ig specific CH1 domain primers were used to amplify sequences to be cloned into a cloning vector. Competent E. coli cells were transformed and screened for correct plasmid inserts. Bacterial plasmids were purified and sequenced. Orthologous IgG, IgA and IgM sequences from other mammalian species were acquired from Genbank for comparative analysis with Jamaican fruit bat sequences. To this end, we have cloned constant regions of Jamaican fruit bat IgG, IgA, and IgM. We aim to subclone amplified gene fragments into expression vectors and produce Ig-specific antibodies. We will use these antibodies to characterize bat immune responses to TCRV and compare them to human antibody responses to the viruses that cause the SAHF.

Divergence of Sulfur-Flower Buckwheat using DNA Analyses

Presenter(s): Brevik, Taylor; McGlaughlin, Mitchell
Faculty Sponsor(s): McGlaughlin, Mitchell

Eriogonum umbellatum Torr. (Polygonaceae), the sulfur-flower buckwheat, is among the most diverse plant species in North America with 40 different recognized varieties. Several of these recognized varieties are rare, 24 of which are termed vulnerable, imperiled, or critically imperiled by NatureServe (natureserve.org). Eriogonum umbellatum species can be found inhabiting 10 states and 2 Canadian provinces in the mountainous west. Varieties display broad morphological, ecological, and geographic differences which make each taxonomically distinct. For this study, I am analyzing and comparing nuclear (ITS) DNA, inherited from both parents, and chloroplast DNA, inherited maternally, among five different varieties of Eriogonum umbellatum from several distinct populations residing in both Colorado and Oregon. Tissue samples were collected from several individuals from each population. The five varieties of interest include E. umbellatum var. hauseri, E. umbellatum var. monensis, E. umbellatum var. majus, E. umbellatum var. aureum, and E. umbellatum var. umbellatum. Genetic analyses of these varieties using molecular markers should help to evaluate gene flow between populations and among varieties, mechanisms of differentiation, and evolutionary history. Understanding these will allow us to determine whether these varieties are monophyletic, share a common ancestor, or if they should be considered distinct evolutionary entities. Implications of this research could affect land management and conservation efforts, as well as our understanding of the mechanisms of evolutionary differentiation within diverse plant taxa.

Natural compounds as sources of new drugs: venoms and cancer

Presenter(s): Broughton, Brianne
Faculty Sponsor(s): Mackessy, Stephen

Snake venoms contain various constituents that may be useful for medicinal purposes, and previous research has indicated that some snake venom components inhibit cancer cell proliferation by both general and specific mechanisms. Paradoxically, the creatures that many people fear may carry a possible treatment for an equally feared disease, cancer. The purpose of this study is to evaluate the effects of Ahaetulla snake venom and purified toxins on the proliferation of MCF-7 breast cancer cells. Our working hypothesis is that crude venom, as well as purified proteins proteins, will inhibit cancer cell growth but show minimal effects on normal cells. Cells were cultured, subcultivated and then added to wells of a microtiter plate containing varying concentrations of Ahaetulla venom. After 24 hr incubation at 37 °C, cell proliferation in the presence and absence of venom was quantified (MTT assay). Initial results indicate that the venom contains potent anti-proliferative activities, an interesting observation in light of the fact that this potency does not correlate with overall venom toxicity, which is very low for mammals. This anti-proliferative effect was found to be contained in one component isolated by size exclusion fractionation of venom. We are currently purifying this venom protein(s) with the goal of obtaining a purified component(s) which will inhibit cancer cell proliferation but not affect normal cells. This research has the potential to discover novel compounds with specific anti-cancer properties, which in turn can assist in rational drug design.
Honors Program Presentations

Students who have reached high levels of academic achievement may enter the Honors Program as incoming Freshmen, Current UNC Students or Transfer students. Encouraging original thinking and research, the Honors Program guides its students through a curriculum of interdisciplinary study, experiential learning, and independent research. All students who graduate with Honors from the program must submit an original thesis or creative capstone project and present their research in public. These students are completing their final requirements for the program. Congratulations!

Session 5
10:20 - 10:35 in the Morning
Council Room
The Effect of Presentation Level on the SCAN-3:A
Research Excellence Award Finalist
Audiology & speech-language sciences
Presenter(s): Matesi, Chelsea
Faculty Sponsor(s): Stoody, Tina
Undergraduate Presentation

Session 6
10:40 - 10:55 in the Morning
Aspen B
How America Used the World Bank and the IMF for Their Benefit
Political Science
Presenter(s): Kranz, Courtney
Faculty Sponsor(s): Blair, Brook
Undergraduate Presentation

Session 7
11:00 - 11:15 in the Morning
Council Room
Engaged Global Millennials: Preliminary Results on an Qualitative Analysis of a Global Millennial Generation
Research Excellence Award Finalist
Anthropology
Presenter(s): Frank, Michaels
Faculty Sponsor(s): Kimball, Michael
Undergraduate Presentation

Session 8
11:20 - 11:35 in the Morning
Aspen B
The Decoding of Symbols within the Courtroom
Communication Studies
Presenter(s): Britt, Jamie
Faculty Sponsor(s): Allen, Lin
Undergraduate Presentation

Session 8
11:20 - 11:35 in the Morning
Council Room
txtng: a nu POV Human Drivers of Modern Language Change
Research Excellence Award Finalist
English
Presenter(s): Johnson, Kelli
Faculty Sponsor(s): Bovaird-Abbo, Kristin
Undergraduate Presentation

Session 9
11:40 - 11:55 in the Morning
Aspen B
On the Bathroom Wall: A Talk on UNC Latrinalia
Anthropology, English
Presenter(s): Lambert, Ryan
Faculty Sponsor(s): McBeth, Sally
Undergraduate Presentation
**Session 10**
12:00 - 12:15 in the Afternoon

**Council Room**
From Prince of Wallachia to Prince of Darkness: An In-Depth Analysis of the Identity of Vlad Dracula
Research Excellence Award Finalist
History
Presenter(s): Goldfarb, Lindsey
Faculty Sponsor(s): Wieben, Corinne
Undergraduate Presentation

**Session 14**
02:00 - 02:15 in the Afternoon

**Aspen B**
Knowledge, Attitudes, and Behaviors Among College-Aged Females Regarding Nutrition Before and During Pregnancy
Dietetics
Presenter(s): Sand, Kayla
Faculty Sponsor(s): Clark, Alena
Undergraduate Presentation

**Session 16**
02:40 - 02:55 in the Afternoon

**Aspen B**
The Art of Technology: A Demonstration of the Effects of Computers on Electronic Music
Music
Presenter(s): Jankovsky, Casey
Faculty Sponsor(s): Ehle, Robert
Undergraduate Presentation

**Session 17 & 18**
03:00 - 03:35 in the Afternoon

**Aspen B**
Engaging Children through Service: Incorporating Service-Learning within Elementary Education
Educational Studies, English, Interdisciplinary Studies, Reading, Spanish
Presenter(s): Owsley, Kendra
Faculty Sponsor(s): Helwick-Jackson, Ginny
Undergraduate Presentation

**Session 19**
03:40 - 03:55 in the Afternoon

**Aspen B**
The End of the Line or, the Beginning of New Sights
English
Presenter(s): Carpenter, Dylan
Faculty Sponsor(s): Zimmerman, Lisa
Undergraduate Presentation

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**Interested in Graduating with Honors at UNC?**

**UNC Students may apply for the University Honors Program if they meet the following criteria:**

- Want to dive deep into a topic of interest, mentored by faculty to produce an Honors Thesis or creative Capstone
- Interested in completing the Honors Foundations with Experiential options, Honors Contract courses, or MIND courses
- Still have at least 3 - 4 semesters of study left at UNC
- Cumulative GPA of at least 3.25

Find out more at [www.unco.edu/honors](http://www.unco.edu/honors) or e-mail us at [honors@unco.edu](mailto:honors@unco.edu)
### Morning Poster Session
10:30 - 11:30 in the Morning
**Mt. Evans & Longs Peak Ballrooms**

- **Playing In Kindergarten Today**
  Educational Studies
  **Presenter(s): Sauter, Megan**
  Faculty Sponsor(s): Guccione, Lindsey
  Undergraduate Presentation

- **Petrographic and cathodoluminescence characterization of zircons in the Hyde School Gneiss, Adirondack Lowlands, New York:**
  Earth Sciences
  **Presenter(s): Müller, Simone**
  Faculty Sponsor(s): Baird, Graham
  Undergraduate Presentation

### Afternoon Poster Session
01:30 - 02:30 in the Afternoon
**Mt. Evans & Longs Peak Ballrooms**

- **Not in My Backyard: A Look at Sex Offender Programming and Management in the State of Colorado**
  Criminal Justice
  **Presenter(s): McKinney, Kamille**
  Faculty Sponsor(s): Fitzpatrick, Colleen
  Undergraduate Presentation

- **Spiritual Spinning Wheels: Religion's Role in Women's Spinning Bees During the American Revolution**
  **Research Excellence Award Finalist**
  History
  **Presenter(s): Johnson, Kate**
  Faculty Sponsor(s): Tomlin, T.J.
  Undergraduate Presentation

- **Themes of Immortality in Media and its Influence on Young Adults**
  Anthropology
  **Presenter(s): Brothe, Mariah**
  Faculty Sponsor(s): McBeth, Sally
  Undergraduate Presentation

- **Es el Colegio para Mi? Why Students of Mexican Descent Choose or Do Not Choose to Attend College**
  Educational Psychology
  **Presenter(s): Quezada, Nancy**
  Faculty Sponsor(s): Pugh, Kevin
  Undergraduate Presentation

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### Special Invitational Presentation from the Front Range Community College Honors Program
**Session 7 & 8**
11:00 - 11:35 in the Morning

**Columbine A**

- **Multiple Session Presentation - Sessions 7, 8**
- **Communities, Cameras, and Conservation - A Mountain Lion Honors Research Project**
- **Front Range Community College Honors Presentation**
- Biological Sciences
  **Presenter(s): Slusher, Donn; Mangan, Ann; Nolde, Doug; Munson, Elizabeth**
  Faculty Sponsor(s): Patterson, Barb
  Undergraduate Presentation
McNair Scholars Presentations

The McNair Scholars Program provides undergraduate research opportunities designed to prepare eligible juniors and seniors for graduate school. As a member of the federal TRIO family of programs, the McNair Scholars Program is dedicated to increasing access to doctoral education among currently underrepresented groups.

Morning Poster Session
10:30 - 11:30 in the Morning
Mt. Evans & Longs Peak Ballrooms

Postural Stability and Flexibility in Young Adults
Research Excellence Award Finalist
Sport & Exercise Science
Presenter(s): Ingle, Danielle
Faculty Sponsor(s): Heise, Gary
Undergraduate Presentation

Self-Esteem and Relationship Perception
Psychology
Presenter(s): Klosterman, Miranda
Faculty Sponsor(s): Pascoe, Elizabeth
Undergraduate Presentation

More Than Therapy: Determining How Speech Language Pathologists Can Best Meet the Needs of Early Intervention Families
Research Excellence Award Finalist
Audiology & speech-language sciences
Presenter(s): Moore, Robyn
Faculty Sponsor(s): Fahey, Kathleen
Undergraduate Presentation

Differences Between College Freshmen and Seniors in Hookup Behavior
Psychology
Presenter(s): Yamasaki, Kara
Faculty Sponsor(s): Dunn, Thomas
Undergraduate Presentation

Reflections for Youth: Staff Perceptions and Experiences
Human Services
Presenter(s): Ochoa, Miranda
Faculty Sponsor(s): Bezyak, Jill
Undergraduate Presentation

Afternoon Poster Session
01:30 - 02:30 in the Afternoon
Mt. Evans & Longs Peak Ballrooms

College Experiences: First-Generation Female Undergraduates
Higher Education & Student Affairs Leadership, Human Services
Presenter(s): Rascon, Andrea
Faculty Sponsor(s): Yakaboski, Tamara
Undergraduate Presentation

Gender Preference and Idealization of the Female Body Type
Psychology
Presenter(s): Posey, Brianne
Faculty Sponsor(s): Granrud, Carl
Undergraduate Presentation

A comparison of postural stability in gymnasts, volleyball players and non-athletes.
Audiology & speech-language sciences
Presenter(s): Howerton, Kayla
Faculty Sponsor(s): Bright, Kathryn
Undergraduate Presentation

Exploring the Outcomes and Perceptions of Traditional and Post-baccalaureate Audiology and Speech-Language Sciences Students
Audiology & speech-language sciences
Presenter(s): Bayard, Kashia
Faculty Sponsor(s): Hanks, Julie
Undergraduate Presentation

Whatever it Takes: How Mentors for College-Level Independent Student Provide Social Capital and its Effects on Educational Attainment
Educational Studies, Sociology, Social Science
Presenter(s): Morones, Seth
Faculty Sponsor(s): Musick, David
Undergraduate Presentation
College Academic Success: Prior Motivations and Perceptions of Parents
Psychology
Presenter(s): Frazier, Cherise
Faculty Sponsor(s): Pugh, Kevin
Undergraduate Presentation

Attachment Styles of African American College Students
Africana Studies, Psychology
Presenter(s): Tindall, Breonna
Faculty Sponsor(s): Jolly, Tricia
Undergraduate Presentation

Using Self-Determination Theory to Examine the Motivation of Ethnic College Students
Research Excellence Award Finalist
Psychology
Presenter(s): Martin, Elia
Faculty Sponsor(s): Caufman, Krista
Undergraduate Presentation

Special Invitational Presentation from the Aims Community College Student Support Services STEM Program

McNair Scholars Program helps make dreams come true!

The McNair Scholars Program is dedicated to increasing access to doctoral education among currently underrepresented groups.

Program Eligibility

- **Juniors and seniors with a 3.0 or higher GPA. (may apply as Sophomore)**
- **First-generation, low-income students and/or members of underrepresented populations in graduate education.**
- **Committed to completing a graduate degree.**

Find out more at www.unco.edu/mcnair or e-mail sarah.chase@unco.edu

Biology Poster Session
03:00 - 04:00 in the Afternoon
Mt. Evans Ballroom

Cloning of Immunoglobulin cDNAs from the Jamaican Fruit Bat (Artibeus jamaicensis)
Research Excellence Award Finalist
Biological Sciences
Presenter(s): Lee, Benjamin
Faculty Sponsor(s): Hawkinson, Ann
Undergraduate Presentation

Natural compounds as sources of new drugs: venoms and cancer
Research Excellence Award Finalist
Biological Sciences
Presenter(s): Broughton, Brianne
Faculty Sponsor(s): Mackessy, Stephen
Undergraduate Presentation

Research Excellence Award Finalist

Biological Sciences
Presenter(s):
Faculty Sponsor(s):
Undergraduate Presentation
The School of Biological Sciences

Presents the

6th Annual
Graduate Student
Research Symposium
University Center Longs Peak Ballroom
8:30 AM – 3 PM

Undergraduate Research
Biology Poster Presentations
University Center Mt Evans Ballroom
3 PM – 4 PM

Registration opens at 8:00 a.m. in the University Center Fireside Lounge.

Each presenter must check-in to receive their participation certificate, complimentary lunch ticket, and Research Day program.
Graduate Biology Oral Presentations
Longs Peak Ballrooms

08:30 AM
Insights into body condition of overwintering Prairie Rattlesnakes (Crotalus viridis viridis) in northeastern Colorado from a 9-year field-study
Biological Sciences
Presenter(s): Dastidar, Dalia Ghosh
Faculty Sponsor(s): Mackessy, Stephen
Graduate Presentation

08:45 AM
Calcification of the larynx and trachea during growth and development in the nasal-emitting echolocating bat Artibeus jamaicensis
Biological Sciences
Presenter(s): Carter, Richard
Faculty Sponsor(s): Adams, Rick
Graduate Presentation

09:00 AM
An investigation of the effect of kinase inhibitors against mosquito borne flaviviruses replication
Biological Sciences
Presenter(s): Hannah, Amanda
Faculty Sponsor(s): Keenan, Susan
Graduate Presentation

09:10 AM
Annual and diurnal patterns in root sap flow of Populus tremuloides
Biological Sciences
Presenter(s): Bretfield, Mario
Faculty Sponsor(s): Franklin, Scott
Graduate Presentation

09:25 AM
Field Research Experiences and Middle School Girls: Supporting Ecological Literacy and Improving Science Perceptions
Biological Sciences
Presenter(s): Garcia, Violeta
Faculty Sponsor(s): Jurin, Richard
Graduate Presentation

09:40 AM
Habitat selection and distribution of canyon wrens in the northern Colorado Foothills
Biological Sciences
Presenter(s): Warning, Nat
Faculty Sponsor(s): Benedict, Lauryn
Graduate Presentation

09:50 AM
Bat community composition in relation to habitat fragmentation in southwestern China and the southern Rocky Mountains, Colorado
Biological Sciences
Presenter(s): Heiker, Laura
Faculty Sponsor(s): Adams, Rick
Graduate Presentation

10:15 AM
Students' perceptions of graphic organizers as a study aid in a general biology laboratory
Biological Sciences
Presenter(s): Cleveland, Lacy
Faculty Sponsor(s): Jurin, Richard
Graduate Presentation

10:30 AM
Evolution and Biological Roles of Three-Finger Toxins in Snake Venoms (families Colubridae, Elapidae, and Viperidae
Biological Sciences
Presenter(s): Modahl, Cassandra
Faculty Sponsor(s): Mackessy, Stephen
Graduate Presentation

10:45 AM
Foraging Patterns By Bats in Forested, Edge, and Masticated Ponderosa Pine Forest in Boulder County, Colorado
Biological Sciences
Presenter(s): Craven, Katelin
Faculty Sponsor(s): Adams, Rick
Graduate Presentation
**11:00 AM**
DNA microsatellite analysis of *S. parviflorus* to clarify morphologically based species level taxonomy and hybridization levels between these two species
Biological Sciences
**Presenter(s): Schwabe, Anna**
Faculty Sponsor(s): McGlaughlin, Mitchell
Graduate Presentation

**11:15 AM**
Response of riparian areas of the Shortgrass Steppe to release from cattle grazing using exclosures: Comparison at different spatial and temporal scales
Biological Sciences
**Presenter(s): Schiebout, Michael H.**
Faculty Sponsor(s): Franklin, Scott
Graduate Presentation

**11:30 AM**
Ethanol Inhibits Mouse Embryonic Stem Cell Differentiation
Biological Sciences
**Presenter(s): Vaughn, Brittney**
Faculty Sponsor(s): DeKrey, Gregory
Graduate Presentation

**11:45 AM**
PfPK7: an antimalarial drug target
Biological Sciences
**Presenter(s): Bullard, Kristen**
Faculty Sponsor(s): Keenan, Susan
Graduate Presentation

**01:00 PM**
Composition of venoms from two sympatric species of montane rattlesnakes: species differences and potential sources of venom variation
Biological Sciences
**Presenter(s): Gandara, Anthony**
Faculty Sponsor(s): Mackessy, Steve
Graduate Presentation

**01:15 PM**
What microsatellites tell us about two closely related endemic plant species in the Colorado Plateau
Biological Sciences
**Presenter(s): Bresowar, Gerald**
Faculty Sponsor(s): McGlaughlin, Mitchell
Graduate Presentation

**01:30 PM**
The Importance of Riparian Habitat to Bats in the Urbanized Prairie
Biological Sciences
**Presenter(s): Brown, Lowrey**
Faculty Sponsor(s): Adams, Rick
Graduate Presentation

**01:45 PM**
Soil CO2 Efflux in Salvage Logged versus Untreated Beetle-kill Forests
Biological Sciences
**Presenter(s): Beverly, Daniel**
Faculty Sponsor(s): Franklin, Scott
Graduate Presentation

**01:50 PM**
Lateral Mobility of Prostaglandin F2a Receptors on the Plasma Membrane of Bovine Luteal Cells
Research Excellence Award Finalist
Biological Sciences
**Presenter(s): Graham, Peter**
Faculty Sponsor(s): Burns, Patrick D; Tatum, Josh C.; Schenk, Adrian C.; Nozykowski, John P.; Zhang, Dongmei; and Roess, Deborah A.
Graduate Presentation

**02:15 PM**
Delivering Biology Online: Wet Labs vs. Virtual Simulations, Future Research Directions
Biological Sciences
**Presenter(s): Ranney, Beverly**
Faculty Sponsor(s): Jurin, Richard
Graduate Presentation
Examining Sclerocactus brevispinus and Sclerocactus wetlandicus genetic diversity in Uintah Basin, Utah

**Presenter(s): Hubbard, Ashley**

Faculty Sponsor(s): McGlaughlin, Mitchell  
*Graduate Presentation*

Examining the role of receptor tyrosine kinase (RTK) intracellular signaling pathways in Drosophila testis stem cells

**Presenter(s): Hammer, Kenneth**

Faculty Sponsor(s): Leatherman, Judith  
*Graduate Presentation*

Engineering plants to aid in the fight against malaria

**Biological Sciences**

**Presenter(s): Johnson, Jacqueline**

Faculty Sponsor(s): Keenan, Susan  
*Graduate Presentation*

Anti-neoplasia effects of a novel snake venom disintegrin, tzabcanin

**Biological Sciences**

**Presenter(s): Saviola, Anthony**

Faculty Sponsor(s): Mackessy, Steve  
*Graduate Presentation*

Undergraduate Biology Poster Session

**03:00 - 04:00 in the Afternoon**

**Mt. Evans Ballroom**

Divergence of Sulfur-Flower Buckwheat using DNA Analyses

*Research Excellence Award Finalist*

**Biological Sciences**

**Presenter(s): Brevik, Taylor; McGlaughlin, Mitchell**

Faculty Sponsor(s): McGlaughlin, Mitchell  
*Undergraduate Presentation*

Natural compounds as sources of new drugs: venoms and cancer

*Research Excellence Award Finalist*

**Biological Sciences**

**Presenter(s): Broughton, Brianne**

Faculty Sponsor(s): Mackessy, Stephen  
*Undergraduate Presentation*

Antioxidants and Anti-Inflammatory Drugs as a Treatment for Parkinson’s Disease

**Biological Sciences**

**Presenter(s): Gross, Ashley**

Faculty Sponsor(s): Thomas, Mark  
*Undergraduate Presentation*

PDGF/VEGF signaling in the somatic stem cells of Drosophila testes

**Biological Sciences**

**Presenter(s): Johnson, Kelli**

Faculty Sponsor(s): Leatherman, Judith  
*Undergraduate Presentation*

Comparative analysis of the song syllable types produced by three nuthatch species: Evolutionary relationships do not predict similarity

**Biological Sciences**

**Presenter(s): King, Carissa**

Faculty Sponsor(s): Benedict, Lauryn  
*Undergraduate Presentation*
Cloning of Immunoglobulin cDNAs from the Jamaican Fruit Bat (Artibeus jamaicensis)
Research Excellence Award Finalist
Biological Sciences
Presenter(s): Lee, Benjamin
Faculty Sponsor(s): Hawkinson, Ann
Undergraduate Presentation

Use of MTT for viability testing may be inappropriate for macrophages.
Biological Sciences
Presenter(s): Lenberg, Jerica
Faculty Sponsor(s): DeKrey, Gregory
Undergraduate Presentation

The effects of dopamine on NMDA receptor responses in a PCP mouse model of schizophrenia
Biological Sciences
Presenter(s): Leyrer, Jonna
Faculty Sponsor(s): Thomas, Mark
Undergraduate Presentation

Cytotoxic Effects of Elapid and Colubrid Venoms on Colon (Colo205) Cancer Cells
Biological Sciences
Presenter(s): Maxey, Elizabeth
Faculty Sponsor(s): Mackessy, Steve
Undergraduate Presentation

Microsatellite divergence among members of Lotus subgenus Syrmatium
Biological Sciences
Presenter(s): Meadows, Laura
Faculty Sponsor(s): McGlaughlin, Mitchell
Undergraduate Presentation

The Role of BMP signaling in the Cyst Stem Cells of the Drosophila Testis
Biological Sciences
Presenter(s): Nesiba, Michelle
Faculty Sponsor(s): Leatherman, Judith
Undergraduate Presentation

Song types, repertoires and patterns of song sharing among canyon wrens, Catherpes mexicanus
Research Excellence Award Finalist
Biological Sciences
Presenter(s): Rose, Anne
Faculty Sponsor(s): Benedict, Lauryn
Undergraduate Presentation

Fish oil supplementation alters lipid microdomains in bovine luteal cells in vitro
Biological Sciences
Presenter(s): Schenk, Adrian
Faculty Sponsor(s): Burns, Patrick
Undergraduate Presentation

Both endosulfan-alpha and endosulfan-beta inhibit macrophage inflammatory responses
Biological Sciences
Presenter(s): Terry, Alexander
Faculty Sponsor(s): DeKrey, Gregory
Undergraduate Presentation

Investigating the role of Akt signaling in Drosophila testis stem cells
Biological Sciences
Presenter(s): Volmer, David
Faculty Sponsor(s): Leatherman, Judith
Undergraduate Presentation
Oral Research Presentations

April 12, 2012
9:00 AM – 4:00 PM
University Center
Aspen Suites
Columbine Suites
Council Room
Spruce Suites

Registration Opens at 8:30 AM
In the University Center Fireside Lounge

Each presenter must check-in to receive their participation certificate, complimentary lunch ticket, and Research Day program.
Session 1  
09:00 - 09:15 in the Morning

Aspen B  
Collection of Curriculum-Based Assessment Training to Improve Quality Field Experience of UNC Special Education Teacher Candidates  
Special Education  
Presenter(s): AlQafari, Shehana  
Faculty Sponsor(s): Pierce, Corey  
Graduate Presentation

Spruce A  
“Los engaños y las contradicciones en El sí de las niñas”  
Foreign Languages, Spanish  
Presenter(s): Pedigo, Maria  
Faculty Sponsor(s): Garza, Efrain  
Undergraduate Presentation

Spruce B  
Film "The Mission" and Colonial Latin America  
Spanish  
Presenter(s): Hernandez, Armando; Barraza, Sujeith; Barron-Avila, Alejandra  
Faculty Sponsor(s): Park, Jungwon  
Undergraduate Presentation

Spruce C  
Multiple Session Presentation - Sessions 1, 2  
Straight Out of Nowhere: A Heterosexual History of the Post War American Youth Through the Social Guidance Media Film  
History  
Presenter(s): Fernandez, Cyrus  
Faculty Sponsor(s): Syrett, Nicholas  
Graduate Presentation

Session 2  
09:20 - 09:35 in the Morning

Aspen C  
Multiple Session Presentation - Sessions 1, 2  
Protestor Impact On Patients Entering a Planned Parenthood of the Rocky Mountains Health Care Center and Abortion Clinic.  
Psychology, Sociology, Social Science  
Presenter(s): Sanchez, Danny  
Faculty Sponsor(s): Sanchez, Daniel  
Graduate Presentation

Columbine B  
Multiple Session Presentation - Sessions 2, 3  
Life History: Critical Inquiry and Humanistic Method in the Undergraduate Classroom; a Works-in-Progress Round Table, Discussion  
Anthropology  
Presenter(s): McBeth, Sally; Lambert, Ryan; Dougherty, Alaina; Schmidt, Christopher; Schuch, Kayla; Mueller, Blair; Jarrell, Rhiannon; Wright, Wendy; Berg, Holly; Sherwin, Alexander  
Faculty Sponsor(s): McBeth, Sally  
Undergraduate Presentation

Spruce A  
“Los ojos que no ven”  
Foreign Languages, Spanish  
Presenter(s): Herrera, Dulce  
Faculty Sponsor(s): Garza, Efrain  
Undergraduate Presentation

Spruce B  
Multiple Session Presentation - Sessions 2, 3  
"Plows, Food, and God" Developing American Imperialism through Humanitarian and Christian Reform Projects  
History, Political Science  
Presenter(s): Powers, Chandra  
Faculty Sponsor(s): Haberman, Aaron  
Graduate Presentation

Spruce C  
Multiple Session Presentation - Sessions 1, 2  
Straight Out of Nowhere: A Heterosexual History of the Post War American Youth Through the Social Guidance Media Film  
History  
Presenter(s): Fernandez, Cyrus  
Faculty Sponsor(s): Syrett, Nicholas  
Graduate Presentation
### Session 3
09:40 - 09:55 in the Morning

**Aspen C**
The Athlete and the L-word: Female Athlete Responses to the Lesbian Label
Sport & Exercise Science
Presenter(s): Bumgardner, Brenda
Faculty Sponsor(s): Brustad, Robert
Graduate Presentation

**Columbine A**
Time course of doxorubicin and dysfunction in the rat aorta
Sport & Exercise Science
Presenter(s): Gibson, Noah
Faculty Sponsor(s): Gibson, Noah
Graduate Presentation

### Columbine B
*Multiple Session Presentation - Sessions 2, 3*
Life History: Critical Inquiry and Humanistic Method in the Undergraduate Classroom; a Works-in-Progress Round Table,
Discussionschu
Anthropology
Presenter(s): McBeth, Sally; Lambert, Ryan; Dougherty, Alaina; Schmidt, Christopher; Schuch, Kayla; Mueller, Blair; Jarrell, Rhiannon; Wright, Wendy; Berg, Holly; Sherwin, Alexander
Faculty Sponsor(s): McBeth, Sally
Undergraduate Presentation

### Spruce A
Western Coast, Eastern Way: The Groundbreaking Hindustani Jazz Sextet of Los Angeles, California
Music
Presenter(s): Parrish, Angela
Faculty Sponsor(s): White, James
Graduate Presentation

### Spruce B
*Multiple Session Presentation - Sessions 2, 3*
"Plows, Food, and God" Developing American Imperialism through Humanitarian and Christian Reform Projects
History, Political Science
Presenter(s): Powers, Chandra
Faculty Sponsor(s): Haberman, Aaron
Graduate Presentation

### Session 4
10:00 - 10:15 in the Morning

**Aspen C**
Breastfeeding Research Panel #1
Dietetics
Presenter(s): Weber, Laurenda; Clark, Alena; Frantz, Helen
Faculty Sponsor(s): Clark, Alena
Undergraduate Presentation

**Columbine A**
Nature’s Relationships with Daoism and Modern China
Asian Studies
Presenter(s): Knapp, Christi
Faculty Sponsor(s): Low, Michelle
Undergraduate Presentation

**Columbine B**
*Multiple Session Presentation - Sessions 4,5*
Response to Intervention in schools: A qualitative study
Educational Studies, Special Education
Presenter(s): Jackson, Lewis; AlSuliman, Maha
Faculty Sponsor(s): Jackson, Lewis
Graduate Presentation

**Council Room**
Aid Effectiveness: Doctors Without Borders/Médecins Sans Frontières How does the Paris Declaration measure aid for a single, neutral development group?
Research Excellence Award Presentation
Modern Languages
Presenter(s): West, Jasmine
Faculty Sponsor(s): Moritz, Christine
Undergraduate Presentation
Spruce A
An Evaluation of the Student Teaching Triad Education
Presenter(s): Ku, Heng-Yu; Hess, Chelsie; Kaufeld, Kimberly
Faculty Sponsor(s): Ku, Heng-Yu
Graduate Presentation

Spruce B
Challenges of Accessing and Merging Public Education Data Education
Presenter(s): Siegrist, Mary
Faculty Sponsor(s): Klopfenstein, Kristin
Graduate Presentation

Spruce C
Multiple Session Presentation - Sessions 3, 4
Rethinking What Counts: Preservice ESL Teachers’ Use of Video Composition at the College Level Education; ESL
Presenter(s): Romero, Deborah; Gomez, Veronica; Coronado, Sully; Balderrama, Delia; Dvorak, Nicolle; Richards, Shelly
Faculty Sponsor(s): Romero, Deborah
Undergraduate Presentation

Columbine B
Multiple Session Presentation - Sessions 4, 5
Response to Intervention in schools: A qualitative study Educational Studies, Special Education
Presenter(s): Jackson, Lewis; AlSuliman, Maha
Faculty Sponsor(s): Jackson, Lewis
Graduate Presentation

Council Room
The Effect of Presentation Level on the SCAN-3:A Research Excellence Award Finalist Audiology & speech-language sciences
Presenter(s): Matesi, Chelsea
Faculty Sponsor(s): Stroo, Tina
Undergraduate Presentation

Session 6
10:40 - 10:55 in the Morning

Aspen B
How America Used the World Bank and the IMF for Their Benefit Political Science
Presenter(s): Kranz, Courtney
Faculty Sponsor(s): Blair, Brook
Undergraduate Presentation

Aspen C
A Generalized Linear Mixed Model for Enumerated Sunspots Applied Statistics & Research Methods
Presenter(s): Riggs, Jamie
Faculty Sponsor(s): Lalonde, Trent
Graduate Presentation

Columbine A
Multiple Session Presentation - Sessions 5, 6
Linguistic Perspectives on Second Language Acquisition: From textbook to classroom. Education; ESL
Presenter(s): Romero, Deborah; Castorena, Roman; Pedigo, Maria; Balagna, Elise; Smith, Jennifer; Pina-Green, Hatzry; Hanson, Myra; Bristol, Lauren
Faculty Sponsor(s): Romero, Deborah
Undergraduate Presentation
**Council Room**
An Exploration of High and Low Level Processes in Understanding Others’ Minds
*Research Excellence Award Finalist*
Psychology, Social Science
**Presenter(s):** Gonzales, Christopher
Faculty Sponsor(s): Peterson, Eric
*Undergraduate Presentation*

**Session 7**
11:00 - 11:15 in the Morning

**Aspen A**
Political Issues In The Mexican American Community
Mexican American Studies
**Presenter(s):** Balderas, David; Barron-Avila, Alejandra; Chavez, Erick; Correa, Norman; Dias, Daniel; Flores, Evangelina
Faculty Sponsor(s): Falcon, Priscilla
*Undergraduate Presentation*

**Aspen C**
Learning through social technologies: Leveraging and Facilitating Learning Experiences with Web 2.0 Tools and Social Media
Educational Technology
**Presenter(s):** Lee, Kang
Faculty Sponsor(s): Williams, Mia
*Graduate Presentation*

**Columbine A**
*Multiple Session Presentation - Sessions 7, 8*
Communities, Cameras, and Conservation - A Mountain Lion Honors Research Project
Front Range Community College Honors Presentation
Biological Sciences
**Presenter(s):** Slusher, Donn; Mangan, Ann; Nolde, Doug; Munson, Elizabeth
Faculty Sponsor(s): Patterson, Barb
*Undergraduate Presentation*

**Council Room**
Engaged Global Millennials: Preliminary Results on an Qualitative Analysis of a Global Millennial Generation
*Research Excellence Award Finalist*
Anthropology
**Presenter(s):** Frank, Michaela
Faculty Sponsor(s): Kimball, Michael
*Undergraduate Presentation*

**Spruce A**
Effects of Calorie Restriction and Voluntary Exercise on Doxorubicin-Induced Cardiac Dysfunction
Sport & Exercise Science
**Presenter(s):** Greufe, Stephanie
Faculty Sponsor(s): Hayward, Reid
*Graduate Presentation*

**Spruce B**
Analysis of Bovine Temperature using Clustered Binomial Logistic and Multinomial Logistic Regression Models
Applied Statistics & Research Methods, Biological Sciences
**Presenter(s):** Shane, Maryann
Faculty Sponsor(s): Lalonde, Trent
*Graduate Presentation*

**Spruce C**
Bilingüismo: Una alternativa para el futuro
Foreign Languages, Spanish
**Presenter(s):** Vargas, Carlos; Campos, Karla; Guerra, Eledora; Pina-Green, Martha; Sandoval, Irma; Nunez, Jose; Vazquez, Zoraya
Faculty Sponsor(s): Garza, Efrain
*Undergraduate Presentation*

**Session 8**
11:20 - 11:35 in the Morning

**Aspen A**
Political Issues In The Mexican American Community
Mexican American Studies
**Presenter(s):** Leach, Sara; Hernandez, April; Hernandez, Armando; Tapia, Jose; Simms, Thomas; Vining, Luna
Faculty Sponsor(s): Falcon, Priscilla
*Undergraduate Presentation*

**Aspen B**
The Decoding of Symbols within the Courtroom
Communication Studies
**Presenter(s):** Britt, Jamie
Faculty Sponsor(s): Allen, Lin
*Undergraduate Presentation*
Aspen C
“El triunfo del amor en El amor que asalta”
Foreign Languages, Spanish
Presenter(s): Vargas, Rodolfo
Faculty Sponsor(s): Garza, Efrain
Undergraduate Presentation

Columbine A
Multiple Session Presentation - Sessions 7, 8
Communities, Cameras, and Conservation - A Mountain Lion Honors Research Project
Front Range Community College Honors Presentation
Biological Sciences
Presenter(s): Slusher, Donn; Mangan, Ann; Nolde, Doug; Munson, Elizabeth
Faculty Sponsor(s): Patterson, Barb
Undergraduate Presentation

Columbine B
M.C. Escher: A man who combined art and mathematics
Mathematics
Presenter(s): Rozner, Sarah
Faculty Sponsor(s): Diaz, Ricardo
Graduate Presentation

Council Room
txtng: a new point of view Human Drivers of Modern Language Change
Research Excellence Award Finalist
English
Presenter(s): Johnson, Kelli
Faculty Sponsor(s): Bovaird-Abbo, Kristin
Undergraduate Presentation

Spruce A
Film "The Mission" and Colonial Latin America (3)
Spanish
Presenter(s): Wright, Wendy; Leal, Erendira
Faculty Sponsor(s): Park, Jungwon
Undergraduate Presentation

Spruce B
Mathematical Experts’ Tools and Reasoning Techniques in Constructing Proofs
Educational Mathematics
Presenter(s): Goss, Melissa; King, Jeffrey
Faculty Sponsor(s): Karakok, Gulden
Graduate Presentation

Spruce C
Spatial-Temporal Generalized Linear Modeling of Mountain Pine Beetle Outbreaks and Other Damage Causing Agents in the Rocky Mountain Region
Applied Statistics & Research Methods, Biological Sciences, Mathematics
Presenter(s): Kaufeld, Kimberly
Faculty Sponsor(s): Lalonde, Trent
Graduate Presentation

Session 9
11:40 - 11:55 in the Morning

Aspen B
On the Bathroom Wall: A Talk on UNC Latrinalia
Anthropology, English
Presenter(s): Lambert, Ryan
Faculty Sponsor(s): McBeth, Sally
Undergraduate Presentation

Aspen C
“Comparación y contraste entre La Celestina y El caballero de Olmedo”
Foreign Languages, Spanish
Presenter(s): Bodkin, Mary
Faculty Sponsor(s): Garza, Efrain
Undergraduate Presentation

Council Room
Strategic Orientation of Big Pharma in Base-of-the-Pyramid Markets
Research Excellence Award Finalist
Business Administration
Presenter(s): Metherd, Joshua; Patrick, Meghan
Faculty Sponsor(s): Wanasika, Isaac
Undergraduate Presentation

Spruce A
Entre cuentos y mininrelatos
Spanish
Presenter(s): McCullough, Amy; Rascon, Leticia
Faculty Sponsor(s): Gonzalez, Ester
Undergraduate Presentation

Spruce B
Villa-Lobos and a Brazilian Portrait
Music
Presenter(s): Nicolau, Thais
Faculty Sponsor(s): Harris, Caleb
Graduate Presentation
**Session 10**

12:00 - 12:15 in the Afternoon

**Council Room**

From Prince of Wallachia to Prince of Darkness: An In-Depth Analysis of the Identity of Vlad Dracula

*Research Excellence Award Finalist*

History

Presenter(s): Goldfarb, Lindsey

Faculty Sponsor(s): Wieben, Corinne

Undergraduate Presentation

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**Session 11**

01:00 - 01:15 in the Afternoon

**Aspen B**

Correlations among executive functions, study strategies, self-efficacy, and academic achievement

Educational Psychology

Presenter(s): Said, Nasar

Faculty Sponsor(s): Welsh, Marilyn

Graduate Presentation

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**Aspen C**

Breastfeeding Research Panel #2

Dietetics

Presenter(s): Clark, Alena; Shrull, Lyndsey; McCann, Caitlin; Munn, Kelsey

Faculty Sponsor(s): Clark, Alena

Undergraduate Presentation

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**Columbine A**

From Confucius to Mushu: A Study on the Ballad of Mulan through Time

History

Presenter(s): Mueller, Hannah

Faculty Sponsor(s): Fong, Adam

Undergraduate Presentation

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**Council Room**

Lateral Mobility of Prostaglandin F2a Receptors on the Plasma Membrane of Bovine Luteal Cells

*Research Excellence Award Finalist*

Biological Sciences

Presenter(s): Graham, Peter

Faculty Sponsor(s): Burns, Patrick D.; Tatum, Josh C.; Schenk, Adrian C.; Nozykowski, John P.; Zhang, Dongmei; and Roess, Deborah A.

Graduate Presentation

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**Spruce A**

Film "The Mission" and Colonial Latin America (2)

Spanish

Presenter(s): Wilson, Ashley; Miller, Bobbie; Fix, Shanna

Faculty Sponsor(s): Park, Jungwon

Undergraduate Presentation

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**Spruce B**

*Multiple Session Presentation - Sessions 11, 12*


History

Presenter(s): Nickell, Amber

Faculty Sponsor(s): Clinefelter, Joan

Graduate Presentation

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**Spruce C**

Lectura de cuentos de famosos escritores españoles

Spanish

Presenter(s): Manoles, Ruby; Kuhr, Kelly; Leal, Erendira

Faculty Sponsor(s): Gonzalez, Ester

Undergraduate Presentation

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**Session 12**

01:20 - 01:35 in the Afternoon

**Columbine A**

The First Virtue in Chinese Culture: Filial Piety and Society's Roles for Women

History

Presenter(s): Saito, Shawn

Faculty Sponsor(s): Fong, Adam

Undergraduate Presentation

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**Council Room**

The Effect of Preconditioning on Initial Physiological and Psychological Assessments Following Treatment

*Research Excellence Award Finalist*

Sport & Exercise Science

Presenter(s): Peterson, Brent

Faculty Sponsor(s): Schneider, Carole

Graduate Presentation
**Spruce A**
Representation of "Latino" in the "70's show"
Spanish
Presenter(s): Guse, Krysten; Blanton, Darcie; Miller, Bobbie; Eckstrom, Jennifer
Faculty Sponsor(s): Park, Jungwon
Undergraduate Presentation

**Spruce B**
Multiple Session Presentation - Sessions 11, 12
History
Presenter(s): Nickell, Amber
Faculty Sponsor(s): Clinefelter, Joan
Graduate Presentation

**Spruce C**
Multiple Session Presentation - Sessions 12, 13
Three Meta-Analytic Studies: Gender, IQ, and Theory of Mind on the “Reading the Mind in the Eyes Test”
Educational Psychology, School Psychology
Presenter(s): Kirkland, Rena; Baker, Crystal; Johnson, Cynthia
Faculty Sponsor(s): Peterson, Eric
Graduate Presentation

### Session 13
01:40 - 01:55 in the Afternoon

**Columbine B**
Multiple Session Presentation - Sessions 13, 14
Male Counseling Students’ Perceptions of Females
Counselor Education
Presenter(s): Huntington, Jody
Faculty Sponsor(s): Black, Linda
Graduate Presentation

**Council Room**
Determinants of Health on the Navajo Nation: Collecting Data through Visual Means
Research Excellence Award Finalist
Public Health
Presenter(s): Carroll, Danya
Faculty Sponsor(s): Sharp, Teresa
Graduate Presentation

### Session 14
02:00 - 02:15 in the Afternoon

**Aspen A**
Multiple Session Presentation - Sessions 14, 15
Aid Effectiveness: Doctors Without Borders/Médecins Sans Frontières How does the Paris Declaration measure aid for a single, neutral development group?
Research Excellence Award Finalist
Anthropology, Foreign Languages, Public Health, Sociology, Social Science
Presenter(s): West, Jasmine
Faculty Sponsor(s): Moritz, Christine
Undergraduate Presentation

**Aspen B**
Knowledge, Attitudes, and Behaviors Among College-Aged Females Regarding Nutrition Before and During Pregnancy
Dietetics
Presenter(s): Sand, Kayla
Faculty Sponsor(s): Clark, Alena
Undergraduate Presentation
**Aspen C**
Self-monitoring in statistics: The case of Paul
Applied Statistics & Research Methods,
Educational Mathematics, Special Education,
School Psychology
Presenter(s): Dibbs, Becky-Anne
Faculty Sponsor(s): Lahman, Maria
Graduate Presentation

**Columbine A**
Manchuria: Platform for Japanese Imperialism
in the 1930’s
History
Presenter(s): Baca, Matthew
Faculty Sponsor(s): Fong, Adam
Undergraduate Presentation

**Columbine B**
Multiple Session Presentation - Sessions 13,14
Male Counseling Students’ Perceptions of
Females
Counselor Education
Presenter(s): Huntington, Jody
Faculty Sponsor(s): Black, Linda
Graduate Presentation

**Spruce C**
Multiple Session Presentation - Sessions 14, 15
Focusing on Strengths in the Workplace
Business Administration
Presenter(s): Elliott, Katelyn
Faculty Sponsor(s): Clinebell, Sharon
Undergraduate Presentation

**Session 15**
02:20 - 02:35 in the Afternoon

**Aspen A**
Multiple Session Presentation - Sessions 14, 15
Aid Effectiveness: Doctors Without
Borders/Médecins Sans Frontières How does
the Paris Declaration measure aid for a single,
neutral development group?
Anthropology, Foreign Languages, Public
Health, Sociology, Social Science
Presenter(s): West, Jasmine
Faculty Sponsor(s): Moritz, Christine
Undergraduate Presentation

**Aspen B**
Incremental Partitioning of Variance of the
Academic Excellence Indicator: Early High
School Scores’ Effect on Students’ College
Ready Performance
Applied Statistics & Research Methods,
Educational Studies
Presenter(s): Ramezani, Niloofar
Faculty Sponsor(s): Lalonde, Trent
Graduate Presentation

**Aspen C**
Multicollinearity and variable selection
procedures
Applied Statistics & Research Methods
Presenter(s): Fang, Wei
Faculty Sponsor(s): Lalonde, Trent
Graduate Presentation

**Columbine B**
Multiple Session Presentation - Sessions 15, 16
“Mexican American Female Icons: La Virgen
de Guadalupe, La Llorona, and La Malinche—
Traditional and Innovative Artistic
Interpretations”
Art & Design, Communication Studies, History,
Interdisciplinary Studies, Mexican American
Studies, Philosophy, Psychology, Sociology,
Social Science
Presenter(s): Lopez, Sofia; Hanna, Michelle;
Maxey, Kelsey; Cummings, Kylene; Diaz,
Daniela; Crenshaw, Brittany; Flores-Soto,
Julian; Flores, Ernesto; Aldava, Anna
Faculty Sponsor(s): Canales, Genie
Undergraduate Presentation

**Council Room**
Your Body as Your Instrument from the
Beginning
Research Excellence Award Finalist
Music
Presenter(s): Nicolau, Thais
Faculty Sponsor(s): Harris, Caleb
Graduate Presentation

**Spruce A**
Facebook and Friends: The Effects of Facebook
on Interactions Among College-Age
Individuals
Communication Studies, Human Services,
Sociology
Presenter(s): Parsons, Natasha
Faculty Sponsor(s): Brothe, Crystal
Undergraduate Presentation
Spruce B
Development of a Community Health Program Evaluation Tool
Public Health
Presenter(s): Mefford, Kelsey
Faculty Sponsor(s): Sharp, Teresa
Graduate Presentation

Spruce C
Multiple Session Presentation - Sessions 14, 15
Focusing on Strengths in the Workplace
Business Administration
Presenter(s): Elliott, Katelyn
Faculty Sponsor(s): Clinebell, Sharon
Undergraduate Presentation

Session 16
02:40 - 02:55 in the Afternoon

Aspen B
The Art of Technology: A Demonstration of the Effects of Computers on Electronic Music
Music
Presenter(s): Jankovsky, Casey
Faculty Sponsor(s): Ehle, Robert
Undergraduate Presentation

Columbine B
Multiple Session Presentation - Sessions 15, 16
"Mexican American Female Icons: La Virgen de Guadalupe, La Llorona, and La Malinche—Traditional and Innovative Artistic Interpretations”
Art & Design, Communication Studies, History, Interdisciplinary Studies, Mexican American Studies, Philosophy, Psychology, Sociology, Social Science
Presenter(s): Lopez, Sofia; Hanna, Michelle; Maxey, Kelsey; Cummings, Kylene; Diaz, Daniela; Crenshaw, Brittany; Flores-Soto, Julian; Flores, Ernesto; Aldava, Anna
Faculty Sponsor(s): Canales, Genie
Undergraduate Presentation

Council Room
Plurality in Undergraduate Student Impressions of Social Justice from a Gendered Perspective
Research Excellence Award Finalist
Higher Education & Student Affairs Leadership
Presenter(s): Cohen, Joshua; Johnson, Lainey
Faculty Sponsor(s): Couture, Rene
Graduate Presentation

Session 17
03:00 - 03:15 in the Afternoon

Aspen B
Engaging Children through Service: Incorporating Service-Learning within Elementary Education
Educational Studies, English, Interdisciplinary Studies, Reading, Spanish
Presenter(s): Owsley, Kendra
Faculty Sponsor(s): Helwick-Jackson, Ginny
Undergraduate Presentation

Aspen C
Film "The Mission" and Colonial Latin America (4)
Spanish
Presenter(s): Vargas, Carlos; Gines, Julian
Faculty Sponsor(s): Park, Jungwon
Undergraduate Presentation

Columbine B
Eng 624 Middle English Panel
English
Presenter(s): Fuhr, David; Harley, Benjamin; Kolder, Sandra
Faculty Sponsor(s): Lindstadt, Abigayil
Presentation

Spruce A
Does the Court System Affect the Victims More than they Should?
Criminal Justice, English
Presenter(s): Denton, Alexandra
Faculty Sponsor(s): Brothe, Crystal
Undergraduate Presentation

Spruce B
Eng 624 Middle English Panel
English
Presenter(s): Wolfe, Kateland; Duffy, Michone; Lindstadt, Abigayil
Faculty Sponsor(s): Lindstadt, Abigayil
Graduate Presentation
**Spruce C**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Meyer, Trevor; McCurley-Hardesty, Karen; Lindstadt, Abigayil; Vance, Bremen  
Faculty Sponsor(s): Lindstadt, Abigayil  
Graduate Presentation

**Session 18**  
03:20 - 03:35 in the Afternoon

**Aspen B**  
Engaging Children through Service: Incorporating Service-Learning within Elementary Education  
Educational Studies, English, Interdisciplinary Studies, Reading, Spanish  
Presenter(s): Owsley, Kendra  
Faculty Sponsor(s): Helwick-Jackson, Ginny  
Undergraduate Presentation

**Aspen C**  
Cinematic interpretation of Juárez Murders  
Spanish  
Presenter(s): Gomez, Juan; Hernandez, Armando; Barraza, Sujeith  
Faculty Sponsor(s): Park, Jungwon  
Undergraduate Presentation

**Columbine B**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Fuhr, David; Harley, Benjamin; Kolder, Sandra  
Faculty Sponsor(s): Lindstadt, Abigayil  
Graduate Presentation

**Spruce B**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Wolfe, Kateland; Duffy, Michone; Lindstadt, Abigayil  
Faculty Sponsor(s): Lindstadt, Abigayil  
Graduate Presentation

**Spruce C**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Meyer, Trevor; McCurley-Hardesty, Karen; Lindstadt, Abigayil; Vance, Bremen  
Faculty Sponsor(s): Lindstadt, Abigayil  
Graduate Presentation

**Session 19**  
03:40 - 03:55 in the Afternoon

**Aspen B**  
The End of the Line or, the Beginning of New Sights  
English  
Presenter(s): Carpenter, Dylan  
Faculty Sponsor(s): Zimmerman, Lisa  
Undergraduate Presentation

**Aspen C**  
Film "The Mission" and Colonial Latin America (5)  
Spanish  
Presenter(s): Gomez, Juan; Weaver, Hope; Helbak, Leah  
Faculty Sponsor(s): Park, Jungwon  
Undergraduate Presentation

**Columbine B**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Fuhr, David; Harley, Benjamin; Kolder, Sandra  
Faculty Sponsor(s): Lindstadt, Abigayil  
Graduate Presentation

**Spruce B**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Wolfe, Kateland; Duffy, Michone; Lindstadt, Abigayil  
Faculty Sponsor(s): Lindstadt, Abigayil  
Graduate Presentation

**Spruce C**  
*Multiple Session Presentation - Sessions 17, 18, 19*  
Eng 624 Middle English Panel  
English  
Presenter(s): Meyer, Trevor; McCurley-Hardesty, Karen; Lindstadt, Abigayil; Vance, Bremen  
Faculty Sponsor(s): Lindstadt, Abigayil
Poster Presentations

University Center
Pikes Peak and Mt Evans Ballrooms

April 12, 2012

Morning Poster Session
10:30 AM – 11:30 AM
Setup begins at 10 AM

Afternoon Poster Session
1:30 PM – 2:30 PM
Setup begins at 1 PM

School of Biological Sciences
Poster Session
3:00 PM – 4:00 PM
Setup begins at 2:45 PM

Registration Opens at 8:30 AM
In the University Center Fireside Lounge

Each presenter must check-in to receive their participation certificate, complimentary lunch ticket, and Research Day program.
Morning Poster Session
10:30 - 11:30 AM

Graduate Poster Morning Presentations:

Ambient Noise Levels Present During School Hearing Screenings
Audiology & speech-language sciences
Presenter(s): Adkisson, Marin
Faculty Sponsor(s): Meinke, Deanna

Creating a connection between the United States and Saudi Arabia in the special education field
Research Excellence Award Finalist
Special Education
Presenter(s): Alabdulwahab, Reem; Alsulaiman, Maha; Alqafari, Shehana; Alsalmi, Amani
Faculty Sponsor(s): Banerjee, Rashida

In-service High School Teachers' Understandings, Representations, and Pedagogical Content Knowledge of Complex Numbers
Educational Mathematics, Mathematics
Presenter(s): Anderson, Stephenie
Faculty Sponsor(s): Karakok, Gulden

Expanding World-Wide Knowledge of Transition and Vocational Resources Supports Adolescents with Disabilities, and Families
Special Education
Presenter(s): Andrade, Supattra
Faculty Sponsor(s): Jackson, Lewis

Teaching Sexual Education and Preventing Sexual Abuse for Adolescents with Autism
Special Education
Presenter(s): Andrade, Supattra; Suk-Erb, Wipanee; Locharoenrat, Weeramol
Faculty Sponsor(s): Jackson, Lewis

Expectations and Beliefs about Career Services from Current UNC Students
Counselor Education, Clinical Counseling, Counseling Psychology, Educational Leadership, Educational Psychology, Higher Education & Student Affairs Leadership, Psychology, School Counseling, School Psychology
Presenter(s): Murdock, Jennifer; Buckley, Tara; Oyer, Laura; Welch, Renee
Faculty Sponsor(s): Murdock, Jennifer

Predicting Sponsorship Effectiveness from Team Attachment Perspective: A Case Study of UNC Football
Sport & Exercise Science
Presenter(s): Chen, Hsin-Chung; Reams, Lamar
Faculty Sponsor(s): Stotlar, David

College Success for Students with Physical or Learning Challenges
Higher Education & Student Affairs Leadership
Presenter(s): Dilka, Krystal; Sorensen, Mary; Lopez, Edward
Faculty Sponsor(s): Couture, Rene

Coastal Marine Engineering in Benghazi City, NE Libya
Earth Sciences
Presenter(s): Khameiss, Belkasim
Faculty Sponsor(s): Hoyt, William

Faculty Plagiarism: The University of Northern Colorado Scandal and its Implications for Today's Students and Educators
Higher Education & Student Affairs Leadership, History
Presenter(s): Lamar, Margaret
Faculty Sponsor(s): Yakaboski, Tamara
Eye Movement Desensitization and Reprocessing in Conjoint Couples Therapy Psychology
Presenter(s): Legg, Elizabeth
Faculty Sponsor(s): Lahman, Maria
Graduate Presentation

Parkinson’s Disease and Exposure to Pesticides: A Meta-Analysis over Case-Control Studies Applied Statistics & Research Methods
Presenter(s): Lu, Pei-Chin; Landram, Suzy; Kincaid, Tyler
Faculty Sponsor(s): Pulos, Steven
Graduate Presentation

The Case of CSU-Pueblo: Does Adding Intercolligate Sports Affect Enrollment? Sport & Exercise Science
Presenter(s): McGe, Micah
Faculty Sponsor(s): Gray, Dianna
Graduate Presentation

Motivational Characteristics of Student-Athletes Representing a U.S. Service Academy Sport & Exercise Science
Presenter(s): McGuire, Kaipo
Faculty Sponsor(s): Brustad, Robert
Graduate Presentation

The nature of engagement for students in a non-traditional faith based student organization Higher Education & Student Affairs Leadership
Presenter(s): Mildrexler, Janella
Faculty Sponsor(s): Schwartz, Jana
Graduate Presentation

Voluntary Wheel Running does not protect against Doxorubicin-induced Osteopenia in the Growing Rat Research Excellence Award Finalist
Biological Sciences, Sport & Exercise Science
Presenter(s): Parry, Traci
Faculty Sponsor(s): Hayward, Reid
Graduate Presentation

Prolonged Grief Symptom Severity and Suicide Risk among Bereaved LGBT Undergraduates Counseling Psychology, Psychology
Presenter(s): Ruechel, Beth; Peters, Annette; Rings, Jeffrey
Faculty Sponsor(s): Rings, Jeffrey
Graduate Presentation

Initial Physiological and Psychological Measures in Cancer Survivors During Treatment Versus Following Treatment Sport & Exercise Science
Presenter(s): Quinn, Colin
Faculty Sponsor(s): Schneider, Carole
Graduate Presentation

Guided Reinvention of the Formal Definition of Convergence of a Sequence in the Classroom Educational Mathematics
Presenter(s): Raish, Robert
Faculty Sponsor(s): Raish, Robert
Graduate Presentation

A Qualitative Analysis of Learning to Hit in Volleyball Educational Psychology, Sport & Exercise Science
Presenter(s): Rhoads, Michael; Larson, Nicole
Faculty Sponsor(s): McDevitt, Teresa
Graduate Presentation

“I’m Homeless Not Hopeless”: An Exploration of Homeless Adults’ Attachment-Based Narratives Counseling Psychology
Presenter(s): Roche, Jeff
Faculty Sponsor(s): Lahman, Maria
Graduate Presentation

Impacts of Blame Assignment and Cause of Death on Prolonged Grief Symptomatology and Suicide Risk Counseling Psychology
Presenter(s): Ruechel, Beth; Peters, Annette; Rings, Jeffrey
Faculty Sponsor(s): Rings, Jeffrey
Graduate Presentation
Investigating Static and Dynamic Variables’ Unique Contributions to Explained Variance in Attendance for the 2011 Major League Baseball Season
Sport & Exercise Science
Presenter(s): Schmitt, Craig
Faculty Sponsor(s): Gray, Dianna
Graduate Presentation

Impact of Language on Chemistry Learning Process for English Language Learner College Students in the United States
Chemistry
Presenter(s): Shingu, Alex
Faculty Sponsor(s): Song, Youngjin
Graduate Presentation

Later Life Repartnering and the Family System: The Current State of the Literature
Gerontology, Psychology
Presenter(s): Sones, Janae
Faculty Sponsor(s): Rings, Jeffrey
Graduate Presentation

Undergraduate Poster Morning Presentations:

Colorado Immigration Policies: Understanding the Impact of Current Policies on Children
Sociology
Presenter(s): Allen, Rebecca
Faculty Sponsor(s): Henderson, Angela
Undergraduate Presentation

Solar Power from Scratch: Building and Testing Dye-Sensitized Solar Cells
Physics
Presenter(s): Bennet, Rachel
Faculty Sponsor(s): Sung, Ruwang
Undergraduate Presentation

Examination of Stereotypical Behavior Portrayed by Gay and Lesbian Characters on Primetime Television
Psychology, Sociology, Social Science
Presenter(s): Bitz, Shelby; Ramsey, Ian
Faculty Sponsor(s): Pascoe, Elizabeth
Undergraduate Presentation

Quantitative NMR determination of Heat Exchanger Waste Fluid.
Chemistry
Presenter(s): Dauner, Brian
Faculty Sponsor(s): Pringle, David
Undergraduate Presentation

PERCEPTIONS OF HIV/AIDS IN A LOCAL AND GLOBAL CONTEXT
Anthropology
Presenter(s): Dougherty, Alaina
Faculty Sponsor(s): McBeth, Sally
Undergraduate Presentation

Optical Tweezers
Physics
Presenter(s): Day, Travis; Gasteiger, Joseph
Faculty Sponsor(s): Sung, Ruwang
Undergraduate Presentation

Postural Stability and Flexibility in Young Adults
Research Excellence Award Finalist
Sport & Exercise Science
Presenter(s): Ingle, Danielle
Faculty Sponsor(s): Heise, Gary
Undergraduate Presentation
Self-Esteem and Relationship Perception  
Psychology  
**Presenter(s):** Klosterman, Miranda  
Faculty Sponsor(s): Pascoe, Elizabeth  
*Undergraduate Presentation*

The Rise of Technology: A Middle Class American's Exploration of a New American Dream  
History  
**Presenter(s):** Maxfield, Nicole  
Faculty Sponsor(s): Haberman, Aaron  
*Undergraduate Presentation*

More Than Therapy: Determining How Speech Language Pathologists Can Best Meet the Needs of Early Intervention Families  
*Research Excellence Award Finalist*  
Audiology & speech-language sciences  
**Presenter(s):** Moore, Robyn  
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Petrographic and cathodoluminescence characterization of zircons in the Hyde School Gneiss, Adirondack Lowlands, New York: Implications for determining the protolith  
Earth Sciences  
**Presenter(s):** Muller, Simone  
Faculty Sponsor(s): Baird, Graham  
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Reinvigorating Our Region: The Importance of Perception and Vision  
*Aims Community College Student Support Services-STEM Program Presentation*  
Civic Engagement  
**Presenter(s):** Nelson, Missy  
Faculty Sponsor: Wyscaver, Sarah  
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Reflections for Youth: Staff Perceptions and Experiences  
Human Services  
**Presenter(s):** Ochoa, Miranda  
Faculty Sponsor(s): Bezyak, Jill  
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'Alike' My Status if I'm a Narcissist  
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**Presenter(s):** Sardelli, Natalie; Perry, Raeden; Theriault, Lauren; Kato, Raquel  
Faculty Sponsor(s): Traxler, Karen  
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Playing In Kindergarten Today  
Educational Studies  
**Presenter(s):** Sauter, Megan  
Faculty Sponsor(s): Guccione, Lindsey  
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Enhancing Learning With "Around the World" Unit: Galeton Boys and Girls Club Weld County  
Sociology  
**Presenter(s):** Workman, Karlynn  
Faculty Sponsor(s): Jennison, Karen  
*Undergraduate Presentation*

Differences Between College Freshmen and Seniors in Hookup Behavior  
Psychology  
**Presenter(s):** Yamasaki, Kara  
Faculty Sponsor(s): Dunn, Thomas  
*Undergraduate Presentation*
**Afternoon Poster Session**  
1:30 - 2:30 PM

**Graduate Poster Afternoon Presentations:**

Using Response to Intervention (RTI) to address behavioral problems that impede academic success  
Special Education  
**Presenter(s):** Alzayer, Rehab  
Faculty Sponsor(s): Jackson, Lewis  
*Graduate Presentation*

Wasted Hospital Supplies: How much is it costing the medical unit at a northern Colorado hospital and what can be done to reduce the cost?  
Nursing  
**Presenter(s):** Beasley, Amanda  
Faculty Sponsor(s): Hummel, Faye  
*Graduate Presentation*

How hiring a Nurse Practitioner versus a Sports Medicine Physician can save thousands in an Orthopedic office  
Nursing  
**Presenter(s):** Beeners, Kendra  
Faculty Sponsor(s): Hummel, Faye  
*Graduate Presentation*

Perspectives of the "Greeley Bible Plan" and religion on campus  
Higher Education & Student Affairs Leadership  
**Presenter(s):** Blount, Ivan; Mahannah, Megan  
Faculty Sponsor(s): Yakaboski, Tamara  
*Graduate Presentation*

Back to the Basics: A Simple and Cost-effective Umbilical Cord Blood Collection Device  
Nursing  
**Presenter(s):** Brinkman, Melissa  
Faculty Sponsor(s): Hummel, Faye  
*Graduate Presentation*

Physiological and Psychological Responses to a Longitudinal Rehabilitation Program  
Sport & Exercise Science  
**Presenter(s):** Brown, Jessica  
Faculty Sponsor(s): Schneider, Carole  
*Graduate Presentation*

Student-Athlete Recruitment at the Football Championship Subdivision: Do Apparel and Equipment Sponsorships Matter?  
Sport & Exercise Science  
**Presenter(s):** Burakowski, Katharine; Davies, Melissa  
Faculty Sponsor(s): Schwartz, Jana  
*Graduate Presentation*

Factors Affecting Retention: A Division II Perspective  
Sport & Exercise Science  
**Presenter(s):** Burakowski, Katharine  
Faculty Sponsor(s): Sharp, Linda  
*Graduate Presentation*

Xenex versus C-Difficile  
Nursing  
**Presenter(s):** Cabbage, Stacy  
Faculty Sponsor(s): Hummel, Faye  
*Graduate Presentation*

Remote Monitoring Reduces Medical Expenses And Improves Care For Diabetes Patients.  
Nursing  
**Presenter(s):** Cabezas, Marian  
Faculty Sponsor(s): Hummel, Faye  
*Graduate Presentation*

First Generation College Student Involvement and Social Identity Development  
Higher Education & Student Affairs Leadership  
**Presenter(s):** Castro, Kyle; Myers, Kimberly  
Faculty Sponsor(s): Couture, Rene  
*Graduate Presentation*

Diabetes Prevention a Cost-Benefit Analysis  
Nursing  
**Presenter(s):** Conte, Mary  
Faculty Sponsor(s): Hummel, Faye  
*Graduate Presentation*
Review of the cost-effectiveness of admitting patients to observation units in a hospital setting
Nursing
Presenter(s): Gathere Wanjiru, Jennifer
Faculty Sponsor(s): Hummel, Faye
Graduate Presentation

An Innovative Weight Based Pyxis System: A Cost Effective Solution for Accurately Charging and Tracking Hospital Supplies.
Art & Design, Human Services, Nursing Education, Nursing
Presenter(s): Grush, Anariza
Faculty Sponsor(s): Hummel, Faye
Graduate Presentation

Personal perceptions of undergraduate student holistic development through spiritual engagement
Higher Education & Student Affairs Leadership
Presenter(s): James, Heather; Mildrexler, Janella; Roberts, Holly
Faculty Sponsor(s): Couture, Rene
Graduate Presentation

Marine Reef and Age Dating of Tertiary Sections, NE Libya
Earth Sciences
Presenter(s): Khameiss, Belkasim
Faculty Sponsor(s): Hoyt, William
Graduate Presentation

A cardiac nurse practitioner is cost efficient and able to provide optimal care for the need of chronic health care maintenance in a cardiology clinic
Nursing
Presenter(s): Lorenzo, Adriana
Faculty Sponsor(s): Hummel, Faye
Graduate Presentation

Examining the Relationship Between Deviance and College Students' Possible Selves
Sociology
Presenter(s): Marshall, Sean
Faculty Sponsor(s): Houser, Jeffrey
Graduate Presentation

Econometric Statistical Investigation of the Causal Relationship Between Educators' Use of Data and Student Achievement
Applied Statistics & Research Methods, Educational Leadership
Presenter(s): Mathis, Jennifer
Faculty Sponsor(s): Klopfenstein, Kristin
Graduate Presentation

Not in My Backyard: A Look at Sex Offender Programming and Management in the State of Colorado
Criminal Justice
Presenter(s): McKinney, Kamille
Faculty Sponsor(s): Fitzpatrick, Colleen
Graduate Presentation

Understanding the Working Alliance between Clients Diagnosed with Anorexia Nervosa and Therapists in Individual Psychotherapy: A Phenomenological Approach
Clinical Counseling, Counseling Psychology, Educational Psychology, Human Rehabilitation, Nutrition, Nursing, Psychology, School Counseling, School Psychology, Sport & Exercise Science, Social Science
Presenter(s): Oyer, Laura; Ruechel, Beth; Joy, Kelly; Sanders, Julianne
Faculty Sponsor(s): O'Halloran, Sean
Graduate Presentation

How much money can be saved by supplying individually packaged antimicrobial sponges for use during central line placement?
Nursing
Presenter(s): Plate, Krista
Faculty Sponsor(s): Hummel, Faye
Graduate Presentation

Simulating Microsatellite Data Sets Using Coalescent Theory
Applied Statistics & Research Methods, Biological Sciences
Presenter(s): Reavill, David
Faculty Sponsor(s): Lalonde, Trent
Graduate Presentation
Does the use of saline locks for intravenous access by EMS personnel save money for the emergency department at North Colorado Medical Center?

Nursing

Presenter(s): Refaat, Hebah  
Faculty Sponsor(s): Hummel, Faye  
Graduate Presentation

Correlations Between Ambivalent Sexism and Health Outcomes

Public Health, Psychology

Presenter(s): Reineke, Maggie; Pascoe, Elizabeth  
Faculty Sponsor(s): Pascoe, Elizabeth  
Graduate Presentation

Cost Benefit Analysis of Reusing Collection Feeder Baby Bottles

Nursing

Presenter(s): Rowell, Kimberly  
Faculty Sponsor(s): Hummel, Faye  
Graduate Presentation

Throwing Away Money: The Importance of Sorting Hospital Waste into the Appropriate Container

Nursing

Presenter(s): Sater, Brittany  
Faculty Sponsor(s): Hummel, Faye  
Graduate Presentation

Cost Benefit Analysis of Mandatory Influenza Vaccine Policy

Nursing

Presenter(s): Schneider, Amy  
Faculty Sponsor(s): Hummel, Faye  
Graduate Presentation

From Body to Soccer: Social Constructions by Somali Youth

Sport & Exercise Science

Presenter(s): Setiawan, Caly  
Faculty Sponsor(s): Stiehl, Jim  
Graduate Presentation

Validation of the Rocky Mountain Cancer Rehabilitation Institute Multistage Treadmill Protocol for Cancer Survivors

Research Excellence Award Finalist  
Sport & Exercise Science

Presenter(s): Shackelford, Dan  
Faculty Sponsor(s): Schneider, Carole  
Graduate Presentation

Saudi Parents’ Guide to the Inclusion of Children with Disabilities in Community Settings

Research Excellence Award Finalist

Special Education

Presenter(s): Shugdar, Effat  
Faculty Sponsor(s): Brewer, Robin  
Graduate Presentation

Cost-Identification Analysis: Reusable Pulse Oximeters versus Disposable Pulse Oximeters in the Emergency Department

Nursing

Presenter(s): Skeen, Debbie  
Faculty Sponsor(s): Hummel, Faye  
Graduate Presentation

The Effect Prior Physical Activity has on Physiological and Psychological Outcomes in Cancer Survivors

Research Excellence Award Finalist  
Sport & Exercise Science

Presenter(s): Smith, Andrew  
Faculty Sponsor(s): Schneider, Carole  
Graduate Presentation

Conduct Meetings: Creating Crucial Conversations for Learning and Growth

Higher Education & Student Affairs Leadership

Presenter(s): Steward, David  
Faculty Sponsor(s): Lahman, Maria  
Graduate Presentation

Evaluation of an Introduction to Proofs Course

Educational Mathematics

Presenter(s): Troup, Jonathan  
Faculty Sponsor(s): Karakok, Gulden  
Graduate Presentation

The Role of NonCognitive Factors in the First Year Seminar

Educational Psychology

Presenter(s): Valdez, Jesse  
Faculty Sponsor(s): Vaughan, Angela  
Graduate Presentation

Cost Management: Congestive Heart Failure

Nursing

Presenter(s): Vecchio, Katie  
Faculty Sponsor(s): Hummel, Faye  
Graduate Presentation
The Costly "Stick" of Sharps Injuries
Nursing
**Presenter(s):** Way, Carole
Faculty Sponsor(s): Hummel, Faye
*Graduate Presentation*

Construction and Characterization of Merged Atmospheric-Oceanic Temperature Profiles from Dropsondes and AXBT's during the ITOP Project
Applied Statistics & Research Methods, Earth Sciences
**Presenter(s):** Young, Kate
Faculty Sponsor(s): Schaffer, Jay
*Graduate Presentation*

**Undergraduate Poster Afternoon Presentations:**

**Division I College Athletes’ in “Country Club” Sports: Does Tennis and Golf Athletes’ Social Capital Create a Sense of Entitlement? How Does this Translate Academically?**
Sociology
**Presenter(s):** Bates, Desirae
Faculty Sponsor(s): Henderson, Angela
*Undergraduate Presentation*

**Exploring the Outcomes and Perceptions of Traditional and Post-baccalaureate Audiology and Speech-Language Sciences Students**
Audiology & speech-language sciences
**Presenter(s):** Bayard, Kashia
Faculty Sponsor(s): Hanks, Julie
*Undergraduate Presentation*

**AmeriCorps: CERCA Creative Communities Craft Room Capacity Building Project**
Leadership
**Presenter(s):** Brescia, Samantha
Faculty Sponsor(s): Crow, Loree
*Undergraduate Presentation*

**Themes of Immortality in Media and its Influence on Young Adults**
Anthropology
**Presenter(s):** Brothe, Mariah
Faculty Sponsor(s): McBeth, Sally
*Undergraduate Presentation*

**AmeriCorps: Dearfield Dream Project - Capacity Building Project**
Leadership
**Presenter(s):** Clark, Shanice
Faculty Sponsor(s): Crow, Loree
*Undergraduate Presentation*

**AmeriCorps: Dearfield Dream Project - Capacity Building Project**
Leadership
**Presenter(s):** Denton, Alexandra
Faculty Sponsor(s): Crow, Loree
*Undergraduate Presentation*

**College Academic Success: Prior Motivations and Perceptions of Parents**
Psychology
**Presenter(s):** Frazier, Cherise
Faculty Sponsor(s): Pugh, Kevin
*Undergraduate Presentation*

**AmeriCorps: Family Literacy Program Capacity Building Project**
Leadership
**Presenter(s):** Galicia, Deisy
Faculty Sponsor(s): Crow, Loree
*Undergraduate Presentation*

**AmeriCorps: Boys & Girls Club Healthy Futures Program Capacity Building Project**
Leadership
**Presenter(s):** Hines, Julie
Faculty Sponsor(s): Crow, Loree
*Undergraduate Presentation*

**Exploration of the Nature of Fingerprints**
Chemistry
**Presenter(s):** Horst, Kayla
Faculty Sponsor(s): Pringle, David
*Undergraduate Presentation*

**A comparison of postural stability in gymnasts, volleyball players and non-athletes.**
Audiology & speech-language sciences
**Presenter(s):** Howerton, Kayla
Faculty Sponsor(s): Bright, Kathryn
*Undergraduate Presentation*
Spiritual Spinning Wheels: Religion's Role in Women's Spinning Bees During the American Revolution
Research Excellence Award Finalist
History
Presenter(s): Johnson, Kate
Faculty Sponsor(s): Tomlin, T.J.
Undergraduate Presentation

What Happens To Electronics Once They Are Thrown Away
Business Administration
Presenter(s): Balderas, Angelica; Klein, Alexander; McAdow, Justin
Faculty Sponsor(s): Krahnke, Keiko
Undergraduate Presentation

AmeriCorps: CERCA Creative Communities Craft Room Capacity Building Project
Leadership
Presenter(s): Krumtum, Alexandra
Faculty Sponsor(s): Crow, Loree
Undergraduate Presentation

Using Self-Determination Theory to Examine the Motivation of Ethnic College Students
Research Excellence Award Finalist
Psychology
Presenter(s): Martin, Elia
Faculty Sponsor(s): Caufman, Krista
Undergraduate Presentation

AmeriCorps: Boys & Girls Club Torch Club Program Capacity Building Project
Leadership
Presenter(s): Martorano, Megan
Faculty Sponsor(s): Crow, Loree
Undergraduate Presentation

Whatever it Takes: How Mentors for College-Level Independent Student Provide Social Capital and its Effects on Educational Attainment
Educational Studies, Sociology, Social Science
Presenter(s): Morones, Seth
Faculty Sponsor(s): Musick, David
Undergraduate Presentation

Gender Preference and Idealization of the Female Body Type
Psychology
Presenter(s): Posey, Brianne
Faculty Sponsor(s): Granrud, Carl
Undergraduate Presentation

Es el Colegio para Mi? Why Students of Mexican Descent Choose or Do Not Choose to Attend College
Educational Psychology
Presenter(s): Quezada, Nancy
Faculty Sponsor(s): Pugh, Kevin
Undergraduate Presentation

The Modified Griess and Sodium Rhodizonate Tests: A Verification of These Chromophoric Tests for Lead and Nitrites In Gunshot Residues
Chemistry, Criminal Justice
Presenter(s): Ransom, Andrew
Faculty Sponsor(s): Pringle, David
Undergraduate Presentation

College Experiences: First-Generation Female Undergraduates
Higher Education & Student Affairs Leadership, Human Services
Presenter(s): Rascon, Andrea
Faculty Sponsor(s): Yakaboski, Tamara
Undergraduate Presentation

Conducting Laboratory Analysis of Gunshot Residue (GSR) on Clothing to Identify a Shooting Suspect
Chemistry, Criminal Justice
Presenter(s): Price, Alan; Arko, John; Ray, Jessi
Faculty Sponsor(s): Price, Alan
Undergraduate Presentation

AmeriCorps: Family Literacy Program Capacity Building Project
Leadership
Presenter(s): Rivas, Angelica
Faculty Sponsor(s): Crow, Loree
Undergraduate Presentation
The Rise of Narcissism among Millenial Offenders  
Sociology  
Presenter(s): Rossman, Jenna  
Faculty Sponsor(s): Henderson, Angela  
Undergraduate Presentation

AmeriCorps: Boys & Girls Club High School Outreach Capacity Building Project  
Leadership  
Presenter(s): Shelton, Carly  
Faculty Sponsor(s): Crow, Loree  
Undergraduate Presentation

Attachment Styles of African American College Students  
Africana Studies, Psychology  
Presenter(s): Tindall, Breonna  
Faculty Sponsor(s): Jolly, Tricia  
Undergraduate Presentation

Determination of Arson Accelerants using Gas Chromatography  
Chemistry  
Presenter(s): Weaver, Tyler  
Faculty Sponsor(s): Pringle, David  
Undergraduate Presentation

Varying Parameters for Maximum Riboflavin Extraction from a Vitamin Tablet  
Chemistry  
Presenter(s): Williams, Derek  
Faculty Sponsor(s): Pringle, David  
Undergraduate Presentation

The effect of discrimination on balance concentration and health-information processing and retention.  
Research Excellence Award Finalist  
Psychology  
Presenter(s): Zivotic, Johanna; Breitenbach, Danette; Callahan, Myraiah  
Faculty Sponsor(s): Pascoe, Elizabeth  
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