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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**

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to life.

***Direct questions or requests regarding
Research Day and Academic Excellence Week to***

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University Scheduling and Events

**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): Stody, 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 a 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 1982-2003) 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.

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 effectors 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

Jerome Cohen, to illuminate how the hybrid identity which was adopted by Vlad Dracula, led to his depiction as a monster. Through the events of Vlad Dracula's life, including his family relations and various times spent in captivity, he cultivated a hybrid identity; neither entirely European nor Turkish, but rather a mix of both. This hybrid identity allowed Vlad Dracula to manipulate his delicate situation within the borderland of Wallachia. Vlad Dracula's hybrid identity, which allowed him to employ conflicting identity markers at different times, left him outside of all societal boundaries.

Graduate Research Excellence Oral Presentations:

Session 11

01:00 - 01:15 in the Afternoon

Lateral Mobility of Prostaglandin F_{2a} 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) F_{2a} 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 PGF_{2a} and anchor to lipid microdomains 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 Hams 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 PGF_{2a}. There was no change in ratio of random and confined diffusion patterns of FP receptors following PGF_{2a} treatment ($P > 0.10$). However, PGF_{2a} 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-PGF_{2a} 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 PGF_{2a} stimulation in bovine luteal cells.

Session 12

01:20 - 01:35 in the Afternoon

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 VO_{2peak} (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 ($p < .05$) main effect for prior PA. Post hoc pairwise comparisons determined that there were significant ($p < .05$) differences between groups 1 and 3 for VO_{2peak} (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 (VO_{2peak}). 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.

Session 13

01:40 - 01:55 in the Afternoon

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), alcoholism, and lack of formal 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.

Session 15

02:20 - 02:35 in the Afternoon

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.

Session 16

02:40 - 02:55 in the Afternoon

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 on 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 equalities. 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.

Research Excellence Poster Presentations **Mt. Evans & Longs Peak Ballrooms**

Graduate Research Excellence Poster Presentations:

Morning Poster Session

10:30 - 11:30 in the Morning

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.

Afternoon Poster Session

01:30 - 02:30 in the Afternoon

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

Sport & Exercise Science

Presenter(s): Shackelford, Dan

Faculty Sponsor(s): Schneider, Carole

Currently there is not a multistage treadmill protocol for cancer survivors. Most protocols have stages that are either too high in intensity or too long in duration and are highly stressful for cancer survivors. The Rocky Mountain Cancer Rehabilitation Institute (RMCRI) developed a treadmill protocol designed specifically for cancer survivors to address this issue. **PURPOSE:** To validate the RMCRI multistage treadmill protocol for cancer survivors. **METHODS:** Fifteen cancer survivors completed a randomized double validation study to compare oxygen consumption (VO₂peak) between two protocols. The RMCRI treadmill protocol, using gas analysis to determine VO₂peak, was validated against the Bruce protocol. Participants completed the randomized trials one week apart in random order. The Bruce protocol VO₂peak was then compared with the VO₂peak recorded from the gas analysis for the RMCRI treadmill protocol. Additionally, ACSM's predicted VO₂peak equations were validated against the RMCRI protocol using gas analysis. **RESULTS:** No significant differences ($p=.98$) in VO₂peak were found between the RMCRI protocol and the Bruce protocol and these values were significantly correlated with the RMCRI gas analysis test ($R^2=.712$, $p=.003$). The VO₂peak achieved using RMCRI gas analysis compared to ACSM's predicted VO₂peak equations showed no significant difference ($p=.72$). The VO₂peak values obtained with ACSM's predicted VO₂peak equations were significantly correlated with the VO₂peak values from the RMCRI protocol gas analysis ($R^2=.830$, $p<.001$). This suggests ACSM's predicted equations may be used in place of gas analysis for the RMCRI protocol. **CONCLUSION:** The RMCRI multistage treadmill protocol which has shorter stages and lower intensities was better tolerated and less stressful for cancer survivors. Given the validity and strong correlations to other treadmill protocols, the RMCRI cancer specific protocol should be the standard for the determination of functional capacity (VO₂peak) in cancer survivors.

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

Sport & Exercise Science

Presenter(s): Smith, Andrew

Faculty Sponsor(s): Schneider, Carole

Cancer survivors are impacted by physical and emotional responses associated with diagnosis and treatment. Current research shows that exercise provides a positive effect in cancer survivors at various stages in their recovery. **PURPOSE:** To investigate the effect physical activity level prior to beginning a cancer rehabilitation program has on physiological and psychological outcomes in cancer survivors following a supervised 3-month exercise intervention. **METHODS:** Two hundred forty-seven cancer survivors participated in initial fitness assessments examining heart rate (HR), systolic (SBP) and diastolic blood pressure (DBP), cardiorespiratory fitness (VO₂peak), and abdominal strength (crunches). In addition, subjects completed inventories assessing fatigue and depression. Subjects were divided into three groups based on self-reported physical activity prior to the initial assessment; none (no prior physical activity), low (< 150 minutes of prior physical activity per week), and moderate (= 150 minutes of prior physical activity per week) according to ACSM guidelines. Subjects were given an individualized exercise prescription and participated in 3 months of supervised exercise. Subjects were reassessed following the 3-month intervention. **RESULTS:** No significant differences ($p>.05$) were found between prior physical activity and any of the physiological or psychological variables assessed following the 3-month intervention. However, significant improvements ($p<.01$) were found when comparing percent change pre to post 3-month exercise in all physiological and psychological variables [HR (-2.56%), SBP (-1.45%), DBP (-1.20%), VO₂peak (+17.51%), crunches (+60.53%), fatigue (-2.13%), and depression (-2.24%)]. **CONCLUSION:** The results of this study suggest that cancer survivors demonstrate improved physiological and psychological outcomes following a supervised three-month exercise intervention regardless of their physical activity level prior to entering a cancer rehabilitation program.

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

Special Education

Presenter(s): Shugdar, Effat

Faculty Sponsor(s): Brewer, Robin

Due to cultural norms and the lack of integration of children with disabilities in Saudi Arabia, parents often feel ashamed to walk with their children with disabilities in their communities or public areas. Based on my experience in working with parents who have children with disabilities, I found that the majority of these parents do not engage their child in different community settings due to this embarrassment. Therefore, teaching parents with disabled children strategies to help them include their children in communities activities with fewer cultural barriers will encourage parents to include their children in their communities successfully. Reviewing the research, two primary research studies were identified to help me develop and teach effective integration strategies. First, Day (2000) designed a process to support families with children with disabilities in including young children in different community settings. Souza and Kennedy (2003) also described an intervention program to include students with disabilities of transition age in a variety of community locations. 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 implement the following steps: How to develop a weekly visual schedule, how to inform a child about the location of the activity, 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.

Undergraduate Research Excellence Poster Presentations:

Morning Poster Session

10:30 - 11:30 in the Morning

Postural Stability and Flexibility in Young Adults

Sport & Exercise Science

Presenter(s): Ingle, Danielle

Faculty Sponsor(s): Heise, Gary

The components of postural stability and flexibility are considered essential to overall physical fitness and well-being. Previous researchers have evaluated the relationship between these factors in the elderly and have drawn conclusions between balance ability and the risk of serious falls in this demographic. However, data concerning the younger population and implications of gender difference has been largely inconclusive. The purpose of this study is to assess the strength of the correlation between stability and flexibility in young adults as well as to evaluate how the anthropometrical differences between men and women dictate flexibility performance. It is a quantitative clinical study with a target of 40 young adults between 18 and 35 years in age. The force platform will be utilized to measure COP (center of pressure) and to detect any sway in the AP axis (anterior-posterior). Flexibility measures will be taken with a manual goniometer and a sit and reach box (SRB). The goniometer will quantify joint angles of the hip, knee, and ankle and the SRB will assess the lower back and hamstring flexibility of each participant. We expect that a strong correlation between stability and flexibility will be apparent in each subject, and that females will express a greater range of motion (ROM) than males. We hope to support the relevance of age in these factors and of gender in flexibility.

Keywords: postural stability, static stability, dynamic stability, balance, flexibility, young adults, gender, force platform, goniometer, sit and reach test, anterior-posterior axis

More Than Therapy: Determining How Speech Language Pathologists Can Best Meet the Needs of Early Intervention Families

Audiology & Speech-language Sciences

Presenter(s): Moore, Robyn

Faculty Sponsor(s): Fahey, Kathleen

Speech and language disorders are the most common reason for early intervention services in children under the age of five. Early intervention seeks to lessen or eliminate the need for speech and language services later in the child's life by providing therapy to the child and education to the parents during the child's critical period of language development. Previous research has indicated that families of children with speech and language disorders are often dealing with other stressors including a lack of emotional support and the financial burdens of therapy and care. The relationship between the caregiver and the speech language pathologist is based on trust and rapport, and the caregivers need to feel that the therapist shares an interest in the child. This qualitative study uses individual interviews and focus groups from both speech language pathologists and caregivers to better understand the needs of caregivers and examine how effectively early intervention speech language pathologists meet these needs. We anticipate that caregivers of children with speech and language disorders are struggling with a lack of resources, including emotional and financial supports, as well the need for more education regarding their child. The results of this study could serve as a training tool for speech language pathologists in meeting the needs of the families they serve.

Afternoon Poster Session

01:30 - 02:30 in the Afternoon

Spiritual Spinning Wheels: Religion's Role in Women's Spinning Bees During the American Revolution

History

Presenter(s): Johnson, Kate

Faculty Sponsor(s): Tomlin, T.J.

The boycott of British goods and the emphasis on homespun are well-known pieces of the American Revolution. Because of their domestic role, the task of creating homespun goods naturally fell to the women of the American colonies. Spinning bees were one of the more public examples of women's efforts and these gatherings varied in size and the women would spend the day at their spinning wheels carding and spinning yarn which could then be woven into cloth. Traditionally these women's actions have been interpreted as political expression and support for the Patriot cause. However, by examining colonial newspapers from the period, a pattern emerges of these bees taking place at minister's homes and often including a sermon or scripture reading. With this context in mind, this research will explore in the New England colonies the influence of religion on women's involvement in the spinning bees and investigate spirituality's role as opposed to politics in participants' motivation. How did the women's religious convictions overlap with their political thoughts? What influence did ministers, sermons, and the religious ideas of the day have on how women approached 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 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.

Biology Poster Session

03:00 - 04:00 in the Afternoon

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 eventual variety, 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*)

Biological Sciences

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 strategy 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

Biological Sciences

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. *hausknechtii*, *E. umbellatum* var. *modocensis*, *E. umbellatum* var. *majus*, *E. umbellatum* var. *areum*, 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

Biological Sciences

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, 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

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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): Stoodly, 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 a Qualitative Analysis of a Global Millennial Generation

Research Excellence Award Finalist

Anthropology

Presenter(s): Frank, Michaela

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

Interested in Graduating with Honors at UNC?

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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:
Implications for determining the protolith**

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

**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, Kasha

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): Kaufman, Krista

Undergraduate Presentation

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

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

Morning Poster Session 10:30 AM – 11:30 AM

Mt. Evans & Pikes Peak Ballrooms

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: Wycaver, Sarah

Undergraduate Presentation

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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

01:40 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 F_{2a} 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

02:30 PM

Examining *Sclerocactus brevispinus* and *Sclerocactus wetlandicus* genetic diversity in Uintah Basin, Utah

Biological Sciences

Presenter(s): Hubbard, Ashley

Faculty Sponsor(s): McGlaughlin, Mitchell

Graduate Presentation

02:40 PM

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

Biological Sciences

Presenter(s): Hammer, Kenneth

Faculty Sponsor(s): Leatherman, Judith

Graduate Presentation

02:50 PM

Engineering plants to aid in the fight against malaria

Biological Sciences

Presenter(s): Johnson, Jacqueline

Faculty Sponsor(s): Keenan, Susan

Graduate Presentation

03:05 PM

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

Laying the foundation needed for the production of an edible malaria vaccine

Biological Sciences

Presenter(s): Eulenstein, Mark

Faculty Sponsor(s): Keenan, Susan

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

Aspen C

Multiple Session Presentation - Sessions 1, 2
Protector 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

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
Protector 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, 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

"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

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, Nicole; Richards, Shelly

Faculty Sponsor(s): Romero, Deborah

Undergraduate 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

Session 5

10:20 - 10:35 in the Morning

Aspen C

Newman's Proof of the Prime Number
Theorem

Educational Mathematics

Presenter(s): Dalgamoni, Tareq

Faculty Sponsor(s): Diaz, Ricardo

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, Hatzyry; Hanson, Myra;
Bristol, Lauren

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): Stoodly, 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, Hatzyry; 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 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

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 mñinirrelatos

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

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

Aspen C

Breastfeeding Research Panel #2

Dietetics

Presenter(s): Clark, Alena; Shrull, Lyndsey;

McCann, Caitlin; Munn, Kelsey

Faculty Sponsor(s): Clark, Alena

Undergraduate Presentation

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

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

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

Spruce B

Multiple Session Presentation - Sessions 11, 12

Establishing "Roots": The American Historical Society of Germans from Russia, 1969-1989

History

Presenter(s): Nickell, Amber

Faculty Sponsor(s): Clinefelter, Joan

Graduate Presentation

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

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

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

Establishing "Roots": The American Historical
Society of Germans from Russia, 1969-1989

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

Spruce A

De Horacio Quiroga a Julio Cortázar

Spanish

Presenter(s): Coatney, Emily; Fix, Shanna;

Gonzalez Garcia, Alondra; Rivas, Angelica

Faculty Sponsor(s): Gonzalez, Ester

Undergraduate Presentation

Spruce B

Second Language Acquisition: Myths and
Theory

Education; ESL

Presenter(s): Rossman, Karisa; Blea, Victoria;

Umulisa, Joseline; Mojahed, Yasamen

Faculty Sponsor(s): Cibils, Lilian

Undergraduate 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

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

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

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 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

Graduate Presentation

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; Alsalman, Amani

Faculty Sponsor(s): Banerjee, Rashida

Graduate Presentation

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

Graduate Presentation

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

Graduate Presentation

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

Graduate Presentation

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

Graduate Presentation

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

Graduate Presentation

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

Graduate Presentation

Coastal Marine Engineering in Benghazi City, NE Libya

Earth Sciences

Presenter(s): Khameiss, Belkasim

Faculty Sponsor(s): Hoyt, William

Graduate Presentation

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

Graduate Presentation

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 Intercollegiate Sports Affect Enrollment?

Sport & Exercise Science

Presenter(s): McGee, 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): Shungu, 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

Failing to Succeed, Resilience in Psychology Graduate Students Comprehensive Exam Survivors: A Case study

Counseling Psychology

Presenter(s): Suk-Erb, Wipanee

Faculty Sponsor(s): Lahman, Maria

Graduate Presentation

The Experiences of Training Practica Students at the University of Northern Colorado

Counseling Psychology, Psychology

Presenter(s): Suk-Erb, Wipanee

Faculty Sponsor(s): Rue, Lisa

Graduate Presentation

Communication and Relationships of Intercultural/Multilingual Couples: Cultural and Language Differences

Counseling Psychology

Presenter(s): Tien, Nai Chieh

Faculty Sponsor(s): Softas-nall, Basilia

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

Faculty Sponsor(s): Fahey, Kathleen

Undergraduate Presentation

**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

Undergraduate Presentation

**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: Wycaver, Sarah

Undergraduate Presentation

**Reflections for Youth: Staff Perceptions and
Experiences**

Human Services

Presenter(s): Ochoa, Miranda

Faculty Sponsor(s): Bezyak, Jill

Undergraduate Presentation

**AmeriCorps: Boys & Girls Club Nutrition
Program Capacity Building Project**

Leadership

Presenter(s): Sand, Kayla

Faculty Sponsor(s): Crow, Loree

Undergraduate Presentation

'Like' My Status if I'm a Narcissist

Psychology

Presenter(s): Sardelli, Natalie; Perry, Raeden;

Theriault, Lauren; Kato, Raquel

Faculty Sponsor(s): Traxler, Karen

Undergraduate Presentation

Playing In Kindergarten Today

Educational Studies

Presenter(s): Sauter, Megan

Faculty Sponsor(s): Guccione, Lindsey

Undergraduate Presentation

**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, Kasha

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 Millennial 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

AmeriCorps: Boys & Girls Club High School Outreach Capacity Building Project

Leadership

Presenter(s): Stewart, Erica

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

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

Faculty Sponsor(s): Pascoe, Elizabeth

Undergraduate Presentation

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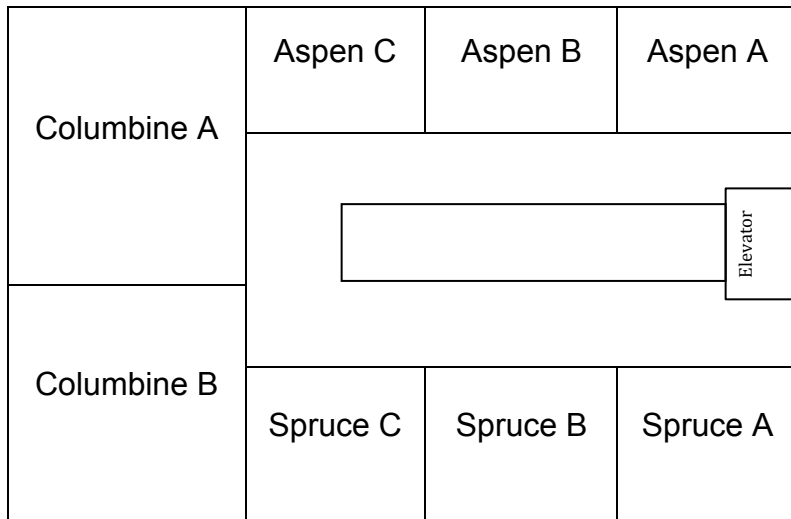
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