

Lewis-Clark

STATE

C O L L E G E

1st Annual LCSC Senior Research Symposium

May 9th & 10th, 2007



*Connecting Research
To Life*

Symposium Program

Mission

The Mission of the Lewis-Clark State College Research Symposium and Student Research Excellence Journal is to enhance student academic achievement, professional development and award research excellence by providing the opportunity for students to present their research in symposium and the opportunity to publish their research for students, faculty, staff, stakeholders and the community through an online research journal forum

Programs Participating This Year

Business

Communication

Chemistry

Geographical Information Systems

Kinesiology

Natural Science

Nursing & Health Sciences

Psychology

Social Work

Social Science

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the Following Sponsors Who Assisted
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Keynote Speakers 2007

Wednesday May 9th

Dr. Rhett Diessner

Title of presentation: Beauty: Engaging the Heart

Rhett Diessner is Professor of Psychology at Lewis-Clark State College, Lewiston, Idaho, USA. His research interests include moral development, especially moral beauty, and the development of human virtues. He received his doctorate in human development from Harvard in 1988, and a masters in educational psychology from the University of Oregon in 1983. He has authored or co-authored papers in the *Journal of Moral Education*; *Peace and Conflict: Journal of Peace Psychology*; *Journal of American Indian Education*; *Converging Realities. A Journal of Art, Science and Religion*; *Peace Psychology Bulletin*; *The Journal of Social Psychology*; *Psychology and Aging*; *Counseling and Values*; *Psychology in the Schools*; *The Journal of Bahá'í Studies*; *The Journal of Genetic Psychology*; *The Journal of Early Adolescence, Educational and Psychological Measurement*; and *The Teaching Professor*. He also has edited two textbooks published by Dushkin/McGraw-Hill: *Sources: Notable Selections in Human Development* (3e, 2007) and *Sources: Notable Selections in Educational Psychology* (2000); and a collection of his papers, *Psyche and Eros: Bahá'í Studies in a Spiritual Psychology*, was published in 2007 by George Ronald, Oxford.

Dean Christine Pharr & Dean Andrew Hanson

Title of presentation: Academic Advising and the Millennials: New Issues, New Demands, New Partnerships.

Dr. Christine Pharr is Dean of Academic Programs at Lewis-Clark State College. She served as a chemistry faculty member at LCSC for six years beginning in 1996 and as Division Chair of Natural Sciences and Mathematics from 2002-2004. Dr. Pharr has a Ph.D. in Analytical Chemistry from the University of Idaho (1996), a MA in Analytical Chemistry from the University of South Dakota (1989) and a BA from Mount Marty College (1979). Prior to taking an administrative position, Dr. Pharr's academic research was in the area of Infrared Spectroelectrochemical Analysis and Chemical Education. As an administrator her research interests have now evolved into the areas of academic program assessment and student success strategies. Dr. Pharr is a member of numerous local and regional civic organizations as well as the American Chemical Society and Sigma Xi.

Dr. Andrew Hanson is Dean of Student Services at Lewis-Clark State College. He was born and raised in Lewiston, Idaho. He finished his bachelor's degree in mathematics and obtained a secondary education credential from Lewis-Clark State College in 1992. While in college, he worked in both the Admissions Office and in the Financial Aid Office. Upon graduation, he was offered employment as the college's high school recruiter. In 1994 he accepted a position with the University of Idaho as an Assistant Director of New Student Services. Also in that year, he began his graduate studies in career guidance and education. He completed both his master's degree and Ph.D. at the University of Idaho. In 1996, he returned to

LCSC. In 2002, he was appointed as the Director of Recruitment and Retention at LCSC. Two years later, he was hired as the Dean of Student Services – a position he currently holds. His research interests include developing statistical models for predicting college student behavior and higher education law. Andy lives in Lewiston with his wife, Elaine, and daughter, Claire.

Thursday May 10th

Edward Endebrook

Title of presentation: Local Business – World Approach: Techniques for Taking a Business From Local to Global

Ed Endebrook is 64 years old. His extended education began at St Edwards University in Austin Texas. He transferred to Foothills College at Los Altos California and then transferred to Lewis Clark State College at Lewiston Idaho, where he will be receiving a Bachelor's of Science degree this coming May. His employment began as a machine designer working in the Silicone Valley for Fairchild Semi-Conductor Inc, Siliconics Inc and International Production Technology Inc. He received his first patent while working for International Production Technology Inc. The patent was for a camera used in the production of semi-conductors. A second patent was received for a wood pelletizing machine after moving to Lewiston Idaho. For the last 27 years he has been self-employed. He is currently President of Hydraulic Warehouse Inc, a manufacturing company that produces hydraulic pumps and motors used in the agricultural, forest products and mining industries. As a certified fluid power specialist, he is continuing to use his knowledge and experience to design new products in this field. The Hydraulic Warehouse Inc., becoming a major player in the global marketplace, can be attributed to his persistence in ferreting out new markets and sources.

Yves Nievergelt

Title of presentation: Applications and Computations of Quadratic Optimization: Artography, Geodesy, Metrology, Surface Fitting, etc.

Yves Nievergelt completed his diploma in mathematics from the Swiss Federal Institute of Technology in Lausanne, Switzerland, in December of 1976, and his Ph.D. in several complex variables (under the guidance of James R. King) at the University of Washington in Seattle in 1984. Since 1985, he has been teaching at Eastern Washington University near Spokane. His professional interests focus on the theory and applications of complex and numerical analysis. His current hobbies include mountain hiking, cross-country skiing, and moderate weight lifting (to work off beer), as well as big-game hunting and large-format photography.

Agenda

Wednesday May 9th

9-10:00 Welcome and Keynote Speaker(s) #1

1. Clearwater/Snake River: Introductions: Dr. Brian L. Christenson: Introduction of Special Guests: LCSC President Dene K. Thomas & LCSC Provost Tony Fernandez
2. Dr. Rhett Diessner (Keynote Speaker 1) 2005 Carnegie Foundation's Professor of the Year. Dr. Rhett Diessner (Keynote Speaker 1): 2005 Carnegie Foundation's Professor of the Year. "Beauty: Engaging the Heart."

10:00-10:15 Morning Break #1

1. **Nursing Poster Presentation:** Debora Lemon (During Daily Breaks in the Williams Conference Center Lobby)

10:15-11:00 Morning Session #1

2. Clearwater/Snake River: Nursing: Kristy Anderson, Bess Botkin, Marla Easum, Normandie Enderton, Bev Kloepfer, Lara Lowry, Crystal Lybarger, Sheila Mills, Amy Neglia, Sheldon Rippee, Shayne Wilson
3. Selway River: Social Work: Robbie Wilson:
4. Lochsa River: Kinesiology : Doug Craig, Dawn Ingham, Kelly Carlstrom
5. Grande Ronde: Social Science : Kent Johnson
6. Salmon River: **Geographic Information Systems Poster Presentations:** Scott Coleman, Ashley Edwards, Neal Hill, Della Paulson, Ryan Spears, Terri Stamper, Travis Steel

11:00-11:15 Morning Break #2

11:15-1200: Morning Session #2

1. Clearwater/Snake River: Nursing: Erin Bowen, Lori Clarke, Sarah Cook, Brian Frei, Michelle Hiseley, Annie Hughes, Holly Jasinski, Ken Marble, Jayson Smith, Rick Stang, Paula Zehner
2. Selway River: Social Work: Skeeter Lynch, Betty Weeks, & Heidi Jorgenson
3. Lochsa River: Kinesiology: AnneMarie Driver; Odette Engan, Nik Slyker
4. Grande Ronde: Social Science: Pasang Sherpa; Seth Lunceford; Mike Bybee
5. Salmon River: Social Work: Meghan Dolny, Julie Eggebraaten

Solarium Poster Presentations:

1. **Psychology Poster Presentations:** 11:15-1:00
Healthier Buys, Cheri Delacruz, Beia Gomez, Shelley Hensel, Holly Jasinski, Mindy Jennings, Carlie Jones, Janeen Nelson, Jason Humphrey, David Steen, Allison Stephens, Monte Garrison
2. **Chemistry Poster Presentations:** 11:15-12:00
Amanda Edmonson, Michelle Breithaupt, Lisa Farley, Jordyn Sperry, Clinton Roby, Gary Blyleven, Joe Schmidt, Jessica Smith, Shauna Roy, Araceli Vasquez, Dresden Beier, Joe Beier, Ben Lemon, Nathan Lilya, BoLing Deng, Jade Fulbright & Gary Fitzgerald; Megen Feleke & Dr. Paul T. Buckley

12:00-1:00 Lunch Break (On Your Own)**1:00-2:00: Afternoon Welcome and Keynote Speaker(s) #2**

1. Clearwater/Snake River: (Keynote Speaker(s) 2) Dr. Christine Pharr, Dean of Academic Programs & Dr. Andrew Hanson, Dean of Student Services

2:00-2:15 Afternoon Break #1**2:15-3:00: Afternoon Session #1**

1. Clearwater/Snake River: Nursing: Nik Slyker, Kristen Richards, Anne Shepard, Anna Lusby, Danelle McCann, Lea' Marineau, Dan Jentges, Esther Gering, Cheri Montes, Shannon Snyder
2. Selway River: Social Work: Crescentia Domebo
3. Lochsa River: Kinsiology: Alecs Guerrero
4. Grande Ronde: Dr. Eleanor P. Downey

3:15-4:00 Afternoon Break #2**3:15-4:00: Afternoon Session #2**

1. Clearwater/Snake River: Nursing: Brandi Appleford, Amy Darrington, Travis Giese, Allison Gilley, Tammy Glass, Debbie Gosso, Holli Graham, Ashley Kleinjans, Summer Miles, Heather Vinson, Rachel Wolfe
2. Selway River: Social Work: Sherry Greenup
3. Lochsa River: Kinesiology: Ryan Wholey; Trevor Olson, Anton Sousa
4. Grande Ronde: Social Science: Jennifer Everts; Darin McCall

Thursday May 10th

9-10:00 Welcome and Keynote Speaker(s) #3

1. Clearwater/Snake River: (Keynote Speaker 3) Edward Endebrook

10:00-10:15 Morning Break #1

10:15-11:00 Morning Session #1

1. Selway River: Social Work: Rose McLaughlin
2. Lochsa River: Natural Science: Becky Brainard
3. Grande Ronde: Social Science: Andy Hunt; Ryland Faller; Sue Edwards

11:00-11:15 Morning Break #2

11:15-12:00: Morning Session #2

1. Selway River: Social Work: Cody Persinger
2. Lochsa River: Natural Science: Elizabeth Flerchinger; Mark Harvilla
3. Grande Ronde: Social Science: Brad Powell; Whitney Palmer
4. Salmon River: Kinesiology: Lee LeGore

12:00-1:00 Lunch Break (On Your Own)

1:00-2:00: Afternoon Welcome and Keynote Speaker(s) #2

1. Clearwater/Snake River: (Keynote Speaker 4) Yves Nievergelt

2:00-2:15 Afternoon Break #1

2:15-3:00: Afternoon Session #1

1. Clearwater/Snake River: Communication: Christopher Aronen, Calandra Dell, Ryan Easttum
2. Selway River: Social Work: Darrah Hocum, Lindsey Holt, Debbie Crawford
3. Lochsa River: Natural Science: Dresden Beier; Joe Beier
4. Grande Ronde: Social Work: Gina Davis
5. Salmon River: Kinesiology: Taryn Joyce-Mendive, April Homan; Megan Kane

3:00-3:15 Afternoon Break #2

3:15-4:00: Afternoon Session #2

1. Clearwater/Snake River: Communication: Katie Hanson and Rachel Wittman
2. Selway River: Social Work: Jenny Ruppel
3. Grande Ronde: Guest Speaker: Thomas Backman
4. Salmon River: Kinesiology: Gabriel Clark Hinkelman, Joseph Caleb Orr; Aaron Mills, Colin Weymer, Adam Ramirez

Abstracts

Communication

Title: The shot heard for 40 years: Current attitudes regarding the John F. Kennedy assassination.

Author: Christopher Aronen

Abstract: The purpose of this study was to examine current attitudes regarding the John F. Kennedy assassination, and whether people associate themselves with the official explanation of events or if they subscribe to the various conspiracy theories. This research was performed on the campus of a Northwestern liberal arts college, surveying students currently enrolled in general education classes, who completed attitude surveys. The researcher examined participants by age, gender and ethnicity to determine whether these factors correlate with attitude.

Title: Adolescent Females' Sexual Behaviors and Attitudes: Influences on Peers and Media.

Author: Calandra Dell

Abstract: High school aged female students completed a questionnaire measuring the influences from peers and media regarding sexual behaviors and attitudes. This research helped to explain influences on adolescent females' sexual behavior and attitudes and what might be done in the future to prevent risk-taking behaviors. The questions on the survey concerned behaviors and attitudes learned from both peers and media.

Title: MySpace.com as a College Recruiting Tool

Author: Ryan Easttum

Abstract: High school and college students completed a questionnaire measuring use of the social networking site MySpace.com and MySpace.com's viability as a college recruiting tool. MySpace.com is the world's largest social networking website with an estimated 200 million profiles and 230,000 new profiles each day. The researcher sought to determine whether MySpace.com can be an effective college recruiting tool, whether students' will visit a college's respective page, and if that page affects their enrollment decision.

Title: Slipping through the cracks: Individual responses to fear appeals in anti-drug campaigns

Author: Katie James Hanson

Abstract: Over the past two decades it has become obvious from data discrepancies that fear appeals do not work the same way on all message receivers. The purpose of this research was attempted to account for some of the previous discrepancies in data by examining the relationship between responses to fear appeals and individual differences in demographics, cultural orientation, levels of anxiety and levels of risk seeking. It was hypothesized that individual characteristics predict how a message receiver perceive fear appeals used in anti-drug message, which was tested by having a quasi-random sample of 200 students from a small Northwest college watch and respond to three different types of fear appeal messages used by anti-drug campaigns. Participants were also assessed for their individual differences in demographics, cultural orientation, levels of anxiety and

levels of risk seeking. Their responses and individual differences were compared to examine whether possible correlations exist.

Title: Employee satisfaction with communication following a merger or acquisition.

Author: Rachel Wittman

Abstract: Research shows that communication during organizational mergers and acquisitions is necessary and vital to the employees before, during and immediately following the merger or acquisition. This research looked at employees' levels of satisfaction with workplace communication following a corporate merger. The methodology used for this research was a Likert-scaled questionnaire. The results of this research will benefit merging organizations or institutions.

Chemistry

Title: Creatine Synthesis

Author: Dresden Beier **Co-Author:** Joe Beier

Abstract: The purpose of our research is to synthesize creatine and optimize its yield. Creatine is used as a performance enhancer in many sports ranging from the high school level all the way to the professional arena. Creatine is found in the human body in places like skeletal muscle and it is readily converted into adenosine triphosphate (ATP), which provides energy during muscle exertion.

Title: The Evolution of The Pill

Author: Michelle Breithaupt, Amanda Edmonson, Lisa Farley

Abstract: The Pill was originally synthesized in 1951 by Luis Miramontes, Carl Djerassi, and George Rosenkranz. The history of the pill is a fascinating look into medicinal pharmacology as a whole. The rise of the pill brought about more conservative laws for releasing new medicinal drugs in the U.S. The Pill has changed dramatically from the original product. Today there are many different dosages of hormone for different patients. With all of the choices on the market today patients can pick a pill based on certain side effects, or some choose based on lifestyle. In this poster, we explored the evolution of The Pill and give an outline for how to choose the best pill. Similar to the beginning steps to synthesizing the Pill we have oxidatively cyclized farnesyl acetate by a free radical path.

Title: Determining DMSA Formation Constants and its Relevance to Chelation Therapy

Author: Megen Feleke **Co-Author:** Dr. Paul T. Buckley

Abstract: DMSA (Meso 2,3-dimercaptosuccinic acid) is used as a chelating agent to remove toxic metals from the body in a process known as chelation therapy. Chelation therapy is a common procedure to treat mercury and lead poisoning in the blood stream. Although DMSA is replacing EDTA (ethylenediaminetetraacetic acid) as the chelator of choice in these procedures, there remains much to learn about how strongly DMSA binds to different metals in different pH regimes. This research aims to quantify this bonding by measuring DMSA-metal formation constants (K_f) and comparing them to well-known K_f 's for EDTA-metal complexes. These results will also be evaluated in light of known urinary excretion rates for metals after DMSA treatment. DMSA will also be evaluated in terms of its

potential to remove beneficial metals such as sodium, potassium, and copper.

Title: Effects of fires on humic acid levels

Author: Jade Fulbright **Co-Authors:** Gary Fitzgerald

Abstract: Humic acids retain water, transport metals, act as a pH buffer and stimulate plant growth in soils. High temperature forest fires break down the humic acids and reduces a soil's ability to perform these tasks. This is why there is a lot of debate around controlled burning. In our project we are comparing levels of humic acids in burned soil and unburned soil to determine if the loss is worth the gain of limiting nutrients released in the soil after a fire. We will be extracting humic acids from samples of burned and unburned soils and comparing the results.

Title: Possible Synthesis for Gedunin to Fight Malaria.

Author: Benjamin James Lemon

Abstract: The purpose of this research is to find a way to synthesize Gedunin for its anti-malarial properties and use it as a drug for third world countries. This is ongoing research to find new drugs as the old Malaria drugs are losing their effectiveness for Malaria. A synthetic way to produce Gedunin has been developed but the chemicals that need to be used are too toxic for this college to use. Future work includes an alternative greener synthesis of Gedunin.

Title: The Greener Fuel: Alternatives to Methanol in Biodiesel Synthesis

Author: Nathan Lilya **Co-Author:** Boling Deng

Abstract: Biodiesel is an alternative fuel to petroleum based diesel fuels. This fuel is made mainly from waste vegetable oil (WVO) or pure vegetable oil, methanol, and a catalyst. Methanol is not a desirable alcohol to work with due to the serious adverse health effects seen simply by exposure of the skin or inhalation of methanol. The purpose of this series of experiments was to determine if the closest relatives of methanol, namely ethanol, propanol, and butanol, are suitable for use in the production of biodiesel. All biodiesel fuels in this experiment were synthesized by base-catalyzed reaction. After biodiesel fuels using these alcohols and a standard made with methanol were synthesized, characterization was done using NMR, Gas chromatography, and infrared to determine the structure of the fuels and to test if they were a pure substance. Percent yield and energy per liter were calculated to determine whether these alternatives are economically feasible. Initial findings seem to point to ethanol as the only viable alternative, as butanol and propanol have problems with separation at the glycerin stage. The ethanol biodiesel was very close in appearance to the methanol standard; however, this is not conclusive of either percent yield or energy per liter being the same.

Title: The Beneficial Properties in Human Health of Manchurian Mushroom Tea.

Author: Jessica Smith **Co-Authors:** Shauna Roy & Araceli Vasquez

Abstract: Manchurian mushroom tea is a health drink that is prepared by using black tea, sugar, water, and a live culture of bacteria and yeast. People from all over the world believe that this tea has medicinal properties. The tea is known to contain small amounts of important nutrients such as the B vitamins, essential amino acids, and could very well have been seen as a miracle food in the past by those who were unknowingly trying to compensate for a very limited diet. We are studying Manchurian Mushroom tea due to the fact that there is not a lot of scientific evidence to back up the claims of longevity and quality of life in humans. In doing

these experiments we are hoping to find the truth behind the tea. We are hypothesizing that Manchurian Mushroom tea is beneficial to human health. To test the hypothesis, the tea was tested for antioxidant, antibiotic properties and tested vitamin B concentration. The tea tested positive for antioxidant properties using the thiobuturic acid test. The tea tested negative for antibiotic properties using an antimicrobial susceptibility test (Kirby-Bauer Method).

Title: The Effect of pH on Caffeine

Author: Jordyn Sperry, Gary Blyleven, Joe Schmidt, Clinton Roby

Abstract: Caffeine is the most widely used stimulant in the world. Why is it that there are some people that don't get to experience the benefits of caffeine? Is it the different levels of caffeine in beverages such as coffee, tea, and soda that affect them differently; or is it more of an internal function that can cause problems? Our experiment involves the testing of the concentration levels of caffeine using the HPLC. We are testing three drinks including; coffee, tea, and soda. We are also testing the affect these caffeine concentrations have on the pH in the human stomach. We are testing this by replicating the pH level of the stomach, adding caffeine to these solutions and measuring the resultant pH.

Kinesiology

Title: Determining If a Specific Body Building Program is More Efficient Than Traditional Body Building Programs

Author: Shane Budde

Abstract: The purpose of this research study is to determine if a specific body building program is more efficient than traditional body building programs. Two young male boy builders will be recruited and train for approximately three months. Pre and post assessments in size, strength, and body composition will be assessed to determine if the program increased gains greater than expected national norms.

Title: Determining VO2 Max, Body Composition, and Free-Throw Shooting Percentages

Author: Doug Craig **Co-Authors:** Dawn Ingham & Kelly Carlstrom

Abstract: The purpose of this research was to determine if any correlation exists between college men's basketball player's VO2max, body composition, and their free-throw shooting percentage through the course of their season. The participants involved in this research were eight male collegiate basketball players. Each participant filled out an informed consent form allowing them to drop out of the study at anytime without consequences. The participants VO2max and body composition were tested half way their regular season. Free throw percentage was accounted for from team statistics throughout the regular season. We measured VO2max using two different tests: the eight minute walk and the astrand-ryhming test. In addition we accessed each participant's body composition by using a standard bio-impedance device and skin-fold calipers using the three-cite test.

Title: Does Injury Have a Psychological Effect on Athletes?

Author: AnneMarie Driver

Abstract: The purpose of this research was to determine if there was any relationship between the psychological mind set of an injured athlete and the time it took for them to recover from an injury and if there is a correlation between

psychological mind set of an athlete and their pre and post-injury performance.

Title: Will the Increase of Daily Light to Moderate Activity Improve Ones VO₂max, Blood Pressure, Body composition and Resting pulse?

Author: Odette Engan **Co-Authors:** Nik Slyker

Abstract: The purpose of this study is to determine the effects of participating in a walking program of light to moderate physical activity has on individual adult's Blood pressure, Body composition, VO₂max, and resting pulse. The results of this study will help determine which health variables are most affected by participation in a walking program. The distance walked per day will be recorded to determine an overall correlation.

Title: Designing a Specific Strength and Power Lifting Program to Enhance Male Athlete Performance

Author: Justin Fraser

Abstract: The purpose of this senior research project is to design a specific strength and power lifting program to enhance male athletes jumping, sprinting and intermittent cardiovascular performance. The program will be designed as a 8-12 week program to enhance athletic performance. Each lift or fitness activity will be detailed in required number of sets and repetitions. Outcomes will not be measured at this time. The purpose of this research project is specifically program design based on review of professional literature.

Title: Does Stress Affect the Moral Reasoning of Male and Female Athletes?

Author: Alecs Guerrero

Abstract: The purpose of this study was to examine stress levels in men and women in a North Western school and how stress may affect their moral reasoning in a school environment. The participants involved in the research study were full time adult male and female students in the kinesiology department and are participating in college athletics. A survey of 16 questions was taken by 50 male and female athletes.

Title: What Coaching Traits Benefits From Being A Good Coach?

Author: Gabriel Clark Hinkelman **Co-Authors:** Joseph Caleb Orr

Abstract: The purpose of this study is to determine which coaching traits prove to be the most successful for men's and women's basketball coaches in the Frontier Conference. The participants being recruited for this research are the men's and women's Frontier Conference coaches. Each participant is being sent a survey via email that they will be asked if they are willing to fill out and return. Filling out the survey should not take longer than 5-10 minutes. The surveys that are being sent to the coaches will have questions using the Likert scale and participants will also be asked to answer two short answer questions as well. The results will be used as will the win and loss records of the teams to determine if any traits show a winning mentality.

Title: Does Lactate Threshold have an Effect on Aerobic Performance?

Author: Taryn Joyce-Mendive **Co-Authors:** April Homan

Abstract: The purpose of this research was to assess the correlation between lactate threshold and aerobic performance. Participants in this study were cross country athletes at a small northwest college. The Identifiable variables were lactate threshold and race time performance. Research took place through the duration of

the fall semester. Lactate threshold was measured consistently with the same measuring instrument and the same conditions. The other comparison was performance which was measured by an average of race results (consistently 5k or 8k) throughout the fall season. We analyzed the data by performing a correlation between the average race times and lactate threshold value to determine if there is any significant relationship. We also analyzed other variables such as; gender, seasons of competition, and age.

Title: Does the Sequence of Exercise (Aerobic before Resistance Training vs. Resistance Training before Aerobic Exercise) have an Effect on Body Composition, Lean Muscle Mass, and Aerobic Capacity?

Author: Megan Kane

Abstract: The purpose of this study was to evaluate which exercise protocol had the greatest effect on body composition (percent body fat), lean muscle mass, and aerobic capacity: resistance training before aerobic training vs. aerobic training before resistance training. There are a total of eighteen participants involved in this research study; they were recruited through Lewis-Clark State College weight lifting courses.

Title: Injury Rates Based Upon Gender and Sport

Author: Lee LeGore

Abstract: The general purpose for my research at Lewis-Clark State College is to determine if there is a correlation between injury rates of now collegiate athletes based upon their genders and the sport they participated in during the time of injury. The participants will be current LCSC student athletes, and the survey will ask them of their injury history as far back as their freshman year of high school. This research will be conducted through a 10 question survey that does not ask any identifiable information and provides total anonymity.

Title: LCSC Outdoor Needs Assessment

Author: Aaron Mills **Co-Authors:** Colin Weymer & Adam Ramirez

Abstract: Lewis Clark State College is located in the heart of American Outdoor Adventure land and it seems only right that LCSC develop programs that reflect our beautiful and recreational location. As students of LCSC we would like to investigate the extracurricular interests of the student body in hopes to improve the total college experience here in Lewiston. Through an interest and needs assessment survey we will be able to determine the interests of the students, faculty, staff, and find new ways to enhance the college environment. The needs assessment survey will focus on both indoor and outdoor activities in the fall and spring.

Title: Is there a Negative Correlation between VO2 Max and an Individuals Body Fat Percentage?

Author: Trevor Olson **Co-Authors:** Anton Sousa

Abstract: The purpose of this research was to determine if there was a significant correlation between an individuals body composition and their VO2 Max (aerobic capacity) by testing male athletes of Lewis-Clark State College. For the procedure we will first test the subjects body fat by using the skin fold test and hydrostatic weighing to determine their body fat percentage. Then we will measure their VO2 Max by assessment with a metabolic machine using a bike odometer test that will measure their VO2 Max. The participants will be connected to the metabolic

machine by a hose, facemask and a heart rate monitor. We will then have them ride a stationary exercise bike for as long as they can with increase in resistance until they reach their predicted VO₂ Max which should take no more than 10 minutes. After measuring their VO₂ Max we will look at their body composition is positively correlated by their VO₂ Max. We will also determine if there was any significant differences in VO₂ Max and body fat percentage by sport.

Title: Periodizational Strength Gains

Author: Ryan Wholey

Abstract: The purpose of this research was to determine if leg power and bench press strength increased more through a periodization strength training program compared to the control group, Lewiston high school weight training program. I compared IRB approved data already collected from the Lewiston high school football weight training class. The periodization program involves three basic power lifting exercises approved by the American College of Sports Medicine: bench, squat, clean. The program was designed for each of the three stages to decrease the repetitions and increase the intensity of progressive sets through the periodization program.

Natural Science

Title: Unlimited-Distance Point Count Studies of Bird Populations to Study the Effects of Urban Sprawl on Local Birds in Lewiston, Idaho: A Preliminary Research Project Report

Author: Rebecca Brainard

Abstract: Urban sprawl has been attributed to the decline of bird populations across North America, including the United States, over the past 30 years. Urban sprawl involves expansion of a town or city into the surrounding natural habitat, which can cause habitat fragmentation and disruption, as well as the introduction of non-native animal and plant species. These factors can threaten and decrease certain bird species, but also encourage other bird populations as well. The purpose of this preliminary research project is to determine whether or not local bird populations and species diversity is affected by urban sprawl and its associated factors in Lewiston, Idaho.

Title: “Towards an Alzheimer’s vaccine using an EFRH peptide as an antigen to immunize against the beta-amyloid peptide.”

Author: Elizabeth Flerchinger

Abstract: A hallmark of Alzheimer’s Disease (AD) is amyloid-beta (A β) plaques. Vaccination against A β plaques using a filamentous phage that displays the EFRH peptide sequence on its surface, has shown to be successful in improving cognition in AD model mice. It has also had some negative side-effects (in human clinical trials). Researcher are attempting to mitigate these negative effects with different strains of the filamentous phage, or they are employing non-filamentous phages. The advantage of using a non-filamentous phage is that it elicits only an IgM response (IgM is too large a molecule to cross the blood brain barrier), clearing peripheral amyloid-beta, which causes a shift in equilibrium that causes the A β to migrate out of the brain. Although this research is still in its infancy, it has been used limited human trials which have shown improvement in cognition. It is not clear at this time why removal of the A β improves cognition but since it does, this is

a promising line of research in the cure and prevention of AD.

Title: Using GIS and FLIR Data to Correlate Fish Spawning Locations to Stream Temperatures within Lapwai Creek, Idaho

Author: Neal Hill

Abstract: The goal of this project is to discern if there may be a correlation between fish population, at known locations, to surface water temperatures in Lapwai creek. I will be looking for Rainbow Trout and Steelhead fish species at ten different georeferenced locations to see what quantities are present. Then build a GIS (Geographic Information Science) model to predict other locations, within Lapwai Creek, to see if there is a correlation. Next, using the model I will look elsewhere within Lapwai creek to check if fish are present and what the quantities are. The data will be provided by the Nez Pearce Tribe department of Water Resources in Lapwai ID. The type of data to be analyzed is LIDAR (Light Detection and Ranging), FLIR (Forward Looking Infrared Imagery) and field samples. A few of the considerations in building the G.I.S. model are; water temperature (is there more or less fish at various locations), Stream cover (does the amount of shade seem to correlate to population), Stream flow (does the stream current offer a preferred living habitat), Stream visibility (does fish population correspond to water clarity.) The results of the G.I.S. model will predict likely habitat for fish populations in Lapwai Creek.

Title: Identification of Potential Wildfire Areas in Nez Perce County Idaho

Author: Della Paulson

Abstract: The intent of this project is to identify high risk areas for natural wildfires within Nez Perce County, Idaho. Data will include information on seasonal weather conditions such as: precipitation, evaporation rate and irrigation; temperature, wind velocity, and lightening strikes. Other studies of significance will include vegetation type and density, fuel loads, topography, to include elevation and slope; terrain, geology, residential and developed areas, proximity to water source and fire history. With each dataset, the factors that contribute to high risk will be weighted, reclassified, and isolated. Considerations will include lowest precipitation, highest evaporation rate, highest temperature, steepest slope, etc. Once these factors have been isolated and ranked, the sets will then be combined to determine the areas most at risk. An overlay method will be used to determine the areas of highest correlation. A number of factors related to wildfire hazard will be examined and each evaluated independently, as well as corporately. By identifying the highest risk areas within the county, special attention could be given to those identified areas during high risk fire seasons. This might lessen the likelihood of large-scale wildfires and prevent loss of property and life. Not only could these areas be observed more closely, contingency plans could be developed well in advance, to best utilize available resources.

Title: Land Analysis of Whitman and Asotin Counties of Washington and Nez Perce County of Idaho for a Future Locations of a Regional Landfill

Author: Terri Stamper

Abstract: The Environmental Protection Agency (EPA) in the late 1980's, established new regulations covering landfill development that restricted landfill sitings from wetlands, unstable soil areas, fault areas, seismic impact zones, and land in the 100 year flood plain, or close to an airport. In view of these new

regulations and according to the Palouse Economic Development Council, the current landfill situated in Clarkston Heights will reach capacity in the year 2032. It is in the best interest of citizens to locate future landfills in areas that meet and exceed federal guidelines by locating future landfills in areas with natural liners that would help control subsurface leachate. In using GIS (Geographic Information Systems) technology to locate the best possible sites, we can decrease the threat of groundwater contamination. This project proposes to examine potential sites for a future landfill in the counties of Whitman, Asotin, and Nez Perce, an area comprising 3649 square miles.

Nursing & Health Sciences

Title: Treating Hunger in America, Backpacks for Kids

Authors: Brandi Appleford, Amy Darrington, Travis Giese, Allison Gilley, Tammy Glass, Debbie Gosso, Holli Graham, Ashley Kleinjans, Summer Miles, Heather Vinson, Rachel Wolfe

Abstract: The Backpack for Kids program assists hungry children within the schools surrounding our area. There are many programs already established that provide meals for kids during school hours only. However, there are many children whose families cannot provide for their nutritional needs during the weekends. The Idaho Foodbank recognized this problem and worked to establish the Backpack for Kids program to meet the hunger needs of children during the weekends. This is a very new program that many people in the community and school system are unaware of. Our goal is to increase public awareness and acquire more support for this program.

Title: Horizontal Violence: Empowering Nurses

Authors: Kristy Anderson, Bess Botkin, Marla Easum, Normandie Enderton, Bev Kloepfer, Lara Lowry, Crystal Lybarger, Sheila Mills, Amy Neglia, Sheldon Rippee, and Shayne Whitson.

Abstract: The purpose of the horizontal violence advocacy project is to provide nurses and senior level nursing students with skill sets to cope and effectively deal with this form of workplace violence. Horizontal violence is a form of abuse found primarily in workplace settings that targets new or less experienced nurses. Its prevalence in the work environment is increasing. It ranges in severity from withholding pertinent patient information to physical abuse. It negatively impacts quality patient care, the nursing shortage crisis, and overall costs to healthcare and hospital facilities. The focus of our advocacy project targets nurses in a variety of healthcare settings. This endeavor will create awareness of this potential work hazard. The end product will provide nurses with information on how to identify this abusive form of violence and apply a variety of applications to effectively cope and diffuse negative interactions with peers and management personnel. This advocacy project will also provide a reference piece with applicable language in which to effectively diffuse potential interactions of horizontal violence. Group members have developed a learning module to be incorporated into the LCSC Nursing Program (BSN) curriculum to commence Fall 2008. The goal of this module is to complement the existing Leadership Management curriculum and better equip LCSC nursing graduates of the BSN program with knowledge and awareness of horizontal violence as they embark on their new careers.

Title: Active Encouragement for Health and Wellness Attitudes and Practices among Nursing Students

Author: AnnaLee M. Hughes **Co-Authors:** Ken Marble, Erin Bowen, Lori Clarke, Sarah Cook, Brian Frei, Michelle Hiseley, Holly Jasinski, Jayson Smith, Rick Stang, Paula Zehner, Annie Hughes

Abstract: A survey was designed to assess nursing student wellness behaviors. The survey will be administered to all levels of current LCSC nursing students. It is anticipated that results from this survey will indicate that the majority of LCSC nursing students do not practice many wellness behaviors. An expected outcome of this study is to ensure that nursing students are informed of available resources for assistance in coping skills and to encourage the development of wellness behaviors. Objective: The development of healthy attitudes and behaviors among nursing students. Nursing school can be a stressful time for students. The intense academic curriculum that defines a nursing education often overwhelms even the most efficient time management practices. Far too often, self care practices are abandoned by nursing students in the quest for scholarship and clinical proficiency. The irony that arises from this is that, in the exercise of their altruistic motivation to care for others, they often neglect their own health and wellness. Health of mind, body, and spirit is essential to optimal performance. Minimizing one's own self care in nursing school, therefore, can lower academic and clinical performance, and set the stage for future professional disenchantment, "burnout," and may result in potential patient harm. Nurses are looked to for health leadership, but the message will not be credible in the absence of a good example. Nursing school should be a time to develop life-long health and wellness practices. Nursing school administrators and faculty must encourage awareness of self-care among their students and promote the many opportunities found on college campuses that can reduce stress and reinforce physical well being.

Title: Barriers for Idaho Licensed Practical Nurses Seeking a Registered Nurse Preparation

Author: Debora Lemon

Abstract: The purpose of this preliminary study was to identify the barriers that exist for licensed practical nurses who seek registered nurses' preparation. The Framework for Educational Accountability was used in conjunction with a survey tool developed by the Idaho Statewide Articulation Plan Committee. Distribution of the tool was in collaboration with the Idaho State Board of Nursing and resulted in a 99.65% return of surveys. A total of 3,555 surveys were returned. The number of respondents included for the survey was 115. The most frequent perceived barriers were cost of education (57.4%), full-time work schedule (38.3 %) and scheduling of classes (16.5%). Analysis revealed perceived barriers were prominent in each region of the state. Employees working in home health care and doctor's offices perceived the number one barrier to be scheduling of classes. Providing web-based courses and options for distance learning is needed to remove barriers.

Title: Lewiston Bicycle Helmet Distribution Program

Author: Nik Slyker **Co-Authors:** Kristen Richards, Anne Shepard, Anna Lusby, Danelle McCann, Lea' Marineau, Dan Jentges, Esther Gering, Cheri Montes, Shannon Snyder

Abstract: The purpose of this research is to assess the need for increased access to

bicycle helmets among Lewiston school children age eight to fifteen. Information will be gathered via a survey that will be distributed throughout various schools in the Lewiston School District. The survey will consist of questions regarding basic demographic information (gender, age, and grade), bicycle use, helmet ownership, helmet use, and desire for access to helmets. The Bicycle Helmet Safety Institute (BHSI) reported that in 2005, 784 bicyclists died on US roads, and 540,000 bicyclists visited emergency rooms with injuries. The U.S. Consumer Product Safety Commission reported that 49.6 percent of those injured in 2005 were between the ages of 5 to 14. Of the 540,000 bicyclists who sought emergency treatment, 67,000 had head injuries. It is estimated that 45 to 88 percent of cyclists' brain injuries can be prevented by the use of a helmet. The BHSI estimates that overall, the rate of bicycle helmet use in the U.S. is no more than 25 percent. We predict that the rate of bicycle helmet use among Lewiston children will reflect the national rate. Our findings will be used to validate the establishment of a bicycle helmet distribution program within the Lewiston community. The goals of this project are: to document the need for bicycle helmets among Lewiston youth, collaborate with a community partner to institute a bicycle helmet distribution program, and find routes/sources of funding to assist the community partner in establishing such a program.

Psychology

Title: Attitudes and Beliefs about Depression

Author: Heather Buys

Abstract: This research project is aimed at determining the beliefs and attitudes held by college students from Lewis Clark State College about depression. It focuses on beliefs about different types of treatments for depression, whether or not depression is seen as a serious medical condition, and attitudes about common stigmas associated with depression.

Title: Rating Optimism & Self-Esteem in College Students: A Correlational Study

Author: Cheri Delacruz

Abstract: The purpose of this study is to examine any possible relationship between optimism and self-esteem.

Title: Appearance and Perception of Feminist Speakers

Author: Beia Gomez & Shelley Hensel

Abstract: The purpose of this study is to investigate the relationship between attitudes and physical appearance as they relate to feminist ideology.

Title: Health Behaviors of Students at Lewis-Clark State College: A Comparison Study

Author: Holly Jasinski

Abstract: The purpose of this study is to collect and analyze data on the health behaviors of students at Lewis-Clark State College. Data from students in different majors/divisions are separated and compared. It is speculated that certain divisions/majors that involve human services and require student practicum within the curriculum will have lower scores of healthy behaviors.

Title: How Many College Students are from Single Parent Families Compared to Dual Parent Families?

Author: Mindy Jennings

Abstract: The purpose of this study is to investigate how many students that attend college are from single parent or dual parent homes and how many of the current college students come from a divorced family.

Title: Perceptions in Romantic Relationships

Author: Carlie Jones

Abstract: This study is to determine whether or not the perception of others influences individual's behavior. 40 volunteers will be asked to answer two questionnaires on the false pretense that it is for a study of satisfaction in romantic relationships. The actual study will determine how much of an emphasis is placed on the opinions of others. An extensive literary review depicts other studies relative to the ideas of: 1) challenges in relationships, 2) gender difference, and 3) self monitoring behavior. This study is conducted to assist individuals in realizing what actually influences their behavior.

Title: Codependency and its Greater Effect on Women Compared to Men

Author: Janeen Nelson & Jason Humphrey

Abstract: The purpose of this study is to investigate whether or not women have more codependent characteristics than men, and in what particular situations do the characteristics of codependency in females seem to surface more than other situations.

Title: Juvenile Delinquent Recidivism

Author: David Steen

Abstract: The purpose of this research is to determine if punishment that is being handed down to juvenile delinquents is not being perceived as punishment by those same juveniles and therefore is ineffective.

Title: Close Female Friendships and their Relationship to Mental Health

Author: Allison Stephens

Co-Authors: Monte Garrison

Abstract: Our research project is a correlational study between close female friendships and overall mental health. This study will be conducted on the Lewis-Clark State College campus and in the surrounding community. Women 18 years and older will be asked to participate in our survey. We predict that women with more close friends will report fewer incidents of mental health related issues such as anxiety and depression.

Social Sciences

Title: Mao Zedong in Perspective: An Assessment of Policies During the Great Leap Forward and the Cultural Revolution

Author: Michael D. Bybee

Abstract: This paper explores the philosophies and practices of Mao Zedong through the lens of the Great Leap Forward (1958-60) and the Cultural Revolution (1968-70ish). This will be done by examining the historical outcomes of these two events and comparing them to the writings of Chinese and Asian historians, as well as first hand testimonies. The hope is to determine if whether the policies carried out by Mao Zedong were constructive or destructive for China and to determine if there was a change in policy between the Great Leap Forward and the Cultural

Revolution as well as ascertaining where and when Mao developed his philosophies.

Title: Folklore in Africa

Author: Jennifer Everts

Abstract: The purpose of this research is to inform the listener about the value of folklore as it is used by tribal societies in Africa, and to explore how folklore can be used to gain information and understanding about cultures different from our own. Folklore has long been a means of socializing children to the values and beliefs of a society. To an outsider, the examination of a society's folklore can provide valuable insights into that society without them actually experiencing it. In our increasingly global world, where people from vastly different cultures interact on a daily basis, it is important that we learn to understand and respect the many different beliefs and values that we come in contact with. Folklore can be a valuable tool for helping us achieve this goal.

Title: Keeping Washington in Check: Making a Case for the War Powers Resolution

Author: Ryland Faller

Abstract: Who has the power to make wars? Is it the Congress? Is it the President? It is my intention in this research paper; using research from various scholars, legislation, and historical precedence to prove that it is ultimately the Congress who has the power to declare war. I will prove that not only was it the intent of the Framers of our Constitution to bestow that power upon the Congress but, that even today, in a World of rapid response and decisive action, the War Powers Resolution is vital in keeping the powers of Checks and Balances in our government. No matter the scope, nature or duration of any conflict, the Congress is ultimately responsible for the commitment and appropriation of U.S. Armed Forces. In an age where we allow the President more unilateral action, the War Powers Resolution is more vital than ever for keeping the "tyrant" out of our Nation's affairs.

Title: Genocide in America

Author: Andy Hunt

Abstract: My presentation will conclude that the United States policies regarding the Native Americans in the 19th century constitutes genocide

Title: An Amalgamated Perspective of a World Revolutionary Epoch

Author: Kent R. Johnson

Abstract: The world of the Revolutionary Era was one of intellectual enlightenment, scientific and technological invention and innovation, as well as industrial, economic, political, and social changes. Contemplate about the Industrial and American Revolutions as economic and political uprisings; additionally, take for granted that the Industrial Revolution allowed quickness of transportation and communication which affected the dreams and ideas of the populous of large parts of the world. Consider that the Enlightenment may have been a revolution of philosophical thought and ideals transported quickly around the world. Acknowledge that the French Revolution was firmly in middle of this era of revolutions. This fact of relationship has helped overshadow the social context of the Revolutionary Era as being more than a French or European phenomenon, and

thus being a worldwide social revolution. Therefore, I discount that the Age of Revolution was from 1789 – 1848, and that it was solely a French or European phenomenon. I posit that the waves of revolutions the world over were all interconnected; they could not have been separated because they were simply individual pieces of one complete whole.

Title: The Misrepresentation of Facts in High School Textbooks Concerning the Atlantic Slave Trade

Author: Darin McCall

Abstract: The purpose of my research project will be to bring some key issues of the Atlantic Slave Trade to light and to also show how high school textbooks continue to leave crucial information out of their text. The information that I provide will give a background of issues concerning the Atlantic Slave Trade, and also will show how textbooks misrepresent information that leaves students in America not knowing the whole truth about historical issues.

Title: Ho Chi Minh's Mature World View

Author: Whitney Palmer

Abstract: This essay argues that Ho Chi Minh's mature world view was formed between 1917-1923, a period ignored by most historians. First, through a brief historiography I demonstrate the relative absence of scholarship directly focused on this period of Ho Chi Minh's life. Then using Ho's own writings I create a window into Ho's intellectual transformation during his six years in Paris. Ho's radicalization did not occur in the context of Lenin's Communist Russia. It occurred in Paris as Ho became disillusioned at the prospect of changing French colonial policy in Vietnam.

Title: Balance for Progress: Women in Development, Nepal

Author: Pasang Yangjee Sherpa

Abstract: Women play significant role in maintaining social relationships and fulfilling domestic needs. As mothers and wives, they provide for their family and influence social change through husbands and other members of the family. However, their contribution to their family and the society is undervalued and most of the time, they are not recorded in the National Income Statistics. This paper looks into the needs of women in Nepal and the socio-economic gap that exists between men and women. Balance is essential for progress and is attainable. When women are given equal opportunities and encouraged to better themselves, development will be successful in bringing positive changes in the society. This paper looks at the history of International Development, women in Nepal; social and cultural roles and finally development tools that can help uplift the standard of women.

Social Work

Title: Foster Care Outcomes after the Implementation of the Adoption and Safe Families Act of 1997

Author: Deborah R. Crawford **Co-Authors:** Lindsey Holt & Darrah Hocum

Abstract: The purpose of this study is to determine if the majority of children in Idaho, after being taken into foster care, are being returned to their biological parents or are experiencing a different outcome. This study shows why children are coming into care, how long children are staying in care, and how many foster homes

they are being placed in. Overall, the purpose of this study is to determine how the implementation of the Adoption and Safe Families Act of 1997 has impacted child welfare and to see how well Idaho is following the guidelines set by ASFA. The participants in this study are children and youth ages 0-17 who have exited foster care in the years 1999-2006 in Idaho's Region II. This study shows that the 75% of children were reunified with their parents; 44.14% of the children came into care because of neglect; 49.09% of the children were only placed in one foster home while in custody of the state; and 51.45% of children stayed in care 0-3 months.

Title: Caring for America's Heroes: Soldiers Diagnosed with Post Traumatic Stress Disorder

Author: Gina L. Davis

Abstract: Our soldiers will be coming home soon. Through the progression of the war in Iraq and Afghanistan, it is safe to assume a large number of our returning soldiers will be suffering from combat post-traumatic stress disorder (PTSD). As a result America needs to address the effectiveness of outreach methods utilized by veterans and examine existing and potential barriers to accessing these services. A historical review of America's wars reveals an immense lack of access to mental health services by combat soldiers. Of the obstacles affecting society today, alcohol, substance abuse, domestic violence, suicide and crime; all or a mixture of these obstacles tend to be present in the lives of a majority of veterans diagnosed with combat PTSD. Therefore, the availability of outreach interventions for veterans diagnosed with combat post-traumatic stress disorder (PTSD) is paramount. The purpose of this study is to evaluate and identify gaps and barriers in services for PTSD veterans of rural areas for Clearwater and Nez Perce County in the State of Idaho. Participants of this study consisted of a convenience selection of men and women from Clearwater and Nez Perce County, who have served in the military.

Title: Identifying Need and Interest for Continued Education and Trainings at Roger's Counseling Center

Author: Meghan Dolny

Co-Authors: Julie Eggebraaten

Abstract: The purpose of this research initiative was to assess the knowledge base, training received, and training needs of the licensed counselors at Roger's Counseling Center (RCC) in Clarkston, Washington. The questions addressed knowledge of sexual assault, eating disorders, and severe emotional disturbances. The goal of this research is to generate future research questions regarding correlations between variables such as training accessibility and overall staff participation in trainings.

Title: The Effects of Foster Care Pre-Indian Child Welfare Act and the Need for Tribal Foster Parents Today

Author: Crescentia R. Domebo

Abstract: The Indian Child Welfare Act (ICWA) of 1978 was enacted by the federal government after decades of Indian children being displaced within the American community. The act was passed in order to deter further displacement of Indian children into non-Indian homes, which is believed to be the core cause of Indian children being unwillingly split apart from their Indian families, cultures, and traditions (Public Law, 95-608). The purpose of the study is to determine why Nez

Perce Tribal foster parents are not volunteering to become foster parents. The study seeks to understand the barriers that hinder potential Nez Perce Tribal foster parents from participating in foster care and their reasoning for not participating in foster care. The participants are Nez Perce Tribal members who are enrolled with the Nez Perce Tribe according to the Tribe's guidelines. Participants comprised of 200 tribal members who currently reside on the Nez Perce Reservation or local surrounding areas (e.g. Lewiston, Moscow, Pullman), and who are twenty-one years of age or older.

Title: Asotin County Substance Abuse Survey

Author: Sherry L. Greenup

Abstract: The purpose of this study is to help Asotin County Community Services in their six year strategic planning process to determine the needed services, gaps in services, and assist in planning services related to substance abuse Prevention, Intervention, Treatment, Aftercare and Violence. This information will be used in developing a written six year strategic plan that will be presented to the State of Washington's regulatory system Division of Substance Abuse for their approval. Once approval is gained, the county will implement the plan. The individuals who participated in this study are residents of Asotin County and people who are employed in Asotin County who chose to respond to a survey either via e-mail or written copy. Participants were solicited through participation in a focus group, town hall meeting, community e-mail lists, and the Lewiston Morning Tribune.

Title: LCSC Center for Rural Aging Community Needs Assessment

Authors: Skeeter Lynch, Betty Weeks, & Heidi Jorgensen

Abstract: The purpose of this project was to survey stakeholders of the proposed Center for Rural Aging about the education needs of those who provide services to elders within Region I and Region II of North Idaho and South East Washington. This data informed the program development and curriculum design for a certificate in aging at LCSC. Sampling consisted of stakeholder participants including: administrators, program directors, direct care providers, and individuals involved in the recruiting and hiring of staff who work with Idaho's Geriatric population in north Idaho and south east Washington. Participants reported a significant need for an academic program in aging focusing on rural aging issues and human service delivery.

Title: Does Touch and Interaction Impact Mood and Behavior among the Elderly?

Author: Rose McLaughlin

Abstract: This study reflects the importance of person centered care for the elderly. There are many issues that those suffering from dementia face. Along with resolving relationship issues and adjusting to physical losses they must succumb to a life of dependence. With more positive interaction in a one on one situation with the elderly who suffer from dementia, practitioners may be able to help fill the basic human need of interactions and touch. Many residents in long term care are lonely and feel isolated from society. By understanding the psychosocial needs among this population, we can better facilitate their needs, and in return give them a more positive experience and promote a healthier person-centered approach to their care. The participants that were selected for this study had recently displayed challenging behaviors and or fluctuating moods. These 4 residents were chosen with the goal of showing a significant improvement that could be measured over time.

Title: Homelessness among the Serious Mentally Ill Population: Investigating the Barriers to Obtain Safe and Affordable Housing

Author: Cody L. Persinger

Abstract: The purpose of this study is to identify the barriers to obtain safe and affordable housing for the severe and chronically mentally ill, including those with criminal histories. Furthermore, this study hopes to gain knowledge in order to devise an approach for mental health practitioners in order to work with property owners in a way that maximizes their willingness to rent to people with mental illness. The participants in this study were Landlords/property owners whom rent in Region 2 as well as mental health practitioners who work for the Idaho Department of Health and welfare in region 2, which includes Lewiston, Moscow, Grangeville, and Orofino. These participants were asked to fill out a survey that included both quantitative and qualitative questions. I will analyze the data I receive and report it as well as make recommendations for the future.

Title: A closer look at Step Back...Move Ahead: an HIV Prevention

Author: Jenny Ruppel

Abstract: This program evaluation is an effort to demonstrate Step Back...Move Ahead as an effective intervention in the fight against the spread of HIV and HCV among inmates during incarceration and after release from prison. Step Back...Move Ahead participants are inmates housed at the Idaho Department of Correction institutions located in Cottonwood and Orofino. During 2006 those who participated in the group level intervention completed behavior change surveys which have been analyzed by the Idaho Department of Sexual and Reproductive Health. This research project takes a closer look at a few of the questions from the anonymous process monitoring survey with the hope of demonstrating the value of Step Back...Move Ahead as an intervention which changes knowledge as well as behavior.

Title: Nutrition and Positive Body Image Education for Girls 4th to 6th Grade in a Group Setting

Author: Robbie Wilson

Abstract: The purpose of this study is to seek to understand if nutrition and body image education promote healthier eating habits and positive body image in 10 to 12 years old girls. The participants of this study are eleven, 4th to 6th grade girls ranging in age from 10-12 at Whitman Elementary who are participating in "Girl Power," an after school program for voluntary participants. Two evaluation tools were administered to determine nutrition knowledge/habits and self esteem.

Keynote, Guest & Invited Presentations

Title: Restoration of Clearwater River Sub-basin Spring Chinook Salmon

Author: Thomas W. H. Backman Ph.D.

Abstract: The Nez Perce Tribe (NPT) is restoring watershed functions and supplementing spring Chinook salmon into tributaries of the Clearwater River Subbasin. A dam, completed in 1927, in the Clearwater River near Lewiston, Idaho blocked spring Chinook from reaching spawning and natal habitat. The dam was removed in the mid 1970's. Habitat damage from mining and forest practices

reduced both available and carrying capacity of the streams to support viable spring Chinook populations. The NPT watershed program is working in concert with other agencies to restore stream functions and the Nez Perce Tribal Hatchery (NPTH) Program is utilizing state-of-the-art science conservation methods to supplement spring Chinook in natural production areas. The Nez Perce Tribal Monitoring and Evaluation (M&E) program evaluates the effectiveness of the restoration and supplementation strategies providing scientific feedback for adaptive management.

Title: Beauty: Engaging the Heart

Author: Dr. Rhett Diessner

Abstract: The Engagement with Beauty Scale (EBS) was designed from the aesthetics of Kant, Hegel, and Aquinas, and the psychological work of Haidt (Haidt & Keltner, 2004). It measures engagement with (a) natural, (b) artistic, and (c) moral beauty. Studies 1 and 2 describe scale construction, exploratory factor analysis, confirmatory factor analysis, internal consistency, and temporal stability with three correlated factors representing the above domains. Studies 1 and 2 also established concurrent validity with the Appreciation of Beauty and Excellence subscale of the VIA-IS (Peterson & Seligman, 2004), the Gratitude, Resentment and Appreciation Test (Watkins, Woodward, Stone, & Kolts, 2003), and the Spiritual Transcendence Scale (Piedmont, 2004). Study 3 used the EBS artistic beauty subscale to differentiate students engaged in the arts from those that were not.

Title: Local Business – World Approach: Techniques for Taking a Business From Local to Global

Author: Edward Endebrock

Abstract: This presentation describes the transition of a business that was moored to the local economy; how it eliminated its dependence on the unpredictable whims of that economy and set out on a new course into global manufacturing. For years the business did repair work for the forest industry, as logging slowed in the area so did the income stream for the enterprise. By taking the knowledge that had been gleaned from servicing area customers a new business model was created: one with a global base for both purchasing and sales. The transition began as an experiment that was not without its pitfalls. The research that went into the experiment is put forth with examples to show methods that can be used to minimize the impact of the learning experience. Areas covered in this presentation include: initial contacts, visiting vendors, setting specifications, language barriers pertaining to manufacturing practices, transferring funds, managing an import “supply chain” and exporting finished goods. The goal of the presentation is to demonstrate to other local businesses how, by thinking outside the box, they can think outside the box, they can expand their business to a global scale, while at the same time providing expanded job opportunities for local citizens and putting increased dollars into the local economy.

Title: Speaking the Unspeakable: The Effect of Research Participation on Racial Attitude.

Author: Eleanor Pepi Downey

Abstract: The presentation will focus on the qualitative results of interviews with 14 mothers about their experience of participation in a longitudinal research study and its effects on their family’s racial attitudes. These results are part of a two-tiered quantitative-qualitative research study designed to explore the unintended effects of

research participation on the racial attitudes of parents and children who participated in a longitudinal study of the acquisition of race and gender concepts and attitudes in the young child. Using a heuristic approach to qualitative research, data analysis led to a description of research participation as a process of engagement, awareness, reflection, and change that took place with the research context. Applying a person-process-context model to explicate the results, participation in the longitudinal study was described as a process leading parents to reject the color-blind myth and to begin to discuss the topic of race with their children as well as to reflect on their own racial attitudes and practices.

Title: Applications and Computations of Quadratic Optimization: Artoraphy, Geodesy, Metrology, Surface Fitting, etc.

Author: Yves Nievergelt

Abstract: The mathematical problem of locating the minimum or maximum of quadratic polynomial with several variables over a quadric surface arises in several contexts. For example, if the polynomial represents the square of the distance (by the Pythagorean theorem), and the surface is an ellipsoid, then the problem amounts to finding the altitude above, or depth below, the surface of such a planet as Earth or Mars. If the surface is a paraboloid or a hyperboloid, then the same altitude or depth matters for the quality control of microwave antennae and cooling towers. Despite the ubiquity of this problem and the vast literature about it, several questions remain unanswered: Practically, how can one compute the solutions fast and accurately? Theoretically, how do the solution formulae relate to the geometry? The talk will answer questions of both types with recent results.

Title: Academic Advising and the Millennials: New Issues, New Demands, New Partnerships

Authors: Dean Christine Pharr & Dean Andrew Hanson

Abstract: Research is showing that Millennial students and their parents are having a dramatic impact on the services and programs offered by colleges and universities across the United States. This has resulted in a culture change in which faculty and staff often feel less effective in their roles because the approaches they have historically taken in advising and mentoring students no longer work. As a fundamental aspect of student retention and success, academic advising is perhaps one of the most critical campus functions in need of review and revision in order to achieve optimal results. Collaborations between academic affairs and student affairs are essential in developing advising techniques to serve Millennials more effectively. This presentation will focus on characteristics of Millennials and their parents; it will examine how these changing student demographics require finding a balance between the need to change academic policies and practices with the need to help Millennials adapt to the expectations of college campus culture.

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