# Program and Abstracts

# Celebration of Student Scholarship



Showcase of Student Research, Scholarship, Creative Work, and Performance Arts

April 5-8, 2006

# **Celebration of Student Scholarship**

## April 5 - 8,2006

Program Overview Adron Doran University Center				
Registration	8 – 8:45 a.m.	3 <sup>rd</sup> Floor Lobby		
Continental Breakfast	8 – 8:45 a.m	3 <sup>rd</sup> Floor Lobby  Commonwealth Room  Commonwealth Room		
Welcome	8:45 – 8:55 a.m.	Commonwealth Room		
Dr. David Magrane, Showcase Organizer Dr. Marshall Chapman, Phi Kappa Phi President/Honors Director				
Student Presentations	9 a.m. – 3 p.m.	6		
15' Oral Presentations	9 – 11 a.m.	301, 302, 312, Riggle Room		
Poster Sessions	11 a.m. – 12 p.m.	3 <sup>rd</sup> Floor Lobby		
Lunch	12 – 12:50 p.m.	Crager Room		
25' Oral Presentations	1 - 3  p.m.	301, 302, 312, Riggle Room		
Welcome Statements				
Welcome Statements				
15 Minute Oral Presentations and Abstracts				
Poster Presentations				
25 Minute Oral Presentations and Abstracts				
Recipients of Undergraduate Research Fellowships 2005-2006				

I am pleased to welcome you to the inaugural event of the Celebration of Student Scholarship at Morehead State University scheduled April 5-8, 2006. During this campus-wide event, the University community will acknowledge the excellent efforts of students in research, scholarship, and creative productions. I take great pride that at MSU, scholars teach and empower a diverse population of students to succeed in pursuing their educational goals.

As president of this great University, I believe teaching, scholarship, and service go hand in hand to provide the most effective learning environment. Faculty members, who effectively mentor students at the University, provide a vital spark that challenges and stimulates these creative minds. As a result, our academic programs provide abundant opportunities for students to work side by side with faculty in meaningful research and creative initiatives. This special week-long event provides a unique opportunity for everyone to see the outcomes of these faculty-mentored student projects. The work presented by these students is truly amazing!

As you review the Celebration of Student Scholarship program, you will find an array of undergraduate accomplishments in individual and group research projects, creative efforts, and artistic performances in a variety of academic disciplines. By attending this showcase, you provide support and encouragement to our young scholars and artists.

The vision for our University is to be recognized for our superb teaching and learning. Through the efforts of our dedicated faculty, Morehead State University will become a premier "institution of choice" for students who want to engage in the process of discovery and become outstanding citizens in an ever challenging and changing world.

Most sincerely, Wayne Andrews, Ed.D., President



Welcome to Morehead State University's first Celebration of Student Scholarship. I have been pleased to see the continuing growth in student scholarship across campus, whether it is students engaged in independent research or creative production or faculty and students engaged in collaborative scholarship. I am proud of this scholarship and celebrate its growth.

As you review the contents of this program, hear the presentations of students or view their posters and performances, please note the great diversity in disciplines and types of scholarship represented. Within the context of Ernest Boyer's construct of scholarship, you will find all four types represented in

this program: discovery of new knowledge about scientific principles or processes; integration of the theories and findings of others; application of principles and creative works; and you will find scholarship of teaching illustrated in posters, presentations, creative productions and performances.

This Celebration is an excellent illustration of the integration of scholarship, teaching, and learning. I wish to thank the many faculty who have committed themselves to the intellectual and artistic growth of our students. I also wish to congratulate the students who accepted the challenge to engage in the role of student scholar; to stretch their minds and talents; and to become role models for their peers. Please enjoy our Celebration of Student Scholarship.

Michael R. Moore, Ph.D., Provost



"The Student Research and Creativity Celebration is the capstone event that recognizes the important contributions of faculty and student collaborative research to the overall education of our students at Morehead State University. Our faculty and students alike benefit tremendously from these one-on-one teaching and learning experiences."

Robert Albert, Ph.D., Dean, College of Business



"This Celebration Week showcases MSU's students - their talents, their enthusiasm, and evidence of their research projects. The College of Education faculty and staff are proud of these awesome students."

Cathy Gunn, Ph.D., Dean, College of Education

"Those within the arts, humanities and social sciences applaud a new focus and priority placed on collaborative learning between faculty and undergraduate students engaged together in research and creative productions. A curriculum based upon 'Undergraduate Scholarship' will advance interdisciplinary activities, promote learning communities, and enhance a student's entire academic experience."



Michael Seelig, J.D., Dean, Caudill College of Humanities



"The annual Celebration of Student Scholarship is the most exciting and stimulating event of the academic year. It marks the culmination of the collaborations among students and faculty that take place throughout the year."

Gerald DeMoss, Ph.D., Dean, College of Science and Technology

"Undergraduate research is the best way to actively engage students with faculty in enterprises that extend teaching and learning well beyond the classroom. When students and faculty get involved in undergraduate research their skills, knowledge, and capacity are significantly impacted and their enthusiasm and intellectual imaginations go off the charts!"



David Rudy, Ph.D., Dean, Institute for Regional Analysis and Public Policy

## **Celebration of Student Scholarship**

#### Adron Doran University Center Morehead State University

April 8, 2006

#### 15 Minute Sessions-ADUC 301

9 - 9:15 a.m.

Dissociation between scopolamine-induced and dopamine-induced hyperactivity

301

\*Clell D. Watts, Jonathan Brown, Alena Hromish, Dr. Ilsun White, Mentor, Department of Psychology, College of Science and Technology

Previously, we have reported that scopolamine, a cholinergic antagonist, impairs spatial learning. The present study compared the effects of scopolamine and amphetamine on spontaneous activity and also examined a possible interaction between cholinergic and dopaminergic systems. Following direct intra-accumbal infusions or systemic administration of these drugs, we examined locomotor activity in the openfield. Systemic injections of scopolamine and amphetamine produced comparable hyperlocomotion. Moreover, a combination of these drugs produced a synergistic effect on locomotor activity. Direct infusion of amphetamine in the nucleus accumbens produced hyperlocomotion. This is consistent with previous reports, and also support the notion that amphetamine-induced hyperactivity is mediated by the nucleus accumbens. On the other hand, intra-accumbal infusion of scopolamine failed to affect behavior. Our data suggest that hyperactivity following systemic scopolamine is mediated via different brain regions that are non-dopaminergic in nature. This research was supported by MSU Undergraduate Research Fellowship and NIH grant (R15MH067606).

9:20 - 9:35 a.m.

Links Between Motivational Mechanisms and Styles of Loving

301

\*Charles D. Prince, \*Angela K. Brown, Drs. Laurie L. Couch and David R. Olson, Mentors, Department of Psychology, College of Science and Technology

The Behavioral Approach System (BAS) is a motivational mechanism that drives one toward situations in search of rewards, often causing impulsivity/novelty-seeking. By contrast, the behavioral Inhibition System (BIS) is a competing mechanism that causes one to avoid situations involving novel stimuli or non-reward. Analyses of the love styles of college women indicated that BAS was associated with a game-playing style of love, whereas BIS was associated with low levels of game-playing. Reward responsiveness (part of the BAS concept) was associated with high levels of a pragmatic/shopping-list approach to love and an obsessive approach to love, and the appetitive drive (also part of the BAS) was associated with low levels of the selfless love style. BIS also was found to be linked to the obsessive and selfless styles of love.

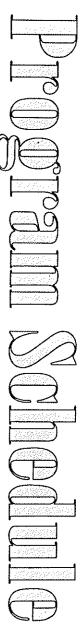
9:40-9:55 a.m.

Predicting Approaches to Love Based on Personality and Interpersonal Problems

301

\*Lindsay A. Newberry, \*Trista E. Stark, Dr. Laurie L. Couch, Mentor, Department of Psychology, College of Science and Technology

The literature on romantic relationships has suggested that styles of loving may be linked to personality, and research has shown that interpersonal problems also can have an impact on love relationships. The present study sought to extend



this research to determine if particular types of interpersonal problems would predict women's love styles. After controlling for the influence of personality, results indicated: passionate loving was best predicted by few problems with intimacy, game-playing was best predicted by intimacy problems and few problems with assertiveness, the practical/shopping-list style of love was best predicted by problems with intimacy and taking too much responsibility, obsessive love was best predicted by control problems, and the selfless love style was best predicted by taking too much responsibility.

10 - 10:15 a.m.

Development of <u>in vitro</u> Protocol to Study Estrogen-Mediated Osteoblast Activation in the Absence of Fetal Bovine Serum

301

\*Christine M. Pendleton, Laura A. Ashley, Sourik Ganguly, Drs. Michael E. Fultz, Carol L. Wymer, David K. Peyton, and Darrin L. DeMoss, Mentors, Department of Biological and Environmental Sciences, College of Science and Technology

Estrogen plays an important role in skeletal physiology by maintaining a remodeling balance between osteoblast and osteoclast activity. Experimental *in vitro* studies show that estrogen directly acts on osteoblasts. To determine how estrogen elicits this action in osteosarcoma cells (7F2), experiments were conducted in the absence of estrogenic compounds. Experimental results indicate that following a 24 hour incubation, estrogen stimulates proliferation of the 7F2 cells; demonstrating estrogen's osteoblastic activity. Estrogen upregulates the transcription of osteoprotegerin (OPG), preventing the stimulation/differentiation of osteoclasts. These experimental findings support the hypothesis of an antiresorptive role for estrogen in skeletal turnover. (Supported by NIH-INBRE 5P20RR01648105)

10:20 - 10: 35 a.m.

The potential of genetic transformation as a mechanism of bacterial DNA repair in Acinetobacter baylyi strain ADP1

301

\*Sara N. Perkins, \*Christina Mullins, \*Sam Byron, Dr. Janelle M. Hare, Mentor, Department of Biological and Environmental Sciences, College of Science and Technology

We are investigating DNA damage response mechanisms in the Gram-negative bacterial genus, Acinetobacter. One member of this genus, A. baylyi strain ADP1, has truncated umnDC DNA damage response operon that makes it unable to respond to DNA damage like other bacteria. However, ADP1 can survive higher levels of DNA damage than many bacteria, such as Escherichia coli, that possess a well-studied DNA damage response. ADP1 cells can also develop natural competence in early log phase to take up DNA via transformation. Our hypothesis is that without umnDC gene function, natural transformation is used as a source of undamaged DNA to help repair DNA damage in ADP1 and possibly other Acinetobacter. We conducted a survey of diverse members of Acinetobacter to: (i) measure various strains' ability to survive DNA damage (from UV light), and (ii) determine whether each strain could develop natural competence to take up plasmid DNA. The ten Acinetobacter strains examined did not develop natural competence under conditions where the ADP1 strain, consistent with previous reports, did develop natural competence. These data, once collected for all 21 strains of Acinetobacter determine whether the extent to which Acinetobacter survival after DNA damage exposure is affected by their ability to perform natural transformation.

10:40 - 10:55 a.m.

Preliminary survey of the faunal succession of necrophilous insects associated with pig heads in Rowan County, Kentucky

301

\*Juli M. Taylor, Dr. Sean O'Keefe, Mentor, Department of Biological and Environmental Sciences, College of Science and Technology

Numerous species of insects utilize carrion as food in at least one stage of their life cycle, which is commonly the larval stage, while other insects are attracted to larvae feeding on the carrion. To generate a taxonomic list and record the faunal succession of necrophilous insects for Rowan County two pigs heads were placed in full sun and a third was placed in complete shade. Within the first ten hours adult *Phaenicia sericate* (Diptera: Calliphoridae) deposited eggs on all three pig heads, which matured to larvae within 36 hours. Fly larvae were then collected daily in order to monitor

their growth rate. Several *Creophilus maxillosus* (Linnaeus) (Coleoptera: Staphylinidae), which are known predators on fly larvae, and silphid beetles appeared on all three pig heads the same day the blow fly larvae emerged. Other necrophilous insects were collected from various carrion in the region. The first studies were completed from late-August through September (late-summer/fall season) and from late-October through February (winter season). The research will also be repeated for the spring season.

#### 15 Minute Sessions-ADUC 302

9-9:15 a.m. Voices of a Generation: Winchester, Ky, World War II Veterans Project Web site

302

\*J. David Clinger, \*Tabitha Berger, \*Ashley Burke, \*Amy Morgan, \*Joey Todd, \*Marla Schafstall, Dr. Yvonne H. Baldwin, Mentor, Department of Geography, Government, and History, Caudill College of Humanities

As part of the research and presentation requirement in HIS 399, the Junior Seminar taught by Prof. Yvonne Baldwin in the fall semester, 2005, students conducted research using oral history videotapes collected by the Winchester Veterans Project in Winchester, Ky. Students viewed the oral history tapes and then invited the interviewers and sponsors of the project, along with three World War II veterans, to address the class in November. They also invited a female member of the Hitler Youth who currently resides in Cincinnati to give a presentation on what life was like for ordinary citizens in the days of the Third Reich. Those sessions were also taped. Using the video archives and on-campus interviews as a point of reference, students conducted primary and secondary source research to formulate presentations centering on the various aspects of World War II covered in the narratives. Working in focus groups, the students then put together presentations that would ultimately form the basis of the website featuring the project. This presentation highlights four aspects of the research, provides an overview of the project, and introduces the Web site.

9:20 - 9:35 a.m.

Free the Grapes: The U.S. Supreme Court and State Discrimination Against Interstate Wine Sales

302

\*Mindy L. McElfresh, \*Dr. William C. Green, Mentor, Department of Geography, Government, and History, Caudill College of Humanities

The Internet has provided thousands of small wineries with the opportunity to sell directly to consumers throughout the country, but many states have prohibited Internet sales by out-of-state wineries while permitting direct sales by in-state-wineries. Our study examines the litigation initiated by small wineries and their customers to free the grapes, the U.S. Supreme Court decision in *Granholm v. Heald* (2005) declaring unconstitutional, state alcoholic beverage control laws which discriminated against interstate direct-to-consumer wine sales, and the extent to which states have complied with the Court's decision and eliminated their discriminatory alcoholic beverage laws.

9:40 - 9:55 a.m. The Paralegal Turned Witness: Case Law Trends and Ethical Consideration

\*Jared B. Arnett, Dr. Dianna D. Murphy, Mentor, Department of Geography,
Government and History, Caudill College of Humanities

About sixteen hundred (1600) cases were identified for review from a database search of all state court cases reported during a five year period. Each case was reviewed to further identify only those cases in which a paralegal had testified for or against an attorney, a current client, or former client. These cases were analyzed to see if the paralegal's testimony had an impact on the outcome of a client's case as well as if it had an impact on cases that involved attorney or paralegal misconduct.

10 - 10:15 a.m.

Attachment to Parents Among Preschoolers in Eastern Kentucky: Influences on Emotion Regulation Capacities

302

\*Cynthia N. Martin, Brittainy Shaw, Jennifer Green, Dr. Shari L. Kidwell, Mentor Department of Psychology, College of Science and Technology

Emotion regulation is a key developmental task of early childhood. The objective of the current study was to demonstrate that securely attached children would show more adaptive emotion regulation capacities, relative to insecurely-attached children. Participants were 36 preschoolers and their parents. Children's attachment was assessed with Ainsworth's (1978) Strange Situation and Crittenden's (1991) classification system. Emotion regulation was assessed via ratings of children's affect and behavior during a standardized interview about six emotions. Consistent with the hypothesis, analyses indicated that children with secure attachments displayed significantly more appropriate emotion, a more positive relationship with the interview, and fewer externalizing symptoms, relative to insecure-ambivalent children.

10:20 - 10:35 a.m.

Exploration of the Intergenerational Continuity Between Parent and Child Attachment Among Families in Eastern Kentucky

302

\*Amanda S. Day, Meagan E. Burgin, Sherry S. Porter, Lisa D. Hinkle Dr. Shari L. Kidwell, Mentor, Department of Psychology, College of Science and Technology

Attachment is the "state of mind" about close relationships, including rules that guide parenting (George, Kaplan, & Main, 1980). We hypothesized, therefore, that attachment security would be "handed down" from parent to child. Subjects were 36 preschoolers (average age of 53 months) and their primary caregivers. Children's attachment was assessed with Ainsworth's (1978) Strange Situation and Crittenden's (1991) classification system. Parental attachment was determined by ratings of an interview based upon Main and Goldwyn's (1984) Adult Attachment Interview. Analyses supported the hypothesis in that 67% of securely attached parents had secure children, while 77% of insecure parents had insecure children.

10:40 - 10:55 a.m.

Parental Consistency and Warmth as Predictors of Children's Emotion Understanding

302

\*Lisa D. Hinkle, Ashley Ratliff, Emily N. Ray, Amanda Day Dr. Shari L. Kidwell, Mentor, Department of Psychology, College of Science and Technology

Gaining an understanding of one's emotions is a crucial early developmental task. The aim of this study was to demonstrate that children with warm, consistent parents would have greater emotion understanding, relative to children whose parents were lower in these qualities. Subjects were 44 preschoolers and their parents. Emotion understanding was measured via ratings of the children's verbal responses to a standardized interview about six emotions. Parenting warmth was measured via ratings of two parent-child interaction tasks, while consistency was assessed with a questionnaire. Supporting the hypothesis, a positive correlation was obtained between warm and consistent parenting and child emotion understanding.

#### 15 Minute Sessions ADUC 312

9 - 9:15 a.m.

Vascular Flora of Broke Leg Falls Nature Preserve

312

\*Tony Evans, Dr. Allen C. Risk, Mentor, Department of Biological and Environmental Sciences, College of Science and Technology

Broke Leg Falls Nature Preserve is a 15 acre preserve centered around a sandstone gorge in eastern Menifee County, Ky. During the growing season of 2005, 69 families were found, representing 152 genera and 202 species. Asteracease and Cyperaceae were the largest families with 14 species each. Rosaceae was the third largest, with 12 species. Two species were documented that are listed by the Kentucky State Nature Preserves Commission (KSNPC). Juglans cinerea is listed as a KSNPC species of special concern and Castanea dentate is listed as endangered. The preserve consists of two distinct communities, upland and gorge. Upland communities consist primarily of Quercus rubra, Q. coccinea, Pinus echinata, Sassafras elbidum, and Liriodendron tulipifera. Gorge communities are dominated by Tsuga Canadensis, L. tulipifera, Q. alba, Betual lenta, Rhododendron maximum, and Magnolia macrophylia.

9:20 - 9:35 a.m.

The effect of breed type on real-time ultrasound carcass traits, performance and pelvic measurement of heifers enrolled in the Eastern Kentucky Heifer Development Program

3112

\*Sarah N. Wheeler, Drs. Troy J. Wistuba, Judith G. Willard, and Philip E. Prater, Mentors, Department of Agricultural and Human Sciences, College of Science and Technology

Young heifers were weighed, pelvic-measured, and ultrasonically scanned to study breed differences for performance, pelvic area, 12<sup>th</sup> rib fat depth, logissimus muscle area, intramuscular fat, and rump fat. Differences were detected in total gain and ADG in that the gelbvieh cross heifers had increased total gain and ADG when compared to the other breed types (P<0.05). In addition, Angus and Angus-cross heifers had the greatest (P<0.05) 12<sup>th</sup> rib fat depth, intramuscular fat, and rump fat of the heifers. These results support the knowledge that earlier developing breeds of cattle have increased intramuscular fat and subcutaneous fat depots.

9:40 - 9:55 a.m.

Civic Engagement and the First Year Initiative

312

\*Randy L. Manis, Communication Major, Dr. Beverly McCormick, Mentor Honors Leadership Residential College

The concept of civic engagement is integral to the development of a well-rounded individual, especially within the collegiate community. In recent years, commentators have noted the decline in civic participation and engagement within the country. By introducing first year students to the concepts of civic engagement and service, the concerns voiced by these commentators may be a thought of the past. In this session, the presenter will discuss several ways that the Honors Leadership Residential College has encouraged and challenged first year students to become engaged within the campus and surrounding community. Ideas such as summer reading programs, Constitution Day, and various service projects will be discussed.

10 - 10:15 a.m.

Familism, Racial Composition, and Socioeconomic Status: A Quantitative Approach to Predicting Block Group Support for City-County Consolidation

312

\*Jesse D. Lowe, Dr. Edward B. Reeves, Mentor Institute for Regional Analysis and Public Policy

The purpose of this study is twofold: a) to examine the factors accounting for the Louisville merger passage in 2000 given its failure in 1982 and 1983; and b) to examine whether factors that were attributed to referendum support during

the 60's and 70's are still attributable today. The results of this study show that measurements of SES, race, and familism are still strong predictors of consolidation support. In a stepwise regression model, percentage of the population holding a professional occupation is the strongest predictor of referendum support, followed by racial composition and percent of family households.

10:20 - 10:35 a.m.

Vladimir 'Vinni-Pukh' Nikolayev

3112

\*Misty Dyer, Dr. Rebecca S. Katz, Mentor, Department of Sociology, Social Work, and Criminology, Caudill College of Humanities

Research has indicated there has been increasing overlap between leaders of the criminal world and legitimate businesses and political office positions in Russia. This is an analysis of how criminal activity in Vladivostok, Russia is intertwined with the political system as evinced by the known criminal record and activities of Mayor Vladimir Nikolayev. This information was gathered by reading E-Gram reports of the U.S. Consulate General which include examples of questionable activities of mayor Nikolayev's private business Nikolayev Associates buying property from the city at low prices and members of his criminal organization becoming employees of the municipal administration.

10:40 - 10:55 a.m.

Vital Actions

312

\*David S. McFann, Dr. Judy Stafford, Mentor, Department of Sociology, Social Work and Criminology, Caudill College of Humanities

One of the goals of the Social Work Program at Morehead State University is to educate and equip students with the knowledge, skills, and attitudes needed to change their community. It also educates students on Research and Data Analysis, resources to assist making changes, and alternative methods to help clients in many facets. In 2005, a research project was started to find out if graduates see themselves as change agents and they are changing the lives of those in their community one-step at a time. The presentation will share stories and offer encouragement for future action.

#### 15 Minute Sessions Riggle Room

9:40 - 9:55 a.m.

**Examining the Online Social Networks of College Students** 

Riggie

\*Debra Michelle Spurlock, Dr. David T. Green, Mentor,
Department of Computer Information Systems, College of Business

The Facebook.com is a Web site that connects college students, creating an intricate online social network of individuals. Facebook is a phenomenon that is sweeping college campuses and has interesting implications for both the social networks of students as well providing a unique opportunity for advertisers to influence a captive and targeted youth audience. This study examined a variety of usage, influence, privacy, and trust measures within the Facebook environment, using a Web-based survey of college students. The results of this study provide support that individuals participating in online social networking Web sites have a high levels of trust in and low privacy concerns among their online network of friends.

10 - 10:15 a.m.

MSU Through a Television Screen: Promoting University Organization and Student Well Being Through Creative Programming for MSU-TV on the

Riggie

**Eagle Vision Network** 

\*Amanda Trolinger, Timothy L. Creekmore, Mentor, Department of Communication and Theatre, Caudill College of Humanities

As a recipient of the fellowship through the Department of Communication and Theatre, I supervise a staff of undergraduate Electronic Media Students producing thirty-second MSU Promotional Video Spots, including Public

Service Announcements, Informative videos, Student Organization Promos and University Promotional Videos targeting MSU-TV viewers. We currently are also producing Spots promoting the Learning Technology Lab facilities in the Camden Carroll Library. I am also the producer of an MSU student affairs talk show called *The Beak Live*, which airs live at 5:00 p.m. every Tuesday. I am presenting examples of these thirty-second Spots, and assorted video segments from *The Beak Live*.

10:20 - 10:35 a.m.

Performance, Practice, and Analysis of Selected Caribbean Region Repertoire

for the Choral Ensemble

Riggie

\*Diana J. Knoll, Dr. Greg Detweiler, Mentor

Department of Music, Caudill College of Humanities

The research project will investigate the musical language, compositional style, expressive aspects, and cultural/historical context of selected choral works from the Caribbean region for the purpose of performance interpretation. In relation to cultural context, literature will be linked to dances and instruments of the region. Stylistically, the basic elements of music will be identified. These elements will be compared to North American choral style in order to determine stylistic qualities that are unique to the Caribbean region. The modifications of bright vs. dark vowels will be addressed as well as the concept of inhalation vs. exhalation when singing the text. The text will be investigated in translation in order to create an image that promotes an understanding of the cultural context as well as a connection to the expressive aspects of the piece.

10:40 - 10:55 a.m.

Explorations in Art Exhibition Design: Promotion and Installation

Riggie

\*Lori K. Votaw, Jennifer Reis, Mentor

Department of Art, Caudill College of Humanities

As an undergraduate fellow, I have been working in the Claypool-Young Art Gallery during the 2005-06 exhibition season under the direction of Jennifer Reis. I have learned about gallery promotions, exhibition design, handling pieces of art, and packing art to be shipped. I have also come to know more about artist and director relations and gallery hospitality through working exhibition openings with Jennifer Reis. And in utilizing my graphic design skills, I have created text and signage for art shows and events, including poster and postcard announcements.

## Poster Session 11 - 11:50 a.m. 3<sup>rd</sup> Floor Lobby

P. 1. An Investigation of Management Curriculums

Lobby

\*Danielle Spence, Professor Shane Spiller, Mentor,

Department of Management, Marketing, and Real Estate, College of Business

This project involved a study of Management curriculums across different academic institutions. Carnegie Foundation data on institutions was used to identify institutions of varying types including AACSB, non-AACSB, national, regional, highly ranked and smaller schools. Samples were randomly generated and examined. The curriculums for each institution were examined using available online data sources. Similarities and differences for course inclusion in the business core, and the concentrations were examined across the majors of Human Resource Management, General Management, Entrepreneurship, and International Management.

P. 2.

Background Research for an Anthology of Translations on the Hero and Leander Theme in Western Literature

Lobby

\*Sarah Rini, Dr. Philip Krummrich, Mentor, English, Foreign Languages, and Philosophy, Caudill College of Humanities The story of Hero and Leander was originally written by Musaeus around fifth century A.D. This simple story has become a recurring theme in literature over many centuries. The limited details have allowed writers to use their literary license to complete the story. Dr. Krummrich, professor of comparative literature at Morehead State University, is currently translating many of the stories of Hero and Leander into English and compiling them into a book. As his assistant, I have researched biographical information about the authors whose books will be included in the book and found artwork and music about this theme.

P. 3. The Out-of-Classroom Experience

Lobby \*Willie E. Carver, Dr. Karen Taylor, Mentor,

Department of English, Foreign Languages, and Philosophy, Caudill College of Humanities

Study Abroad is essential for students who wish fully to understand the culture, language, and daily life of a country and its people. Most American universities that offer majors in world languages offer some form of study abroad program for their students. Many large universities are able to offer a program that draws almost exclusively from their own student pools, but for smaller institutions, a consortium model of study abroad can be a more effective and financially viable option. The Kentucky Institute for International Studies' program in France supports many of the possible goals

P. 4. Re-Orchestration of Philip Wilby's Concert Gallop for Wind Orchestra

\*Paul W. Robinson, Dr. Scott McBride, Mentor
Department of Music, Caudill College of Humanities

Orchestration, the process of re-assigning instruments from one medium to another, remains a widely used practice in the Western classical tradition. The purpose of this study is to re-orchestrate for the instruments of the wind orchestra Philip Wilby's *Concert Gallop*, a work originally set for the instruments of the British brass band. It is intended that the new wind orchestration retain the concept of the original composition while exploiting the relatively vast color palate of the wind orchestra. Ultimately, this orchestration of Wilby's *Concert Gallop* will extend the availability of this music to enthusiasts of the wind band medium, worldwide.

P. 5. Legal 'Cheat Sheets' and Their Relationship to Undergraduate Test Scores

\*Belinda Riley, Drs. Lola Aagaard and Ronald Skidmore, Mentors, Department of Counseling, Leadership, Adult and Higher Education, College of Education

The purpose of this research was to investigate the attributes of legal 'cheat sheets' prepared as study aides and used during tests and to determine whether these attributes were related to students' test scores. The participants in this study were 149 undergraduate students enrolled in a sophomore-level course. Analysis indicated a low positive relationship between test score and work count ("A" students had the most words on their cheat sheets and "F" students the least). The use of highlighting or underlining was less related to higher test scores. Some lower scoring students did not make cheat sheets at all.

P. 6. Building connection between cultures: Inclusive Korean activities to introduce diversity to predominantly white classes

Lobby

of such model.

\*Emily Brown, \*Jussie Rice, Professor Mee-Ryong Shong, Mentor Department of Curriculum and Instruction, College of Education

This poster session shows the holistic picture of this research with depiction of multicultural literature review, finding of limited Asian curriculum in the states, selection of possible diversity activities for predominantly White Preschool

through 5<sup>th</sup> grade class, development of best curriculum to invite the target children and its authentic practices engaging children at Montessori school. The undergraduate student's engagement in several debriefing processes with her mentor, personal narrative notes, and curriculum development procedure, and reflections on her teaching will be shared to the audience.

P. 7.

Using ultrasound as a quantitative tool to assess body condition score in Quarter and Thoroughbred horses

Lobby

\*Andrea Bomkamp, Beth McCoy, Sarah N. Wheeler, Drs. Judith G. Willard, Troy J. Wistuba, Phillip E. Prater, Mentors, Morehead State University, Dr. Broc A. Sandelin, Mentor, California State Polytechnic University, Department of Agricultural and Human Sciences, College of Science and Technology

Twenty mature horses (11 Quarter horses (QH) and 9 Thoroughbreds (TB)) were simultaneously subjected to objective body condition scoring and real-time ultrasound. The center of the rump measurement and the center of the neck regions were the most highly correlated at 0.58 and 0.43 respectively. When breeds were compared QH tended (P< 0.17) to have greater levels of subcutaneous fat in the regions of the center of the neck, the center of the rump, and the chest. Furthermore, this resulted in QH having an elevated BCS when compared to TB (P< 0.01). This data suggests that ultrasound measurement may be a means of quantitatively analyzing body condition score.

P. 8.

Impact of Calcium Channel Antagonists on Blood Pressure in Female Brown Norway Rats

Lobby

\*Eric D. Nickel, \*Jennifer L. Harris, \*Ashley M. Sargent, Ashley B. Griffith, Ashleigh D. Greene, Dr. Darrin L. DeMoss, Mentor, Department of Biological and Environmental Sciences, College of Science and Technology

The effects of estrogen and calcium channel antagonists were evaluated in six month old ovariectomized Brown Norway Rats. Concentrations of estrogen were utilized which have previously prevented bone loss in ovariectomized rats, ensuring a maximal estrogen response. Calcium channel antagonists were injected daily, subcutaneously, at doses known to be effective in cardiovascular research. To evaluate the impact of estrogen replacement therapy and calcium channel antagonists on mean tail blood pressure, data was collected utilizing a non-invasive blood pressure system. Ovariectomy and estrogen replacement therapy had no significant effect on blood pressure when compared to controls. Calcium channel antagonists significantly lowered blood pressure when compared to controls even when given in combination with estrogen replacement therapy. (Supported by NIH-INBRE 5P20RR01648105)

P. 9.

Influence of Calcium Channel Antagonists on the Excretion of Various Bone Degradation Markers

Lobby

\*Kelli D. Trent, \*Rachel E. Gabbard, \*Ashley N. Arnett, Christine M. Pendleton, Dr. Darrin L. DeMoss, Mentor, Department of Biological and Environmental Sciences, College of Science and Technology

Bone metabolism and calcium transport are correlated, indicating calcium channels are potentially a regulation point for skeletal modeling. Understanding calcium channel antagonist action on bone turnover is essential to their utilization therapeutically. Experimentation utilized six month old female Brown Norway Rats to compare the effects of estrogen and antagonists on bone turnover. ELISA assays measured bone degradation makers in urine collected throughout the experimental period. Ovariectomized females displayed increased excretion of deoxypyridinoline, pyridinoline, and helical peptide, indicating increased bone turnover, while those receiving estrogen replacement therapy were not significantly different from controls. Calcium channel antagonists decreased excretion of deoxypyridinoline, pyridinoline, and helical peptide, indicating decreased bone turnover, suggesting a mode of action similar to estrogen. (Supported by NIH-INBRE 5P20RR01648105)

P. 10. Probing for Answers: Using CT/MR to Treat Parkinson's

\*Jason Humphrey, \*Joshua Justice, Cynthia Y. Gibbs, Mentor
Department Imaging Science, College of Science and Technology

The use of computed tomography (CT) and magnetic resonance (MR) to diagnose various disorders have increased greatly in the past 10 years. One disease the CT/MR is useful in treating is Parkinson's disease. This disease destroys the substantia nigre, causing the brain to be deprived of dopamine. This lack of dopamine causes degeneration of the central nervous system. Deep brain Stimulation (DBS) inactivates areas of the brain responsible for Parkinson's symptoms. During surgery, an electrode is implanted through the skull and placed within the brain. CT and MR scans are used to determine a precise location for the DBS probe. The DBS electrical stimulation to the affected area interferes with the brain's electrical signals which alleviated Parkinson's symptoms.

P. 11. Effects of Exercise on Bone Density in Women

\*Debra J. Van Dyke, Donna Corley, Mentor
Department of Nursing, College of Science and Technology

Increasing the amount of activity and movement and/or weight bearing exercises throughout ones lifetime especially later in life is theorized to reduce the amount of bone demineralization and loss of function and/or fractures later in life. Older women thus will experience a broader range of activities and quality of life by taking preventative measures throughout life. This study presents current research on the effects of exercise on bone density in women. The analysis includes studies of different types of exercise and different ages of women to compare and contrast the value of exercise in the reduction of osteoporosis and other bone density degenerative conditions.

P. 12. Review of Research on Stroke Risk Factors and Prevention Measures

\*Kimberly R. Pack, Donna Corley, Mentor
Department of Nursing, College of Science and Technology

Every 45 seconds someone in the United States will experience a stroke. Today four out of every five American families will be touched by stroke. Kentucky's morbidity and mortality rates for victims of stroke are above the National average. This presentation will review current stroke research with a focus on preventable risk factors.

P. 13. Success Rate and Health Outcomes of Smoking Cessation Programs

\*April Collins, \*Shannon Conley, Donna J. Corley, Mentor
Department of Nursing, College of Science and Technology

The single most preventable cause of death in America today is smoking. Encouraging smoking cessation interventions can profoundly improve health. Three types of interventions have been compared and evaluated which include pharmacological therapy, structured behavioral therapy, and self-help therapy. The purpose of this project is to review current research on success rate and health outcomes of three types of smoking cessation interventions.

P. 14. Palliative Care

\*Mindy Clevinger, Donna J. Corley, Mentor
Department of Nursing, College of Science and Technology

Many patients with chronic life threatening illness would like to be able to die comfortably without heroic measures to sustain or maintain their life. However, many obstacles may prevent the patient's wishes from being supported and implemented. This presentation will address research concerning obstacles to a patient's right to die. Issues include family agreement, health care workers inability to discuss end of life treatment options, and lack of patient education concerning living wills or Do Not Resuscitate orders.

P. 15. The Impact of Nurse Staffing on Patient Outcomes

Lobby \*Julie C. Allen, Donna J. Corley, Mentor

Department of Nursing, College of Science and Technology

With patient safety in the forefront of health care, nurse staffing issues have been highlighted. There has been much debate and discourse on mandatory staffing ratios, restricted work hours, nurse fatigue, and a host of other care issues. The purpose of this presentation is to review current research on the impact of nurse staffing on patient outcomes.

P. 16. Risk and Benefit of Hormone Replacement Therapy

Lobby \*Merry-Jo Aguilar, \*Norma Ginter, Donna J. Corley, Mentor

Department of Nursing, College of Science and Technology

Many women face health related decisions regarding hormone replacement therapy. In the absence of data based information, health decisions regarding HRT may be based on myths or untruths. Additionally, health care providers often have differing opinions concerning the risks and benefits of HRT further complicating the personal decision for the health care consumer. Since HRT in not standard care, women need to be well informed to make educated health care decisions. This presentation will review current research on health risks and benefits of HRT.

P. 17. New Rotational Bands in Strontium-81

\*Aaron D. Scruggs, Dr. Ignacio Birriel, Mentor
Department of Physical Sciences, College of Science and Technology

High-Spin states in <sup>81</sup>Sr have been studied using the reaction <sup>58</sup>Ni(<sup>28</sup>Si, 2p) with a 128 MeV <sup>58</sup>Si beam from the 88-Inch Cyclotron at Lawrence Berkley National Laboratory. The <sup>58</sup>Ni target had an effective thickness of 0.246 mg/cm<sup>2</sup>. Three of the previously existing seven bands and two feeder bands were modified. The level scheme was extended by 68 new transitions and 2 rotational bands. Statistical analysis shows the possible start of shape change in the 2 new rotational bands. The data was analyzed using the Radware software package. The hardware was a Solaris based workstation purchased with EPSCoR grant number 4-6S752-02-341.

P. 18. Vertical Declining Dials: The Breckinridge Sundial at Morehead State

\*James Griffith, Dr. Jennifer J. Birriel, Mentor
Department of Physical Sciences, College of Science and Technology

Declining dials are vertical sundials whose face does not direct toward the cardinal points. The declining sundial on Breckinridge Hall has caught the attention of retired physics professor Dwight Carpenter. Professor Carpenter was concerned with the construction of the dial and asked a few specific questions that boil down to "is the dial accurately constructed." This paper will attempt to answer Dr. Carpenter's questions.

P. 19. Spectra of Bright Stars Using A Relatively Cheap Spectroscopic Setup

\*Sarah E. Smith, Dr. Jennifer J. Birriel, Mentor
Department of Physical Sciences, College of Science and Technology

We are using the Meade ETX 125mm telescope with the Meade LPI camera to look at the spectra of some bright stars in the spring sky. A spectrum is a band of colors that white light is composed. These colors appear in the order: red, orange, yellow, green, blue, and violet. They are classified by their wavelength, red having the longest in the visible spectrum to blue having the shortest. For a spectrum to be analyzed, incoming radiation is split into strips of color. To measure the incoming radiation a device called a spectroscope is used. We will be using the Rainbow Optics Slitless Spectroscope. In its most primitive form, a spectroscope consists of an opaque barrier with a slit in it, a prism and a screen or eye piece. Spectroscopes detect a particular molecule or atom, solely through the study of the light it emits. The emission spectrum of a gas is known as the specific pattern of light emitted by a gas of given chemical composition. These appear as the narrow bright lines of different colors. The absorption lines appear on the spectrum as gaps that are narrow, dark lines. These lines represent wavelengths of light that has been absorbed by other gases. This represents a preliminary study of the challenges involving the use of a relatively cheap setup – under \$1500 for the telescope, spectroscope and the imager – to obtain spectra of bright objects with optimal width and resolution.

P. 20. Exploratory Studies of the Sun and Moon with the MX 716 CCD

\*Grant D. Webb, Dr. Jennifer J. Birriel, Mentor
Department of Physical Sciences, College of Science and Technology

Since the early 1990's, digital astronomical imaging devices (or CCD's) have become cheaper and more user friendly. Such devices are now available for interested amateur astronomers and small colleges and universities. Here we explore several basic aspects of CCD operation with a small telescope. The sun and moon make good targets with which to begin studies – they are large, bright, and easy to identify but still have many fascinating traits that can be examined. We will examine structures – sunspots on the sun and lunar rays and craters on the moon – while exploring the digital image processing capabilities of the monochrome (black and white) Starlight Xpress MX 716 astronomical CCD.

P. 21. Continuous Progressive Ratio Schedules as an Assessment of the Effects of Amphetamine on Motivation

Lobby

\*Marcus Hundley, Richard Cates, Tiffany R. McNabb, Clinton M. Blair, Dr. Wesley O. White, Mentor
Department of Psychology, College of Science and Technology

On a progressive ratio schedule, the number of responses required to obtain reward is increased after each reward. Changes in progressive ratio breakpoint (the highest ratio the subject completes) have been used to assess the effects of treatments on motivation. Following treatment with saline or amphetamine, rats initiated responding on a progressive ratio schedule at different times during the light-dark cycle. The change in the pattern of breakpoints produced by amphetamine administration suggested that the animals were in different physiological/psychological states at different times post treatment. NIDA grant 1R15DA15351-01 to WW and NCRR grant 5P20RR016481-05.

P. 22. The impact of subclinical depressive symptoms on scores from the Conners' Adult ADHD Rating Scales: An initial inquiry

Lobby

\*Courtney L. Brown, Dr. Sean P. Reilley, Mentor
Department of Psychology, College of Science and Technology

Attention Deficit/Hyperactivity Disorder is a lifespan neurobehavioral disorder. Self-report measures used in the diagnosis of adults with AD/HD do not contain data for differentiating attention problems due to psychiatric conditions, including depression. Previous research suggests that moderate depressive symptoms are likely to yield a false AD/HD outcome on adult AD/HD rating scales. We examined this effect in 115 students using the popular Conners' Adult ADHD Rating Scales and a depression index from the Psychiatric Diagnostic Screening Questionnaire. Consistent with expectations, Inattentive (r =.58), and, to a lesser degree, Hyperactive/ Impulsive (r =.35) AD/HD symptoms were significantly correlated with depression scores.

P. 23

The impact of depression and anxiety symptoms on the Audit Self Report Scale for ADHD,

Lobby

\*Joshua A. Sheets, Dr. Sean P. Reilley, Mentor,
Department of Psychology, College of Science and Technology

Attention Deficit / Hyperactive Disorder is frequently misdiagnosed in adults. Attention rating scales are currently used in the diagnostic process for adult AD/HD. Difficulties arise when these measures are used in differentiating between primary attention problems in AD/HD and secondary attentional features of psychiatric disorders. We evaluated the impact of depression and anxiety on a popular AD/HD screening instrument, the Adult Self-Report Scale (ASRS), using a quasi-experimental design. Students without AD/HD, but who had significant depressive or anxiety symptoms yielded ASRS scores which were not significantly lower than students with AD/HD alone. Possible implications of these findings are discussed.

P. 24.

Effects of Media Composition and Spacing on Hydroponic Float-bed Production of Basil, *Ocimum basilicum* "large-leaf Italian"

Lobby

\*Jerry Henderson, Drs. Brent Rogers and Debby Johnson, Mentors Department of Agricultural and Human Sciences, College of Science and Technology

Changes in the tobacco industry have resulted in growers seeking alternative uses for float-beds constructed for tobacco transplant production. A study to evaluate the effect of media mixes and different plant spacings on production of basil was conducted in outdoor float-beds. When plants were harvestable, stems were cut just above media level and total shoot weight per flat was recorded. Data from four replications has been gathered. Analysis of data indicates media mix is not a significant contributing factor in basil production. Spacing is a significant factor with wider spacing producing more desirable plants. Additional studies on basil and other species of herbs in indoor float-beds are planned.

## Lunch 12 - 12:50 p.m. Crager Room

#### 25 Minute Sessions-ADUC 301

1 - 1:25 p.m.

Influence of Calcium Channel Antagonists on Estrogen-Regulated Bone

Resorption

301

\*Laura A. Ashley, Eric D. Nickel, Christine M. Pendleton, Kelli D. Trent Dr. Darrin L. DeMoss, Mentor, Department of Biological and Environmental Sciences, College of Science and Technology

Bone metabolism is invariably correlated with calcium transport indicating that calcium channels are a potential point of regulation for skeletal remodeling. Literature suggests that calcium channel antagonists decrease osteoblastic activity and estrogen exerts a protective action on skeletal mass. Thus a more comprehensive understanding of the action these antagonists and estrogen have on bone turnover is required. Experimentation utilized female Brown Norway Rats six months of age to compare the effects of estrogen and the antagonists on blood pressure and bone turnover. The mechanism by which these drugs elicit their action appears to be synergistic to that of estrogen for the calcified skeletal compartment. (Supported by NIH-INBRE 5P20RR01648105)

1:30 - 1:55 p.m.

Geographic and Temporal Factors Affecting College Degree Attainment in

Seven Appalachian States

301

\*Jason W. Marion, \*Sourik Ganguly, Department of Biological and Environmental Sciences and Institute for Regional Analysis and Public Policy

This study identifies geographic and temporal factors affecting baccalaureate degree attainment in seven Appalachian states. A total of 406 counties from seven Appalachian states were selected randomly and considered in the study. 203 of the 406 counties are designated Appalachian by the Appalachian Regional Commission (ARC). A balanced two-factor nested factorial design was utilized with 1990 and 2000 U.S. Census data. The mathematical model assessed year, state, Appalachian, county and interaction effects. The model produced a robust R<sup>2</sup> value of 96.88@ and all model terms contributed to the model significantly (p<0.01). The results could impact higher education policies affecting Appalachia.

2 - 2:25 p.m.

Cultural Experiences Gained While on a Medical Mission in Vellore, India

301

\*Laura A. Ashley, Senior, Biology Major, Drs. Marshall Chapman, Academic Honors Program and Darrin DeMoss, Mentors, Department of Biological and Environmental Sciences, College of Science and Technology

The World Gospel Mission's Volunteers In Action Program allowed me to travel throughout Southern India for two months volunteering at a local hospital and its associated clinics. I lived and volunteered at Christian Medical College Vellore, a mission hospital established by an American missionary (Dr. Ida Scudder) in the early 1900's. My experiences in the clinical setting involved rotations through various departments allowing interactions with patients from all over the country. While immersed in Indian culture, learning everything from the language to the preparation of fine Indian cuisine, I was able to take an introspective look comparing my own culture to that of India.

2:30-2:55 p.m.

**Ancient Greek Astronomy** 

301

\*Tabitha M. Aldridge, \*Chelsea Estep
Dr. Marshall Chapman, Mentor, Academic Honors Program

The Ancient Greeks made various contributions to the field of astronomy. We will examine some of the most important contributors and how their contributions influenced and shaped the field of modern astronomy. Their belief system will be analyzed in order to ascertain why certain ideas were accepted and others rejected regardless of whether or not they were true. We will examine the major constellations and the stories behind their origin in our presentation.

#### 25 Minute Sessions-ADUC 302

1 - 1:25 p.m.

Maxey Flat and CERCLA: The Afterglow of Industrial Neglect

302

\*Jonathan Henry, Dr. Michael N. Harford, Mentor
Department of Management, Marketing, and Real Estate,

Department of Management, Marketing, and Real Estate

College of Business

The Maxey Flat waste facility is a "superfund" project, a synergy the result of industrial dumping of nuclear material and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLA addressed environmental problems at Maxey Flat by creating a local employment source, thereby bringing a secondary benefit to

the community, along with the principal benefit of environmental remediation. This presentation will review CERCLA, discuss the nature of the Maxey Flat project, and explore the financial ramifications of the project for the region of Maxey Flat.

1:30 – 1:55 p.m. Comics Code Authority: Censoring an American Art Form

302 \*Bradley J. Given, Graduate Student in Art, Dr. Marshall Chapman, Mentor, Academic Honors Program

The Comics Code Authority, established in 1954, has been compared to "an iron-fist in a sand paper glove." Its strict rules and regulations doomed businesses, censored artist and held back one of American' truly unique industries, "To save America's youth." I shall examine the history of The Code, the comic book industry, and the repercussions that both have had on an America art form and its implications on American culture.

2 – 2:25 p.m. Patch Antenna Design Utilizing MATLAB

302 \*Toby A. Hale, Senior, Mathematics and Physics Major, Dr. Marshall Chapman, Mentor, Academic Honors Program

MATLAB, a complex computing language, has several mathematical uses. One of these uses is antenna design. I have studied in detail the code sequences behind these programs and have designed several patch antennas. For each of these microstrip antennas, I have looked at the surface current distribution, input impedance, return loss, and radiation pattern in order to determine the most efficient patch antennas for use in Morehead State University's Space Science Center.

2:30 – 2:55 p.m. Costume Design: From Concept to Construction

302 \*Lauren D. Dickerson, Denise Watkins, Mentor
Department of Theatre, Caudill College of Humanities

For my fellowship I was able to take the costume design for Ladies' Day from concept to construction. Much of my research went toward finding examples of clothing from Ancient Greece, the 1960's and characters from modern popculture. From there I was able to create and build my designs. I was nominated to present my designs for competition at the Kennedy Center American College Theatre Festival in February. I am currently working on a project that will allow me to create a pattern and build a costume for Aida, an opportunity most won't get until grad school.

#### 25 Minute Session-ADUC 312

1-1:25 p.m. Our National Forest: Use It, Don't Abuse It!

312 \*Angela M. Brown, Senior, Biology Major, Dr. Marshall Chapman, Mentor, Academic Honors Program

This presentation will focus on the various ways in which individuals illegally abuse public land. The main focus will be on garbage dumping, illegal ATV usage, illegal timber theft, marijuana cultivation, clandestine meth labs, suicide on public land, and poaching of various game. Also, methods that National Forest Law Enforcement use to catch and prosecute these persons. There will be extensive photographs showing the various abuses that are suffered. Some of these photographs are difficult to view and may not be suitable for some people.

1:30 – 1:55 p.m. Risk Management: An Interactive Look

\*Matt D. Fyffe, Drs. Julia A. Hypes and Michael Hypes, Mentors, Department of Health, Physical Education, and Sport Sciences, College of Education

Risk Management is essential to every sport manager when addressing the daily functions of a sport or physical activity facility. Facilities have a legal duty to provide a safe environment for spectators, participants, and sponsors. This presentation will include defining the process of risk management and identifying elements to be considered in a risk audit. The audience will be guided through an interactive facility risk management process

2 – 2:25 p.m. Synergy: Breaking the Barrier Between Philosophy and Science

\*Timothy J. Evans, \*Brianna L. Swetnam, Juniors, Biology Majors, Dr. Marshall Chapman, Mentor, Academic Honors Program

To the modern layperson and student, it appears that there is a wall between the two disciplines of sciences and philosophy. This prejudice, however, does not reflect the way the two disciplines operate. The two are intertwined, both needed equally to form an accurate world-view. We will examine why the "wall" exists, the popular misconceptions regarding both doctrines, and illustrate how the curriculum of the Academic Honors Program facilitates the deconstruction of the "wall."

2:30 – 2:55 p.m. Building a Robotic Manipulator to Run an Obstacle Course

\*Casey M. Brown, \*William R. Lindbergh, \*Dwayne Yeary, David G. Nickel,
Brandon Osborne, Dr. Farouq A. Alhourani, Mentor, Department of Industrial
and Engineering Technology, College of Science and Technology

The Industrial and Engineering Technology Robotic Team designed and built a robotic manipulator without using any robotic kits or off-the-shelf robot manipulators. A vision system was used to run the robot and a flat poster regarding the manipulator was also prepared. The team captured third place in the 2005 nationwide Tele-Operated Robotic Manipulator Contest held in St. Louis, Missouri. The robot had to run an obstacle course and pick up and carry an 8-inch long piece of conduit. Furthermore, the team demonstrated it for local middle schools, with one demo at the Morehead State University student center during the Student Technology Leadership Program (STLP) and another at Rowan County Middle School.

3-3:25 p.m. A Voice for Hospital Workers: 1199 in West Virginia and Kentucky

\*Justin R. Yelton, \*Katherine K. Reeder, Dr. John Hennen, Mentor, Department of Geography, Government and History, Caudill College of Humanities

Justin and Katherine have each worked with me (Hennen) in 2005-2006 as CCH undergraduate fellows. Katherine, who graduated in December, transcribed and edited oral history interviews that I have conducted since 1999 for a book project on the history of Local 1199, the National Union of Hospital and Health Care Employees. Justin is organizing primary source material from the same project into a database and systematic archival collection. Their presentation will include analyses of the regional presence of the union since 1970 based on these interviews and primary documents, placing WV and KY health care workers into the contexts of occupational history, the regional history of organized labor, and regional and national contexts of labor relations in the hospital industry.

## Recipients of Undergraduate Research Fellowships

Dr. Wayne Andrews, President of Morehead State University, supported an initiative for undergraduates to engage in research, scholarship, creative works, and performance activities with faculty mentors. These fellowships were distributed campus-wide. Listed below are the 2005-2006 awardees and their mentors.

#### Student

Arnett, Jared
Ashley, Laura
Carroll, Joseph
Carver, Willie
Cole, Jamie Marie
Day, Amanda
Dickerson, Lauren
Doepke, Brady
Dyer, Misty Dawn
Fyffe, Matt
Grey, Ryan
Henry, Jonathon L.

Henry, Jonathon L. Hinkle, Lisa Knoll, Diana McElfresh, Mindy McFann, David Miller, Melissa S. Pendleton, Christine

Perkins, Sara Rhan, Joshua Reeder, Kathryn Riley, Belinda Rini, Sarah Robinson, Paul Sheets, Josh Smith, Sarah

Spence, Sara Danielle Spurlock, Debra M. Stephens, Lauren E.

Taylor, Julie

Trolinger, Amanda

Votaw, Lori Watts, Clell

Wheeler, Sarah Nicole

#### Mentor

Dianna Murphey, J.D.
Darrin DeMoss, Ph.D.
Mark Blankenbuehler, Ph.D.
Karan Taylor, Ph.D.

Karen Taylor, Ph.D. Maureen Doyle, Ph.D. Shari Kidwell, Ph.D. Denise Watkins, M.F.A.

Denise Watkins, M.F.A. Kent Price, Ph.D.
Becky Katz, Ph.D.
Julia Ann Hypes, Ph.D.
Michael Fultz, Ph.D.
Michael Harford, J.D.
Shari Kidwell, Ph.D.
Greg Detweiler, D.M.A.
William Green, Ph.D.
Judy Stafford, Ph.D.
Ali Ahmadi, Ph.D.
David Peyton, Ph.D.
Janelle Hare, Ph.D.
Terry Irons, Ph.D.
John Hennen, Ph.D.
Lola Aagaard, Ph.D.

Lola Aagaard, Ph.D.
Philip Krummrich, Ph.D.
M. Scott McBride, Ph.D.
Sean Reilley, Ph.D.
Jennifer Birrell, Ph.D.
Shane Spiller, Ph.D.
David Green, Ph.D.
Barbara Lyons, Ph.D.
Sean O'Keefe, Ph.D.
Timothy Creekmore, M.A.

Jennifer Reis, M.A. Ilsun White, Ph.D. Troy Wistuba, M.S.

#### Other Activities During Celebration of Student Scholarship Week

## **Department of Art** April 3-12, 2006 **Claypool-Young Art Gallery**

The Claypool-Young Art Gallery on the campus of Morehead State University will present '2006 MSU Sophomore Art Exhibition' April 3 – 12, 2006. An opening reception was on Wednesday, April 5<sup>th</sup> from 6 – 8 p.m. with refreshments and live music. Sophomore art students participate in the exhibition allowing them an opportunity to exhibit their work in the professional realm.

The '2006 MSU Sophomore Art Exhibition' is followed by a required participation in the Sophomore Review. In the Sophomore Review, each student will meet with two art faculty to review their exhibited art work, discuss their direction and progress in the art program, and determine the resources, courses, and special activities that will enable them to achieve their goals.

Music at the reception on April 5, provided by Forin Pocket whose members are:

Chasen Little on Drums

Rodney Mora on Keyboard/Piano

Jose Mendoza on Bass

Matt Hornbeck on Guitar

#### Sophomore Exhibition List

April 2006

Vickie Adkins Tomas Ayala Stephanie Ballinger Amanda Barnett Jessica Barnett Eden Bolin Cara Breeze	Michael Donohew Valarie Fileds Erin Fraley Brandi Garrett Dwight Harris Susan Hawkins Rachel Haves	Katie Kundel Jennifer Mack Casey McCowan Adora Miller Kevin Oakley Tiffany Oldaker Autumn Reed	Lance Sparkman Caleb Spence Tammy Staton Gloria Stepp Mark Stevens James Stockelman Heather Utterback
	•	•	
		-	
Cara Breeze	Rachel Hayes	Autumn Reed	Heather Utterback
James Carr	Craig Hintz	Steven Reed	Stephen Waddles
Gabriel Casey	Kendrick Holbrook	Steven Rodgers	Kyle Wattula
Kevin Cockrell	Rachel Kendall	Stacy Scott	Kenton Wheeler
Colin Daugherty	Eric King	Andrew Slone	Lacy Whitley
			Charli Wright

#### **Department of Communication & Theatre** April 5-6, 2006 Lucille Little Theatre

The MSU Dance Ensemble presented "Kinetic Exposure" at 7:30 p.m. in the Lucille Little Theatre. The students indicated were mentored by Ashley Suttlar, an instructor in Communication and Theatre.

Dancers:

20

Megan Anthony Alicia Collier David Fonda

Katrina Hardy

Costume:

Jonathon Mayo Stage Manager: Brittany Mitchell

Lighting:

Anthony Sublett Jamie Thompson

Camille Nichols

### Department of Music April 6, 2006 3 p.m. Duncan Recital Hall

The 19<sup>th</sup> annual A. Frank and Bethel C. Gallaher Memorial Music Competition was held on the April 6, and is included in the Celebration of Student Scholarship week. This Performance Competition, established in 1987, honors the memory of the parents of Department of Music Chairperson Emeritus, Dr. Christopher S. Gallaher, who were strong advocates for education and particularly, the arts. The winner of the Gallaher Competition receives a \$1000 cash prize and is featured in performance at the annual Academic Awards Convocation. The Department of Music in the Caudill College of Humanities presents the finalists for this competition.

Four Miniatures...... Joseph Turin (b. 1947) Eric Siereveld, trumpet Chia-Ling Hsieh, piano Fantaisle...... Georges Hüe (1858-1948)Emily Listermann, flute Chia-Ling Hsieh, piano Michi for Solo Marimba...... Keiko Abe (b. 1937) Mark McCafferty, marimba Concerto for Trumpet...... Aleksander Arutiunyan (b. 1920) Jessica Crittendon, trumpet Linda Conn, piano Concerto for Horn op. 11 ......Richard Strauss (1864-1949)Mark Hopkins, hornist Chia-Ling Hsieh, piano

## Kickoff Speaker for "Celebration of Student Scholarship" Week April 6, 2006 4:15 - 5 p.m. Breckinridge Auditorium 002

Dr. Fred J. Roisen, Professor and Chair Department of Anatomical Sciences and Neurobiology, University of Louisville, presented a talk on The Potential of Human Stem Cells: "The Nose Knows." This talk was sponsored by the Kentucky Biomedical Research Infrastructure Network. The lecture was followed by a reception, also supported by KBRIN, in Dr. Roisen's honor in the Breckenridge Society Room, Breck 109, from 5:15-6 p.m. Students, faculty, and guests had an opportunity to speak with Dr. Roisen personally and gain further insight in the direction stem cell research is going.

### President's Reception for Showcase Mentors April 7, 2006 President's Home

The President and Mrs. Andrews hosted a reception in the President's Home for all of the faculty mentors who provided direction to students in independent research or creative production, and who are presenting their outcomes in the Celebration of Student Scholarship. This reception was held from 6-8 p.m. on Friday, April 7, 2006.

## Phi Kappa Phi Banquet April 8, 2006 Crager Room

The Morehead State University Chapter 148 of the National Honor Society of Phi Kappa Phi will hold its Annual Celebration of Academic Excellence Banquet at 6 p.m. on April 8, 2006 in the Crager Room of the Adron Doran University Center. Following the banquet, PKP members, faculty and student inductees, parents, and guests will hear banquet speaker, Dr. Larry T. McGehee, Professor Emeritus of Religious Studies, Wofford College, who will speak on "Coloring Outside the Lines." Afterward, freshmen honorees, sophomore scholarships, graduate fellowships will be awarded, followed by faculty and student initiates inducted into Phi Kappa Phi. Finally, the Margaret Patton Scholarship Award will be presented to senior psychology student, Ms. Lisa D. Hinkle.

# Celebration of Student Scholarship Sponsored by:

Office of the President
Office of the Provost
Academic Honors Program
Student Government Association
Phi Kappa Phi
Kentucky Biomedical Research Infrastructure Network

#### Members of the Celebration of Student Scholarship Committee

Dr. Deborah J. Abell
Dr. Marshall Chapman
Dr. David T. Green
Dr. Robert J. Franzini
Dr. Timothy Hare
Dr. David Magrane
Ms. Cynthia Martin
Dr. Michael Seelig
Dr. Mee-Ryoung Shon

Special acknowledgement to Ms. Edwina J. Jennings, secretary specialist, in the Academic Honors Program for her efforts in helping make this program possible.

