

Oral Presentations

1:15-1:35 p.m.

COS42
Main 202

Finding the Best Movie Seat in the Theater

Charles Starkey, Ashley Wheaton, Daniel Lukac, Stacy Walterbusch, COS
Faculty Sponsor: Pamela Warton

Using mathematical formulas and measurements from local theaters, it is possible to find the best seat in a movie theater. We will show you how!

COS12
Main 203

The University, Information Assurance and Me: The Why and How

Josh Ziegler, COS
Faculty Sponsor: Helen Schneider

Information assurance (IA), as the term is used in relation to information technology (IT) within the Department of Defense (DoD), is defined as: "operations that protect and defend information and information systems by ensuring availability, integrity, authentication, confidentiality and non-repudiation." This presentation will discuss the IA audit performed by the presenter on The University of Findlay's computer systems and how it relates to his education. Subjects discussed include the project's background, methods and tools used, and types of problems discovered during the IA audit.

COS53
Main 209

Digital Herbarium Project: A Web-Based Cataloging System of Plant Images and Taxonomic Information

Jeffery Mocini, Abdulaziz Aljabre, Long Shi, COS
Faculty Sponsor: Heda Samimi

Our team of software engineers has developed a digital herbarium for the biology department at The University of Findlay. This software contains plant images and taxonomic information in a database which will allow students to update or modify the database as new plants or information is collected. Students will be able to print labels that contain information of the specimens located in the herbarium. Users will also be able to use the database online, where they can upload their own photos and

information. This presentation will share the results of this project.

COS10
Main 212

Using Geographic Information Systems (GIS) to Study Land Use Change in Hancock County, Ohio, from 1988-2006

Jeanette Smith, COS
Faculty Sponsor: Cheryl Cape

Population growth and/or rural residential development over the past 20 years may have contributed to loss of agricultural land to residential land in Hancock County, Ohio. The purpose of this study was to identify and measure the amount of land use change over a 20-year time span using the analysis of aerial photographs in a Geographical Information System (GIS). GIS is a combination of computer hardware, software and geographic data used to manage, analyze and display geographically referenced information. Four land use categories were chosen for analysis: agriculture (including both cropland and pastureland), residential, forest and other (mainly consisting of water and construction features). The areas of each category were calculated to identify trends and patterns in land use change. The greatest loss of agricultural land was found in areas that are closest to rural towns.

COS49
Main 213

College of Business Student Assessment

Wesley Simmons, Majed Afandi, Nasser Alqahtani, COS
Faculty Sponsor: Heda Samimi

Our team of software engineers has developed a database and the needed software to assist the College of Business in performing its student assessment tasks. This presentation will share the results of this project.

COS22
Main 216

The Truth of Cardiovascular Problems with The University of Findlay

Azia Routson, COS
Faculty Sponsor: Benjamin Dolan

Most young women do not think of the ramifications of taking birth control, especially while in college. Young

women below the age of 50 are still at great risks of having strokes and other cardiovascular problems, but most people associate this with the elderly. Cardiovascular problems are increased with many activities that occur during the college life of the student. What are these risks? How many women are familiar with these issues? The diet, prescriptions and increased smoking or alcohol consumption during college increases these risks. What are the chances of stroke among women on The University of Findlay's campus? This presentation will discuss these issues and more.

COLA14
Main 300

Health Communication Matters

Leslie Thatcher, COLA

Faculty Sponsor: Jeanette Drake

Health care is an important topic politically, socially and economically. The success of the entire health care system is dependent upon effective communication. The presenter will discuss how public relations, small group and health communication skills and knowledge helped in planning, organizing and implementing an informational event for her client, the department of communication at The University of Findlay. The event was in the form of an informational symposium with four speakers and a moderator and was televised live on UF-TV channel 20 and WLFC 88.3 FM. The topic and title of the event was Health Communication Matters, and the event attracted nearly 100 attendees from the University and surrounding community.

COS45
Main 301

A Preliminary Study of the Planning and Policy of the United States and Nepal to Combat the H1N1 Pandemic

Rojee Rajbanshi, COS

Faculty Sponsor: William S. Carter

A comparative analysis of the planning and policy regarding the H1N1 pandemic in a developed country, U.S., and a developing country, Nepal, with a brief description on swine flu will be provided. The presentation will be based on data available online and data collected on a recent visit to Nepal. The presentation will provide comparisons between the plans and policies the two countries adopted, U.S. vs. Nepal.

COLA19
Main 305

Freedom or Enslavement: Two Contrasting Views on Working Class Dynamics

Stephanie Springer, COS

Faculty Sponsor: Marianna Hofer

This presentation will be based on a paper exploring the working class dynamics of the mid-18th century as presented by Herman Melville in "Moby Dick" and Rebecca Harding Davis in "Life in the Iron Mills." These authors held two contrasting views; both authors dealt with ideas of social hierarchy and social conventions but portrayed them from two different perspectives. This presentation will explain how Melville's novel revealed new opportunities made possible by a new era in American life, while Davis' story showed the problems arising from the same.

COS4
Main 308

Rider Conformation: How Your Body Affects Your Equitation

Jessica Stemmler, COS

Faculty Sponsor: Janet Harms

The rider's position on the horse is vital to the horse's performance. To identify the conformation advantages and disadvantages of the average equestrian and to outline a plan for helping those with these problems to correct them, work with them and compensate, more than 70 riders were surveyed, observed and interviewed over the course of four months. Findings include acknowledgment and understanding of the effects of back problems, long limbs, short limbs, abnormalities of the torso, injuries, unevenness and other body conformation traits on a person's ability to ride a horse.

1:45-2:05 p.m.

COS5
Main 202

The Complex World of Chaotic Fractals

Kora Ridings, COS

Faculty Sponsor: Pamela Warton

The beauty of fractals surrounds us from the universe down to subatomic particles. The mathematical study of fractals leads to fascinating branches of mathematics called chaos theory and complexity theory. This presentation will explore the relationship between these two theories.

Oral Presentations (continued)

COS46
Main 203

Bailout at What Cost to the Tax Payer?

Mark Preston, COS

Faculty Sponsor: Michael Homsher

General Motors entered Chapter 11 bankruptcy protection recently and reemerged as a “new” company with a measure of future hope. While operating in protection, GM rescinded contracts, trimmed workforces and shifted legal obligations stemming from past actions to Motors Liquidation (Old GM). More than 120 former GM sites require environmental cleanup totaling \$450 million, while 42 sites in Michigan and Indiana alone have cost \$400 million. GM Central Casting Facility in Massena, N.Y., has been estimated to cost another \$260 million and may require substantially more due to extensive contamination. Cleanup funding comes from a Canadian/U.S. government-backed loan totaling \$1.17 billion of which at least half is expected to be used to pay for lawyers, consultants and accountants. Remediation sites that are close to you may be left untreated, with the taxpayers ultimately paying the true costs of the GM “bailout.” Who bails out the taxpayers?

COS52
Main 209

Virtual Chemistry Laboratory

Jeanette Smith, Kody Glasgow, Josh Ziegler, COS

Faculty Sponsor: Heda Samimi

Our team of software engineers has developed online software to allow students to perform chemistry experiments without using valuable lab materials. The software provides a virtual online learning environment to enhance student learning and supplement on-campus lectures. This presentation will share the results of this project.

COS7
Main 212

Habitat for Humanity: Building and Beyond!

Amy Lack, Michael Pesato, COS; Chelsey Anglin, Melissa Beaver, COLA;

Faculty Sponsor: Crystal Weitz

Experience the work that Habitat for Humanity does both on campus and in the community! Learn about new and interesting opportunities, including building green in the Findlay community and the introduction of the Habitat ReStore. Members from the Habitat campus chapter will

discuss the annual Collegiate Challenge Spring Break trip and the chapter’s ultimate goal of sponsoring its own house in 2015!

COS50
Main 213

Comforting Companions, LLC

Micah Stevens, Mark Binkley, COS

Faculty Sponsor: Heda Samimi

Our team of computer science programmers has developed a Web site for Comforting Companions LLC, an elder care service for those still living in their own homes. The Web site helps Comforting Companions LLC to collect information and better communicate with potential clients and employees. This presentation will share the results of this project.

COS55
Main 216

Northridge Swim and Tennis Club Members Tracker

Justin Little, Tim Gossard, Bandar Alotaibi, COS

Faculty Sponsor: Heda Samimi

Our team of software engineers has developed software for the Northridge Swim and Tennis Club of Findlay, Ohio. The software assists the club by keeping track of memberships and signing in members and their guests. This presentation will share the results of this project.

COLA17
Main 300

Media Training Workshop

Heather Snyman, Adrian Poston, COLA

Faculty Sponsor: Jeanette Drake

In today’s 24/7 media world, knowing how to communicate effectively on camera has become a necessity for more than public relations professionals. Athletes, health professionals, faculty and every other role within an organization may be asked to speak to reporters. Media training is an important part of on-the-job training. Knowing a few basics before going in front of a camera will help you give a polished interview that reflects well on you and your organization. The purpose of our demonstration is to instruct audience members on how to give an effective media interview. Specific topics will include:

- 1.) How to anticipate questions reporters ask
- 2.) How to structure effective answers and gain control of the interview
- 3.) Tips and techniques for effective on-camera and off-camera behavior

COLA18
Main 305

Creative Short Stories

Melinda Bednarik, COHP

Faculty Sponsor: David Essinger

A reading of short creative pieces that were created while attending The University of Findlay will be presented. The first reading consists of scenes from a short story titled "Angel." The second piece has no title and was created from a writing activity during Writers' Club.

COS20
Main 308

Ear Cropping: Liposuction for the Dog World?

Lindsay Hacker, COS

Faculty Sponsor: Matt Stolick

Ear cropping is an ethical issue that all veterinary students will have to take a stand on at some point in their careers. The presenter will present the pro and con arguments for ear cropping and develop a hypothetical way to resolve the issue altogether.

2:15-2:35 p.m.

COLA 1
Main 202

The Acceptance of Death: A Case Study

Elisabeth George, COLA

Faculty Sponsor: John Malacos

Even though there has been much research completed on death and dying, there has been little research on death acceptance and religious sisters. The purpose of this presentation is to discuss the factors that play a role in how a religious sister accepts death. Certain factors such as gender, age, religion and one's relationships have been proven to impact one's acceptance of death. It was found that all four factors played a role in the participants' death acceptance, with religion being the most influential.

COB10
Main 209

Health Care Plan: Pro and Con

Michael Blinn, Anika Kumar, Garrick Daniels, Ryan Davis, Kara Juknelis, COB

Faculty Sponsor: Shiv Gupta

Students attended the 2010 Annual MBAA International Conference in Chicago. At the conference, two students discussed the pros of the government reform of health care and two additional students spoke about the cons of the health care plan. Upon return to Findlay, students will lead a discussion about the experiences and share what was learned and presented while in Chicago.

COLA10
Main 212

A Proposal to Change Current Housing Requirements at The University of Findlay

Paula Sadler, Mary Talbott, Jenifer Kitchen, COLA

Faculty Sponsor: Ron Tulley

This presentation is designed to highlight research into the current student housing requirements at The University of Findlay. Currently, students with a junior rank are required to live on campus. The presenters will show how an alternative proposed policy would allow students more freedom of choice while utilizing the resources of the University to their maximum benefit.

COLA8
Main 213

Washington D.C.: The Life-Changing Internship

Sarah Everly, COLA

Faculty Sponsor: Marie Loudon-Hanes

The presentation will include a description of an internship experience during the summer of 2009 with defense attorney Joanne D. Slaughter. Three months were spent in the D.C. metropolitan area, residing in Alexandria, Va. The presentation will span from the intern's work as a young professional to day-to-day life in the diverse, eye-opening city of Washington, D.C.

COLA7
Main 216

An American Family

Casey Lauger, COLA

Faculty Sponsor: Adam Criblez

The presentation will provide a unique look at one of Hancock County's founding families. Discover how the McKinnis family came to Ohio and the contributions they made to the community. The presentation will follow the family from 17th century Ireland to how their memory is being preserved today. Learn how the family made a home on the edge of the Great Black Swamp and

Oral Presentations (continued)

the hardships they and other early settlers overcame to survive. The story of the McKinnis family could be the story of any American family. If you can trace your family tree to Northwest Ohio, you will not want to miss this presentation.

COLA9
Main 300

ImPulse

Max Reinhart, COLA

Faculty Sponsor: Jeanette Drake

The idea of a blog component to supplement the print version of The Pulse was developed, resulting in ImPulse. For this project, the presenter thoroughly researched both the history and current state of the blogosphere. Blogs, by definition, are specific to one particular topic. In the case of ImPulse, the topic is The University of Findlay events and trends, as well as how those events and trends reflect the current collegiate atmosphere of the United States. The presenter will explore the technical and creative process and the challenges associated with launching a blog in today's extremely interconnected society.

COLA11
Main 301

A Trip to Remember: UF Sign Club Trip to Gallaudet University

Caitlin Corbet, COLA

Faculty Sponsor: Janice Blum

Last spring, the UF Sign Club took a trip to Washington, D.C., to visit Gallaudet University, the only liberal arts deaf college. The trip allowed participants to experience being the minority just by entering campus. Many of the participants had completed ASL 1 at UF and found it very exciting to recognize places that were presented in class. The campus tour guide shared many interesting stories about the history of the campus, such as how laundry was thrown down a staircase, Abraham Lincoln's intended visit and the former campus doorbells. The newer buildings on campus utilized natural lighting as well as glass walls to allow easy communication. After the campus tour at Gallaudet, participants visited the nation's capital.

COLA12
Main 305

Flower Bloggers: The Women of Shakespeare

Diane Susdorf, COLA

Faculty Sponsor: Judith Lanzendorfer

Completed for an English course on Shakespeare, the presenter created a blog written from the point of view of female characters from Shakespeare's plays. The blog explores the minds and decisions of each female character in an environment in which the women can express their true opinions. The women of Shakespeare share their experiences and offer advice to one another, but do so using "flower language" instead of frank, modern language. By using these symbols to convey potentially provocative messages, the blog pays tribute to this cultural phenomenon that prevailed in Shakespeare's time and even appeared in his plays. The blog will be shown using a PowerPoint presentation to demonstrate the methods with which the women of Shakespeare communicated both in the blog and in their respective plays.

2:45-3:05 p.m.

COLA2
Main 202

What Is the Meaning of Love?

Elisabeth George, Martin Travis, COLA

Faculty Sponsor: John Malacos

This project was developed by The University of Findlay's senior capstone class. A survey was created to collect information such as gender, religion, relationship status and age; along with the question, "What is the meaning of love?" The surveys, along with three large cutout hearts as well as one large wooden heart, were placed in various locations around The University of Findlay campus. Students and faculty were asked to write their responses to the survey on the papers and place them in boxes designated by the hearts or write their answers on the larger hearts. The results of this project will be relayed at this presentation.

COB7
Main 203

India Study Abroad: Business and Cultural Immersion Program

Bharatkumer Mekwan, COB

Faculty Sponsor: Nabarun Ghose

The India Study Abroad program at The University of Findlay has been successfully completed two years in a row. The program is unique because of its focus on enhancing the career and professional competencies of participating students. The program stresses both business and cultural competencies. Insights into the various aspects of the program will be presented.

COS6
Main 209

Using Complexity to Predict the Future Location of Terrorist Cells

Brittany Fanning, COS

Faculty Sponsor: Pamela Warton

Complexity is a relatively new branch of mathematics that can be used to model complex systems such as weather predictions, social interactions and human behavior. This presentation will explore the use of complexity in addressing the possible locations of terrorist cells.

COLA6
Main 212

Linguistic and Cultural Immersion Through Study Abroad

Heather Patel, COLA

Faculty Sponsor: Julia Perez-Gamboa

This presentation is based on a study abroad trip to Ecuador in the summer of 2008. Due to a Spanish-only language policy, constant interaction with the locals and an array of experiences in various regions of the country, much was gained from the program. The presentation will include a description of the experience as well as an explanation of the benefits of programs that provide linguistic and cultural immersion.

COB9
Main 213

Long-Term Health Care for Asians

Deepali Jain, COB

Faculty Sponsor: William Ruse

This presentation introduces a long-term health care model plan for the elderly Asians in society and how it can lower the cost burden on the existing health care system. This discussion was also presented at the International Academy of Business and Public Administration Disciplines, Florida, and published in the conference proceedings. The presenter is majoring in the healthcare management and international business fields. The subject matter of the presentation sheds light on a different aspect of health care and how the costs can be curtailed by concentrating on one ethnicity while helping the people of the same ethnicity. The conference participation broadened the presenter's outlook on the health care field and the international perspective.

COB5
Main 216

Share Valuation of Guess Inc.

Bhavin Shah, Arpita Patel, Kunal Patel, Darshit Patel, Ketan Patel, COB

Faculty Sponsor: Joon Young Song

This presentation is about the share valuation of Guess Inc., based on different share valuation models.

COLA4
Main 300

From Aristotle to Adderall: The Role of Telos in the Medication of Children with ADHD

Adam Houser, COLA

Faculty Sponsor: John Leach

The number of children diagnosed and prescribed medication for attention deficit hyperactivity disorder (ADHD) in America has risen in recent years and is projected to increase in the near future. The author argues that the rise in rates of prescribed medication could be partially attributable to the replacement of the child's Aristotelian telos with the adult Aristotelian telos. As efforts to replace the child telos with adult telos fail in some instances, the child telos shines through in ways that mimic ADHD symptomatology; due to the concomitant branding of these symptoms as indicative of disorder, children who express these vestiges of the child telos are medicated to eliminate those symptoms and return the child to a state that is considered "normal." Because many decisions to medicate children are incorrectly made on this return to normalcy, the presenter contends that the foundation for medication of children with ADHD is in need of critical reexamination.

COE2
Main 301

The Facts: Child Abuse and Neglect

Christian Felty, COE; Ariel Lee, Janine Swartz, COS

Faculty Sponsor: Terri LaRocco

This presentation is designed to share different perspectives of the same problem. Students in English 145 combine reading *The Glass Castle*, vocabulary and their own research to develop a different point of view on child abuse. After reading the story of Jeannette Wall's childhood and working on increasing their study habits, students in English 145 classes collaborated on creative projects on the topic of child abuse and neglect. The students will attempt to answer the question, when does discipline at home and school become abuse?

Oral Presentations (continued)

COS54
Main 305

2010 World Cup Tracker

*Galeb Alshammary, Faleh Alhajrei, Munif Alotaibi,
Soltan Alenazi, COS
Faculty Sponsor: Heda Samimi*

Our team of software engineers has developed software with information about each of the 2010 FIFA World Cup national teams, information about the national teams' players, including their biographies and stats, and the ongoing schedule of the matches. Soccer fan enthusiasts will be able to keep track of their favorite teams and matches that will take place in South Africa in June. This presentation will share the results of this project.

3:15-3:35 p.m.

COB14
Main 202

U.S. Health Care Reform: Its Domestic and Global Impact

*Vishakha Khanolkar, Simeen Khan, COB
Faculty Sponsor: Maria Gamba*

The current administration of President Obama is promoting reform in health care. Any change that may eventually take place will affect individuals and businesses in the United States. This presentation intends to provide an analysis on the impact of health care reform on the domestic economy and on other countries.

COB3
Main 203

Overview on Hospital Industry: Managed Care and Costs

*Janak Patel, COB
Faculty Sponsor: Nabarun Ghose*

This presentation provides an overview of the hospital industry in the United States. Health insurance and Medicare payments are based on prices historically charged to individual patients. Since the payment rates were not negotiated and patients could choose any hospital for care, gaining negotiating leverage with payers was not relevant. The cost control was not important since hospitals received more funds by providing more services. Managed care insurers are increasingly involved in the organization and provision of health care services rather than just the financing of them. As a result, hospitals

have redirected their marketing focus away from physicians and patients exclusively, and toward managed care organizations. The research showed that managed care lost its ability to significantly reduce the rate of increase in hospital costs.

COB2
Main 209

A Tale of Two Leaders: How Jeff Immelt and Carly Fiorina Exemplify Leadership Theory in the Transformation of Their Organizations

*Sandy Langhals, COB
Faculty Sponsor: Joseph Martelli*

This presentation will explore the leadership styles of Carly Fiorina, former CEO of Hewlett-Packard and Jeff Immelt, current chairman and CEO of General Electric. Fiorina's 2006 Memoir, "Tough Choices," as well as David Magee's 2009 book, "Jeff Immelt and the New GE Way," were the main sources used in the exploration of the leadership style of these two leaders. Through the course of this presentation, leadership models and theories contained in Richard L. Daft's book, "The Leadership Experience" (2008), will be used to compare and contrast these two leadership styles. The journey Fiorina and Immelt have taken is firmly rooted in the linkage between the theories discussed in this presentation and the practices that have helped them to attain their career success. Similarity of styles, as well as their differences, demonstrates classic leadership theories that have served these leaders well in their career paths.

COB18
Main 212

International Accounting Standard and Risk Management in Insurance Industry: An Information Technology Perspective

*Bindiya Kadloor, COB
Faculty Sponsor: Patricia Abels*

In the vast ocean of insurance industry, it was not capricious for ships of accountancy practices that were built to weather the hurricanes of one country to struggle against the tornadoes of another. Likewise, the insurance ocean in itself being a potboiler of risks was fraught with many dangers including but not limited to the sharks of legal interpretation and the tide of pricing. It was then imperative to introduce efficient risk management practices to mitigate the influence and consequence of

such risks. Though many a number of strategies were invented to improvise risk management, the human factor surfaced again to arrest the full impact of such strategies on efficiency. Information technology, a super wave of facilitator, with its computational, processing and interfacing abilities, makes possible the birth of high operational efficiency in the insurance ocean. This presentation further explores the nuances of such an information technology-powered voyage.

COB12
Main 213

Medical Diagnostic Test — A Significant Cost in the Health Care System

Kintukmar Lad, COB

Faculty Sponsor: William Ruse

Medical Diagnostic Tests (MDTs) are used by many doctors to confirm the diagnosis of a disease. These tests are helpful for the doctors when they are not sure about the diagnosis, progression and treatment outcome of a particular disease. Moreover, there are more health-conscious people in the United States that prefer their physician confirm a diagnosis by running a battery of tests so they can receive the best possible treatment. Even when a physician is certain of a diagnosis, the ordering of unnecessary tests to assure patient satisfaction may lead to malpractice. The costs associated with medical tests are significant. There are several ways to reduce these costs, including reducing the number of tests, adopting a personal health record or conducting a reform of the nation's malpractice laws. The presenter will discuss the issues surrounding MDT and the possible solutions to reduce costs.

COB15
Main 216

Financial Analysis of American Eagle Outfitters Inc.

Princy Paul, Sharayu Nayak, Nikhil Karpe, COB

Faculty Sponsor: Joon Young Song

With the help of financial tools, presenters will analyze the financial reports of American Eagle, which includes pro forma statements, bankruptcy predictions, pro forma stock price, and buy or sell decisions in relation with the stock price.

COB20
Main 300

GM&U Marketing Challenge

Holly Whitta, Tanya Smith, Lora Williams, COB

Faculty Sponsor: Chris Ward

Students will present the results of a competition, during which students designed an integrated marketing communication plan to launch the General Motors college discount program. Student teams researched and identified the target market, developed a message to reach the target audience and composed a creative proposal to describe and justify each element of the plan. Various media were used, including traditional print ads and nontraditional media such as social networking sites with samples provided for each element of the plan. Effective use of the \$1.5 million budget was determined by well-defined success criteria, such as increased Web site traffic and car sales.

COE7
Main 301

History Comes Alive: A Collaboration Between Hancock Park District, Hancock County Schools and College of Education Method's Block Juniors

Sandy Alesch, Cassie Holman, Austin Searfoss,

Bridgett Lauger, Emily Brungard, Stefanie Lauer, COE

Faculty Advisor: Kim Forget

As part of a week-long field-based teaching experience, pre-service teacher candidates will share their experiences related to becoming early Hancock County pioneers in the History Comes Alive at Litzenberg Farms. Fourth-grade students, teachers and volunteers visited the Litzenberg Farm during fall 2009 and engaged in a variety of learning stations (e.g., wool carding and spinning, sing-alongs, butter churning, woodworking, trail hiking), which were conducted by UF College of Education methods block students. More than 300 students and teachers experienced these historically accurate and highly engaging lessons. Junior block participants will discuss their parts in the yearly event.

COE1
Main 305

Teaching with Storytelling in the Content Areas: Making it Real

Anjie Trusty, COE

Faculty Sponsor: Melissa Cain

As a society, we communicate largely through storytelling. We share countless stories with young

Oral Presentations (continued)

students in their first years of school through picture books and read-alouds, but storytelling is less common as students grow older and the content they are studying becomes more complex. In this presentation, literature will be shared that emphasizes numerous benefits of using storytelling in the classroom to teach the content areas of science, social studies and math. The final part of the presentation will address integrating multimedia into stories through digital storytelling. Digital storytelling offers the benefits of teaching content with storytelling, plus the added benefit of addressing 21st century skills, such as problem solving, collaboration, media literacy and technology information skills.

3:45-4:05 p.m.

COB16
Main 202

Six Sigma

Jacob Rowland, Kristin Johnson, Jose Montilva Zambrano, Joshua Fox, COB; Chelsea Magee, COE
Faculty Sponsor: Jeffery Forsyth

This presentation will be based on the six sigma principles of operations management and logistics and supply chain. Students will review the goals of black and green belts and include information on how these individuals and ideals benefit industry and efficiency.

COB6
Main 203

Occupational Safety Law: Content, Guidelines, Responsibilities and Rights

Bharatkumer Mekwan, COB
Faculty Sponsor: Nabarun Ghose

This presentation visits the origin of the Occupational Safety Law and provides details on its contents. Next, there is a consideration of inspection guidelines, prescribed by the law and the resultant responsibilities and rights of both employers and employees. Expert opinions and examples will be shared.

COB21
Main 209

Business Research and the Global Environment

Brian Reid, COB
Faculty Sponsor: Patricia Abels and Joseph Martelli

The presentation includes an overview, teaching and practical application of business research. Methods,

how to obtain information, a brief explanation of SPSS and its capabilities, and the overall procedure of doing business research are covered. The application portion of the presentation will talk about the changes in the Global 500 companies and possible implications to the United States. Examples of this would be changes in manufacturing and where these jobs are going, where the United States is growing and possible reasons why, and the implications these changes bring to the United States.

CPHM25
Main 212

An Economic Evaluation of the Treatment and Control of Asthma Utilizing MTM Services

Courtney Kahl, Monica Hogrefe, CPHM
Faculty Sponsor: Joseph Crea

This presentation is based on an economic evaluation of the treatment and control of asthma. The perspective of the study was from that of a third-party payer considering insuring the use of MTM (medication therapy management) services to effectively treat and manage asthma patients. MTM services involve the collaboration of patients and their health care professionals to promote the proper use of medications in order to optimize therapeutic outcomes. The study compared the cost of asthma management with and without the use of MTM services. The results of this study will provide insurance companies with the most cost-effective way to manage a person's asthma.

COB11
Main 213

Stark Laws: The Hedge Around Health Care Professionals Making Legal Counsel Inevitable and a Disciplinary Action in the Health Care System

Deepali Jain, Chintan Shah, COB
Faculty Sponsor: James Wilkins

This presentation is based on "Stark laws," one of many regulatory health care requirements that impact the system. To increase awareness among health care management professionals, students composed a research paper on this topic and presented their findings at the International Academy of Business and Public Administration Disciplines, Florida. Their work was published in the conference proceedings.

COB17
Main 216

Whether the Recession Affects the Number of Insured and Uninsured (health insurance) People in United States or Not?

Arpit Patel, COB

Faculty Sponsor: Joon Young Song

This presentation is based on the current recession and the number of insured and uninsured citizens. Recession, high cost of health care and uninsured people are related to one another. A study of the relationship between recession and uninsured people in various years will be presented. The presenter will correlate percentage changes of GDP in each year with percentage change in uninsured people with different age groups.

COB1
Main 300

The Rotaract Club's Experience at Rotary International's Uniendo Conference

Allison Bowers, Stephanie Heydinger, Joseph Howison, Stacy Walterbusch, Tiffany Umin, COB

Faculty Sponsor: Robert Rustic

At the end of January, eight UF students traveled to Guatemala and participated in Rotary International's annual Uniendo Conference. At the conference, students were responsible for gathering information to bring back to the Rotary clubs in Findlay's district as well as participating in roundtable discussions on microcredit, potable water, etc. While in Guatemala, students also performed several service projects. This presentation will discuss and share the experiences the group had while on the trip.

COE6
Main 301

A New Way to Teach Ohio History

Gina Heckel, COE

Faculty Sponsor: Kim Forget

This presentation will introduce the audience to an informational trade book series on Ohio history. In addition, the presenter will reflect upon the process that occurred with developing such a book series.

CPHM1
Main 305

Inositol Trisphosphate Kinase Modulates Epidermal Growth Factor-Stimulated Cell Motility

Kirat Shahiwala, CPHM

Faculty Sponsor: Chandra Sekar

Epidermal growth factor [EGF] plays an important role in cell migration. Understanding the biochemical steps involved in this pathway may lead to novel therapies for cancer and wound healing. EGF binding to its receptor leads to the breakdown of phosphatidylinositol (4, 5)-bisphosphate and generation of inositol (1,4,5)-trisphosphate [IP₃]. In this study, using an IP₃-kinase inhibitor and siRNA methodology, we investigated the effect of IP₃ to IP₄ conversion on EGF-stimulated cell motility and conclude that inhibition of this step leads to decreased cell motility.

Poster Presentations (Croy Gymnasium)

COB4

Advantages and Disadvantages of Independent Living Services for Foster Children

Tiffany Zehender, COB

Faculty Sponsor: Robin Walters-Powell

The purpose of this presentation is to discuss the advantages and disadvantages of independent living services for foster children. This presentation will consider, from a pre-existing group, different areas of skill foster children are doing better in and which need more work. There will be a conclusion on what can be done to make the children perform well in all areas.

COB8 (Judged)

What is the Difference in Tobacco Advertising and Store Placement of Tobacco Products in Rural and Urban Areas of India?

Darshitkumar Patel, Khushboo Patel, Arpit Patel, COB

Faculty Sponsor: Josephine Kershaw

This presentation is based on an environmental scan of tobacco advertising and promotions at different locations in rural and urban areas. In 2003, India adopted the Cigarettes and Other Tobacco Products Act, which restricted tobacco marketing and consumption. The results of this environmental scanning will provide information regarding compliance with the 2003 tobacco products law as well as differences in tobacco advertisements and promotions between rural and urban areas. Environmental scanning is important for India to understand the current situation, and it might be helpful to develop global tobacco control policies, as tobacco companies expand their markets to non-U.S. consumers around the world.

COB13 (Judged)

The Effects of Yoga Curriculum on Youth Groups Affected by Parental Domestic Violence

Patience Moss, COB

Faculty Sponsor: Robin Walters-Powell

The purpose of this presentation is to identify the effects of incorporating a yoga-based structure for youth and young adults affected by parental domestic violence. The research performed and data collected will help provide and teach a curriculum designed to decrease violence,

increase concentration, provide an outlet for reducing stress and help develop coping skills for young victims of parental domestic violence. The research group consists of youth that participate in a children's group within a local agency and other research and data collected from various sources that have implemented this type of curriculum into their organization's structure.

COB19 (Judged)

Home-Based Therapy Effectiveness

Sasha Collins, COB

Faculty Sponsor: Robin Walters-Powell

This presentation will explore the effectiveness of home-based therapy. A survey provided to clients that have finished therapy six months ago will be compared to their Ohio Scales scores before and after treatment. Lastly, there will be an exploration of programs that they have since been established.

COE3 (Judged)

LAMP: Literacy and Mentoring Partnership with Van Buren Elementary School

Mackenzie Wenner, Samantha Cohen, COE

Faculty Sponsor: Dorothy Copas

The presentation will discuss UF students' experiences as mentors for elementary students at Van Buren. There also will be a reflection of how it has impacted the participants as well as prepared them for future field experiences and the teaching profession.

COE4 (Judged)

COE Ambassadors Host Chinju University Students from South Korea

Jordan Kirwen, Jessica Burkett, COE

Faculty Sponsor: Dorothy Copas

Eighteen teacher education students served as ambassadors to 18 students from the Chinju University, South Korea (CUE). This experience began in the fall 2009 semester, as Chris Sippel of international education studies paired the Korean and UF COE students in teams. Contact was initiated by UF students via e-mail, and participants developed friendships through the fall semester. During the spring 2010 semester, CUE students spent one month on the UF campus and experienced classes, activities and field experiences under the direction of Chris Sippel and Dr. Chris Moser. The presentation will discuss the exceptional educational partnership developed between UF ambassadors and the CUE students.

COE5 (Judged)

Out of the Box

*Karlie Trusty, Justine Elton, Gina Brown, COE
Faculty Sponsor: Dorothy Copas*

Students participating in the COE Ambassador Program met 18 students from South Korea and will discuss their experiences in bridging the gap between U.S. culture and theirs. Americans tend to place the world in a box, and by being a part of this program, participants opened their eyes to what other countries have to offer.

COHP2 (Judged)

Traumatic Bilateral Posterior Knee Dislocations with Multi-Ligamentous Injuries: A Case Report

*Maria Steinemann, COHP
Faculty Sponsor: Jean Weaver*

The purpose of this case report was to document the progression of a patient receiving physical therapy services for functional limitations as a result of an accident in which the pedestrian patient was struck by a vehicle traveling at approximately 54 miles per hour. A documented overview of surgical and rehabilitation interventions following the accident will be provided. There is no established protocol for rehabilitation of the specific injuries sustained by the subject of this case report. The student physical therapist provided rehabilitation of the patient based on research evidence of other orthopedic knee injuries. Although this was not an experimental study and there was no proven relationship between the interventions and effects, the documentation of this specific patient is valuable to the field of physical therapy as it may provide other physical therapists with a baseline of where to start in the rehabilitation of patients with similar injuries.

COHP3 (Judged)

The Impact of Classical Ballet Training on Balance and Strength in Children with Physical Developmental Disabilities

*Amber Daniels, Katrina Van Ostrand, Abigail Schwab, Diane Flowers, COHP
Faculty Sponsor: Sharon Walsh*

Eight children with various developmental disabilities were recruited for a research study investigating the effects of a six-week classical ballet training on balance and strength as measured by hand-held dynamometry and the Pediatric Balance Scale. Ballet classes were held

two times per week for 90-minute sessions. Each ballet session was tailored to each child's ability level. A typical session consisted of warm-up, stretching, work at the barré and jumping. After six weeks, significant positive changes were noted in the single limb stance portion of the Pediatric Balance Scale. No significant changes were found in strength measures of hip extension, hip abduction, knee extension or plantarflexion.

COHP4

Alternative Therapy in Hospice Settings: A Focus on Therapy Animals

*Niki Sidle, COHP
Faculty Sponsor: Robin Walters-Powell*

This presentation focuses on using animals as an alternative therapy in a home health and hospice setting. In collaboration with Bridge Home Health and Hospice, the benefits and complications, as well as the economics and practicality, of an animal presence will be researched and reported.

COHP5 (Judged)

The Effectiveness of Behavior Modification Therapy, Using a Level System, Within the Population of Teenage Girls in a Group Home Setting

*Krystina Strimpel, COHP
Faculty Sponsor: Robin Walters-Powell*

The research encompasses the effectiveness of Behavior Modification Therapy, in correlation with teenage girls living in a group home setting. The research was first conducted by developing a level system that will help determine whether positive or negative reinforcement tactics are most effective with adolescent teenage girls. Although general in nature, the punishments or consequences that were enforced fluctuated depending on the maturity, comprehension level and psychological function level of the resident. After the level system was introduced, the girls' progress was documented and the most suitable results were examined for each girl. The use of positive reinforcement to praise good behavior, and the consequences of mal behavior, within this age and population of girls, will be presented.

COHP6 (Judged)

Overstretching of the UE Resulting in Radial Nerve Palsy: A Case Study

*Mandy Magoto, COHP
Faculty Sponsor: Jean Weaver*

Poster Presentations (continued)

To date, there is an abundant amount of research performed on injuries to the radial nerve. However, most of these cases entail trauma to the limb involving a fracture to the humerus and/or surgical repair or the compression of the nerve by a muscle, tendon or fascia. This case is unique in that it involves a traumatic injury to the radial nerve acquired through overstretching of the left upper extremity resulting in radial nerve palsy. Demonstration of physical therapy treatment progression from twelve days post injury until discharge for services is outlined with interventions including fine motor manipulation, gross motor therapeutic exercises, myofascial release and modalities. The patient experienced improvements in wrist extension and ulnar deviation range of motion, muscle strength and return to normal function as measured by the DASH Self-Report Scale.

COHP7

Research Project at Crime Victim Services

April Dill, COHP

Faculty Sponsor: Robin Walters-Powell

Crime Victim Services (CVS) provides victims who have received assistance with a quality assessment survey at the close of a case. The purpose of the research is to evaluate CVS's 2009 victim surveys from Allen and Putnam Counties, Ohio, to determine whether the survey data statistically demonstrates a positive correlation with the intended results of services. CVS studies if victim reports improve in four targeted outcome areas (safety, healing, justice and restitution), and if so, to what degree victims benefit. Tasks included collecting and assessing surveys, entering survey data into the statistical Package for the Social Sciences (SPSS) software, determining solutions for data entry problems, analyzing and discussing data results with CVS supervisor and executive director and presenting data results to CVS staff and board with recommendations for improvement to increase the number (quantity) and positive responses (quality) on surveys for victims.

COHP8 (Judged)

Free Volunteer-Staffed Mental Health Care Clinics

Juli Madden, COHP

Faculty Sponsor: Robin Walters-Powell

In light of today's economy and the numerous budget cuts throughout the mental health care community, the concept of a free mental health care clinic has become an attractive as well as a practical solution to the already over-burdened system. A free clinic would be staffed by volunteers and cater to those who are uninsured or

underinsured. There is a growing population of individuals and families in desperate need of mental health services that cannot or do not seek help. The concept of the free clinic would not be competitive with existing agencies but would target those who would not normally seek any services at all from the more traditional mental healthcare options.

COHP9

Sensory Integration Dysfunction

Stephanie Short, COHP

Faculty Sponsor: Robin Walters-Powell

One in every five children has a form of sensory integration dysfunction. This disorder is a neurological disorder in which a person's brain does not organize and process sensations properly. Teachers especially are having a difficult time in their classrooms knowing how to work with children with the disorder. This research project will help teachers be more aware of and start implementing sensory integration into the classrooms, thus decreasing sensory seeking behaviors within children.

COHP10 (Judged)

How to Increase the Efficiency of Hospital Coding for Advanced Directives

Michelle Huff, COHP

Faculty Sponsor: Robin Walters-Powell

This is a study on the efficiency of coding for advanced directives on a patient's chart in a hospital setting. Importance is placed on the correct coding on a patient's chart for advanced directives. Hospital staff needs to be aware of the patient's wishes, such as: full code, meaning there is no limit on life sustaining treatment; do not resuscitate (DNR), the patient will receive no resuscitation or CPR if cardiac or pulmonary arrest occurs; patients will be treated as medically indicated; DNRCC (comfort care) the patient will receive no CPR, no extraordinary measures and no new treatment modalities; no decision, neither patient nor family has made any choice from the above, at which time the patient remains at full code status. Overall, this study hopes to achieve an efficient method of maintaining proper code status on patient charts in a hospital setting.

COHP11

The Biggest Loser

Monica Boehler, COHP

Faculty Sponsor: Robin Walters-Powell

The purpose of this study is to identify the real importance of providing a well-rounded diet and exercise program at a group home for youth. Particularly, this study will capture the effectiveness of a controlled diet and exercise plan and the impact this may have not only on the physical health, but also for the psychological state of the teenage mind.

COHP12 (Judged)

Comparing Knee Flexion Angles During a Drop Landing and Brace Compliance While Wearing a Functional Knee Brace in Physically Active Females

Allyson Hoops, Tasha Schill, COHP

Faculty Sponsor: Susan Stevens

Injury to the anterior cruciate ligament (ACL) is becoming increasingly more common in athletics. Although these injuries occur in both genders, females are more likely to suffer an ACL injury than their male counterparts. Landing with knees and hips extended is a risk factor in non-contact ACL injuries. The purpose of this study is to compare the Donjoy 4titude and the Donjoy Female Fource on landing position, specifically knee flexion angle. Also examined will be brace comfort and compliance. Subjects will include 18-30-year-old females with no time loss lower extremity injuries requiring a functional brace. The subjects will perform a 60 cm single leg drop landing while wearing each of the two braces and no brace. The landings will be video analyzed with Dartfish ProSuite to measure differences in knee flexion angles. A survey will also be completed to determine the comfort and compliance of each brace.

COHP13 (Judged)

What is the Best Outcome Form to Use in the Mental Health Profession?

Deb Howell, COHP

Faculty Sponsor: Robin Walters-Powell

It is state-mandated to assess the outcomes of intervention in the field of mental health. The need for increasing awareness on how to measure the effectiveness of individual case management is emphasized in this research. Despite the widespread application of the concept of quality of life in mental health evaluation, it has been observed that quality of life measures do not reliably capture changes expected to result from intervention efforts. Many forms are too difficult for those with mental illness to comprehend and too overwhelming to complete. The presentation will discuss various forms and propose a tool that won't be so cumbersome for the chronically mentally ill to complete.

COHP14 (Judged)

Patient-Centered Care

Lisa Kochan, COHP

Faculty Sponsor: Robin Walters-Powell

This presentation will focus on the effectiveness of allowing residents in a nursing home environment to sleep through the night. At present, residents are awakened every two hours for bed checks and medication rounds. The presenter will focus on the beneficial physical and mental health results of uninterrupted sleep. This study will contribute toward the efforts of the continued implementation of patient-centered care that is a priority in the field of geriatric residential living. Ultimately, the goal is for the resident's rights to autonomy.

COHP15 (Judged)

Acute Effects of Pre-Practice Stretching Protocols on Hamstring Flexibility in Collegiate Football Players

Katherine Greisiger, Stephanie Smith, Kali Conger, COHP

Faculty Sponsor: Susan Stevens

It has been suggested that a lack of flexibility may predispose an athlete to injury and significantly affect performance. There are several stretching techniques used clinically to increase joint range of motion with proprioceptive neuromuscular facilitation (PNF) becoming the most common. The purpose of this study was to determine if unassisted PNF stretching with a Jump Stretch Flex Band® is as effective as assisted PNF stretching with an athletic training student to increase hamstring flexibility. Hamstring flexibility was measured using the Active Knee Extension Test (AKE) before and after each session's protocol. Our data supports the idea that there is no difference between the two types of PNF stretching protocols to increase hamstring flexibility; therefore, in-season collegiate football players can achieve flexibility gains with either PNF stretching with an athletic training student or using a band.

CPHM2 (Judged)

An Evaluation of Compounding Curriculum in U.S. Pharmacy Schools

Joshua Unsworth, Lin Zheng, Luke Fawcett, Amanda Rosario, CPHM

Faculty Sponsor: Sandra Earle

A noticeable increase in compounding throughout the nation has been seen over the past decade. There is an increase in the demand for personal and individualized care, where desired strengths, preparations, and/or

Poster Presentations (continued)

routes are not available through manufacturers. The working hypothesis is that U.S. pharmacy schools are not providing adequate education for the increasing demands of compounding within the professional field of pharmacy. Questions in the survey will include basic demographics of the school, compounding courses offered and requirements of the students for additional compounding experiential hours outside of class. Presenters take the data from these surveys and analyze them to see how the pharmacy schools in the United States are incorporating compounding education into their curriculums.

CPHM3 (Judged)

Diabulimia

Elizabeth Ray, David Saltz, Casey Cowles, Keith Smith, CPHM

Faculty Sponsor: Debra Parker

Young adults with type 1 diabetes have been known to intentionally withhold insulin therapy in an attempt to lose weight. This eating disorder is known as diabulimia, and its consequences are serious and life-threatening. Patients who practice insulin omission have higher incidences of recent hospitalizations, emergency room visits and hyperglycemic events. The primary aim of this study is to assess the attitudes of patients with type 1 diabetes toward diabulimia. Secondary goals for this study are to determine whether education influences attitudes toward diabulimia, assess the prevalence of diabulimia in patients ages 18-30, and to compare reported male versus female prevalence. Surveys and a request to participate in a brief education program were sent to type 1 diabetes patients at Blanchard Valley Medical Association, The University of Findlay and other schools. Participants were asked to complete the survey assessing their attitudes towards diabulimia and resurveyed after the educational program.

CPHM4 (Judged)

Patient Counseling in a Community Setting: Assessing Impact on Patient Knowledge, Adherence and Blood Pressure Control

Renee Barnhart, CPHM

Faculty Sponsor: Lori Ernsthansen

Hypertension is identified as one of the most significant risk factors for cardiovascular disease. Increasing awareness of hypertension and improving control of blood pressure with appropriate treatment are critical public health initiatives to reduce cardiovascular morbidity and

mortality. Pharmacists in a community pharmacy setting can make an important impact on controlling a patient's hypertension by increasing the patient's knowledge about his medications. A student pharmacist assessed patients' knowledge and adherence to their blood pressure medications and provided an intervention to improve both, with expectations of better blood pressure management. Patient satisfaction was assessed with a post intervention survey. No statistically or clinically significant difference in systolic blood pressure was found between the control and intervention groups. However, of the patients who completed the post survey, most found the intervention to be helpful and would use the service if it were offered to them at no charge.

CPHM5 (Judged)

“HOPE” Health Outcome Project Evaluation

Amanda McMullen, Raquel Morales, Natasha Niemeyer, Jennifer Remot, CPHM

Faculty Sponsor: Debra Parker

The presentation will assess the relationship between statin transition (low potency) and LDL cholesterol control. Students hypothesized those insurance driven switches from high to low potency cholesterol medications will result in adequate cholesterol control. The presentation will present the results of a retrospective review Blanchard Valley Medical Associates and Toledo Cardiology center patient charts assessing current medication and cholesterol levels.

CPHM6

Assessment of Patient Adherence in a 340B-Funded Clinic

Stephanie Walchli, LaNikki Thomas, CPHM

Faculty Sponsor: Debra Parker

Asthma is a prevalent disease among patients of Allen County Health Partners, a federally funded clinic serving a low-income, low-literacy population. The purpose of this project is to assess baseline markers of asthma medication adherence in this clinic's patient population. Asthma medication adherence will be reassessed following a brief pharmacist-provided educational intervention. Data from this research project may be used to support the implementation of a program targeted at improving this area.

CPHM7 (Judged)

Comparison of Evidence-Based Hypertension Guideline Model to an

Alternative Model

Meghan Malone, Caryn Hinders, Amy Sanchez, Raquel Morales, Veronica Ciaccia, CPHM
Faculty Sponsor: Joseph Crea

Many in the health care field have heard of medication therapy management (MTM), helping a patient get the most benefit and least harm from his or her medications. This is done primarily by a pharmacist sitting face-to-face with one patient. MTM is done in various settings: hospitals, physician offices and pharmacies. Is MTM worth the time and money? The objective of this project is to create a pharmaco-economic model from evidence-based guidelines that can be used to determine if MTM for hypertension is cost effective. Additionally, the results of this model will be compared to an alternative model published in the literature.

CPHM8 (Judged)

Health Literacy and Adherence to Asthma Medications in a Low-Income Community Health Clinic

Matthew Markiewitz, Michael Carter, CPHM
Faculty Sponsor: Debra Parker

Asthma is a prevalent disease among patients of Allen County Health Partners, a federally funded clinic serving a low-income, low literacy population. The purpose of this project is to assess baseline markers of health literacy, asthma literacy and asthma medication adherence in this clinic's patient population. Asthma literacy will be reassessed following a brief pharmacist-provided educational intervention. Data from this research may be used to support the implementation of a program targeted at improving these areas. The design of this project will be a cross-sectional retrospective chart review with a concurrent patient survey. Some objectives of this research include assessing the knowledge of asthmatic patients about their disease before and after a pharmacist intervention and assessing general health literacy using validated tools.

CPHM9 (Judged)

Smoking Cessation Interventions and Outcomes in a Multi-Specialty Practice

Nathaniel Bucher, Christine Lohr, CPHM
Faculty Sponsor: Debra Parker

Retrospective chart review and patient completed survey for any current or former smoker (within the previous 12 months) will be presented.

CPHM10 (Judged)

Influence of the Source of Information About the Safety and Efficacy of the 2009 H1N1 Vaccine on Vaccination Rates: A Survey of the General Public and Health Care Workers in Northwest Ohio

Ashley Davis, Jessica Geiger-Hayes, CPHM
Faculty Sponsor: Laura Perry

The 2009 H1N1 flu was first detected in humans in the United States in April 2009 and was declared a pandemic by the World Health Organization (WHO) in June 2009. There are many myths circulating about the safety of the H1N1 vaccine through blogs, e-mails and the media. Students surveyed and compared the opinion of the general public and health care workers relating to vaccine safety and efficacy. The primary aim of the study will determine if the myths about the 2009 H1N1 vaccine have influenced the decision to be vaccinated or if the media has succeeded in dispelling these myths. A secondary aim is to examine the quality of information being circulated in Northwest Ohio.

CPHM11

A Cost-Effectiveness Evaluation of MTM services in DM2 Patients vs. Traditional Disease State Management

Amanda Kobylinski, CPHM
Faculty Sponsor: Joseph Crea

Studies have shown that interventions by health care providers help patients with diabetes make the behavioral changes needed to improve glycemic control. Because pharmacists are so readily available to patients, more so than any other health care provider, pharmacists are in an advantageous position to provide continued support to patients with diabetes. In this study, students used an evidence-based financial model to determine the cost-effectiveness for treatment of type 2 diabetes patients that participate in a pharmacist-run Medication Therapy Management clinic versus patients that receive traditional physician-managed care. An evidence-based financial model was created from a review of the literature for the current recommended treatment guidelines for DM2. The average cost-effectiveness ratios were then calculated. The results will be presented.

Poster Presentations (continued)

CPHM12 (Judged)

Comparing The Genotoxic Effects of Amiodarone and Mitomycin C (MMC)

*Amanda Fesko, Alyssa James, Samuel Gothke, CPHM
Faculty Sponsor: Alexander Vaglenov*

The aim of this study was to investigate the possible genotoxic/carcinogenic effects of amiodarone and MMC on human lymphocytes after in vitro exposure. Amiodarone CAS # 1951253, anti-arrhythmic drug, has not been investigated in vitro for genotoxicity. There is weak evidence suggesting that this drug is capable of generating free radicals, as well as alterations of gene expression, apoptosis and transcriptional remodeling. Genome susceptibility was evaluated by the cytokinesisblock micronucleus cytome assay. Human lymphocytes were treated with different concentrations of amiodarone as follow: 0.5, 1.5, 2.5, 3.5 and 4.5 ug/ml. A comparison of the biomarkers (proliferative index, micronuclei, nuclear bridges, nuclear buds, apoptotic and necrotic cells) has been done with MMC at the same study in vitro design. The following concentrations of MMC were given: 0.025, 0.05, 0.1, 0.15, and 0.2 ug/ml.

CPHM13 (Judged)

An Evaluation of Antibiotic De-Escalation Rates in Patients with Positive Microbial Cultures Prescribed Piperacillin/Tazobactam and Imipenem/Cilastatin

Hamid Sheikhi, CPHM

Faculty Sponsor: Bradley Shinn

Piperacillin/tazobactam (Zosyn®) and imipenem/cilastatin (Primaxin®) are two common antimicrobial agents that are used empirically in many patients with a suspected or active infection secondary to an unidentified organism. This therapy is chosen because it covers a wide variety of possible pathogens. Once the causative organism is isolated and identified, antimicrobial therapy should be adjusted to target the specific organism, which is ideally the most narrow spectrum, cost-effective agent to which the organism is sensitive. This is termed de-escalation of therapy. The primary objective of this study was to evaluate the proportion of patients with positive cultures for Gram negative bacteria, who were originally prescribed piperacillin/tazobactam or imipenem/cilastatin and had therapy de-escalation performed within five days from when the culture was drawn. A secondary objective focused on the choice of alternative antibiotic(s) during the de-escalation phase of the study.

CPHM14 (Judged)

A Review of Acetaminophen-Induced Liver Toxicity in Light of Recent FDA Advisory Committee Recommendations

Bethany Tjolsen, CPHM

Faculty Sponsor: Bradley W. Shinn

The risk of liver toxicity secondary to inappropriate use of over-the-counter (OTC) acetaminophen (APAP) has come under heightened scrutiny by the FDA. In June 2009, a joint advisory committee of the FDA developed a number of recommendations with the goal of decreasing the number of APAP overdoses in the U.S. This work reviews the current epidemiology of APAP overdoses, mechanisms of toxicity and factors that increase the risk of an APAP overdose. Advisory committee recommendations are also reviewed and practical guidelines are provided to assist both clinical practitioners and consumers in the rational use of APAP containing products.

CPHM15 (Judged)

Analysis of Acetaminophen Prescribing in an Elderly Population in Rural Ohio

Susan Stephenson, Nicole Wetoskey, CPHM

Faculty Sponsor: Laura Perry

Living with daily pain can impact a geriatric patient's quality of life and lead to other conditions such as depression, insomnia and social withdrawal. Consequently, routine use of acetaminophen is common in the long-term care setting. Presently, the maximum recommended daily dose of acetaminophen is 4,000 mg but in response to the concern of acetaminophen overdose, a statement by the FDA panel has recommended that the maximum daily dose of acetaminophen should be decreased to 2,600 mg in select groups. With this recent warning, it is imperative to evaluate the use of acetaminophen in elderly populations as the elderly are at a high risk for acetaminophen toxicity. The following study is designed to evaluate prescribing habits and usage of acetaminophen in elderly residents of a long-term care facility.

CPHM16 (Judged)

Herbal Supplement Use In Our Community

Jennifer Fehl, CPHM

Faculty Sponsor: Chandra Sekar

A discussion of the use of Niacin, Red Yeast Rice and Vitamin D in the community, as they are the largest selling supplements in our pharmacy, will be provided. The presenter hypothesized that while patients do use these supplements, they are not knowledgeable about proper use and adverse effects of these products. Surveys to determine patient knowledge and information on these products as well as volume reports will be used to gather information and test the hypothesis.

CPHM17 (Judged)

Comparative Genotoxic Effects of Ibuprofen

Sheena Burwell, CPHM

Faculty Sponsor: Alexander Vaglenov

Currently, the results of ibuprofen's genotoxic potential are contradictory. This drug, tested by several different endpoints has indicated significant positive results for sister chromatid exchange (SCE) in bone marrow in mice. Other classical endpoints such as the Ames test, or after in vivo clinical use by evaluation of the SCE on human lymphocytes, have been negative. Additionally, there is no report based on in vitro exposure and assessment of the genotoxic effect on human lymphocytes to ibuprofen. The aim of this study was to evaluate in vitro the possible genotoxic effect of ibuprofen on human lymphocytes. Cytokinesis block micronucleus cytome assay was used as an endpoint. Peripheral human lymphocytes were treated with different concentrations of ibuprofen as follow: 1, 10, 20, 40, 80, 160, 320, and 1000 µg/ml. Gentamizin was used as a positive control.

CPHM18 (Judged)

Signaling in Endothelial Cells and Cardiovascular Disease

Lubna Kousa, Hamid Sheikhi, CPHM

Faculty Sponsor: Chandra Sekar

Endothelial cells line the chambers of the heart and vasculature. Cilia present on the surface of endothelial cells act as "pressure sensors" and determine the fluid shear stress determined by blood flow. Alterations in sheer stress play a critical role in cardiovascular disease. Both activation of sheer stress and a specific protein receptor (cholinergic) on the cell surface leads to calcium mobilization. In this research project, we plan to study the effect of both an activator of cholinergic receptor and sheer stress on calcium mobilization in three different cell lines: a wild type (WT) with intact cilia, a wild type that is missing a sensor protein for cilia (Pkd1) and a cell type lacking cilia (Tg737). More detailed understanding of the mechanism underlying sheer stress response will lead to better treatment options for cardiovascular disease.

CPHM19 (Judged)

Recognition of Drug Interactions by Pharmacists and Students

Regina Wowk, Lauren Courie, Amanda Lee, CPHM
Faculty Sponsor: Sandra Earle

As a pharmacist, it is essential to be able to recognize potential drug-drug interactions that may appear in patient medication therapy. Ohio pharmacists and pharmacy students attending The University of Findlay were surveyed to gather information regarding their knowledge of drug interactions. The survey consisted of 22 pairs of drugs intended to be co-administered. The participant was asked to choose the most appropriate response regarding the distribution of these medications. The objective of this study is to assess whether years away from graduation affect the ability of participants to recognize potential drug-drug interactions. Responses will be considered acceptable or unacceptable. Early research shows that pharmacists are more able to correctly assess the given drug combinations in comparison to pharmacy students. The results of this survey could be helpful in possibly modifying school curriculum or continuing education programs for pharmacists.

CPHM20

A Description of OTC Medication Consultations in a Community Pharmacy

Danny Miller, CPHM

Faculty Sponsor: Bradley Shinn

Pharmacists in the community setting have the opportunity to advise patients regarding the use of over-the-counter (OTC) medications. However, pharmacists may encounter resistance to appropriate recommendations due to both patient and physician misconceptions about the products, as well as concerns about the pharmacists' training and background. Aggressive brand name advertising is part of the problem. Many prescribers are confused about the specific contents and therapeutic actions of products that they recommend. In many cases, the recommended product does not correlate with the patient's symptoms. This study examines the number and type of OTC interventions and clarifications that take place in a typical community pharmacy over a two-month period of time.

Poster Presentations (continued)

CPHM21 (Judged)

A Retrospective Evaluation of a Weight-Based Heparin Dosing Protocol

Kelly Podolak, CPHM

Faculty Sponsor: Bradley Shinn

An intravenous infusion of unfractionated heparin is an important treatment for deep venous thrombosis and pulmonary embolism. Intravenous heparin is challenging to dose and may result in adverse events, such as bleeding or the extension of a thrombotic episode. A national patient safety goal issued by The Joint Commission in 2008 recommended the standardization of heparin dosing and monitoring to help minimize these adverse effects and maximize the heparin efficacy. A revised weight-based heparin protocol was initiated Jan. 1, 2009, at a 100-bed community hospital. This study compares achievement of time to the first therapeutic activated partial thromboplastin time with the new heparin protocol versus the previous heparin protocol.

CPHM22

Long-Term Care: Who Supplies Your Medications?

Erin Stafford, Samantha Herdrich, Brande Bunish, CPHM

Faculty Sponsor: Charlie Mosler

A discussion about long-term care facilities and the supplier of their medications and their satisfaction with their current service will be given. The presenter also will gather information on where they receive answers to their drug information inquiries, whether it is from their current provider or another source. Data will be assessed to determine the most common form of medication supply to LTC facilities, and results will be used to evaluate the safety, efficiency and the facilities' satisfaction with that system.

CPHM23 (Judged)

Learning Styles of Pharmacy Students, Faculty and Preceptors

Kenneth Mueller, Travis Plumley, CPHM

Faculty Sponsor: Sandra Earle

Assignments, teaching methods and evaluation tools used in the classroom may favor one type of learning style over others. The VARK (Visual Aural Read/Write Kinesthetic) learning styles assessment tool has been shown to be helpful in evaluating learning styles and understanding preferences for certain assignments and activities. Students, faculty and preceptors of The University of Findlay College of Pharmacy were asked to complete the

VARC learning styles assessment. Data generated from the online VARK questionnaire will be reported. This data will be compared with various oral and written evaluations throughout the pharmacy curriculum to determine if there is a correlation between learning style and achievements on certain types of evaluations. Subsequent data generated could influence future pharmacy school curricular development.

CPHM24 (Judged)

Study on Warfarin Genotoxicity

J. Michael Gulley, Ave Maria Orlando, Samuel Gothke, CPHM

Faculty Sponsor: Alexander Vaglenov

Warfarin is an anticoagulant that has never been investigated for genotoxicity. Previous in vivo or in vitro studies suggest that Warfarin is not capable of generating ROS, inducing apoptosis, or growth inhibition, alone. However, Warfarin may enhance the ability of such cellular events secondary to a stimulus like ionizing radiation. The aim of the study was to investigate the possible genotoxic effect of Warfarin. Bleomycin was used as a positive control, and in combination with Warfarin for lymphocytes exposure to both agents. Susceptibility of the lymphocytes to each agent or to combined exposure was assessed in vitro by the cytokinesis block multi-endpoint assay. The following biomarkers have been evaluated: proliferative index, micronuclei, nuclear bridges, nuclear buds, apoptotic and necrotic cells. The effect of Warfarin on the above biomarkers was assessed after exposure to the following concentrations: 1, 5, 10, 15, 30 and 60 μ g/ml, & bleomycin: 0.025, 0.05, 1.5 and 10 μ g/ml respectively.

CPHM26

An Economic Evaluation of the Treatment and Control of Asthma Utilizing MTM Services

Courtney Kahl, Monica Hogrefe, CPHM

Faculty Sponsor: Joseph Crea

This presentation is based on an economic evaluation of the treatment and control of asthma. The perspective of the study was from that of a third-party payer considering insuring the use of MTM (medication therapy management) services to effectively treat and manage asthma patients. MTM services involve the collaboration of patients and their health care professionals to promote the proper use of medications in order to optimize therapeutic outcomes. The study compared the cost of asthma management with and without the use of MTM services. The results of this study will provide insurance companies with the most cost-effective way to manage a person's asthma.

CPHM27 (Judged)

Attenuating Oxidative Damage through Exogenous Delivery of Acylated Glutathione Derivatives

Mira Chun, Christina Kopa, Natasha Niemeyer, LaNikki Thomas, CPHM

Faculty Sponsor: Richard Dudley

Oxidative stress is suspected in the development of many diseases including diabetes, Alzheimer's, cardiovascular and renal disease. Glutathione (GSH) is produced by cells in response to oxidative stress, yet can be quickly depleted under extreme stress. Previous studies have shown that fatty-acylation of peptides can enhance their cellular delivery. The presenters will synthesize fatty-acylated analogs of GSH in an attempt to identify a scavenger capable of crossing the plasma membrane and prevent oxidative damage. Oxidative stress will be induced in Caki1 cells using menadione, a known generator of free radicals. Cellular GSH synthesis will be inhibited by buthionine sulfoximine. Cell viability will be measured using the MTT viability assay and the Cyquant proliferation assay. Total cellular GSH levels will be measured with the mGSHGlo luminescence assay. The presentation will identify novel compounds with broader applications in reducing or preventing oxidative damage.

CPHM28 (Judged)

Cytotoxic Effects of Tetracycline Analogs in HEI-OC1 Cells

Bradley Beavers, Zinkeng Asonganyi, CPHM

Faculty Sponsor: Richard Dudley

Ototoxicity is an adverse effect of several drugs including the antibiotic gentamicin. Gentamicin has been shown to induce apoptosis in House Ear Institute-Organ of Corti-1-cells (HEI-OC1 cells). An area of uncertainty is the effect of tetracycline (TCN) antibiotics on the auditory system. Doxycycline and a newer TCN analog tigecycline see routine clinical use. To address this uncertainty, student presenters performed viability studies on HEI-OC1 cells after incubations with doxycycline and tigecycline (25, 50, and 100 μ M) in culture for 72 hours. Doxycycline reduced cell viability by approximately 90 percent at all three concentrations while tigecycline treatment showed an average reduction in viability of 28 percent at tested concentrations. In order to elucidate a mechanism of cell death, additional experiments will be conducted: trypan blue exclusion, induction of apoptosis, western blot analysis probing for activated caspase enzymes and DNA fragmentation. Once identified, a preventative measure can be sought.

CPHM30 (Judged)

Increasing Patient Awareness Through Cholesterol Screenings Implemented by Student Pharmacists

Charlie Nedock, Shane Henry, CPHM

Faculty Sponsor: Lori Ernsthausen

Hyperlipidemia is a condition that requires patient education and monitoring in order for it to be managed effectively. Allowing pharmacists and pharmacy student interns to expand their roles into disease state monitoring by offering full lipid panels to patients during community health screenings may improve patient access to laboratory monitoring and allow for pharmacist intervention and patient education. Patients were solicited for voluntary, free, full lipid panel testing during community health screenings at a local mall. The cholesterol levels of 41 patients were evaluated via portable cholesterol monitors. Patients were then provided with their results and educated on the importance of maintaining appropriate levels and cholesterol management. Patient satisfaction with the service provided was assessed.

CPHM31 (Judged)

Minimization of Pharmaceutical Waste Release into Ecosystems via Nanotechnology

Vamsi Krishna Ramachandrapurapu, CPHM

Faculty Sponsors: Basu Sakar, Michael Homsher

The study considers the waste minimization of pharmaceuticals released into aquatic ecosystems, which creates imbalances among the flora and fauna populations. The human health effects from drinking polluted water may lead to toxic effects. USEPA has taken effective steps to minimize the toxicity through enhanced water purification procedures, but this is only a symptomatic treatment. An attempt should be made to suppress the root cause by minimizing the pharmaceutical waste released into the environment. This presentation presents effective measures to minimize a root cause of pharmaceutical waste release through nanotechnology pharmaceutical delivery. This technique lowers the amount of unwanted bulk raw materials and reduces the size of pharmaceutical doses, which eventually minimizes the amount of pharmaceutical waste released into ecosystems. This approach would decrease unintended pharmaceutical waste exposure to humans and the environment.

Poster Presentations (continued)

COS2 (Judged)

Making Existing Gas Stations Greener

Seth Hartings, COS

Faculty Sponsor: Timothy Murphy

The overall goal of this project was to look at turning an existing gas station green. Saving energy and money is an important part of “going green.” The station’s outdoor cooler needed to be put in the shade to save energy from direct sunlight, a wall in the store could be refinished to keep heat from the oven hitting the coolers and heat could be redirected throughout the store and pulled out during the summer. The last aspect of going green studied included putting magnets in the cooler doors to keep them from bouncing open. The ideas and results will be presented.

COS3

Sustainability of Marathon Gas Station

Kelly Walter, COS

Faculty Sponsor: Timothy Murphy

Due to a growing interest in sustainability, Marathon Oil Co. and The University of Findlay are working together to alter an existing gas station by making it environmentally friendly and energy efficient. This project will be carried out in hope that some of these suggested solutions will be applied to all gas stations across the nation. Topics covered include identifying solutions to reduce solid waste and water pollution, improve water conservation and decrease chemical usage, and researching the possibility of utilizing a living roof. Most of the solutions suggested are cost effective, offer a quick return rate and will provide environmental benefits.

COS8 (Judged)

Educate. Activate. Advocate ...

Bringing it Home

Amy Lack, Michael Pesato, COS; Chelsey Anglin,

Melissa Beaver, COLA

Faculty Sponsor: Crystal Weitz

This poster will showcase the experience and growth that came from the students’ trip to Chicago to attend the Global Village and Youth Leadership Conference. Students will show how the newly acquired skills were implemented in campus activities.

COS9 (Judged)

Estimates of Growth Rate and Age of Bullfrogs, *Rana (=Litobates) Catesbeiana*, in a Recently

Constructed Wetland in Northwest Ohio

Rebecca Lauer, Kintukumar Lad, Jeremy Mascaro, COS

Faculty Sponsor: Terry Schwaner

Larval growth and time to metamorphosis for the American bullfrog (*Rana catesbeiana*) vary with environmental conditions throughout the eastern United States. The aim of this study was to determine growth rates and ages of bullfrogs in Spurgat Wetland. Students marked 65 bullfrogs with pit tags and took body lengths of captured and recaptured frogs. The inner (smallest) toe was taken to estimate age by skeletochronology. Results verified three age groups at the wetland and indicated that bullfrog larvae in Ohio can develop from eggs and transform in the same season.

COS13 (Judged)

Multiple Approaches to Identifying Unique Lineage Distributions in the Black Mountain Dusky Salamander, *Desmognathus Welteri* (Gaudata: Plethodontidae)

Alicia Oberhaus, COS

Faculty Sponsor: Jessica Wooten

Students combined phylogeography and ecological niche modeling to examine unique cryptic lineages and to estimate the abiotic and biotic factors that may limit the geographic distribution of the Black Mountain dusky salamander, *Desmognathus welteri*, throughout the known geographic range in the Cumberland Plateau and mountains. Sequences totaling approximately 1,200 base pairs for the 12S valine transfer and cytochrome oxidase I portions of the mitochondrial genome were analyzed to create a phylogenetic hypothesis to delimit evolutionary relationships within this group. Maximum likelihood and Bayesian methods were used to reconstruct the phylogeny. Preliminary analyses revealed four unique clades partitioned by current stream drainage. There was no apparent indication of distinguishable morphological characteristics detected among the individuals distributed in the unique clades; however, a more extensive morphological investigation is underway. Ecological niche modeling, using presenceonly data, showed that abiotic requirements of temperature and precipitation limit the geographic distribution of *D. welteri*.

COS14 (Judged)

Improving Ammonia Removal with Biofilter in Swine Farrowing Rooms

Elizabeth Palmieri, Amanda Sterrett, COS

Faculty Sponsor: Ed Bonnette

This test investigated if adding a commercially available yucca schidigera extract (which binds to ammonia in animal wastes) into the oil bath of the biofilter will also bind ammonia in the air. To test this hypothesis, a small-scale biofilter that utilizes recycled soy oil, yucca schidigera extract, and straw was used to filter the air at a defined volume per minute. This biofilter was placed at floor level in rooms housing animals. Ammonia levels in the air were determined before and after use of the filter using an Ammonia STEL machine. The biofilter was operated once with only soy oil and another time with soy oil mixed with a yucca schidigera extract. In conclusion, ammonia levels in the air were found to be reduced by the addition of the yucca schidigera extract.

COS15 (Judged)

Enhancing Horse Hair Color

Jill Dentel, Sarah Thomas, Kayla Radin, COS

Faculty Sponsor: Ed Bonnette

The darkest hair color possible is a goal in certain breeds of horses. There are several different additives to help darken hair color. The purpose of this experiment was to test how well two commonly used products affect hair color. Twelve horses were randomly assigned to one of three treatments: Control, the spice paprika and a commercial product called Black as Knight. Two teaspoons of applesauce had to be given to all horses to entice eating the daily treatments as a top dress. All horses were given their regular hay and feed levels and kept on their assigned training program. Hair samples were taken from the horses before the trial and again in approximately the same spot after four weeks. Hair samples were analyzed for amount of color using a spectrometric method.

COS16 (Judged)

Bucket Color Effect on Water Consumption in Horses

Brian Dent, Austin Clark, Amy Lack, Kara Sheerer, COS

Faculty Sponsor: Ed Bonnette

An old wives' tale has suggested that horses drink more water out of a light colored bucket versus a darker colored one, but no research project previously explored this theory. Twelve horses were used in a study where water consumption was recorded twice each day for

four weeks using a light green and a dark blue bucket. Buckets were placed side by side on the same wall as the feed tub. Each week, bucket positions were rotated to make sure horses were not always drinking from the bucket closest to the feed. Horses were kept on standard feeding and exercise programs and buckets were cleaned according to the barn's standard operating procedures. Volume of water consumed and location were analyzed. Statistically, the horses drank more from lighter color buckets, but location had no effect.

COS17 (Judged)

Study in Laterality in Horses

Kara Sheerer, Elisa Gerkin, Bridgette Morltz, COS

Faculty Sponsor: Ed Bonnette

This study is to determine if a horse has a natural laterality (whether they are "left handed" or "right handed") or if laterality is influenced by the horse's training (or trainer). Determining laterality may help place a horse in a program for which it is more suited. For example, a "left handed" horse may be better in making left hand turns on a race track whereas a "right handed" horse may be better as a halter horse which makes more right turns. Twelve geldings and 12 mares will be randomly chosen for a series of tests. Horses will be observed in different gaits including walk and trot (in both directions). Next, horses will be observed while being walked and trotted on lead with a handler on both left and right side. Horses will move over obstacles in the last test.

COS18 (Judged)

In Vitro Experimental Approach for Modulation of Human Lymphocytes Susceptibility to Cadmium by Antioxidants

Samuel Gothke, COS

Faculty Sponsor: Alexander Vaglenov

Cadmium is the most important genotoxicant among heavy metals. It has a high carcinogenic potential for humans and has been classified as human carcinogen from first group (IARC 1993). Cadmium genotoxicity is usually explained by indirect mechanisms, such as generation of reactive oxygen species (ROS), inhibition of DNA repair enzymes, as well as damaged cell proliferation. The aim of the present study was to gain insights into genotoxic, antigenotoxic and adaptive response induced after in vitro exposure of human

Poster Presentations (continued)

lymphocytes to CdCl₂, with or without antioxidants. The cytokinesis-block micronucleus multi-endpoint assay was used as a biomarker for DNA damage. The proliferative index, micronuclei, nuclear bridges, nuclear buds, apoptotic and necrotic cells were recorded per 1,000 cells. Different vitamins, alone or in combination, added at G0 or S phase of the cell cycle, were explored as antioxidants to ameliorate the genotoxic/carcinogenic effects of cadmium.

COS19 (Judged)

Chemical Communication in Two Species of Dusky Salamanders (Genus *Desmognathus*) from the Southern Appalachian Mountains

Caitlin Corbet, Danielle Peters, COS
Faculty Sponsor: *Jessica Wooten*

Black-bellied salamanders, *Desmognathus quadramaculatus*, displace other smaller dusky salamanders, such as the seal salamander, *Desmognathus monticola*, in terrestrial habitats. The dwarf black-bellied salamander, *Desmognathus folkertsi*, is a morphologically cryptic species recently described from within populations of *D. quadramaculatus*. *Desmognathus folkertsi* and *D. quadramaculatus* are mostly sympatric in nature. However, a single population of *D. folkertsi* (Rothwell Creek, Stephens Co., Ga.) and a single population of *D. quadramaculatus* (Dick's Creek, Stephens Co., Ga.) are allopatric. The aim of this study was to test reciprocal responses of each species to chemical cues deposited by individuals from the allopatric and sympatric populations. Presenters found that *D. quadramaculatus* escaped significantly more often for every trial combination than from unused filter paper, which was the control ($\chi^2 = 10.495$; $p = 0.03$); whereas, *D. folkertsi* did not escape from any of the combinations significantly more often than the control ($\chi^2 = 7.525$; $p = 0.11$).

COS21

Application of Magnetic Nanoparticles in Cancer Hyperthermia

Jennifer Smith, COS
Faculty Sponsor: *Heather Yu*

Treatment of cancer using the concept of hyperthermia is a promising technique, but still under development. The premise of hyperthermic treatment is that cancer cells die at temperatures around 43°C while healthy, noncancerous, cells survive at these temperatures. Magnetic nanoparticles can generate heat by absorbing energy from an externally applied alternating magnetic

field. These magnetic particles, when injected locally into a tumor, can absorb enough energy from an alternating magnetic field to heat and kill tumor cells. This project investigates the main factors that affect the generation of heat by magnetic particles. Using Brownian and Neels models, presenters calculated the specific loss power for different particle sizes and magnetic fields. Results indicated that frequency, amplitude and particle size are important factors in heat generation. The two models we investigated and our calculation results can be used to simulate a temperature profile around a tumor during hyperthermic treatment.

COS23

Postcranial Skeletal Anatomy of Tree Squirrels and New World Monkeys

Lisa Brown, Abigail Carolan, Conrad Davenport, Adam Emahiser, Hanna Holmes, Rebecca Lauer, Cynthia Magill, Kasandra Morelock, Alexander Oberlin, Shawn Parks, Victoria Simpkins, Scot Sliwinski, Alexander Wyatt, Trisha Zamora, COS
Faculty Sponsor: *Jacqueline Connour*

This project compares limb bone parameters in tree squirrels and small New World monkeys. Both groups are almost entirely arboreal. Both groups run and walk quadrupedally, but can also jump large distances. Despite these similarities, they diverged from a common ancestor close to the origins of placental mammals more than 60 million years ago, and they differ in hand and foot structure. Based on this information, the hypothesis was that the two groups would be similar in properties affected by mechanical loading such as limb bone thickness, and differ in properties more constrained by ancestry such as joint size. Measurements of X-rayed bones were used to calculate femoral and humeral lengths, shaft thicknesses and joint areas. The values were analyzed using linear regression and ANOVA. Results support the hypothesis, as shaft thicknesses were similar between the two groups, and the monkeys had longer limbs and larger articulations than the squirrels.

COS24

The Emerald Ash Borer Presence on The University of Findlay Campus

Caitlin Gilbert, COS
Faculty Sponsor: *Benjamin Dolan*

Emerald ash borers were found in the City of Findlay a few years ago, and this past summer, the Ash trees on The University of Findlay's campus were treated with an insecticide called Treeäge™. This study will monitor if the treatment is having any effect on the ash trees on campus. The ash trees will be surveyed annually

to reassess health. The goal of this study is to lay the foundation for future work that will monitor and record the effect that the Treeäge™ insecticide has on each ash tree on The University of Findlay's campus, as well as the effect on the emerald ash borers inside each tree. The location and the existing condition of each tree was recorded, including independent variables that are commonly used to indicate the health of trees.

COS25 (Judged)

Epigenetic Events of Genes: Methylation Patterns of CpG Islands in Cells Treated with Cadmium

Candace Black, Alisa Marvin, COS
Faculty Sponsor: Micheal Edelbrock

The effect of cadmium on the regulation of human genes and its association with cancer is poorly understood. The hypothesis of this investigation is that abnormal methylation on promoters of tumor-suppressor genes and/or proto-oncogenes may occur when cells are exposed to cadmium. A bioinformatics approach was used to determine the DNA promoter sequences likely to regulate the transcription of cancer-associated genes. Cells were treated in the absence and presence of cadmium and sequences were amplified by PCR. Sequence analyses of the amplified DNA products will determine if methylation patterns are different between cadmium treated and control cells.

COS26 (Judged)

Using the Comparative Method to Investigate Life History Evolution in Dusky Salamanders

Kimberly Eaken, Caitlin Corbet, COS
Faculty Sponsor: Jessica Wooten

For closely related species with overlapping geographic distributions, character displacement is common. The presenters investigated character displacement and life history evolution in three closely related salamander species from the Appalachian Mountains using the comparative method. The comparative method is useful in studies of character displacement and life history evolution because it reveals any significant effects of evolutionary history, while allowing for the independent investigation of adaptive evolution. The focus of this study included character displacement among three closely-related dusky salamander species in life history traits, such as egg size, size at maturity, clutch size from published, peer-reviewed articles and from unpublished studies. A phylogenetic hypothesis was reconstructed with sequences downloaded from Genbank and life

history data were organized into matrices using the computer program Mesquite version 2.7. Students discovered that phenotypic traits related to life history evolved multiple times in disparate populations.

COS27 (Judged)

Morphological Homoplasy in Three Species of Closely-Related Dusky Salamander Species (Family Plethodontidae: Genus Desmognathus) in the Southern Appalachian Mountains

Danielle Peters, COS
Faculty Sponsor: Jessica Wooten

Salamanders in the family Plethodontidae are known to exhibit extensive morphological homoplasy, where the same morphology has evolved multiple times in related groups; therefore, previously generated evolutionary relationships based on morphology yield incorrect and misleading relationships among species. Phylogenetic relationships are reconstructed using genetic data; however, there are no studies that have investigated morphological homoplasy in the context of phyletic evolution. The presence of morphological homoplasy was tested in three closely related salamander species, including the black-bellied salamander, *Desmognathus quadramaculatus*, dwarf black-bellied salamander, *Desmognathus folkertsi*, and the shovelnosed salamander, *Desmognathus marmoratus*. Twenty-nine measures of morphology were completed for 250 salamanders using the program tpsDIG. Results suggest that similar morphological structures have independently evolved in multiple lineages. These results may indicate that environmental pressures are selecting for these morphologies in these salamander species. Morphological characteristics should be used with caution when reconstructing evolutionary relationships in groups that exhibit extensive morphological stasis.

COS28 (Judged)

Physiological Effects of Irreversible Electroporation in the Porcine Model

Lisa Stadelman, COS
Faculty Sponsor: Linda Peck

Electroporation is the tissue effect caused when a high voltage electrical field is applied to cells. The electrical charge destabilizes the lipid bilayer and causes pores to open through the membrane. Irreversible electroporation (IRE) utilizes high voltages, and longer electrical charge durations, in order to disrupt cellular metabolism. IRE produces cell death in a well-defined area and has minimal impact on tissue adjoining the area of effect.

Poster Presentations (continued)

IRE also shows promise in promoting rapid tissue regeneration and minimal scarring. Electroporation creates an electric field throughout the body, potentially causing secondary physiologic effects. RR intervals and QRS complexes on the ECG readings were analyzed in order to determine the heart's response to the ablation technology. Blood chemistries were examined to determine the extensiveness of tissue damage to the target organ.

COS29 (Judged)

An Initial Analysis of Vegetation in a Newly Created Wetland

Rebecca Lauer, COS

Faculty Sponsor: Terry Schwaner

Vegetation succession occurs when plant diversity changes due to interactions of species with their environment and among themselves. The goal of this study was to measure vegetation around a newly created wetland to provide an initial set of data to detect changes in subsequent years. Species identifications based on preserved specimens, individual numbers, height and percent cover were taken in 1m quadrants, for each meter along six 10m to 40m transects, extending outward from water's edge. Diversity of vegetation and its height increased away from the water's edge and consisted mostly of plants in the surrounding fields. Although succession could not be detected for most species in this baseline data, we did find that the common, rhizomatous cattail (*Typha latifolia*) was represented by three above ground plants in the fall of 2008, and by 1,120 plants in summer 2009.

COS30 (Judged)

The Correlation Between Gravity on the Human Body and Posture Control

Candace Black, Alisa Marvin, COS

Faculty Sponsor: Heather Yu

Gravitational force from the Earth acts on the human body all the time. It affects our body posture, walking, muscle tension, blood pressure, etc. This presentation will demonstrate how gravity generates torque that affects our body posture and muscle tensions. The correlation between gravity and our walking paces will be shown. Presenters will also provide tips to avoid gravitational effect on blood pressure. Different types of human beings such as athletes, overweight people and expectant mothers are used as models in the research.

COS31 (Judged)

Epigenetic Expression of DNA Repair Proteins in Cadmium-Treated Cells

Katy LeVon, Corina Benjamin, Lisa Brown, Callie Robb, COS

Faculty Sponsor: Michael Edelbrock

Cadmium is well accepted as a human carcinogen. Current evidence in the scientific literature suggests that cadmium interferes with DNA repair by interfering with protein expression or function. Our hypothesis is that cadmium decreases the expression level of DNA repair proteins. Human cells are cultured and treated with varying concentrations of cadmium. Untreated control cells are grown in the same manner. Proteins recovered from the nucleus will be compared by Western blotting. Similarly, nuclear proteins in cells will be visualized using fluorescence microscopy. Differences observed between treated and untreated cells indicate that cadmium is interfering with DNA repair protein expression.

COS32 (Judged)

How Safe is Your Drinking Water?

Vinod Tujalpuram, COS

Faculty Sponsor: Michael Homsher

Atrazine is frequently found in drinking water across the United States. In Findlay, Ohio, atrazine has been detected after runoff from spring rains. The herbicide enters the body by ingestion and acts as an endocrine disruptor by binding to neurohormonal receptors, which lead to misdirection of the actions of sex and steroid hormones. The researchers adapted USEPA Method EPA 508.1 a Gas Chromatography (GC) Electron Capture analysis to low ppb levels. Modification was required to adapt to the temperature program capabilities of our SRI™ 8610 Model GC. Solvent flush technique was used to run blanks and calibration standards. Actual water samples are prepared using Solid Phase Extraction procedures. An analysis of a performance evaluation sample was conducted to demonstrate the ability to correctly identify and report herbicide concentrations in water samples.

COS33 (Judged)

Tetracycline and Streptomycin Resistance of Coliform Bacteria in Surface Water

Iwona Popkowski, Rebecca Lauer, Jackie Boyd, COS

Faculty Sponsor: Bethany Henderson-Dean

Tetracycline and streptomycin are used in agriculture for the prophylactic treatment of livestock, which lead to

antibiotic-laced manure leeching into surface water. Bacteria may respond to the selective pressure of antibiotic use by obtaining antibiotic resistance genes. The objective of the experiment is to understand the use of these antibiotics and their effects on antibiotic resistance genes in bacteria present in surface water. Soil samples from locations along the Blanchard River in Findlay, Ohio, were collected. Diluted soil samples were grown on Coliscan® plates and brain-heart infusion plates containing tetracycline or streptomycin. Upon isolating resistant coliform colonies, PCR assay will be performed and amplification products will be sequenced. BLAST analysis will be completed on sequence data for bacterial identification. The presence of antibiotic resistance genes will be tested using designed primers and amplified using PCR analysis. This will allow the researchers to determine if there is multidrug resistance in bacteria.

COS34

Emerald Ash Borer: Plant Community Composition

Alexander Wyatt, COS

Faculty Sponsor: Benjamin Dolan

The emerald ash borer (*Agrilus planipennis*) is an invasive insect that was introduced from Asia affecting many ash (*Fraxinus* spp.) trees found within deciduous forests of the Great Lakes region. As the trees die and fall, it leaves many openings within the forest canopy and floor, allowing other vegetation to grow. This project is investigating the plant community composition of the overstory and understory associated with ash trees. The driving hypothesis is that when these infected ash trees die, a change in light regime will take place allowing for the plant community to change. To test this hypothesis, plots with and without ash will be monitored to assess the vegetative state surrounding the trees. This work represents baseline data collection, and plots will be monitored annually as ash trees succumb naturally to EAB.

COS35

Wetland Mitigation

Alexander Wyatt, COS

Faculty Sponsor: Dwight Moody

Wetlands are areas of land that are covered by water year round or at seasonal times of the year. They are a significant source of biodiversity in plant and animal life, some of which play major roles in the ecosystem. As a wetland mitigation researcher for the Hancock County Park District, the presenter determined areas of interest that could be considered wetlands by collecting data on plant species as well as recording the different species of

wildlife that inhabit the area. The presentation represents some of the continuous data collection that has occurred since 1998 and research being done to preserve wetlands in Hancock County.

COS37

Bioinformatics Insights into the Rise and Spread of Antibiotic Resistance

Ayesha Ather, Carolyn Weiss, COS, Jana Hucker, CPHM

Faculty Sponsor: Matt Hoostal

Bacteria utilize two-component regulatory systems (TCRS) in regulating an array of heavy metal and antibiotic efflux pumps. Although the molecular physiology of TCRS has been extensively studied, their evolutionary biology is less understood. Therefore, this project investigates potential phylogenetic relationships among TCRS and corresponding pumps, as well as the role of horizontal gene transfer (HGT) in the spread of these genes. To assess potential evolutionary relationships, Bayesian phylogenetic trees were reconstructed with sequences from the GenBank database and bootstrap measures of confidence. Phylogenetic reconstructions suggested antibiotic resistance and heavy metal efflux proteins share common origins. In addition, comparisons of phylogenetic reconstructions to 16S rDNA trees revealed multiple potential examples of HGT. In many of these instances, differential G+C contents of target genes compared to the overall G+C content of corresponding bacterial genomes confirmed potential examples of HGT in the spread of antibiotic and heavy metal resistance genes.

COS39 (Judged)

Dogs as Genotoxicity Sensors for Community Health

Katherine Bevan, Iwona Popkowski, Cristina Danks, COS

Faculty Sponsor: Michael Edelbrock

This presentation discusses the usefulness of dogs to reflect family and community health given that they share the human environment and respond to toxicity much like humans. Dogs have physiologically compressed lives, making them efficient sentinels. This study exposes dog blood to cadmium, which is suggested to act as a co-carcinogen. Circulating lymphocytes are stimulated to divide and are arrested immediately after the first cell division. They are then fixed and stained on a microscope slide. Control slides (no cadmium) will be prepared for each cohort. The presence of micronuclei is scored as a biomarker for genotoxic stress and will be

Poster Presentations (continued)

compared between pet and stray dogs. The hypothesis is that any differences are due to environmental stressors. This study seeks to find if pet dogs can be used as bioindicators for family health and stray dogs for general community health.

COS40 (Judged)

A Wocket in My Pocket

Ryan Spath, COS

Faculty Sponsor: Helen Scheider

As phones become more and more like computers, their potential for mobile design grows as well. While this may make it more like designing for a desktop environment, there are aspects of mobile that the desktop, or laptops for that matter, have never faced. Within mobile design the developer has an entire arsenal of tools they can use. Most mobile devices today have GPS, camera, WiFi, compass, touch screens, keyboards, bluetooth, etc. This gives the developer the potential to create amazing applications. There are also perils to mobile design just as all of those things are a treasure trove; they create compatibility issues with phones that might not have Bluetooth or a touch screen. This presentation will focus on all of the different platforms phones come on.

COS41 (Judged)

NMR Spectroscopic Study of Phenytoin

Joy Sizemore, COS

Faculty Sponsor: Hafed Bascal

Molecular orbital theory finds approximate solutions to Schroedinger's Equation, to get energies and orbitals of electrons. Energies can be used for geometry, reaction energetics, activation energies for kinetic and spectroscopic prediction. These methods are available in many of the modeling packages, such as Spartan Pro. In this study we use Spartan Pro to calculate at several theoretical levels the ^1H NMR and ^{13}C NMR chemical shifts of Phenytoin, $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}_2$. The calculated data was compared to the experimental spectra and will be presented.

COS43 (Judged)

Temporal Shifts in the Functional Diversity of Normal Microflora Associated with Organically Raised Jersey Cows

Jessica Kummer, COS

Faculty Sponsor: Matt Hoostal

Dairy cattle on organic farms live primarily outdoors until inclement weather warrants relocation indoors. While shifts in normal microflora composition may modulate host immunity during transition periods, these shifts are poorly understood. The objective of this study was to examine temporal shifts in the functional diversity of microflora from udders of organically raised dairy cows. Microbial samples were swabbed from udders of 14 Jersey cows at three different times during which the cows transition from being kept fully outdoors to indoor enclosures. Extracellular enzyme activities (EEA) were monitored as indicators of functional diversity among microbial consortia. Total bacterial plate counts, total coliform and *E. coli* were also measured to normalize EEA. Post hoc analyses of repeated-measures ANOVA comparing normalized EEA during transitions from pasture to indoor facilities, demonstrated statistically significant results. Thus, dairy cattle microflora may experience shifts during living environment transitions pertinent to the overall health of the animal.

COS47 (Judged)

Web Usability Document Cycle Utilizing Heuristics and Multiple Audiences

Kim Andersons, Shenna Haselman,

Lancelot Francioni, COS

Faculty Sponsor: Erik Hayenga

In this presentation, students analyze a Web site using the heuristics of Jacob Neilson. The analysis included six steps: 1) determine audience, purpose and context of the Web page; 2) order the user types most-to-least important to the company; 3) analyze the Web site and locate potential problems; 4) conduct a usability heuristic inspection primarily using Jacob Neilson's heuristics; 5) reanalyze the entire Web site; 6) catalog and record potential problems. After reviewing Jacob Neilson's heuristics, 10 were determined to correspond with the problems of the Web site. The results were compiled into a catalog listing the problems of the Web site and possible improvements the company could make. This analysis included executive summary, introduction, usability access, methodology, user types, heuristics, usability issues, conclusion and pictures of the Web site to help visualize the problems.

COS48 (Judged)

Survey of Tetracycline Resistance in the Blanchard River

Kasandra Morelock, COS

Faculty Sponsor: Bethany Henderson-Dean

As resistant bacteria numbers grow, antibiotic resistance remains a major concern. This study aims to examine the prevalence of tetracycline-resistant Enterobacteriaceae in the Blanchard River. Agricultural land surrounds much of the river, and runoff from these farms can contain antibiotic resistant bacteria. A 100fold dilution was plated on Blood Heart Infusion agar (BHI) to gather a better representation of total bacteria colonies present. Samples were also plated on BHI with tetracycline (10 µg/mL) to gather a better representation of total tetracycline-resistant bacteria colonies present. Tetracycline-resistant colonies were transferred to Eosin Methylene Blue agar (EMB). Multiple genes can be responsible for tetracycline resistance; therefore, bacterial genomes are not limited to one resistance gene. To identify specific tetracycline resistance genes, PCR amplification was run to qualitatively analyze the presence of specific genes using primers for tetO, tetM, tetS, tetW, tetA, tetB, tetC, tetD, tetE, tetG, tetK, tetL, tetQ, and tetT resistance genes.

solvent suspension, and the speed and operation time of the centrifuge. The project objective is to analyze the physical principles related to centrifugal technique to predict the position of a particle at equilibrium relative to the forces created at a given centrifugal speed. An experiment was then designed to test the relationship. The theoretical analysis and experiment results will be reported, providing more insight into the main factors affecting particle separations in a high-speed centrifugal situation.

COS56 (Judged)

Monitoring for Noise in the Music Facilities

Sean Johnson, COS

Faculty Sponsor: William Carter

The presentation focuses on the research conducted to monitor the noise levels in the music facilities and comparing them to the OSHA and ACGIH standards. The methods used to complete the research include the Sampson noise monitor and the Q300 noise monitor. These pieces of equipment are very accurate in the way that they monitor for sound. The analysis of the results using the quest program for the Q300 device were studied and compared to the standards of ACGIH and OSHA. The student will present the results.

COS57 (Judged)

Physics Factors Determining Particle Sorting in Gradient Centrifugation

Ashley Cooley, Ryan Gibson, COS

Faculty Sponsor: Heather Yu

Gradient centrifugation is a broadly used technique that separates two or more sub-cellular particles. Effective separation depends on properties of the particles, the

Performances/Demonstrations

1-1:15 p.m.

COLA5
AMU, Atrium

Tuba Selections

1-2:35 p.m.

COS36
AMU, Fireside Lounge

Modern Art: Fundamentals of the Graphic Tablet

Megan Smith, COS
Faculty Sponsor: Anne Beekman

This demonstration will illustrate the usefulness of a graphic tablet in art today. Points that will be covered in this demonstration include basic use of the graphic tablet, brand distinction and pros and cons of the graphic tablet. This is a presentation of how to use technology in art and to showcase the modern type of art media used today.

1-3 p.m.

COLA3
Cory Street Mall, Outdoor Tent

The Use of Spray Paint in Contemporary Painting

Jonathon Combs, COLA
Faculty Sponsor: Valerie Escobedo

This presentation is a practical demonstration of tools and techniques in the medium of spray paint as used in contemporary painting. Common tools used by practicing artists will be showcased live with commentary highlighting their use in studio work. The presentation will provide inspiration and information for artists as well as introduce non-artists to the medium. With the increasing popularity of street art in contemporary galleries, this presentation will allow students to see the technical aspects of this cultural phenomenon first hand.

STC 1
AMU, Atrium

A Status Report on Services, Projects and Research Exploration

Alex Betts, COS; TJ Dietsch, COB; Audra Dundore, COLA/COE; Charles Koch, COS; Ryan Rothenbuhler, COLA; Dayna Lessig, COS; and Stephanie Smith, COHP
Faculty Sponsors: Beth Stewart and Raymond J. McCandless

The student coaches of the STC (Student Technology Center) will give presentations that focus on the services the Center can provide to students and faculty; showcase exemplary projects that have been produced using the Center; and demonstrate segments of workshops that are offered. An important aspect of their presentation will be the discussion of the research exploration and experimentation that went into workshop development and specialized student projects. In addition, there will be workshop schedules and other STC information available.

1-4 p.m.

COLA13
AMU, Atrium

Photography Student's Portfolio and Portrait Demonstration

Rebecca Cross, COLA
Faculty Sponsor: Jeanette Drake

This display and demonstration are designed to share the presenter's skills, knowledge and passion of photography by way of an exhibition and miniature portrait studio. The presenter will display her portfolio while giving the audience an opportunity to discover firsthand what it takes to capture a photograph. In addition to viewing the exhibit, attendees may pose for a portrait. While observing and participating in portrait photography, the audience will learn that lighting, composition, subject placement, depth of field, aperture and shutter speed all work together to shoot a decent picture.

1:15-1:35 p.m.

COLA15
Ritz Auditorium

A Recital of Music in the Art Song, Opera and Theatre Traditions

Janelle Limber, COHP, Kara Wilkinson, COLA
Faculty Sponsor: Vivian Dettbam

A performance of works from the classical and theatre repertoire by senior applied voice students Kara Wilkinson and Janelle Limber will be provided. Janelle and Kara have represented The University of Findlay in solo recitals, choral programs and University theatre productions. This program is a portion of the recital that will be presented on April 24 at 8 p.m. in Ritz Auditorium. Today's concert will include art songs, arias and works from American musical theatre, and will be sung in Italian, French and English. The music program at the University provides individual music instruction and ensemble performance courses for all interested students.

Powell-Grimm Theatre

Scenes from “Sylvia”

*Samantha Woodman COLA; Michelle Billen COLA;
Kevin Subler COHP and Tom Lalonde COLA
Faculty Sponsor: Heather Williams*

This theatre production consists of excerpts from the play, “Scenes from Sylvia”.

1:45-2:05 p.m.

COLA15
Ritz Auditorium

A Recital of Music in the Art Song, Opera and Theatre Traditions

2-2:15 p.m.

COLA16
AMU, Atrium

Just A Closer Walk With Thee

*Emily Anderson, Kim Funk, COB; Kayla Meeks, COHP;
Thomas Kahle, Ashton Atkins, CPHM
Faculty Sponsor: Jack Taylor*

This piece is a fun remake of the beloved hymn “Just A Closer Walk With Thee,” remade by the Canadian Brass into a jazz piece. “Just a Closer Walk with Thee” retains the famous, slow, New Orleans-style introduction. Later, the song lets loose for some Dixie fun. Included are short written solos for clarinet, trumpet and trombone, as well as some opportunity for improvisation.

2:15-2:35 p.m.

COLA5
AMU, Atrium

Multiphonics and the Tuba: A Unique Aural Experience

*Adam Houser, COLA
Faculty Sponsor: Lori Bitz*

Multiphonics is the practice of using a monophonic instrument to play multiple tones at once. Aboriginal didgeridoo players and Tibetan throat singers have mastered this technique, manipulating airflow through the vocal tract to produce surreal and mystifying sounds. This technique can be replicated on brass instruments by simultaneously singing and playing into a horn, thereby layering the harmonics of a given note and producing a series of multiphonic tones. After a year of research and study, the presenter has learned to successfully create multiple

harmonic tones on his tuba and will present his work. The audience will learn the basic physics behind multiphonics, how these sounds are generated and sustained, and how to create their own multiple harmonic tones with a little practice. The presenter will conclude with a tuba performance that features multiphonics and a beat boxing, so come listen and partake in this unique aural experience.

Powell-Grimm Theatre

Scenes from “Sylvia”

2:45-4:05 p.m.

COS44
AMU, Fireside Lounge

Application and Exploration of Adobe Flash CS4: Virtual MP3 Player

*Scott Keller, COS
Faculty Sponsor: Helen Schneider*

Adobe Flash CS4 has a wide variety of applications. This presentation demonstrates the design and encoding aspects of the program in application to the creation of a virtual MP3 player. This MP3 player was created for use in conjunction with a Web site. Both are original works designed and created entirely by the presenter. The presenter will show a brief explanation of Adobe Flash CS4, the various stages of the virtual player, the final working application and a brief view of the Web site to show the application of the player.

3-3:15 p.m.

COS38
AMU, Atrium

Concerto in C Minor for Oboe and Piano by Benedetto Marcello

*Jill Dentel, COS
Faculty Sponsor: Jack Taylor*

Benedetto Marcello was an Italian composer who lived from 1686-1739. Among his many compositions, his Concerto in C Minor for Oboe has become a standard in the repertoires of oboists around the world. This piece is comprised of three movements and may be accompanied by band, orchestra or in this case, piano. This performer has been playing oboe since she was 11 and is a member of numerous ensembles including The University of Findlay Wind Ensemble and is studying under the guidance of Dr. Jacqueline Leclair. This piece was her choice composition for her recital in December of 2009.

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Alesch, Sandy	COE 7	3:15-3:35	Main 301	Daniels, Amber	COHP 3	4:00-4:30	Croy Gym
Alhajrei, Fahh	COS 54	2:45-3:05	Main 305	Daniels, Garrick	COB 10	2:15-2:35	Main 209
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				Moss, Patience	COB 13	4:00-4:30	Croy Gym
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	COS 9	4:00-4:30	Croy Gym	Patel, Heather	COLA 6	2:45-3:05	Main 212
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Smith, Jennifer	COS 21	4:00-4:30	Croy Gym		COS 52	1:45-2:05	Main 209
Smith, Keith	CPHM 3	4:00-4:30	Croy Gym				
Smith, Megan	COS 36	1:00-2:35	AMU, Fireside Lounge				
Smith, Stephanie	STC 1	1:00-4:00	AMU, Atrium				
	COHP 15	4:00-4:30	Croy Gym				
Smith, Tanya	COB 20	3:15-3:35	Main 300				
Snyman, Heather	COLA 17	1:45-2:05	Main 300				
Spath, Ryan	COS 40	4:00-4:30	Croy Gym				
Springer, Stephanie	COLA 19	1:15-1:35	Main 305				
Stadelman, Lisa	COS 28	4:00-4:30	Croy Gym				
Stafford, Erin	CPHM 22	4:00-4:30	Croy Gym				
Starkey, Charles	COS 42	1:15-1:35	Main 202				
Steinemann, Maria	COHP 2	4:00-4:30	Croy Gym				
Stemmler, Jessica	COS 4	1:15-1:35	Main 308				
Stephenson, Susan	CPHM 15	4:00-4:30	Croy Gym				
Sterrett, Amanda	COS 14	4:00-4:30	Croy Gym				
Stevens, Micah	COS 50	1:45-2:05	Main 213				
Strimpel, Krystina	COHP 5	4:00-4:30	Croy Gym				